



京都

May 2014 Kyoto, Japan
Conference Proceedings

ISEPSS

International Symposium on
Education, Psychology and
Social Sciences

ICSSAM

International Conference on
Social Science and Management

Conference Proceedings

*May, 2014
Kyoto, Japan*

ICSSAM

International Conference on Social Science and Management

ISEPSS

*International Symposium on Education, Psychology and Social
Sciences*

ICSSAM

International Conference on Social Science and Management

ISBN 978-986-89536-9-7

ISEPSS

International Symposium on Education, Psychology and Social Sciences

ISBN 978-986-89844-4-8

Content

Conference Schedule	7
General Information for Participants	10
ICSSAM International Committee Board	12
ISEPSS International Committee Board	13
Special Thanks to Session Chairs	14
Keynote Speech	16
Conference Venue Information	18
Conference Venue Floor Plan [4F]	19
Oral Sessions – May 8	20
Management & Marketing I	20
ICSSAM-592	21
ICSSAM-600	42
ICSSAM-603	55
ICSSAM-614	57
ICSSAM-701	58
Communication I	59
ICSSAM-742	61
ICSSAM-556	63
ICSSAM-637	65
ICSSAM-639	74
ICSSAM-665	95
ICSSAM-944	102
ICSSAM-762	112
Society & Social Science I	113
ISEPSS-1869	114
ISEPSS-1772	116
ISEPSS-1762	128
ISEPSS-1729	129
ICSSAM-674	131
Law I	138
ICSSAM-493	139
ICSSAM-634	150
ICSSAM-748	160
ICSSAM-606	172
ICSSAM-635	173
Education I	188
ISEPSS-2016	190
ISEPSS-1795	205
ISEPSS-1880	206
ISEPSS-1889	208
ISEPSS-1878	210
ICSSAM-816	217

ISEPSS-1758	218
Culture.....	219
ICSSAM-533	220
ICSSAM-545	221
ICSSAM-667	233
ICSSAM-778	234
ICSSAM-627	241
ICSSAM-934	254
Management & Marketing II	274
ICSSAM-666	276
ICSSAM-672	287
ICSSAM-684	298
ICSSAM-687	310
ICSSAM-702	319
ICSSAM-962	320
ISEPSS-2051	328
Finance & Economics I.....	330
ICSSAM-370	331
ICSSAM-477	373
ICSSAM-450	401
ICSSAM-535	411
ICSSAM-965	439
Education II.....	445
ICSSAM-746	447
ICSSAM-754	449
ICSSAM-872	461
ICSSAM-880	465
ICSSAM-815	490
ICSSAM-887	491
ISEPSS-1923	513
Psychology I.....	515
ISEPSS-1819	516
ISEPSS-1815	523
ISEPSS-1755	524
ISEPSS-2063	534
ISEPSS-2082	535
ISEPSS-2069	540
Education III.....	557
ISEPSS-1870	559
ISEPSS-2093	561
ICSSAM-629	574
ICSSAM-668	585
ICSSAM-676	596
ICSSAM-731	603

ISEPSS-1890	605
Society & Social Science II	615
ISEPSS-1893	616
ICSSAM-726	637
ICSSAM-501	648
ICSSAM-553	666
ICSSAM-626	676
ICSSAM-834	692
Management & Marketing III	700
ICSSAM-714	702
ICSSAM-761	711
ICSSAM-793	717
ICSSAM-977	727
ICSSAM-782	733
ICSSAM-700	746
ISEPSS-2067	747
Oral Sessions - May 9.....	748
Management & Marketing IV	748
ICSSAM-502	750
ICSSAM-888	761
ICSSAM-717	770
ICSSAM-851	771
ICSSAM-971	782
ICSSAM-904	802
ICSSAM-935	815
Society & Social Science III	825
ISEPSS-1751	826
ISEPSS-2048	827
ISEPSS-1798	829
ISEPSS-1757	831
ISEPSS-1868	833
ICSSAM-808	843
Psychology II.....	844
ICSSAM-594	846
ICSSAM-695	847
ICSSAM-624	855
ICSSAM-743	861
ICSSAM-954	871
ISEPSS-2101	885
Finance & Economics II.....	887
ICSSAM-417	888
ICSSAM-736	889
ICSSAM-845	896
ICSSAM-418	908

ISEPSS-2089	919
Education IV.....	921
ISEPSS-1904	922
ISEPSS-1748	930
ISEPSS-1791	931
ISEPSS-1922	945
ISEPSS-2001	946
ISEPSS-1725	947
Law II & Politics.....	958
ICSSAM-770	959
ICSSAM-786	970
ICSSAM-447	971
ICSSAM-747	972
ICSSAM-936	984
Management & Marketing V	1014
ICSSAM-890	1016
ICSSAM-915	1017
ICSSAM-916	1028
ICSSAM-917	1040
ICSSAM-844	1052
ICSSAM-818	1060
ICSSAM-802	1061
Communication II.....	1062
ICSSAM-721	1064
ICSSAM-750	1073
ICSSAM-751	1083
ICSSAM-837	1095
ICSSAM-886	1103
ICSSAM-448	1117
ICSSAM-959	1136
Society & Social Science IV	1147
ICSSAM-661	1149
ICSSAM-673	1156
ICSSAM-680	1169
ICSSAM-780	1175
ICSSAM-877	1184
ISEPSS-2112	1194
Psychology III	1195
ICSSAM-549	1197
ICSSAM- 624	1205
ICSSAM- 697	1212
ICSSAM- 725	1214
ICSSAM- 755	1216
ISEPSS- 2098	1229

Education V.....	1235
ICSSAM-442	1237
ICSSAM-787	1246
ICSSAM-500	1247
ICSSAM- 608	1263
ICSSAM- 797	1271
ICSSAM- 507	1272
Finance III	1291
ICSSAM-689	1293
ICSSAM-767	1294
ICSSAM-788	1296
ICSSAM-690	1298
ICSSAM-584	1323
ICSSAM-616	1324
ICSSAM-995	1325
Education VI.....	1334
ISEPSS-2105	1335
ISEPSS-2106	1337
ISEPSS-2111	1347
ISEPSS-2113	1360
ISEPSS-1761	1374
ISEPSS-1720	1375
Poster Sessions– May 8	1387
Education.....	1387
ISEPSS-1800	1398
ISEPSS- 1735	1408
ISEPSS- 1809	1409
ISEPSS-1820	1411
ISEPSS- 2066	1417
ISEPSS- 1849	1418
ISEPSS- 1892	1423
ISEPSS-1924	1430
ISEPSS-1726	1437
ISEPSS-2100	1443
ICSSAM-794	1444
Communication, Society & Psychology	1453
ICSSAM-604	1455
ICSSAM- 578	1464
ICSSAM- 677	1472
ICSSAM- 548	1481
ICSSAM- 943	1483
ICSSAM- 538	1484
ISEPSS- 1733	1485
Poster Session - May 9.....	1487

Social Science, Society, Culture& Politics	1487
ISPESS-2065	1489
ISPESS-1853	1491
ISPESS-1881	1492
ICSSAM-947	1501
ICSSAM-663	1514
ICSSAM-696	1516
ICSSAM-729	1523
ICSSAM-964	1530
ICSSAM-870	1540
ICSSAM-722	1549
Economics, Finance & Management	1560
ICSSAM-765	1562
ICSSAM-426	1564
ICSSAM-402	1585
ICSSAM-733	1606
ICSSAM-602	1619
ICSSAM-643	1620
Psychology.....	1621
ICSSAM-452	1623
ICSSAM-454	1625
ICSSAM-567	1626
ICSSAM-768	1628
ICSSAM-568	1629

Conference Schedule

Wednesday, May 7, 2014
Pre-Registration (15:00-17:00)
Kyoto Research Park 4F

Thursday, May 8, 2014	
Oral Session	
Time	Information
08:15-18:00	Registration
09:00-10:30	Oral Session Room B, Management & Marketing I Oral Session Room C, Communication I Oral Session AV Room, Society & Social Science I
10:30-10:40	Tea Break
10:40-12:10	Oral Session Science Hall, Keynote Speech Dr.Stepen B.Ryan Oral Session Room B, Law I Oral Session Room C, Education I Oral Session AV Room, Culture
12:10-13:10	Lunch Time
13:10-14:40	Oral Session Room B, Management & Marketing II Oral Session Room C, Finance & Economics I Oral Session AV Room, Education II
14:40-14:50	Tea Break
14:50-16:20	Oral Session Room B, Psychology I Oral Session Room C, Education III Oral Session AV Room, Society & Social Science II
16:20-16:30	Tea Break
16:30-18:00	Oral Session AV Room, Management & Marketing III

Thursday, May 8, 2014	
Poster Session, Kyoto Research Park 4F	
Time	Information
08:15-18:00	Registration
10:30-10:40	Tea Break
11:00-12:00	Education Communication, Society & Psychology
12:10-13:10	Lunch Time
14:40-14:50	Tea Break

Friday, May 9, 2014	
Oral Session	
Time	Information
08:15-16:30	Registration
	Oral Session Room B, Management & Marketing IV
09:00-10:30	Oral Session Room C, Society & Social Science III Oral Session AV Room, Psychology II
10:30-10:40	Tea Break
	Oral Session Room B, Finance Economics II
10:40-12:10	Oral Session Room C, Education IV Oral Session AV Room, Law II & Politics
12:10-13:10	Lunch Time
	Oral Session Room B, Management & Marketing V
13:10-14:40	Oral Session Room C, Communication II Oral Session AV Room, Society & Social Science IV
14:40-14:50	Tea Break
	Oral Session Room B, Psychology III
14:50-16:20	Oral Session Room C, Education V Oral Session AV Room, Finance III
16:20-16:30	Tea Break
16:30-18:00	Oral Session Room C, Education VI

Friday, May 9, 2014

Poster Session, Kyoto Research Park 4F

Time	Information
08:15-16:30	Registration
	Social Science, Society, Culture & Politics
09:00-10:00	Economics, Finance & Management
	Psychology
10:30-10:40	Tea Break
12:10-13:10	Lunch Time

General Information for Participants

Information and Registration

The Registration and Information Desk will be situated at the **Kyoto Research Park** on the **4th floor** during the following time:

Wednesday, May 7, 2014 (15:00-17:00)

Thursday, May 8, 2014 (08:15-18:00)

Friday, May 9, 2014 (08:15-16:30)

Parallel Sessions

Parallel Sessions will run on **May 8** and **May 9**. Sessions are usually 90 minutes in length.

Presentations and Equipment

All presentation rooms are equipped with a screen, an LCD projector, and a laptop computer installed with PowerPoint software. You will be able to insert your USB flash drive into the computer and open the file of your presentation in Microsoft PowerPoint. We recommend that you bring two copies of your presentation in case of one fails. You may also link your own laptop computer to the projector cable, however if you use your own Mac please ensure you have the requisite connector.

A Polite Request to All Participants

Participants are requested to arrive in a timely fashion for all addresses, whether to their own, or to those of other presenters. Presenters are reminded that the time slots should be divided fairly and equally between the number of presentations, and that they should not overrun. The session chair is asked to assume this timekeeping role.



Sandals or Slippers



Tank Top



Shorts

Poster Sessions & Poster Requirements

Materials Provided by the Conference Organizer:

1. Poster Panel (90cm×173cm)
2. Push pins

Materials Prepared by the Presenters:

1. Home-made Poster(s)

Requirement for the Posters:

1. Material: not limited, can be posted on the poster panel
2. Maximum poster size is A0



(Example)



ICSSAM International Committee Board

Ajay Kumar Ghosh	Govt Hamidia Arts & Commerce College
Ariffin Abdul Mutalib	Universiti Utara Malaysia
Asiante Mausio	University of Fiji
Dina Juliani	Ministry of Law and Human Rights
Jastini Mohd Jamil	Universiti Utara Malaysia
Maria Christina Endarwati	National Institute of Technology Malang
Meng Vong	Royal Academy of Cambodia
Weiwei Wu	Harbin Institute of Technology

ISEPSS International Committee Board

Abbas Gholtash	Islamic Azad University
Adrian North	Curtin University
Armin Mahmoudi	Academic Member University
Asrul Akmal Shafie	University of Malaya
Awam Amkpa	New York University
Bishnu Mohan Dash	University of Delhi
Cai Su	Beijing Normal University
Channaveer Rachayya Mathapati	Department of Social Work
Debkumar Chakrabarti	Indian Institute of Technology Guwahati
Geoffrey I. Nwaka	Abia State University
I Wayan Suyadnya	Brawijaya University
Khalachuchi Flores	Southwestern University
Laura B. Liu, Ed.D.	Beijing Normal University's Center for Teacher Education Development
Lee Byung Hyuk	University of Seoul
Lee, Yang	Gyeongsang National University
Leela Pradhan	Tribhuvan University Kathmandu
Li-Ling Yang	Roger Williams University
Mahabbat Pernebaevna Ospanbaeva	Taraz State Pedagogical Institute
Md Abdul Jalil	Shahjalal University of Science & Technology
Mohamed Azmi Ahmad Hassali	School of Pharmaceutical Sciences
Napaporn Srichanyachon	Bangkok University
Özlem AVCI	Uşak University
Rajeshwari Nagaraj Kenchappanavar	Karnatak Arts College
Reyhan Bilgiç	Middle East Technical University
Rizwana Yousaf	University of Gujrat
Robert Evola	Université de Yaoundé
Sakina Riaz	University of Karachi
Subhan El Hafiz	Muhammadiyah University
Tirelo Modie-Moroka	University of Botswana
Ying Xing	China University of Political Science and Law
Young-Ok Kim	Chonnam National University

Special Thanks to Session Chairs

Peter W. Tse	<i>City University of Hong Kong</i>
Thitinun Pongnam	<i>Northeastern University</i>
Nattinee Thongdee	<i>Nakhon Ratchasima Rajabhat University</i>
Kalyakorn Worakullattanee	<i>Thammasat University</i>
Chi-Yo Huang	<i>National Taiwan Normal University</i>
Aiman Sulaiman	<i>International Islamic .University Malaysia</i>
Norihito Mizuno	<i>Akita International University</i>
Gwyntorn Satean	<i>Naresuan University</i>
Lih-Wu Hourng	<i>National Central University</i>
Hsiu-Tsu Cho	<i>National Taichung University of Education</i>
Christian Wolff	<i>University of Luxembourg, and CEPR</i>
Pudtan Phanthunane	<i>Naresuan University</i>
Wei Chu	<i>Hong Kong Polytechnic University</i>
Nik Rosila Nik Yaacob	<i>Universiti Sains Malaysia</i>
Pattaraporn Thampradit	<i>King Mongkut's Institute of Technology Ladkrabang</i>
Nor Faridah Abdul Manaf	<i>International Islamic University Malaysia</i>
Feng Yan	<i>The Hong Kong Polytechnic University</i>
Ekrachan Chaichana	<i>Nakhon Pathom Rajabhat University</i>
Touchkanin Jongjitvimol	<i>Pibulsongkram Rajabhat University</i>
Thunwadee Srithawirat	<i>Faculty of Science and Technology Pibulsongkram Rajabhat University</i>
Awatif Saber Jasem	<i>Tikrit University</i>
M W Gui	<i>National Taipei University of Technology</i>
Marc Kuhn	<i>Cooperative State University Stuttgart</i>

Chi-Yo Huang	<i>National Taiwan Normal University</i>
Mardiana binti Mohamad	<i>International Islamic University Malaysia</i>
M. Sidrach-de-Cardona	<i>Universidad de Málaga</i>
Chiuh-Cheng Chyu	<i>Yuan-Ze University</i>
Marwa A. Elsherif	<i>Helwan University</i>
Tetiana Kuchai	<i>Bohdan Khmelnytskyi National University</i>
Mohsin Hingun	<i>International Islamic University Malaysia</i>
G.D. Ransinchung R.N.	<i>Indian Institute of Technology Roorkee</i>
C.Y. Jim	<i>University of Hong Kong</i>
Robert Kucęba	<i>Czestochowa University of Technology</i>
Saodah Wok	<i>International Islamic University Malaysia</i>
Prisana Mutchima	<i>Suan Dusit Rajabhat University</i>
Panitarn Wanakamol	<i>Srinakharinwirot University</i>
Mohd Irwan Adiyanto	<i>Universiti Sains Malaysia</i>
Mah Ngee, Lee	<i>Universiti Tunku Abdul Rahman</i>
Qiao Yu Warren Cai	<i>National Taichung University of Education</i>
Jui-Jane Chang	<i>Soochow University</i>
Masoud Ibrahim Mohamed	<i>Northern Border University</i>
Chia-Nung Li	<i>Chinese Culture University</i>
Solachuddin Jauhari Arief Ichwan	<i>International Islamic University</i>
John Clayton	<i>Waikato Institute of Technology</i>
Amira Mohsen Hamdan	<i>Faculty of Science, Alexandria University</i>
Amin Ismael Nawahda	<i>Sohar University</i>

Keynote Speech

Science Hall

10:40~12:10

Thursday, May 8

Topic: Recognizing the Affect of Hidden Cultural Bias in Cross-Cultural Communication



Stephen B. Ryan

Professor of Intercultural Communication

Yamagata University

Dept. of Literature and Social Sciences

ryan@human.kj.yamagata-u.ac.jp

Summary

Culture is a meaning system of norms, beliefs, values and traditions that we share with other members of our community. It is both dynamic in that it evolves as we interact with different groups or contexts and stable as these values and beliefs are passed down from one generation to the next. It defines who we are as community members and shapes our interpretation of reality by helping us unconsciously select which stimuli are important and which can be ignored. In other words, culture helps us simplify, stereotype and make sense of a highly complex world in a smooth and efficient way.

As conference participants from all over the world gather here in Kyoto to present our research to others from distinct cultural backgrounds, we each bring with us a unique set of cultural norms and hidden cultural biases that we use to interpret others' communicative behavior. Although this cross-cultural interaction is easily discernible, our interpretations and ultimate conclusions are based on unrecognized cultural schemata. This is problematic for the international sojourner because cross-cultural and psychology research has shown that our cultural schema creates a hidden bias that guides our behavior most often without our awareness.

The aim of my own research and this presentation are two folds. First, I hope to make clear that culture influences and shapes how we make decisions, interpret research findings and communicate with others. It is a pervasive influence that is vastly underestimated affecting all academic fields of study and yet its effects go largely unnoticed. The second aim is to present my research of how cultural schemata can be brought to the surface and investigated so that cross-cultural misunderstandings can be better understood or even

avoided. The focus of my research is on business contexts between Japanese and Americans.

Conference Venue Information

Kyoto Research Park

Tel: +81-75-322-7800

Address: 134, Chudoji Minami-machi, Shimogyo-ku, Kyoto 600-8813, Japan

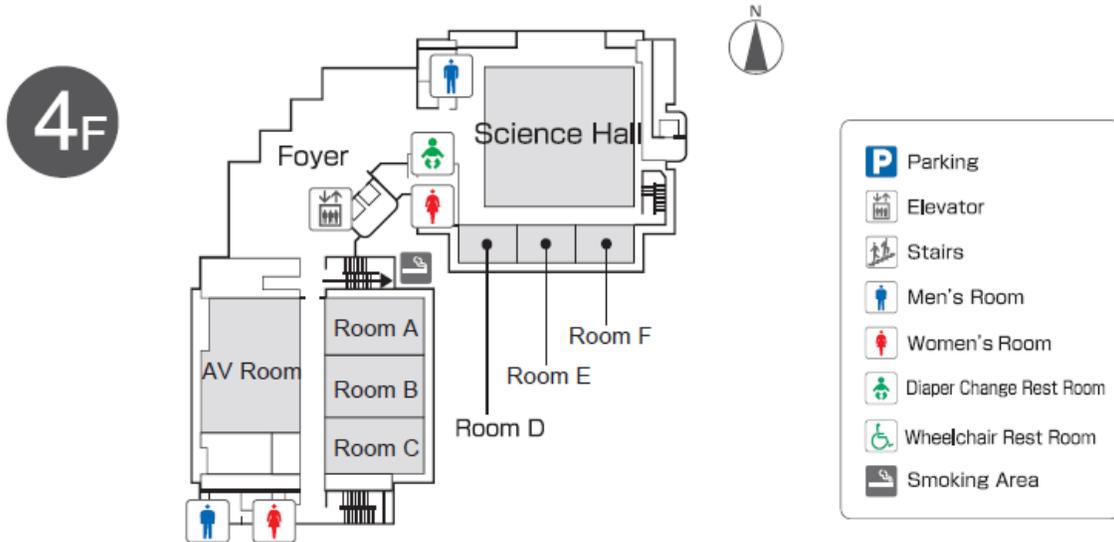
Located at the ancient capital of Japan, Kyoto Research Park (KRP) is set at a convenient spot. KRP has a wide variety of networks involving universities, industries, administrative institutes, public research institutes, and economic bodies. KRP offers various of conference rooms, offices, and labs.

The conference will be held at Hall 1 inside the research park. Hall 1 is near to JR Tanbaguchi-Eki.



Conference Venue Floor Plan [4F]

Floor Map of Bldg. #1



Oral Sessions – May 8

Management & Marketing I

Room B

09:00-10:30

Thursday, May 8

Session Chair: *Prof. Nattinee Thongdee*

ICSSAM-439

Brand China's Identity and Reputation

Thomas Chiang Blair

Southern Taiwan University of Science and Technology

ICSSAM-592

The Impact of Strategic Corporate Social Responsibility on Operating Performance: An Investigation Using Data Envelopment Analysis

Dominique Aubert

BINUS Business School

Razafindrambinina

Annisa Sabran

BINUS Business School

ICSSAM-600

Tourism Interpretation Management in Silk Village Cultural Heritage Site: A case of silk villages in "NAKHONCHAIBURIN" South-Northeastern Region, Thailand

Nattinee Thongdee

Nakhon Ratchasima Rajabhat University

ICSSAM-603

Consumer Attitude toward Self-Service Technology: Multiple Media Kiosk in Taiwan

Shih-Hao Wu

Commerce Development Research Institute

Huang-Chi Lin

Commerce Development Research Institute

Ruo-Ying Shih

Commerce Development Research Institute

ICSSAM-614

Examining the Relationship between Task Uncertainty and Work Stress: the Moderating Effects of Active Procrastination

Mu Yi Chen

Yuan Ze University

Yueh Ysen Lin

Yuan Ze University

ICSSAM-701

The Influences of Social Network on the Opinion Leaders : the Case of Pay Applications

Yi-Fen Chen

Chung Yuan Christian University

Yu-Fu An

Chung Yuan Christian University

ICSSAM-592
The Impact of Strategic Corporate Social Responsibility on Operating Performance: An Investigation Using Data Envelopment Analysis

Dominique Aubert Razafindrabinina

Binus Business School, School of Accounting, Bina Nusantara University – Jakarta, Indonesia
dominique@binus.edu

Annisa Sabran

Marketing Management, Prasetya Mulya Business School – Jakarta, Indonesia
annisa.sabran@hotmail.com

Abstract

Facing the growing trend of Corporate Social Responsibility (CSR), businesses are struggling to comply and maximize on the issue. Do firms strategize CSR to improve their operating performance? The purpose of this thesis is to investigate the relationship between strategic Corporate Social Responsibility including its individual elements and operating performance. The study uses annual reports of financial and non financial publicly listed companies in Jakarta Stock Index. Global Reporting Index framework was applied for the content analysis to calculate the aggregate score for CSR. Data Envelopment Analysis as one of the latest methods is conducted for the research. For both groups, the correlation results reveal that there is no significant impact between CSR and operating performance. However, different results were obtained when the elements of strategic CSR were investigated individually. Only for financial companies, operating performance is positively correlated with Environment and Product Responsibility and negatively with Labor Practice. For the regression results, the non financial companies seem not to strategize on their CSR program. Their CSR and its elements showed no significant impact on their financial performance. The findings of the financial group of companies are mixed. Their CSR has no impact on operating performance however its elements namely Human Rights and Product Responsibility positively affect operating performance. It seems that Indonesian publicly listed companies are neither fully committed in implementing nor strategizing their CSR plans. The absence of significant impact of strategic CSR among non financial companies might be because they consider it as operating costs since they have to do it by the law.

Keywords: *Strategic CSR, Corporate Social Responsibility, Operating Performance, Data Envelopment Analysis, Indonesia, GRI, Content Analysis*

1. Introduction

A firm's decisions should be congruent with the interests of various stakeholders within and outside the company including workers, customers, suppliers, non-governmental organizations, the local community, society and the environment (Huang, 2010). To fulfil demands of different stakeholders, corporate social responsibility (CSR) is used as a legitimate tool for corporate strategy (Susanto, 2008). The product of CSR reporting is a holistic view of the company that allows the appreciation of creation of value that can both harm or help the larger system (Leduc, 2011).

The World Business Council for Sustainable Development describes sustainable development as: “continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large”. The statement is consistent with Oeyono et al. (2011) and Elkington’s views on the three pillars of the sustainable development which includes the consideration of economic, social and environmental aspect, that is the Triple Bottom Line approach to sustainability. The trend in corporate strategy has shifted from a narrow perspective of maximizing shareholder value at any cost, to a broader objective of considering social and environmental values in economic decisions (Welford, 2004).

2. Theoretical Framework

Business for Social Responsibility states that CSR is: “achieving commercial success in ways that honour ethical values and respect people, communities and the natural environment.”

In accordance with a strategic advisory group on CSR, the International Organization for Standardization defines CSR as “*Corporate social responsibility is a balanced approach for organizations to address economic, social and environmental issues in a way that aims to benefit people, communities and society*” (Leonard & McAdam, 2003). According to Elkington’s view, the triple bottom line concept of sustainability is social, economic and environmental elements (Deegan, 2009).

The following theories used in this research explain why companies choose to engage in CSR activities. Stakeholder Theory and Legitimacy Theory is included to show how both of the theories in practice are interrelated and overlapping, while Institutional Theory is also included as it is an extension of both the Stakeholder and Legitimacy theory (Deegan, 2009).

Ethical branch of Stakeholder Theory states that all stakeholders have an intrinsic right to be treated fairly by an organization, since the affect of the organization on the life of a stakeholder should be what determines the organization’s responsibilities, instead of the stakeholder’s economic power on the organization (Deegan, 2009). The *Managerial Branch* of Stakeholder Theory states that corporate management have a higher tendency to attend to the expectations of powerful stakeholders (Deegan, 2009).

Legitimacy Theory states that organizations regularly seek to make sure they are perceived as operating adhering to the bounds and norms of their respective societies (Deegan, 2009). Deegan (2009) further asserts that bounds and norms are not fixed, but go through continuous changes. The legitimacy theory relies on the notion of the credibility of a company, which depends on corporate expertise, corporate trustworthiness and corporate likability (Kotler & Keller, 2009).

The research uses Global Reporting Initiative (GRI) to measure CSR since it serves as a generally accepted reporting framework for the organization’s economic, environmental and social performance. It is designed to be utilized by organizations of any size, sector or location. Furthermore, the framework is agreed among a wide range of stakeholders for an indicator of sustainability performance with a diverse range of stakeholders considered: business, labour, non-governmental organizations, investors and accountants.

In this study, the profitability ratio Return on Asset (ROA) is defined as a measure of a firm’s earning ability and indicator for operating performance. The higher the figure of ROA indicates a higher efficiency of the firm to produce more income from the assets they own (Gibson, 2009).

Belu and Manescu (2009) suggest that operating performance is determined by several factors including the firm's size, leverage, capital intensity, retained earnings, sales, price-to-book ratio and dividends-to-book ratio. The study by Belu and Manescu follows the previous study findings on 2007 conducted by Manescu and Starica where the determinants are comprised of the same factors.

3. Research Methodology

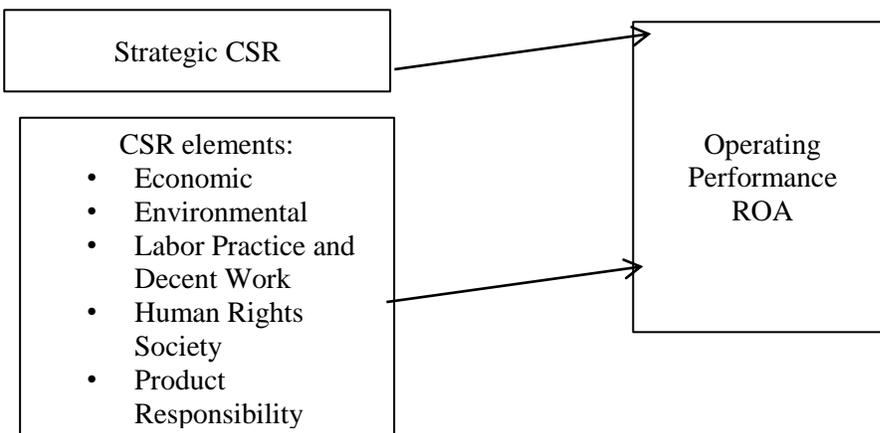
CSR has played a greater role in a company's performance from an altruistic perspective of conducting morally sound practices to becoming a strategic plan to enhance a company's value and operating performance. Assuming the various findings from research that revealed strategic decisions in CSR resulted in a positive relationship with company's performance (Baron, 2005) (Belu & Manescu, 2009) (Boesso & Michelin, 2010) (Hine & Preuss, 2009) (Heal, 2004) (Quairell-Lanoizelée, 2011), the author creates an initial hypothesis based on the findings of the studies. Further, other researches also promote the belief that if perceived benefits in engaging in CSR is higher than the costs, implying strategic form of CSR, studies show that companies will forgo short-term economic gain to reap higher amount of benefits in the long-run (Siegal & Paul, 2006) (Ioannou & Serafeim, 2009). Using the information gathered from past research conducted in the field of strategic CSR and operating performance, the initial hypothesis is created:

H₁: Strategic CSR positively affects operating performance.

A second hypothesis is also included in this research in order to determine further the relationship between CSR and operating performance. The hypothesis is formulated to understand which elements of CSR have the greatest impact on operating performance:

H₂: All CSR elements positively affect operating performance.

Conceptual Map of Research



The author used annual reports of publicly listed companies in IDX that conducted CSR in 2008-2010 as the sample. Due to differences in regulations the sample is divided into two groups: financial companies and non-financial companies. The division will allow a meaningful way to interpret the findings since they are subject to different laws and regulations.

To properly assess the indicators of CSR, the content analysis method is adopted in the research by examining the annual reports of companies using the GRI framework: Economic (ECO), Environmental (ENV), Labour Practices (LA), Human Rights (HR), Society (SOC), Product Responsibility (PR). The research uses frequency and word count as a method of the content

analysis. The word count method enables less room for subjectivity and filters conspicuous intentions of CSR report writers (Nuzula and Kato, 2010).

The author utilized Data Envelopment Analysis (DEA) Model and Linear Programming Model to analyze the strategic impact of CSR. DEA is a non-parametric Linear Programming technique to calculate the relative efficiency of a comparative ratio of outputs to inputs for every decision-making unit such as firm (Oberholzer & Prinsloo, 2011). The purpose of DEA is to create an index score relative to the other units of CSR performance. Thus, the ratio obtained is the base for the CSR index used as a dependent variable in the model. The efficiency score obtained in DEA will be used to measure CSR, and the weights generated will be used as the measure for each individual CSR element.

$$\begin{aligned} & \max \theta y^{ij} \\ & \text{subject to, } \theta y^{ij} \leq \sum_k \lambda_k y^{ik}, \quad i=1, \dots, 6 \\ & \lambda_k \geq 0, \quad k = 1, \dots, j, \dots, N \\ & \sum_k \lambda_k = 1 \end{aligned}$$

The optimal set of weights is company specific and will favour dimensions where company performance is better as a result of the business strategy employed by the manager. Furthermore, DEA is able to identify which elements of CSR the company should improve on due to the minimum CSR engagement in the area (Belu & Manescu, 2009). The use of DEA in strategic CSR means that managers can select best which activity should reflect the companies' interest in their decision-making process.

In the construction of CSR indexes, y is assumed to be the CSR scores as measured through the content analysis provided by the GRI framework. The number of firms in the sample is represented by $j=1 \dots N$. The CSR dimension is measured by i , which divides CSR into six categories: Economic performance, Environmental, Labor Practices, Human Rights, Society and Product Responsibility. K indexes the firm under scrutiny and λ_k represents the assigned weights of each dimension. The model of DEA is based on Belu and Manescu's (2009) model.

Numerous researches use ROA as an indicator of operating performance (Burja, 2011; Dooley & Lerner, 2004; Karagiorgos, 2011; Ashok & Kunal, 2003; Bauwhede, 2009; Belu & Manescu, 2009; Ivan, 1999). ROA captures a firms' ability to utilize assets efficiently, reflects general profitability of a firm and is a ratio that is often used for analysis by firms. Furthermore, it is free from short-term consideration of its owners regarding the size of the capital.

$$\text{ROA} = \text{Earnings Before Interest and Taxes} / \text{Average assets}$$

The research includes commonly used control variables when analyzing operating performance determinants (Nugent, 1998) (Wernerfelt & Hansen, 1998; Belu & Manescu, 2009; Spanos et al., 2004; Capon et al., 1990; Ashok & Kunal, 2003; Bauwhede, 2009). The control variables in the research are as follows:

Table 3.1: Control Variables

Control Variable	Meaning	Formulae
SIZE	Size	Natural Logarithm of Assets (2)
LEV	Leverage	Total liabilities/Shareholder Equity (3)
PTB	Price-to-book ratio	Market Value / Book Value (4)
RE	Retained Earning	Retained Earning (5)
CI	Capital Intensity	Capital Expenditure / Fixed Assets (6)
GRO	Firm's Growth	2 year percentage change in sales (7)
DY	Dividends-to-Book ratio	Dividends Paid / Book Value (8)

This paper includes a one year lag between CSR and ROA to ensure that the data are contemporaneous. That is, the CSR in year t will be reflected on ROA in year t+1 because it takes time for company's CSR engagement to reflect in the performance, since stakeholders will only know what CSR strategy is employed by the company after the annual report is published. Data will be analyzed using descriptive statistics, correlation analysis and multi-regression analysis. The models used in the research are as follows:

$$ROA_{t+1} = \alpha + ROA_t + \beta_1 CSR_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 PBV_{it} + \beta_5 RE_{it} + \beta_6 CI_{it} + \beta_7 GRO_{it} + DY_{it} + \varepsilon \quad (1)$$

$$ROA_{t+1} = \alpha + ROA_t + \beta_1 ECO_{it} + \beta_1 ENV_{it} + \beta_1 LA_{it} + \beta_1 HR_{it} + \beta SOC_{it} + \beta PR_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 PBV_{it} + \beta_5 RE_{it} + \beta_6 CI_{it} + \beta_7 GRO_{it} + DY_{it} + \varepsilon \quad (2)$$

4. Findings and Discussion

4.1 Descriptive Statistics

The justification of the lack of engagement CSR in certain companies can be explained by the view that investment in CSR is compromising the shareholder's value and profitability (Arx & Ziegler, 2009) (Valor, 2007) (Friedman, 1970). High CSR variation can be due to factors like differences in company's size, industry, corporate culture, stakeholder demands and past historical involvement in CSR (Tsoutsoura, 2004). Further, another explanation can be due to returns gained are insignificant compared to the costs incurred (Ioannou & Serafeim, 2009) explaining the companies resistance to engage in certain CSR elements. Moreover, companies might choose to only focus on certain social issues as it is the one that impacts the company the most and is strategic for them to do so to enhance firm's competitive advantage (Boesso & Michelin, 2010).

The high weight of the element Human Rights can be explained by the need to manage reputational risks related to human rights violation by publishing annual reports on social and environmental performance (Ioannou & Serafeim, 2011). To avoid threats to legitimacy, companies have to avoid incidents experienced by Levi Strauss and Freeport that caused rejection among human rights group (Kemp, 2001). This problem becomes more apparent in companies with numerous laws and cases receiving higher attention from the society to make engaging in CSR more explicit, especially human rights cases (Waagstein, 2011).

The second and third most engaged on average by the companies is Product Responsibility and Environmental elements of CSR. Product responsibility is one of the highest CSR engaged which is in line with Siregar and Bachtiar's (2010) research explaining that disclosure in product is directly related with economic benefit as it will gain further revenue for the firm. Engaging in

environmental CSR activities is explained by the view of Heslin and Ochoa (2008) that business leaders are increasingly concerned in regard to how companies can address environmental and social challenges while reaping benefits. Moreover, a study by United Nations Environmental Program revealed that conducting CSR is due to competitive pressure, gaining competitive advantage and seeking legitimacy (Nikolaev & Bicho, 2011).

4.2 Correlation Test

Financial companies

No correlation between strategic CSR and ROA for financial companies can be due to various factors. According to the stakeholder theory, since the primary stakeholder is the shareholders, companies decisions will be congruent with the shareholders' needs. Shareholders in Indonesia might not put sustainability performance as an important factor in investing as opposed to profitability. However some of CSR elements are correlated with ROA. Using the legitimacy theory, it can be understood that companies do not need to retain or gain legitimacy since financial companies may already possess the quality or do not need to engage in social and environmental activities because they do not commit excessive destruction. In accordance with the institutional theory, financial companies follow the trend in the industry. Since most companies engagement of CSR is not very high and there is no regulation pressure, other companies will mimic the trend.

The positive correlation of ROA with Environment and Product Responsibility are in line with the findings of Nikolaev and Bicho (2011) and Siregar & Bachtiar, (2010) respectively. Negative correlation between Labour Practices can be explained by the information disclosed regarding the CSR activities. The information regarding occupational health, occupational safety, equal opportunities and diversity might be conflicting with societal expectations. When the minimum expectation is not met, it can drive away consumers (European Commission, 2008), further, today's investors place importance on social concerns as well (Nuzula & Kato, 2010). In addition, since companies Labour Practices is also related with training, companies might invest more in training programmes in order to improve the intellectual capital of human resources due to higher benefit in the long term. When companies have more training programmes, they might sacrifice short-term performance to reap higher benefits in the future.

Non-financial companies

The absence of correlation between strategic CSR and ROA for Non-financial companies is explained by several reasons. From the stakeholder theory perspective, companies may not commit to CSR because of the lack of strong pressure from shareholders, environmentalist and consumers to do social and environmental performance. The findings indicate that the legitimacy is already sufficient, thus engagement in CSR will not necessarily increase operating performance. According to the institutional theory, company's behavior is a sign of coercive political pressure and mimic industrial trends. The trend is to focus less on CSR and deviation of performance will result in reduced profitability (Deegan, 2009) due to diverting profit to perceived unnecessary investments.

Non-financial companies do not have a correlation with elements of strategic CSR can be explained by several reasons. Considering the period of 2008 and 2009 companies is still reviving from the economic crisis, companies might allocate their limited funding to more important elements other than environment or social issues. This proves to be true in developing countries where economic benefit will be prioritized compared to environmental reasons (The

Economist, 2001) by putting corporate interest and growth first (The Guardian, 2008). Moreover, companies do not engage in CSR practices can indicate either the society do not expect companies to conduct extra responsibility rather than their economic responsibility.

4.3 Multiple Regression Test

All the remaining values of VIF of the models for both financial and non-financial companies are less than 10, therefore it can be concluded that there is no multicollinearity in both the models and meaningful analysis and interpretation of statistical data can be conducted.

Financial companies

This group shows a lack of engagement in CSR. However, those companies are engaged in strategic CSR since they choose to focus only on certain elements of CSR. This is in agreement with Porter and Kramer's view which is about making choices on which social issues to focus on since it is aimed to improve a firm's competitive edge (Boesso & Michelon, 2010). The result in financial companies sample can be explained due to altruistic motive as opposed to strategic motives, this is in line with past studies by Aupperle, Carrol and Hatfield (Tsoutsoura, 2004). Altruistic motive as explained by Lantos and Cooke (2003) is related with philanthropic activities which can be because of corporate communication, choosing a donation cause that is the most popular as opposed to the most urgent ones; donations may also be symbolic as opposed to doing good due to the high amount of publicity in advertising cost as compared to the size of the donation and finally, the entity's chance of obtaining tax breaks (Valor, 2007).

Further, since the sample consists of **non-financial** companies, another explanation can be due to the mandatory CSR laws enacted by the Indonesian government, Company Act No. 40 year 2007 (Siregar & Bachtiar, 2010). Companies in mining and agricultural industries must conduct CSR, otherwise sanctions will be given. This means CSR is not done to gain higher profitability or because of shareholder and consumer's expectations, but due to possible lawsuits and penalties if the companies in mining and agricultural industries fail to conduct CSR.

Non - financial companies

Strategic CSR and ROA has no significant relationship indicating that companies do not engage in strategic CSR, instead do altruistic form of CSR, that is committing to philanthropic responsibilities (Lantos & Cooke, 2003). This result is supported by Tsoutsoura (2004), who proved that there is no relationship between strategic CSR and company's operating performance. The lack of significant relationship could also be explained by how CSR is perceived by Indonesian companies. They do not believe that engaging in CSR will result in long-term benefit or higher profit, improved regulatory protection or increased consumer satisfaction.

The trend in engaging with human rights and product responsibility is also seen in Australia where four banking companies are in the top 10 of compliance with GRI in relation with environment, labour and human rights (Khan, 2010); showing that banking industries may also place importance on environmental and social issues.

5. Conclusion

This research examines the relationship between strategic CSR and operating performance using Data Envelopment Analysis in all IDX companies in the year 2008-2010. DEA allows the construction of efficiency score and weights resulting in an aggregate measure of CSR that favours the elements the company possess a competitive advantage in, making the calculation of strategic CSR possible.

From correlation analysis, in financial companies and non financial companies, strategic CSR has no correlation with ROA. When broken down to elements, financial companies have a positive correlation with Environment and Product Responsibility, while Labour Practice is negative and the rest of the elements have no significant correlation. Non-financial companies no significant correlation with any CSR elements.

From the regression analysis, no significant relationship exists between strategic CSR and operating performance in both financial and non-financial companies. If CSR is broken down to elements, in financial companies, Human Rights and Product Responsibility has a positive relationship while in non-financial companies no elements have a significant relationship.

There are several limitations for this research. First, missing annual reports which were not available for publicly listed companies both in IDX and the company's website. This reduced the number of sample, which could have been incorporated in the study. Second, although there are various researches in Indonesia regarding CSR and corporate performance, there are very few studies conducted regarding strategic CSR and even less when relating to the individual elements of CSR. Third, the result of this research is only applicable to Indonesian companies, the different regulation, culture and society's expectation might have a different outcome when investigating the relationship between strategic CSR and operating performance in other countries. This is especially true in European countries that put emphasis on environmental and social activities.

REFERENCES

- Adams, C.A. (2004). The ethical, social and environmental reporting-performance portrayal gap. *Accounting, Auditing & Accountability Journal*, 17(5), 731-757. Retrieved from ProQuest Education Journal Database.
- Arx, U., & Ziegler, A. (2009). The Effect of CSR on Stock Performance: New Evidence for the USA and Europe. (Working Paper No.85). Retrieved from Social Science Research Network.
- Ashok, A., & Kunal, B. (2003). Strategic Flexibility and Firm Performance: The Case of US Based Transnational Corporations. *Global Journal of Flexible Systems Management*, 4(1), 1-8. Retrieved from ProQuest Education Journal Database.
- Baron, D.P. (2005). Corporate social responsibility and social entrepreneurship. (Working Paper No.1916). Retrieved from Social Science Research Network.
- Bauwhede, H.V. (2009). On the relation between corporate governance compliance and operating performance. *Accounting and Business Research*, 39(5), 497-513. Retrieved from Proquest Journal of Education.
- Belu, C. & Manescu, C. (2009). Strategic Corporate Social Responsibility and Economics Performance. (Working Paper No. 362). Retrieved from Scandinavian Working Papers in Economics: <http://swopec.hhs.se/gunwpe/abs/gunwpe0362.htm>
- Boesso, G., & Michelon, G. (2010). The effects of stakeholder prioritization on corporate financial performance: an empirical investigation. *International Journal of Management*, 27(3), 470-496. Retrieved from ProQuest Education Journal Database.
- Burja, C. (2011). Factors influencing the company's profitability. *Annales Universitatis Apulensis Series Oeconomica*, 13(2), 215-224. Retrieved from ProQuest Education Journal Database.
- Capon, N., Farley, J.U., & Hoenig, S. (1990). Determinants of financial performance: a meta-analysis. *Management Science*, 36(10), 1143-1160. Retrieved from ProQuest

Education Journal Database.

- Deegan, C. (2009). *Financial Accounting Theory*. New South Wales, Australia: McGraw-Hill.
- Dessler, G., & Tan, C.H. (2009). *Human Resource Management*. Singapore, Singapore: Pearson Prentice Hall.
- DiMaggio, P.J. & Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 146-60. Retrieved from Mendeley.
- Dooley, R.S., & Lerner, L.D. (1994). Pollution, profits, and stakeholders: The constraining effect of economic performance on CEO concern with stakeholder expectations. *Journal of Business Ethics*, 13(9), 701-712. Retrieved from ProQuest Education Journal Database.
- Friedman, M. (1970, 13 September), The Social Responsibility of Business is to increase its Profits, *The New York Times Magazine*.
- Gibson, C. H. (2009). *Financial Statement Analysis*. Connecticut, USA: South-Western Cengage Learning
- Golja, T., & Nižić, M.K. (2010). Corporate social responsibility in tourism - the most popular tourism destinations in Croatia: Comparative Analysis. *Management*, 15(2), 107-121. Retrieved from ProQuest Education Journal Database.
- Heal, G. (2004). Corporate social responsibility – an economic and financial framework. (Working Paper). Retrieved from Social Science Research Network.
- Hine, J.A.H.S., & Preuss, L. (2009). “Society is out there, organisation is in here”: on the perceptions of corporate social responsibility held by different managerial groups. *Journal of Business Ethics*, 88, 381–393. Retrieved from ProQuest Education Journal Database.
- Huang, C.J. (2010). Corporate governance, corporate social responsibility and corporate performance. *Journal of Management & Organization*, 16(5), 641–655. Retrieved from ProQuest Education Journal Database.
- Indonesia Stock Exchange. (2010). *IDX Fact Book 2010*. Retrieved from: <http://www.idx.co.id/Portals/0/StaticData/Publication/FactBook/FileDownload/Fact%20Book%202010.pdf>
- Ioannou, I., & Serafeim, G. (2009). The impact of corporate social responsibility on investment recommendations. (Working Paper). Retrieved from Social Science Research Network.
- Jackson, G., & Apostolakou, A. (2010). Corporate Social Responsibility in Western Europe: An Institutional Mirror or Substitute? *Journal of Business Ethics*, 94, 371–394. Retrieved from ProQuest Education Journal Database.
- Karagiorgos, T. (2010). Corporate Social Responsibility and Financial Performance: An Empirical Analysis on Greek Companies. *European Research Studies*, 13(4), 85-110. Retrieved from ProQuest Education Journal Database.
- Khan, M.H.U.Z. (2010). The effect of corporate governance elements on CSR reporting. *International Journal of Law and Management* 52(2), 82-109. Retrieved from ProQuest Education Journal Database.
- Kotler, P., & Keller, K.L. (2009). *A Framework for Marketing Management*. New Jersey, USA: Pearson International Edition.
- Lantos, G.P., & Cooke, S. (2003). Corporate socialism unethically masquerades as "CSR". *Strategic Direction*, 19(6), 31-36. Retrieved from Proquest Journal of Education.
- Leduc, L. (2011, August). Measuring social responsibility. *CA Magazine*. Retrieved from: <http://www.camagazine.com/archives/printedition/2001/aug/regulars/camagazine26209.aspx>

- Leonard, D. & McAdam, R. (2003). Corporate social responsibility. *Quality Progress*, 36(10), 27-32. Retrieved from ProQuest Education Journal Database.
- Mitchell, R.B., Agle, B., & Wood, D. (1997). Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *The Academy of Management Review*, 22(4), 853-885. Retrieved from ProQuest Education Journal Database.
- Nikolaeva, R., & Bicho, M. (2011). The role of institutional and reputational factors in the voluntary adoption of corporate social responsibility reporting standards. *J. of the Acad. Mark. Sci.*, 39, 136–157. Retrieved from Proquest Journal of Education
- Nugent, J. (1998). Corporate profitability in Ireland: overview and determinants. *Journal of the Statistical and Social Inquiry Society of Ireland* 27, 1, 35-82. Retrieved from ProQuest Education Journal Database.
- Nuzula, N., & Kato, M. (2010). Quantitative Relations between Corporate Social Responsibility Activity and Share Price: Introducing “Nila”. Retrieved from: Research Journal of International Studies.
- Oberholzer, M., & Prinsloo, T.F. (2011). Comparing different methods to determine the relationship between environmental performance and economic performance. *Studia UBB, Oeconomica*, 56(2), 3-15. Retrieved from ProQuest Education Journal Database.
- Oeyono, J., Samy, M., & Bampton, R. (2011). An examination of corporate social responsibility and financial performance. *Journal of Global Responsibility*, 2(1), 100-112. doi: 10.1108/20412561111128555
- Quairell-Lanoizelée, F. (2011). Are competition and corporate social responsibility compatible?. *Society and Business Review*, 6(1), 77-98. Retrieved from ProQuest Education Journal Database.
- Siegel, D.S. & Paul, C.J.M. (2006). Corporate social responsibility and economic performance. *J Prod Anal* 26, 207–211. Retrieved from ProQuest Education Journal Database.
- Siregar, S., & Bachtiar, Y. (2010). Corporate social reporting: Empirical evidence from Indonesia Stock Exchange. *International Journal of Islamic and Middle Eastern Finance and Management*, 3(3), 241-252. Doi: 10.1108/17538391011072435
- Spanos, Y.E., Zaralis, G., & Lioukas, S. (2004). Strategy and industry effects on profitability: evidence from Greece. *Strategic Management Journal*, 25(2), 139-165. Retrieved from ProQuest Education Journal Database.
- Sutanto, P. (2008). Social disclosure rating system for assessing firms’ CSR reports. *Corporate Communications: An International Journal*, 14(1), 34-48. doi:10.1108/13563280910931063
- Tsoutsoura, M. (2004). Corporate social responsibility and financial performance. *UC Berkeley: Centre for Responsible Business*. Retrieved from: <http://www.escholarship.org/uc/item/111799p2>
- Valor, C. (2007). A global strategic plan for corporate philanthropy. *Corporate Communications: An International Journal*, 12, 3, 280-297. Retrieved from ProQuest Education Journal Database.
- Waagstein, P.R. (2011). The Mandatory Corporate Social Responsibility in Indonesia: Problems and Implications. *Journal of Business Ethics*, 98, 455-466. doi: 10.1007/s10551-010-0587
- Welford, R. (2004). Corporate Social Responsibility in Europe and Asia: Critical Elements and Best Practice. *The Journal of Corporate Citizenship*, 13, 31. Retrieved from Proquest Education Journals database.

- Wernefelt, B. & Hansen, G. S. (1998). Determinants of firm performance: the relative importance of economic and organizational factors, *Strategic Management Journal* 10(5), 399 -352. Retrieved from Proquest Education Journals database.
- White, A.L. (1999). Sustainability and the accountable corporation. *Environment*, 41(8), 30-44. Retrieved from Proquest Journal of Education

APPENDICES

Descriptive Statistic

Table 5.1: Descriptive Statistics for Financial Companies

	N	Minimum	Maximum	Mean	Std. Deviation
ROA _{t+1}	78	-.041763	.418581	.048538	.074734642
ROA	78	-.048387	.418581	.04815903	.083714837
CSR	78	.015152	1.000000	.38143459	.349557755
SIZE	78	.076961	13.016503	8.29495758	2.642349953
LEV	78	-.979623	15.188805	5.32621531	4.951088187
PBV	78	.090000	6.070000	1.35897436	1.056632226
RE (in billion)	78	-2772.181	24442.187	2043.32239744	4717.642659449
CI	78	2.576079	5180.000000	146.49918872	692.849579613
GRO	78	-95.500000	2122.222222	40.35393783	241.535359450
DY	78	.000000	.954000	.04697179	.117575068
Valid N (listwise)	78				

**Table 5.2: Descriptive Statistics for Non-financial companies
CSR**

	N	Minimum	Maximum	Mean	Std. Deviation
ROAt+1	24 3	-.152542	.589707	.124124	.119311739
ROA	24 3	-.135338	.589707	.122825	.119861616
CSR	24 3	.015874	1.000000	.634285	.347592484
SIZE	24 3	4.127134	11.633877	8.168995	1.506064184
LEV	24 3	-1.579949	28.295455	1.806436	2.582250355
PBV	24 3	-.070000	31.120000	2.095021	3.138696810
RE	24 3	-27746.281	44730.000	1869.8223 14	7869.724927 317
CI	24 3	-4.356828	30313.008 130	383.71549 1	3192.503036 106
GRO	24 3	-82.395732	5337.0919 88	54.767743	379.1233182 02
DY	24 3	.000000	1.179000	.057382	.140320799
Valid N (listwise)	24 3				

Table 5.3: Descriptive Statistics for Financial Companies CSR elements

	N	Minimum	Maximum	Mean	Std. Deviation
ECO	78	.000000	.006944	.00151637	.002372514
ENV	78	.000000	.109827	.00583944	.016924476
LA	78	.000000	.007576	.00236101	.003087119
HR	78	.000000	.200000	.01624892	.045749936
SOC	78	.000000	.006993	.00147421	.002401900
PR	78	.000000	.045455	.00331854	.009419783
Valid N (listwise)	78				

Table 5.4: Descriptive Statistics for Non-financial companies CSR elements

	N	Minimum	Maximum	Mean	Std. Deviation
ECO	243	.000000	.034483	.00426349	.006962854
ENV	243	.000000	.142857	.00940337	.025930685
LA	243	.000000	.026415	.00323641	.005992226
HR	243	.000000	1.00000	.11987423	.226147466
SOC	243	.000000	.062500	.00487340	.010249164
PR	243	.000000	.500000	.02226083	.069840686
Valid N (listwise)	243				

Correlation Test

Table 5.5: Correlation Test for Financial companies

	ROAt +1	RO A	CSR	SIZ E	LEV	PBV	RE	CI	GR O	DY
ROAt Pearson +1 Correlation	1	.920**	-.070	-.179	-.372**	-.031	-.128	-.100	-.052	.201
Sig. (2-tailed)		.000	.544	.117	.001	.786	.264	.386	.651	.078
N	78	78	78	78	78	78	78	78	78	78

Table 5.6: Correlation Test for Non-financial companies

	ROAt +1	ROA	CSR	SIZ E	LEV	PB V	RE	CI	GR O	DY
ROA Pearson t+1 Correlation	1	.856**	.060	.120	-.060	.261**	.069	.216**	-.047	.159*
Sig. (2-tailed)		.000	.354	.062	.354	.000	.286	.001	.469	.013
N	243	243	243	243	243	243	243	243	243	243

Table 5.7: Correlation Test for Financial companies, CSR elements

	ROA t+1	ROA	EC O	EN V	LA	HR	SO C	PR	SIZ E	LE V	PB V	RE	CI	GR O	DY
ROA Pearson t+1 Correlation	1	.920**	.088	.349**	-.250*	.029	-.079	.346**	-.179	-.372**	-.031	-.128	-.100	-.052	.201
Sig. (2-tailed)		.000	.446	.002	.027	.798	.490	.002	.117	.001	.786	.264	.386	.651	.078
N	78	78	78	78	78	78	78	78	78	78	78	78	78	78	78

Table 4.8: Correlation Test for Non-financial companies, CSR element

	ROA t+1	ROA	EC O	EN V	LA	HR	SO C	PR	SIZ E	LE V	PB V	RE	CI	GR O	DY
ROA Pearson At+1 Correlation	1	.860**	.097	-.034	.016	-.093	-.017	.036	-.119	-.021	.012	-.099	.229**	-.048	-.062
Sig. (2-tailed)		.000	.130	.597	.805	.150	.796	.574	.063	.744	.847	.125	.000	.452	.336
N	243	243	243	243	243	243	243	243	243	243	243	243	243	243	243

Multiple regression Test

Table 5.9: Model 1, Financial companies (N=81)		
Variables	VIF	Conclusion
ROA	1.427	No multicollinearity
CSR	2.280	No multicollinearity
SIZE	4.149	No multicollinearity
LEV	3.025	No multicollinearity
PBV	1.599	No multicollinearity
RE	1.915	No multicollinearity
CI	1.086	No multicollinearity
GRO	1.026	No multicollinearity
DY	1.077	No multicollinearity

Table 5.10: Model 1, Non-Financial companies (N=261)		
Variables	VIF	Conclusion
ROA	1.169	No multicollinearity
CSR	1.183	No multicollinearity
SIZE	1.386	No multicollinearity
LEV	1.061	No multicollinearity
PBV	1.448	No multicollinearity
RE	1.251	No multicollinearity
CI	1.106	No multicollinearity
GRO	1.027	No multicollinearity
DY	1.374	No multicollinearity

Table 5.11: Model 2, Financial companies (N=81)		
Variables	VIF	Conclusion
ROA	1.850	No multicollinearity
ECO	3.615	No multicollinearity
ENV	1.635	No multicollinearity
LA	5.281	No multicollinearity
HR	2.295	No multicollinearity
SOC	3.151	No multicollinearity
PR	1.976	No multicollinearity
SIZE	4.286	No multicollinearity
LEV	3.538	No multicollinearity
PBV	1.781	No multicollinearity
RE	2.780	No multicollinearity
CI	1.125	No multicollinearity
GRO	1.049	No multicollinearity
DY	1.110	No multicollinearity

Table 5.12: Model 2, Non-Financial companies (N=261)		
Variables	VIF	Conclusion
ROA _{t-1}	1.151	No multicollinearity
ECO	1.195	No multicollinearity
ENV	1.135	No multicollinearity
LA	1.098	No multicollinearity
HR	1.144	No multicollinearity
SOC	1.078	No multicollinearity
PR	1.157	No multicollinearity
SIZE	1.330	No multicollinearity
LEV	1.048	No multicollinearity
PBV	1.451	No multicollinearity
RE	1.325	No multicollinearity
CI	1.254	No multicollinearity
GRO	1.066	No multicollinearity
DY	1.405	No multicollinearity

Table 5.13: Regression results for Hypothesis 1, Financial companies

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.025	.016		1.529	.131
ROA	.834	.049	.934	16.952	.000
CSR	-.010	.015	-.046	-.655	.514
SIZE	-.001	.003	-.038	-.409	.684
LEV	.001	.001	.038	.474	.637
PBV	-.005	.004	-.071	-1.214	.229
RE	4.839E-7	.000	.031	.479	.634
CI	-2.906E-6	.000	-.027	-.561	.577
GRO	-4.466E-6	.000	-.014	-.309	.758
DY	-.004	.030	-.006	-.125	.901

a. Dependent Variable: ROAt+1

Adjusted R square: 0.836

ANOVA: .000^a

Table 5.14: Regression results for Hypothesis 1, Non-financial companies

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.013	.024		.560	.576
	ROA	.858	.035	.862	24.311	.000
	CSR	-.021	.012	-.060	-1.686	.093
	SIZE	.003	.003	.036	.931	.353
	LEV	-.003	.002	-.064	-1.881	.061
	PBV	.002	.002	.047	1.185	.237
	RE	-2.946E-7	.000	-.019	-.530	.597
	CI	-1.248E-6	.000	-.033	-.968	.334
	GRO	-2.887E-5	.000	-.092	-2.760	.006
	DY	-.008	.033	-.009	-.240	.810

a. Dependent Variable: ROAt+1

Adjusted R square: 0.74

ANOVA: .000^a

Table 5.15: Regression results for Hypothesis 2, Financial companies

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	.015	.019		.798	.428
	ROA	.796	.051	.891	15.694	.000
	ECO	1.415	2.500	.045	.566	.573
	ENV	.321	.236	.073	1.363	.178
	LA	3.689	2.322	.152	1.588	.117
	HR	.218	.103	.134	2.113	.039
	SOC	4.419	2.306	.142	1.917	.060
	PR	1.607	.466	.202	3.451	.001
	SIZE	-.003	.002	-.122	-1.406	.165
	LEV	4.699E-5	.001	.003	.040	.969
	PBV	-.005	.004	-.071	-1.266	.210
	RE	1.281E-6	.000	.081	1.161	.250
	CI	-3.356E-6	.000	-.031	-.703	.485
	GRO	2.883E-7	.000	.001	.022	.983
	DY	.003	.028	.005	.122	.903

a. Dependent Variable: ROAt+1

Adjusted R square: 0.866

ANOVA sig: .000^a

Table 5.16: Regression result for Hypothesis 2, Non-financial companies

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	.040	.028		1.457	.146
	ROA	.871	.035	.870	24.588	.000
	ECO	.929	.625	.054	1.486	.139
	ENV	.068	.164	.015	.414	.679
	LA	.756	.696	.038	1.086	.279
	HR	-.022	.019	-.042	-1.183	.238
	SOC	-.236	.403	-.020	-.586	.559
	PR	-.074	.061	-.043	-1.202	.231
	SIZE	-.003	.003	-.034	-.883	.378
	LEV	-.001	.002	-.023	-.695	.488
	PBV	-.002	.002	-.047	-1.189	.236
	RE	4.271E-7	.000	.028	.733	.464
	CI	-8.713E-7	.000	-.023	-.624	.533
	GRO	-4.954E-6	.000	-.016	-.456	.649
	DY	.011	.034	.012	.312	.755

a. Dependent Variable: ROAt+1

Adjusted R square: 0.737

ANOVA sig: .000^a

ICSSAM-600

Tourism Interpretation Management in Silk Village Cultural Heritage Site: A case of silk villages in “NAKHONCHAIBURIN” South-Northeastern Region, Thailand

Nattinee Thongdee

Tourism and Hospitality Department, Faculty of Management Science
Nakhon Ratchasima Rajabhat University 340 Suranarai Road, Nakhon Ratchasima Province,
Thailand 30000

Email address: nattineeoh@live.com

Abstract

This research aims to synthesize the intellectual of tourists' interpretation toward cultural heritage sites and to create a pattern of the interpretation of four silk villages in “NAKHON CHAI BU-RIN” areas. Subjects of quantitative data consisted of 1,600 Thai and 120 foreign tourists who had visited one of the four research target areas. Tourists' behavior and needs of tourism interpretation management were found in this research. The subjects of qualitative data comprised of local communities and stakeholders of the target areas. While some parts of the results showed that Thai and foreign tourists were different in their traveling behavior and needs of tourism interpretation management, other parts showed that they had some similar needs of the tourism interpretation management. Most of them were interested in the cultural heritage and local wisdom related to silk heritage, local wisdom scholars, silk making process demonstration, participation in the silk making processes and local festivals, ways of life, visiting silk museums, and the silk making process exhibitions. In conclusion, the four silk villages have the cultural value of their local wisdom regarding silk production where this intangible value can attract the tourists. Thus, the interpretation management of these silk villages should create the interpretation from intangible to tangible cultural heritage and should be impressive for the tourists as well as to give good experiences and knowledge to them.

Key word: Tourism interpretation management, Cultural tourism management, Tourism value added and local cultural identity conservation

1. Introduction

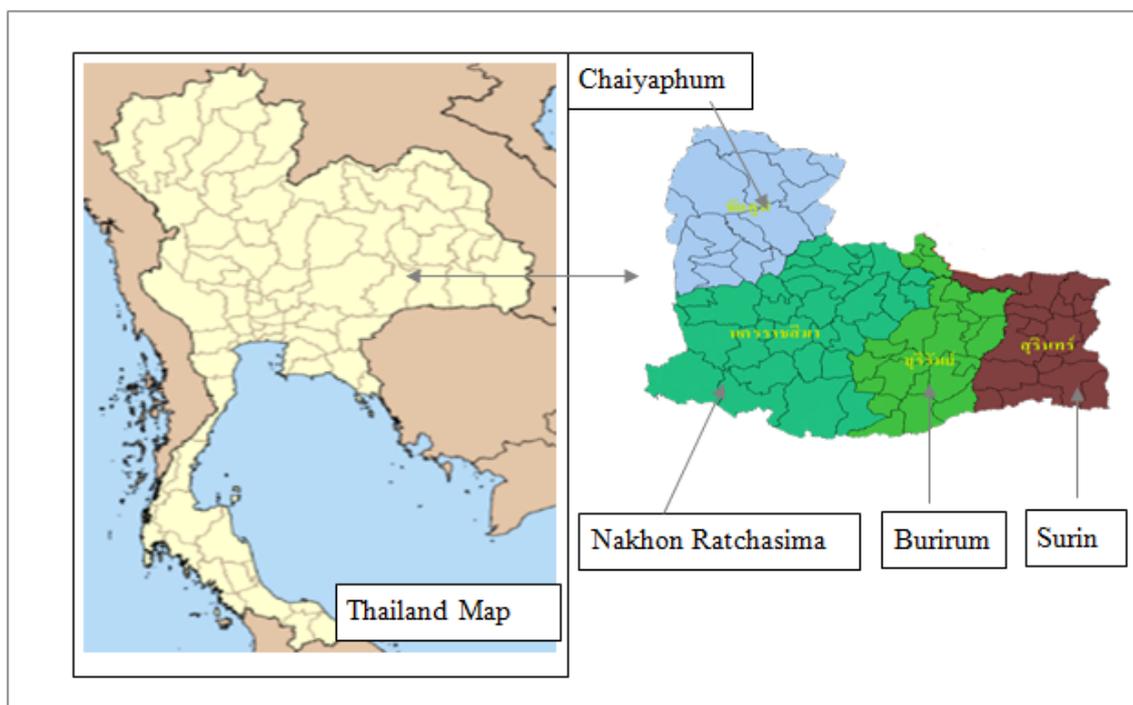
Tourism industry creates a major income for Thailand. In 2012, the tourism industry created 22,354 US dollar in total [1]. Traveling trend in Thailand was created by tourism campaign from the government that aimed to promote the country's economy. From the campaign, cultural tourism became famous among Thai and foreign tourists.

The term “NAKHON CHAI BU-RIN” comes from names of four provinces in the south-northeastern region of Thailand which are Nakhon Ratchasima, Chaiyaphum, Burirum, and Surin [2]. These four provinces are known as gateway to the south-northeastern region of Thailand, situated in Korat plateau – the prehistoric civilization area.

The significance of “NAKHON CHAI BU-RIN” is related to local wisdom of silk production. There are more than 200 silk villages in the area. In 2010, silk products generated about 900-1,000 million Baht from export and 3,000 million Baht from the tourists and buyers in the area [3]. Recently, silk industry became one of the strategic development plans of the four provinces. In 2010, the government provided a budget to develop silk value chain and the tourism development of the silk villages is a part of silk project development to promote cultural tourism destination of the south-northeastern region.

The cultural tourism is considered as sustainable tourism because of the usage of social resources to drive the tourism process in the community. The community will be strong and harmonious as the cultural tourism will create jobs and income. The migration into the city will become less and relationship among family members will be better. At the same time, the culture and the folk or ancient tradition will be restored.

Figure 1 : Map of NAKHONCHAI BURIN research target areas.



Interpretation is all about helping people appreciate something that you feel special and it refers to the full range of potential activities intended to public awareness and enhance understanding of cultural heritage site [4]. Beside this, Freeman Tilden described what is considered of

interpretation. There of three are particularly important. Interpretation should provoke, related, and reveal. Getting important to related to its audience is largely about good communication principle [5]. It can take various forms – it may involve walks or tour with a guide, publications, or panels at features of interest [6].

One way to educate visitors about the cultural heritage significance during their visit and correctly interpret their experience is to improve site interpretation. [5] UNESCO is aware of the importance their experience plays in site management and conservation [7]. Tourism interpretation is counted as an important tool for cultural preservation and natural conservation.

There are three contents which are important to implement. These include knowledge content, responsibility content and emotion content [8]. Results from relevant researches revealed that the most appropriated cultural interpretations, especially for intangible cultural heritage, are the interpretation of villagers, demonstrations, interpretation center and signs. The tourism interpretation aims not only to create impressive experiences but also to create understanding and pleasure of the tourists. The interpretation, consequently, has to be created to impress, and delight the tourists as well as to give good experiences and knowledge to them.

2. Objectives of the Research

1. To synthesize the intellectual of tourists' interpretation toward cultural heritage sites
2. To create a pattern of the interpretation of four silk villages in “NAKHON CHAI BU-RIN” areas

3. Definition of Terms

Tourism Interpretation is the translation or definition towards culture and environment in the silk village communities situated in NAKHON CHAI BU-RIN areas. So, visitors or tourists will know, understand and enjoy. Tourism interpretation is one of educational activities that attract the tourists to learn rather than compelling them. It is also used as a medium of the translation by giving relationship between surrounded environments as well as creating understanding and cognition among the tourists. Nevertheless, it depends on their interest and experiences as well as local identity preservation.

Cultural Tourism Management is a type of tourism based on cultural resources created by human. The cultural tourism in this study consisted of local wisdom in silk, agriculture, way of life, culinary, clothes, household, fine arts, language and literature, public health, local business and Thai traditional medicine.

4. Research Methodology

4.1 Theoretical frameworks and related literature

Researchers included theoretical frameworks related to tourism interpretation, cultural tourism that focuses on community participation in local wisdom and cultural resources management and the concept of sustainable cultural heritage preservation with tourism development. The aforementioned development was primarily derived from desires of the communities, consumers or tourists. Research mythology related to this development consisted of main concepts of sustainability of cultural and social resources in the research areas.

4.2 Samples

This research aims to synthesize the intellectual of tourists' interpretation toward cultural heritage sites and to create a pattern of the interpretation of four silk villages in "NAKHON CHAI BU-RIN" areas. The research was conducted in 2010 – 2011 and contained both quantitative and qualitative data. The subjects of quantitative data consisted of 1,600 Thai and 120 international tourists who visited one of the four research target areas. Tourist's behavior and needs of tourism interpretation management were found.

The subjects of qualitative data comprised of local communities and tourism stakeholders of the four research target areas. The tourism interpretation development and management in silk villages for tourism value added and local cultural identity conservation were found.

4.3 Study design

The study design was consisted of 4 stages including:

1. Collection and assessment of cultural significance of silk villages to identify vision, mission, strategy and goal about tourism capability in the communities such as cultural tourism resources, local wisdom, the intellectual related to tourism management as well as human resources. In-dept interview was used to stimulate the community members to take part in the heritage site information searching and ranking.
2. Survey tourist's behavior and needs of tourism interpretation management.
3. Development of the tourism interpretation management plan.
4. Interpretation evaluation.

4.4 Analyses

Data were collected from primary and secondary sources. The primary sources included survey, questionnaires and in-depth interviews of the stakeholders. Secondary sources consisted of information and documents from relevant data resources.

The statistical data analyses were reported in percentage, frequency, mean, standard deviation and content analysis.

5. Research Results

Research results can be divided to 3 parts, including 1) classification and assessment of cultural heritage at the silk villages 2) a study of tourists' needs on their tourism interpretation and 3) sequences of strengthening cultural tourism for the silk village.

Part 1: The researchers' classification and assessment of cultural heritage at the silk villages.

After discussion with the tourism networks in the target areas, the researchers could categorize the intellectual related to cultural heritage of the silk villages in NAKHON CHAI BU-RIN as follows;

1. Local wisdom on silk production 1.1 mulberry farming 1.2 silk worm racing selection 1.3 silk worm growing 1.4 living style of silk villagers
2. Local wisdom on industrial/ home economic issue 2.1 local food 2.2 local cooking
3. Local wisdom on fine arts 3.1 silk filature 3.2 silk dyeing 3.3 silk weaving
4. Others 4.1 virtue custom 4.2 the settlement of people 4.3 believes on spirit house 4.4 local tradition

Part 2: Research result of tourists' needs on their tourism interpretation

The results revealed that Thai and foreign tourists were different in traveling behavior and needs of tourism interpretation management within the silk villages. Interpretative information, interpretative pattern and interpretative media technique are for examples. Details of the results are as follows:

Most of Thai tourists were interested in interpretative information regarding cultural heritage and local wisdom related to silk cultural heritage, local wisdom scholars in silk production, folk tale, and history of the villages (Table A).

The tourism interpretative pattern can be divided into four categories: handicrafts, arts and cultures, exhibitions and architectures, and tourism services. For handicrafts category, most of subjects were interested in demonstration of the silk making process. Tourists participated in silk making processes such as silk weaving. They shopped silk products, and learned to produce the other handicrafts. The results also showed that the samples paid attention to arts and cultures category. They participated in events and local festivals, local ways of life, local performances, and ate local foods. For exhibitions and architectures category, the results revealed that samples desired to visit silk museums and silk making process exhibitions to learn about history of the communities. They also wanted to take photos at the silk villages'

landmark. For the last category, tourism services, the finding found the tourists would like tourism services and facilities such as restrooms, a tourism interpretative center, green zone recreation parks, maps, interpretative signs, foods and beverages service points, souvenir shops, home stays, services and routes for handicapped, and historical animation movie about the villages (Table B). For interpretative media technique, the result showed that most of Thai tourists needed interpretative signs, interpretative movie, the internet services and publications such as brochures, short movies, and animations (Table C). The result of tourist activities showed Thai tourists were interested in participating and visiting the silk villages especially in to learn cultural heritage of the local wisdom (Table D). The most appropriate traveling duration according to the Thai tourists was 1-2 hour(s) per a visit (Table E).

The majority of International tourists desired to know about cultural heritage and local wisdom regarding silk cultural heritage information, history and social information of village, general information of local community about culture and environment (Table A).

For tourism interpretative pattern within the handicrafts category, most of the samples were interested in silk making process demonstration. Additionally, they participated in silk making processes. They shopped silk products and learned to produce other handicrafts. For exhibit and architecture category, they preferred to visit silk museum and exhibition to learn about the community's history and to take photos at the silk villages' landmark. Regarding tourism services category (Table B), most of International tourists required a route map, a tourism interpretative center, local guides, interpretative signs, restrooms, short movies, the internet media, and publications such as magazines, short movies, and animations (Table C).

The result of tourist activities showed International tourist interested in participating and visiting the silk villages especially in cultural heritage of the local wisdom (Table D). They desired to visit the silk village about 1-2 hour(s) per visit. Besides, some of the samples stated that they would like to take a haft day trip (Table E).

Part 3: Sequences of strengthening interpretation management for the silk communities.

The researchers analyzed information received from the interview with villagers about the tourism interpretation to create marketing plan. The approachable communication channels are the communication of the villagers or local tour guide, booklets or travel guide, internet, website, animation, silk village VDO presentation, interpretation center, cultural show, silk local wisdom route and interpretation sign which is according to interested and needs of tourist.

6. Conclusion and Discussions

1. Tourism interpretation is counted as an important tool for cultural preservation. Results from relevant research revealed that the most appropriate cultural interpretations, especially for Intangible Cultural Heritage are the interpretation of the villagers, demonstration and booklets such as traveling guide and signs. Besides creating impressive experience, the tourism interpretation also aims to create understanding and pleasure for the tourists. Thus, it is important to analyze tourist's desires and traveling behavior of the individual tourist.

For the first stage of the interpreting plan, researchers need to collect useful and reliable data or knowledge, both tacit and explicit knowledge. This is relevant to a framework of Donluthai Kovatanakul that conducted a study on cultural interpretation through community tourism at Nonsela village, Phukeyaw district, Chaiyaphum Province [9] and Prakrobsiri Pakdeepinit [10]. Steps of the interpretation are searching and determining site physical objectives, collecting relevant information, planning the interpretation procedure from the intellectual, communication method, media and signs, creating interpretation activities and the integration of the tourism networks.

2. Cultural heritage and local wisdom preservation are considered as fundamental resources and can be divided into 2 types which are Tangible Cultural Heritage and Intangible Cultural Heritage. NAKHON CHAI BU-RIN area is rich in its culture and consists of over 200 silk villages. Thus, a goal of this research is to study about the cultural intellectual that can be improved and created tourism activities on the basis of cultural preservation. This is because the researchers believe that local wisdom and culture are valuable heritage and should be preserved by the current generations. The important preservation mechanism is the integration of concerned parties. The researchers had stimulated the community members to be proud of their communities and set up knowledge exchange channel that became learning centre among tourists, community members and concerned parties.

3. Community-Based Tourism (CBT) plays important roles and is expected to be tourism management for sustainable tourism for the communities. It is also expected to reduce communities' problems such as Pro-poor Tourism and Green Tourism. Many countries have used the community-based tourism, especially Thailand in the last two decades. Communities cannot be isolated and stand alone among changes of the society. It will be difficult for the communities with lack of "Social, Cultural and Manufacturing Assets" to compete with the outsiders [11]. This is especially significant for Thai society that mostly relies on the government. From researchers' viewpoint, although the community-based tourism can be a tool for sustainable tourism and community development, it can cause direct effects to the communities, especially weak communities.

Thus, it is very important to analyze efficiency and strengths of the communities as well as pay attention to the communities' needs. A basic analysis of the tourism interpretation and intellectual shows that it is important to pay attention to the communities for the community development and cultural preservation. Thus, it is needed to clarify the word "Community" and analyze problems of each community in order to link tourism and community development together.

7. Recommendations

1. Local administration organization should pay more attention on cultural heritage of their communities. This is because the cultural heritage could be exterminated and difficultly renewed. A process to raise cultural awareness of the community members would help the community development to be operated easier.
2. Cultural tourism promotion and development should pay attention on searching relevant information to attract the tourists. Nevertheless, the information has to be accurate, not refined.
3. Planning and development organizations should also pay more attention on tourism interpretation and understand that the interpretation does not mean only signs or symbols. Rather, the interpretation has to create impressive experiences, knowledge and pleasure for the tourists.

8. Acknowledgments

I thank four provincial governors, the director of tourism and sport officials and other government officials in these four areas for providing budgets and opportunity to carry out this research as well as leaders of the silk villages, local people and tourists. Also, I thank Juthatip Suttithev, Thanawat Kovitwanicha phan, Kamonthat Nuananan, Praitia Prensens, Warunee Damkratok, and Supaporn Yodthonglang for their great researcher staff. And special thank to Nakhon Ratchasima Rajabhat University for this opportunity to do this research.

9. Appendix

Table A :Descriptive statistic for *tourism interpretative information*

Item	Description	Thai Tourist		I n t e r n a t i o n a l t o u r i s t	
		Frequency	Percentage	Frequency	Percentage
1	Historical information of village	704	46.1	60	45.1
2	Local story telling	736	55.9	40	29.8
3	Village information	352	22.0	55	40.2
4	Architecture and vernacular	588	36.8	36	27.0
5	Cultural heritage and local wisdom related to silk cultural heritage	928	58.1	90	59.3
6	Local wisdom scholar in silk procedures	780	17.3	50	35.4
7	Tourism information	460	28.8	20	15.5

Table B :Descriptive statistic for *tourism interpretative pattern*

Item	Description	Thai Tourist	I n t e r n a t i o n a l t o u r i s t
------	-------------	--------------	------------------------------------------------------------------------------------------------------

		Mean	SD	Mean	SD
Handicrafts categories					
1.1	Demonstration in silk procedure	4.25	.731	4.55	.776
1.2	Participate in silk making process	4.45	.856	4.43	.759
1.3	Silk products shop	4.27	.738	4.29	.898
1.4	Learning to produce other handicrafts	4.01	.881	4.13	.829
Art and culture categories					
2.1	Local ways of life	4.14	.779	4.32	.709
2.2	Local foods	4.02	.791	4.09	.777
2.3	Local performance	4.13	.747	4.28	.798
2.4	Event and local festivals	4.18	.757	4.36	.767
Exhibitions and architectures category,					
3.1	Silk museum and silk making process exhibitions	4.24	.691	4.55	.657
3.2	Exhibition of silk village history	4.12	.764	4.34	.754
3.3	Photo silk landmark	4.11	.844	4.10	.898
Tourism Interpretative service and facilities					
4.1	Interpretation center	4.28	.796	4.45	.777
4.2	Home stay	4.16	.788	4.35	.745
4.3	Accommodation	3.97	.881	3.99	.856
4.4	Local transportation	4.06	.809	4.01	.823
4.5	Disable people cultural route	4.16	.823	4.19	.832
4.6	Restroom	4.32	.805	3.98	.851
4.7	Food service shop	4.20	.802	4.29	.820
4.8	Recreation area	4.26	.792	4.27	.729
4.9	Silk souvenir shop	4.17	.849	4.30	.834

Table C :Descriptive statistic for *Tourism interpretative media*

Item	Description	Thai tourist	I n t e r n a t i o n a l t o u r i s t

		Mean	SD	Mean	SD
1	Local guide	4.08	.853	4.45	.843
2	Interpretation sign	4.20	.765	4.36	.777
3	Cultural Map	4.25	.823	4.25	.890
4	Tourist guidebook	4.12	.784	4.13	.772
5	Cultural Route	4.15	.752	4.56	.734
6	Brochure and publications	4.06	.854	4.15	.767
7	Animation	3.78	.960	4.18	.962
8	Tourism movie	3.89	.915	4.22	.998
9	Website, Internet	4.03	.943	4.19	.910

Table D :Descriptive statistic for *tourist activities*

Item	Description	Thai Tourist		I n t e r n a t i o n a l t o u r i s t	
		Frequency	Percentage	Frequency	Percentage
1	Visit mulberry farming, silk worm racing selection,silk worm growing	740	46.3	43	30.1
2	Silk procedures cultural route	584	36.5	50	32.4
3	Demonstration of silk procedures	712	44.5	77	48.7
4	Visit local wisdom of silk village	804	50.3	82	51.2
5	Participate and visit of local wisdom	868	54.3	101	55.4
6	Take local translation to visit silk village	360	22.5	38	22.5
7	Participate in cultural activities	556	34.8	55	34.8
8	Visit traditional festival	776	48.5	42	31.2
9	Visit art and cultural	664	41.5	35	23.4
10	Visit history site	524	32.8	30	21.6
11	Other	44	2.8	9	1.8

Table E :Descriptive statistic for *travel time*

Item	Description	Thai Tourist		I n t e r n a t i o n a l	
		Frequency	Percentage	Frequency	Percentage
Duration of traveling in silk village					
1	1-2 hours	664	41.5	29	24.2
2	Half day tour	636	39.8	65	54.2
3	One day tour	248	15.5	20	16.7
4	More than one day	52	3.2	6	4.9
	Total	1,600	100.0	120	100.0
Duration time of visit silk making process					
1	1-2 hours	762	47.6	80	66.7
2	Half day tour	654	40.9	35	29.2
3	45 minutes	184	11.5	5	4.1
	Total	1,600	100.0	120	100.0

10. References

- [1] UNWTO. UNWTO tourism highlights, 2013.
- [2] www.nakhonratchasima.go.th
- [3] <http://www.thaitextile.org>
- [4] Carter James. A sense of place: An interpretative planning handbook, Tourism and Environment Initiative, Inverness,2001: pp. 3-7.
- [5] ACTPPR Asian center for tourism planning and poverty reduction,2007.
- [6] www.ICMOS.org
- [7] UNESCO and Institute for Tourism Studies (IFT). Tourism at Cultural Heritage Sites in Asia Cultural Heritage Specialist Guide Training and Certification Programme for UNESCO World Heritage Sites, A Training Manual for Heritage Guides, Macao SAR,2007

- [8] M.H. Jacobs, M. Harns. Influence of interpretation on conservation intentions of whale tourists, *Journal of Tourism Management*, 2014, 42, pp.123-131.
- [9] Kovatanakul Donluthai. The study on cultural interpretation through community tourism at Nonsela village, Phukeyaw district, Chaiyaphum Province, 2009.
- [10] Pakdeepinit Prakobsiri, The potential of community tourism interpretation: Rong Hai community, Phayao province. *Naresuan University Journal*, 18, 2010, pp. 82-90.
- [11] Responsible Ecological Social Tour-REST, *Community Based Tourism*. 2546.

ICSSAM-603

Consumer Attitude toward Self-Service Technology: Multiple Media Kiosk in Taiwan

Shih-Hao Wu^a, Huang-Chi Lin^{b,*}, Ruo-Ying Shih^c

^{a, b, c} Commerce Development Research Institute, 4F, No. 303, Sec. 1 Fu-Xing S. Rd., Taipei City 10665, Taiwan

^a E-mail address: paul@cdri.org.tw

^b E-mail address: wikeylin@cdri.org.tw

^c E-mail address: snowshih@cdri.org.tw

Abstract

Self-service technologies (SSTs) have been widely used in business service sectors around the world. Numerous service providers in Taiwan, at the same time, are also attempting to adopt SSTs in the service process to reduce costs, to boost efficiency and competition, to satisfy consumers, and to make profits as a result. Not all the service providers, however, are successful in utilizing SSTs. Many of them have great expectations for the adoption of SSTs in the first beginning, but the results have come as a disappointment to service providers.

Among the current applications, the SST used in convenience stores, or multiple media kiosk (MMK), is a huge success in Taiwan. Started with only a handful of service, MMK now offers plentiful services—including printing files, scanning papers, downloading documents, purchasing tickets, paying bills, applying public service, buying pre-paid cards, and so on. According to the report of the largest convenience store franchise, 7-ELEVEN, its MMK was used 150 million times in 2012 in Taiwan. The popularity of MMK is obvious.

This study focuses on exploring consumer attitudes toward using MMK in convenience stores to understand the reasons beyond the success of the machine. The preliminary results with 400 subjects show that *consumer readiness* significantly has positive effects on their *perceived usefulness* and perception of *easy of use*. The perceived usefulness then significantly affects consumers' *attitude toward using* the MMK, which later influences their *intentions to use*. The results suggest the critical role of consumer readiness—including *role clarity*, *ability*, *instrumentality*, and *opportunity*—is the antecedent factor which drives consumers to give SSTs a trial in the first place. The usefulness of SSTs later decides the final success. The results suggests that the service providers need to enhance consumer readiness under all circumstance before utilizing SSTs in the service process. The features that actually assist consumers is then the critical factor when consumers and SSTs confront.

Keyword: Self-service technology (SST), Multiple media kiosk (MMK), Consumer Readiness, Perceived usefulness, Intension to use.

ICSSAM-614

Examining the Relationship between Task Uncertainty and Work Stress: the Moderating Effects of Active Procrastination

Mu-Yi, Chen

Yuan Ze University, 135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.

muyichen0524@gmail.com

Yueh-Ysen, Lin

Yuan Ze University, 135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.

claudia.ylin@saturn.yzu.edu.tw

Abstract

Procrastination has been studied from different angles for years. For example, Solomon & Rothblum (1984) focused on the influence of procrastination on task performance, while Ferrari, Johnson & McCown (1995) focused on the emotional impact to individuals who delay the task. Other researchers focused procrastination in a negative way and dysfunctional behavior. On the other hand, Chu & Choi (2005) proposed that not all procrastination behaviors are lead to negative consequences.

This study will follow Chu and Choi's study and attempts to explore the relationship between task uncertainty and work stress. It is argued that task uncertainty will be positively related to work stress. When individuals have high task uncertainty, they are more likely to feel stress on their job. The study also proposes that active procrastination will moderate the influence of task uncertainty and work stress. The study plans to collect 400 sets of data and using dyadic design. It is expected that the findings can help employee to reduce their job stress and to promote their efficiency. Manager can also adopt this perspective to recruit person who has this trait.

Key word: task uncertainty, work stress, active procrastination.

ICSSAM-701

The Influences of Social Network on the Opinion Leaders : the Case of Pay Applications

Yi-Fen Chen

Graduate Institute of International Business, Chung Yuan Christian University,
200, Chung Pei Rd, Chung Li City 32023, Taiwan ROC
fen1307@gmail.com

Yu-Fu An

Graduate Institute of International Business, Chung Yuan Christian University,
200, Chung Pei Rd, Chung Li City 32023, Taiwan ROC
cena198799@gmail.com

Abstract

This study examines social network centralities to identify the peer group's opinion leader with the aim of determining whether the opinion leader and perceived value of pay applications influence the relationship between perceived value and purchase intention in the field of mobile pay applications. Social network analysis (SNA) and regression are applied to examine the hypotheses within the theoretical framework. The results showed that consumer purchase intentions are influenced by the perceived value of pay applications and the opinion leader. In addition, using Ucinet 6 as the tool to examine the consulting network centrality, friendship network centrality and information centrality of every member of the group indicated that based on group structure, the group member receiving the most information has the potential to be the opinion leader.

Keyword: Opinion Leader, Social Network Analysis, Centrality, Pay Applications, Purchase Intention

Communication I

Room C

09:00-10:30

Thursday, May 8

Session Chair: *Prof. Kalyakorn Worakullattanee*

ICSSAM-742

Bragging: Comparison between Japanese and Hong Kong Chinese

Yumi Inoue

The Chinese University of Hong Kong

ICSSAM-556

The Impact of Green Advertising Appeal on Inhibiting Consumers' Ambivalent Attitudes: The use of Egoism/Altruism and Promotion/Prevention Appeals

Wen Kuei Wu

Chaoyang University of Technology

Ya-Yi Jiang

Chaoyang University of Technology

ICSSAM-637

Media Consumption Behavior and Media Literacy Skills of Student in Pathumthani

Kalyakorn Worakullattanee

Thammasat University

ICSSAM-639

The Impact of Social Network Sites Usage on Food Safety Anxiety in Taiwan

Pei-Ling Yang

Fu Jen Catholic University

Jin-Fong Zhong

Fu Jen Catholic University

Ying-ju Lai

Fu Jen Catholic University

ICSSAM-665

Teachers' Awareness and Knowledge about Students' Media Litteracy in Prathumthani Province, Thailand

Prapaipit Muthitacharoen

Thammasat University

ICSSAM-944

The Impact of Brand-to-Brand High-Similarity on Purchase Intentions

Shu-Hsun Ho

Providence University

Yen-Hsin Juan

Providence University

ICSSAM-762

How Media Source And Personal Opinion Jointly Affect Voters' Perception Of Press Bias When Public Polls are Reported

Stella C Chia

City University of Hong Kong

ICSSAM-742

Bragging: Comparison between Japanese and Hong Kong Chinese

Yumi Inoue

The Chinese University of Hong Kong

yinoue@cuhk.edu.hk

Abstract

Nobody wants to feel inferior to the person with whom he/she is talking or associating. In Japan, any kind of bragging is discouraged, but behaviors which Japanese consider as “bragging” are accepted among Hong Kong Chinese. It is important to understand this cultural difference, but little is known about “bragging” behavior in these two cultures. In this paper, I examine what behavior is considered as bragging for Japanese and Hong Kong Chinese, and discuss how people react to others’ bragging behavior in these two cultures.

Japanese communication avoids any kind of “bragging”. One is not supposed to share interesting stories of an overseas trip to colleagues or friends who can’t afford such a trip; one is not supposed to talk about his/her children’s academic achievement to “*mama tomo*” or “mothers of children’s friends”; and one shouldn’t even talk about having some knowledge of plants as illustrated below:

When two friends are looking at flowers

A: These are beautiful chrysanthemum.

B: Yes, they look like chrysanthemum, but they are actually roses.

A: Is that so!?

B: Yes, I like flowers and I kind of know a lot about flowers.

A:

Another example is that a person saying “she is busy” can be labeled as “someone who brags about being busy all the time” (“*isogashii to jimansuru tomodachi*”). For Japanese, working hard is a virtue, and people desire to work hard (“*mame ni hataraku*”) by eating sweet black beans in the beginning of a year. But it may confuse Chinese who wish to have more holidays by eating fish in Lunar New Year’s day (“年々有餘” or “have more spare time and money” as “fish” and “spare time” are the same pronunciation in Chinese). When a person brags, he/she may be criticized indirectly by others in the form of spreading negative rumors about him/her, punishment by social exclusion, or being the target of hash comments, sometimes associated with “*kire*” or “bursting emotion”, which may surprise the recipients.

In Japan where people respect and endorse modest behavior, a bragger may even be considered as suffering from psychological problems.

Hong Kong Chinese brag more than Japanese from the Japanese perspective. It is acceptable to share stories of an exotic trip or children's academic achievement with friends and colleagues. It is even considered useful to inform business acquaintances subtly how well a person and his/her family members are doing financially, physically, or academically. Hong Kong Chinese are skillful when and how to convey their achievements to their friends and coworkers. The way of handling "bragging" is also very different from the typical way in Japan as illustrated below:

Among colleagues

A: The stock I bought last month is already up by 30%!

B: How many shares do you have?

C: Did you earn a lot?

A: Well, I am doing quite well!

B: Why don't you treat us dinner tonight?

I aim to describe cultural differences in bragging behavior based on the results of surveys and interviews conducted among Hong Kong Chinese and Japanese. The objective is to identify the major reasons behind why differences exist in the interpretation of similar behaviors across these two cultures.

Reference

Leung, K & Inoue, Y. 2003. "Chinese Social Behavior - Group Dynamics (in Japanese)", Social Psychology. Tokyo: University of Tokyo Japan.

ICSSAM-556

The Impact of Green Advertising Appeal on Inhibiting Consumers' Ambivalent Attitudes: The use of Egoism/Altruism and Promotion/Prevention Appeals

Wen Kuei Wu

Chaoyang University of Technology

wenkuei@cyut.edu.tw

Ya-Yi Jiang

Chaoyang University of Technology

Abstract

Previous research suggests that consumers are concerned about the environment and show interest in purchasing green products (Pickett-Baker and Ozaki, 2008). However, research also indicates that consumers still hesitate to buy green products due to their ambivalent attitudes (Costarelli and Colloca, 2004; Chang, 2011), that is, consumers usually consider green products to be expensive and no good quality when buying green products (D'Souza, Taghian and Khosla, 2007). Therefore, a challenge marketers face is determining how to overcome consumers' doubts or negative perceptions of high prices and inferior quality associated with green products. This study propose that when using the egoism-promotion appeal, consumers' ambivalent attitudes about green products will be more likely reduced.

Numerous studies have been conducted to investigate the effect of green advertising message on consumer behavior. The results show several contradictions. Consumers still fear that green products will not work as well as non-green products (Fowler, 2002). However, some recent research reveal that consumers perceive green products as being able to offer comparable or superior quality over non-green products (Manget, Roche and Munnich, 2009; Borin et al., 2013). Given the different levels of product involvement, environmental involvement and substantiation of environmental claims, the green appeals reveal different level of effectiveness on consumer behavior (Schuhwerk and Lefkoff-Hagius, 1995; D'Souza and Taghian, 2005; Chan et al, 2006), and these conflicting findings are to be expected. In addition, the examination of copy and situation aspects of green advertisements also provides alternative reasons, such as, ecological terms, graphics, presenters, and green logotypes or certification labels (Leonidou et al. 2011). These elements have been confirmed to influence the comprehensiveness of the green advertisement. Finally, the cause of contradictions is related to the consumers' ambivalent attitudes. Several researches demonstrated that

consumers are more likely to lead to avoidance of advertising when they experience high level of ambivalence (Jin and Villegas, 2007).

The current study highlights the importance of overcoming ambivalence in promoting green products. Across an experiment comprised of experimental online advertisements with various green appeals, we demonstrate the role of ambivalence in purchase intention of green products. We test for the role of ambivalence by examining whether the tendency to buy green products or non-green is related to the ambivalent attitudes. We do this by designing a fiction of shopping webpage, and by demonstrating that the high level of ambivalence leads to preferences for non-green products. To investigate the effectiveness of green advertisements on inhibiting ambivalent attitudes, we manipulate the green advertising appeal through the use of egoism/altruism and promotion/prevention appeals, and demonstrate that the level of ambivalence is most likely to be decreased through the egoism-promotion appeal when buying green products. Furthermore, the results confirm that people consider self-interests and positive outcomes to be important criteria of buying green products, and the use of egoism-promotion appeal can lead to a lower ambivalence for buying green products.

ICSSAM-637

Media Consumption Behavior and Media Literacy Skills of Student in Pathumthani

KalyakornWorakullattanee

Journalism and Mass Communication, Thammasat University

kalyakornw@gmail.com

Abstract

The study titled “Media consumption behavior and media literacy skills of student in Pathumthani” ,the province nearby Bangkok, used qualitative research by conducting 4 focus groups of students in state school grade 4-6 and grade 7-9 , boys and girls. Most of the interviewees are in low-income working family. The results of students’ media literacy skill include accessibility, understanding, and media creating skills. It was found that students had no difficulty to access to any media. However they use on using media for entertain themselves. For understanding skills, it was found that students had weaknesses since they had been never formally trained in this area before. They could not evaluate the negative impacts of media especially violent and sexual contents. In addition, even they had trained for media creating skill in school, especially Photoshop and video editing soft ware, it was found that students might have strong skill using programs but lack of creative content.

Introduction

In 1982 UNESCO emphasized the significance of media literacy in Grunwald’s declaration on media education, which said that “We live in a world where media are omnipresent: an increasing number of people spend a great deal of time watching television, reading newspapers and magazines, playing records and listening to the radio. In some countries, for example, *children already spend more time watching television than they do attending school*” and “*The school and the family share the responsibility of preparing the young person for living in a world of powerful images, words and sounds.* Children and adults need to be literate in all three of these symbolic systems, and this will require some reassessment of educational priorities.”

According to Buckingham’s policy paper (2001) prepared for UNESCO, media education is not about the instrumental use of media as ‘teaching aids’ and it should not be confused with educational technology or educational media; media education aims to develop *both* critical understanding *and* active participation.

It enables young people to interpret and make informed judgments as consumers of media, but it also enables them to become producers of media in their own right, and thereby to become more powerful participants in society. Media education is about developing young people's critical *and* creative abilities.

Media education is very significant, especially for young people since they spend their time entertaining themselves through various media. According to research by the Thai Health Promotion Foundation (2012), 45% of young people use online media, 36% watch television (36%) and 4% listen to the radio. Moreover, 53% used those media for entertainment and 47% search for information related to education. Children grow up in capitalist social systems, wherein advertising plays a major role. According to Thailand Media Monitor (2008), the advertising strategies most frequently used with children in Thailand were: sales promotions, giving premiums, using size and price strategy, using cartoons and celebrities, and using exaggeration. Even though research shows that a very high percentage of young people use media, there is a lack of awareness regarding media literacy curricula in Thailand (Prapaitit Muthitachareon: 2013).

Media literacy enables people to have the skills, knowledge and understanding they need to make full use of the opportunities presented both by traditional and new communications services. Media literacy also helps people to manage content and communications, and protect themselves and their families from the potential risks associated with using these services. Ofcom defines media literacy as "the ability to use or access, understand and create media and communications" (Ofcom: 2001, 9).

This research will concentrate on three components of media literacy skills according to Ofcom, which are as follows:

1. Access

According to Buckingham (2005), the literature suggests that children and young people already possess quite high levels of functional literacy - that is, the skills and competencies needed to gain access to media content, using the available technologies and associated software. Older children are generally aware of regulatory mechanisms and systems of guidance, and take these into account in seeking to make their own decisions. Facer et al. (2003) found that children generally *did* have the functional expertise to locate what they were looking for, but not the critical literacy required to interpret, critique and manage that information. The large majority of young people show some awareness of risks relating to sexual dangers on the internet; although they are less aware of potential economic risks.

Several studies in this area conclude that education in media literacy may be a more effective strategy than blocking or filtering, for example Breda (2001) and Sutter (2000) suggest the way forward for media literacy is through open discussion and engage with risks rather than censorship.

2. Understanding

According to Buckingham (2005), this literature suggests that children's awareness of areas such as the difference between representation and reality, and the persuasive role of advertising, develops both as a function of their increasing knowledge of the world, and as a result of their broader cognitive and social development. Research suggests that children become aware of some of the formal differences between advertisements and programmes at the age of two or three (Jaglom and Gardner, 1981); but the knowledge that advertisements are designed to persuade them to buy particular products tends not to appear until about the age of seven (ITC, 2002; Young, 1990). During the 'perceptual' stage (age 3-7), children remain at the level of perceptual rather than abstract or symbolic thought. At this age, they distinguish between commercials and programmes primarily on the basis of perceptual characteristics, and have a generally positive attitude towards them. In the 'analytical' stage (age 7-11), they make significant leaps in their ability to identify underlying principles, and to take account of multiple perspectives. Accordingly, they distinguish advertisements on the basis of their persuasive intent, and recognise that they can be dishonest, biased or deceitful.

Finally, in the 'reflective' stage (age 11-16), they become more able to understand the complex social contexts and meanings related to consumption. Their attitude towards advertising modulates somewhat at this age, becoming skeptical and discriminating rather than comprehensively dismissive. (John Roeder Deborah: 2002)

Children also learn to cope with potentially unwanted or upsetting emotional responses, and to make critical judgments about areas such as television violence, by employing forms of media literacy. It is important to emphasize that these areas apply just as much to fictional material as to factual material; and that critical understanding goes hand-in-hand with the development of aesthetic and emotional responses to media of all kinds. There is considerably less research about how children interpret, evaluate and respond to other media, including the various forms of content found on the internet (Buckingham: 2005).

3. Creativity

According to Buckingham (2005), there is considerable potential for media to be used as a means of communication and self-expression, not least by socially disadvantaged groups; that creative involvement in media production (particularly in the context of education) can make

an important contribution to the development of critical understanding; and that new media such as online gaming and mobile telephony provide possibilities for new forms of interaction. Creative activity of this kind necessarily involves the kinds of skills and understandings that we have considered thus far; and it might also be expected to assist in their further development. Media production requires an ability to access and manipulate technology, and an understanding of issues such as media language and representation, as well as an awareness of one's audience.

Research Methodology

This study aimed to find the media consumption behavior and the media literacy skill of young people. It focused on a group of students from low-income working class families since they make up the majority of the population in Thailand. The study used qualitative research by conducting four focus groups of both boys and girls aged 9-15 who studied in state schools in grades 4-6 and 7-9.

This study also explored students' understanding skill using print advertisements (sales promotion strategy, using cartoons and celebrities, and using exaggeration).

Results

The results of this study will be reported based on the objectives as follows:

Media consumption behavior

For media consumption behavior at home, the research found that the most popular media consumed among students were television and internet, respectively. Favorite television programs were news variety and variety programs, especially supernatural related programs.

Besides television, young people spent their time on the computer. More than half of the interviewees owned desktop computers and had Internet access. They spent most of their online time on Facebook, online games and on YouTube. More than half of the interviewees, especially girls, used Facebook at least one hour everyday. The most popular activity in Facebook was uploading pictures and commenting on those of their friends. The findings show that young people enjoyed using media for their entertainment.

For media consumption behavior at school, the most popular media consumed among students were the computer and newspapers. However, very few students still read newspapers. They tended to consume news through news variety programs on television almost every morning.

They used computers at school for searching information related to their class assignments. The findings show that students tended to use media at school for academic purposes.

Considering media consumption behavior outside the home and school, the most popular media consumed among students were personal mobile phones and computers at internet cafés. Every student in the focus group owned a mobile phone. Around half of the interviewee owned smart phones. The students who owned smart phones had a high frequency of using social networks, especially the Facebook and Line applications. The research also found that some boys skipped class to play online games at internet cafés near their school. The findings show that students tended to use media outside the home and school for engagement with friends.

Media literacy skills

1. Access

The above results on media consumption behavior show that there were no barriers to accessing media even though the families were low-income and working class. The interviewees were able to access a variety of both traditional media and new media, so they had high functional literacy skills such as texting, playing games, searching for information, downloading applications, etc.

However, the study found a negative impact of media while students consumed media. Some students revealed that they visited pornographic websites. Other interviewees admitted that they didn't use their real names to register on Facebook. Some of them even created fake Facebook profiles using the pictures of university students to make themselves more credible. They said that "It's cool to be someone else." This information shows that interviewees were not aware of future risks while using these media.

Although students displayed high functional literacy, they had quite low emotional literacy. They were easily manipulated and influenced by the emotional content they were exposed to, such as violent clips and games. Some of them admitted that they imitated violent behavior and attacked their friends.

2. Understanding

During the discussion among the interviewees, it was found that there was no subject in the curriculum related directly to media education or media literacy. However, for grades 4-6, it was found that teachers held current news discussions during homeroom sessions almost every morning. The topics of the news discussion were chosen by the teacher. The details of the discussions mostly focused on current events that might affect student wellbeing.

Teachers would let students search for information from a variety of media (Internet, books, magazines, newspapers). Per the discussion in the focus groups, it was found that some classes integrated the use of media as an assignment or in class workshops. For example, in a Thai language class, the teacher asked students to analyze the use of Thai language in advertisements. In a social studies class, the teacher asked students to search for the history of kings from the Internet or newspaper. In some schools, students had to create marketing campaigns as class assignments. In grades 7-9, the research found that there was a computer class that focused on using software such as Photoshop.

Furthermore, this study used print advertisements to assess interviewees' understanding of the motivation of advertising. The strategies the advertisements employed were: 1. exaggeration and celebrities; 2. Sales promotions (sweepstake). The results were as follows: Interviewees understood the motivation of each advertisement. They showed literacy skills by analyzing the use of the advertising strategy of each print advertisement. They could explain the purpose of the advertising using the strategies; for example, they pointed out the differences between using human celebrities and cartoons. They said that the reason for using celebrities in advertisements was to attract teenagers, who were the target of the advertisements (for roll on deodorant and cooling powder); the reason for using cartoons in advertisements was to attract children. They even explained the details of each advertisement and how the use of computer programs such as Photoshop made the advertisements more attractive and powerful. However, they still wanted to buy the products. They admitted that using these strategies had a significant impact on them.

The research suggests that interviewees had understanding skills in terms of advertising motivation, as it was found in this research that students in grades 7-9 had training in some computer programs at school. Teachers had also given class assignments that required students to analyze advertisements since grade 4.

While interviewees showed advertising literacy skills, they were not able to evaluate the negative impact of using media improperly. The most concerning issue in this research was sexual and violent content since every interviewee was able to access inappropriate content.

Most of the interviewees admitted that they had access to both of these types of content, especially on the Internet. They accessed this content on YouTube, Facebook, and online games (fighting games). As mentioned earlier, the interviewees lacked emotional literacy, and had high tendency to respond to this content uncritically without considering its appropriateness.

3. Creativity

The research found that students had training in the use of computer programs such as Photoshop and video editing software as part of class assignments. In fact, the curricula of state schools focus on using these programs. Buckingham's policy paper (2001) indicated that media education is not about the instrumental use of media. However, teaching students how to use computer programs could help them to analyze the elements of advertisements.

The research also found that assignments in class were always initiated by teachers, which led to a lack of creative content and creative thinking on the part of the students. Therefore, teachers should get students to participate in the development of assignments.

Creativity was used during online activities, with interviewees creating online content almost everyday on Facebook, YouTube, and in role playing games ,etc., in order to create self identity through online media. Therefore, teachers should also focus on teaching creativity in daily life.

Discussion and Recommendations

According to research on media consumption behavior, young people use media for different purposes depending on the place and social environment. Regarding media consumption behavior at home, the findings show that young people enjoyed using media for entertainment. With respect to media consumption behavior at school, the findings show that students tended to use media at school for academic purposes. And with regard to media consumption behavior outside the home and school, the findings show that students tended to use media outside home and school for engagement with friends.

It was found that young people in low-income working class families consumed television and the Internet, spending most of their free time with these media. It is clear that students learned from their experience online. However, parents were not aware of the importance of teaching online literacy skill to their children, since the children's skills often exceeded those of the parents. Parents seem to play an important role in teaching traditional media literacy, such as television. Families watched television together in the evening, especially soap opera programs. However, these young people socialized using social networks such as Facebook everyday without supervision.

The results also show that there were no barriers preventing students from accessing media and that they had functional literacy. However, they lacked emotional literacy skill. They were also exposed to sexual and violent content.

The students were not aware of some negative impact online. It was also found that students had the ability to understand advertising content and had production skill in regard to some computer software.

According to Buckingham's policy paper (2001), it is the task of both parents and teachers to teach media literacy skills to children. However, this can be difficult due to the social and economic environments of low-income working class families. Therefore, media education in school should play a major role in providing information and facilitating discussion. Breda (2001) and Sutter (2000) both suggest that the way forward for media literacy is through open discussion and engagement with risks rather than censorship.

To create effective programs for media literacy in schools, teachers should take on a major role in terms of enabling students. Schools should have policies for online media training for teachers in order to foster understanding of the nature and use of media. Moreover, homeroom sessions should be used as a forum to discuss the risks that students might be exposed to. Schools should also have concrete curricula on media education. Finally, school curricula should focus on the understanding of the issues of violence and sexuality in media and on encouraging creative thinking.

References

Books

- Buckingham, David. (2005) *The Media Literacy of Children and Young People A review of the research literature on behalf of*
Ofcom. Centre for the Study of Children Youth and Media Institute of Education University of London.
- Buckingham, D. (2000) *The Making of Citizens: Young People, News and Politics*
London: Routledge
- Facer, K., Furlong, J., Furlong, R. and Sutherland, R. (2003) *ScreenPlay: Children and Computing in the Home* London: RoutledgeFalmer
- ITC (2002) *Emulation, Fears and Understanding: a Review of Recent Research on Children and Television Advertising*
London: ITC
- Jaglom, L. and Gardner, H. (1981) 'The preschool television viewer as anthropologist', in Kelly, H. and Gardner, H. (eds.)
Viewing Children Through Television San Francisco: Jossey-Bass
- John, D.R. (2002) 'Consumer socialization of children: a retrospective look at twenty-five years of research', pp. 25-90 in
Hansen, F., Rasmussen, J., Martensen, A. and

Klapper, Joseph T (1960). The effects of mass communication. Glencoe, Ill:Free Press
Potter, W. James (2005).Media Literacy.California: Sage Publication.
Potter, W. James (2013).Media Literacy.California: Sage Publication.
Silverblatt, Art (2001).Media literacy: Keys to interpreting media messages.CT :Greenwood
Publishing Group.
Scheibe, Cyndu and Rogow, Faith (2012). The Teacher's Guide to Media Literacy. California:
a Sage Company.
Tuftte, B. (eds.) *Children – Consumption, Advertising and Media* Copenhagen: Copenhagen
Business School Press.

Articles

Christ, William G. & Potter, James W. (1998). Media Literacy, Media Education, and the
Academy. *Journal of Communication*, 48 (Winter), 5 –15.

Research

PrapaipitMuthitachareon (2013). Awareness and knowledge of teacher in media literacy.
Journalism and mass communication Thammasat University.
Ofcom UK Adults' Media Literacy.Research Document (2001)

Websites

http://guruclubit.blogspot.com/2012/06/blog-post_26.html
<http://research.krirk.ac.th/>
<http://www.edu.ku.ac.th>
<http://www.ofcom.org.uk>
<http://gseis.ucla.edu/sudikoff/archive/pdfs/>
<http://www.milthailand.org>

ICSSAM-639

The Impact of Social Network Sites Usage on Food Safety Anxiety in Taiwan

Pei-Ling Yang^a, Jin-Fong Zhong^b, Ying-ju Lai^{c,*}

^aGraduate Institute of Mass Communication, Fu Jen Catholic University,
New Taipei City, Taiwan
Email: joanne791223@hotmail.com

^bGraduate Institute of Mass Communication, Fu Jen Catholic University,
New Taipei City, Taiwan
Email: aw800328@gmail.com

^{b,*} Department of Journalism & Communication Studies, Fu Jen Catholic University,
New Taipei City, Taiwan
E-mail address: laiyingj@gmail.com

Abstract

Food safety has again become one of the public concerns in Taiwan since 2013. A series of food scandals, such as soft drink makers using industrial plasticizer in some beverages and big brands blending their cooking oils with illegal additives, have led to the loss of public trust in those companies as well as government. In addition to continuous media coverage on the problems of food safety, an increasing number of heated discussions and information sharing on social network sites accelerated the public anxiety towards this issue. This project aims to explore the extent to which Facebook use, such as reading, sharing, and commenting on food-safety-related information, would magnify users' level of anxiety, and the degree to which the strength of interpersonal relationship with Facebook friends, perceived importance of the food safety issue, and the relevance of the issue to the individual users would come into play and influence users' anxiety. In this study, we examine the relationships among several variables, including anxiety, the intensity of Facebook use, interpersonal ties, mere-exposure effect, and the relevance of the food safety issue (i.e., degree of involvement) to individual users. A preliminary data analysis showed that social ties, Facebook use intensity, mere-exposure effect, and issue involvement would affect users' degree of anxiety.

Keyword: Social Network Sites and Facebook, Anxiety, Issue Involvement, Social Ties, Mere-Exposure Effect

In recent years, people are more aware of the importance of food safety issue in Taiwan. Since 2013, a series of food scandals, including soft drink makers using industrial plasticizer in some beverages and some big brands blending their cooking oils with illegal additives, have led to the loss of public trust in those companies as well as government.

Under such circumstances, the loss of confidence in food quality control and the fear of eating those illegal additives in their daily meals have caused a great deal of anxiety among consumers in Taiwan. Unfortunately, without a proper communication platform, most consumers can only rely on the news coverage by the mass media to obtain food-safety-related information.

However, the characteristic of internet allows its users to share information with each other, and the rise of social media makes it easier to connect people with similar interests and hobbies, as well as to strengthen their interpersonal relationship. Social media users will be able to expand the size of their social network with a certain degree of real-life connection with their existing friend network. So far Facebook is the biggest and the most well-developed social network site in the world. Its users will be able to get friends latest updates and share information with other users. In other words, Facebook provides a virtual space to connect people who share some similarities, such as people who have similar concerns for food safety issues in Taiwan.

Facebook enables its users to add other users as friends, to exchange messages, and to create a well-developed social network (Boyd & Ellison, 2007). Users are able to stay connected to new information and updates about their friends' profiles which can facilitate an intimate interaction with each other. Therefore, we consider that gaining information through the social network site and its effect are significant issues and worthy of our attention.

During the period of the food safety problems exposed by media, however, the heated discussions and arguments via the social network site cause a great deal of anxiety among the public. The mere-exposure effect is a psychological phenomenon by which people tend to develop a preference for things merely because they are familiar with them (Zajonc, 1968). Thus, this project aims to explore how "the mere-exposure effect" influences social media. Take the food safety problem for example that whether the amount of news unconsciously distributed and shared on social network sites by the users would increase the users' level of anxiety.

Besides, Zhang & Chia (2006) pointed out that the person who owned higher social capital and was being more sociable tends to participate in civic and political affairs.

We would further explore the connection between the social subject and one's degree of socialization and social capital. In other words, a person who has more social connections and social capitals may be more aware of the social events. Thus, the research would also take the strengths of users' interpersonal relationship into consideration and observe if it is one of the reasons led to users' anxiety.

Lastly, the significance and the relevance of the issues should be different among SNS users; therefore, we believe that the degree of the involvement into the issues may also have impacts on users' anxiety level.

Literature Review

The Food Safety Crisis in Taiwan

In 2013, the food safety in Taiwan is compromised. In May, there were the plasticizer event and the toxic starch event. In November, there was even a series of crises, from the Top Pot Bakery bread event to the black-hearted oil and barbecue sauce events, showing that there was some serious problem with the gate-keeping for food safety in Taiwan (Liu, 2013). In October, the cooking oil safety issue began to spread. In the beginning, the President olive oil was found mixed with some cheap oil. Then Flavor Full was found to mix some cottonseed oil in its cooking oil. Finally a famous enterprise was found adding copper chlorophyll in its drinks and foods while the labels said the chlorophyll used was natural. All these events had caused consumers' worries about food additives such as cottonseed and copper chlorophyll¹.

According to a report on Taiwan Times, with the efforts of the Food and Drug Administration, Ministry of Health and Welfare, besides the companies such as Taiwan Bifido, Chinhaoo, and Fonyu, which were already known with some additive issue, another 8 downstream companies of Yihyuan were found illegally adding copper chlorophyll to their products (Chou, 2013). Yihyuan manufactured liquid additives and sold them to Shunghung for pearl tapioca, to Minghui for fish patty, to Land Young for kelp, New Cheng for kelp, and Luxe for cold noodles. There was even hearsay of a famous drink sold through 7-11 under Uni-President contained sodium copper chlorophyllin to blend colors while there was only chlorophyll on the label. Doctor Chiang, the doctor in charge of the Department of Nephrology, National Taiwan University Hospital, indicated that according to the international literature currently copper chlorophyll and sodium chlorophyllin are not considered toxic. However, the risk of using them outside the regulated range has never been evaluated.

¹ There are two types of copper chlorophyll. One is oil-soluble copper chlorophyll and another is water-soluble sodium copper chlorophyllin. Besides foods, they can also be used in cosmetics legally.

Table 1. The List of the Serious Food Safety Events in Taiwan during 2013

Food	Suspected additive	Crime
Processed food	Toxic starch	Illegal additive
Bread	Artificial flavor	False product labeling
Oil products	Cottonseed oil	False product labeling
Oil products	Copper chlorophyll	Illegal additive
Noodles, sweets, drinks, health products, processed meat products	Sodium copper chlorophyllin	Illegal additive and false product labeling

Summarized by this study

According to the online “Food Safety and Reliability Survey” held by “Etoday Survey”, 60% of people lost confidence on the food safety in Taiwan. Among them, 42% were “very lack of confidence”. As for the most disappointing food safety event, 61% of people chose the plasticizer event and the toxic starch event, while only 12% chose the Top Pot Bakery bread event (Ettoday, 2013). In the Taiwanese society, when the fear from the above-mentioned events still lingered, the hot pot chain under a group with a great reputation in the food industry, Tripodking, was found using mixed powder to formulate its decoction instead of natural materials. And other hot pot ingredients were found containing carcinogenic substance after examination. Every time, when a food safety event broke up, the responsible company would apologize under the pressure of public opinions and fines, along with a promise of making improvements. Yet, it does not seem like the doubts and panics caused by food safety can be put down in a short time.

The panics and worries caused by food safety have been widely discussed on online social networks, especially Facebook. People’s knowledge of, attitude toward (change in the degree of worry), and behavior (clicking “like”, posting criticism, and sharing) related to these food safety events have been influenced by their use of Facebook. Thus, this study aimed to explore the fermentation of this food safety event issue with Facebook being the information carrier.

Social Network Sites (SNSs)

In the modern digital age with flourishing development of new technology, the Internet has become necessary in people’s life, and its influences have become stronger and stronger. A social network site (SNS) comes with a highly interactively environment for participation.

Users can share information on SNS and respond. It helps users to develop a sense of being recognized by a group of people in the virtual community. More and more attention has been paid to the use of media and participation in public affairs.

In the past, information from traditional media was delivered to audience in a one-way method. SNSs create close connections so that people can communicate and exchange information with each other. Yet, users may passively receive broader information while browsing other people's profile pages (Lin, 2012). The diversity of new technology helps to improve the propagation effects and citizen participation, as well as create more possibilities. Especially, current popular SNSs (e.g. Facebook) are the new media examples with great developmental potentials.

Through social media and SNSs, such as Facebook, Twitter, and Plurk, a group of people of the same hobby, common interpersonal relationships, or similar preference for activity can be gathered up to create a community online. These websites are actually a highly interactive system. Usually, their users have certain degrees of connections and relationships, so they often care about the information provided through the social media they are using and their friends' messages there. Thus, an interpersonal relationship network with frequent communications is created. This kind of media expands their networks through their users' interpersonal relationships, developing a superfast and efficient propagation method.

Nowadays, more and more Internet users share information, ask questions, and respond others through SNSs. Due to the characteristic of allowing users to hear each other and exchange information on the internet, users' information sharing and interactions through responses on a SNS can be considered as a type of group behavior. (Boyd & Ellison, 2007) indicated that Facebook connects one individual to another, one individual to his/her friends, his/her families, and his/her colleagues, through communication. In other words, Facebook allows its users to see their friend circles and links, so that they can create their own social networks (Boyd & Ellison, 2007).

Feezell et al. (2009) summarized the five major features of Facebook:

1. Group: This is the function that can present Facebook's nature of increasing interpersonal interactions the most. Each group offers an open and private space for people to discuss the topics they are interested in.
2. Wall: Users can post messages on their own wall.
3. Notes: Users can share their viewpoints in a way like writing a blog.
4. Share: Users can post links from outside the network on their own page.
5. Fan pages: Users can show their support for something or someone they love (cited from Lin, 2012).

SNSs help people to not only create their social circles but also see or link to other members' pages through public or semi-public information relationships to achieve the purpose of resource sharing and broad information exchange. Through information sharing, no doubts SNSs have potentials in increasing young people's participations. Yet, the previous studies regarding SNSs are mostly about users' characteristics. Very few of them focused on SNSs' characteristics; in other words, the influences of their information propagation on their users.

Because the amount of information exposed on a SNS is much higher than a general website, public personal information makes interpersonal relationships more adhesive with the function of connecting offline lives. Thus, information propagation is even faster. However, the advancement of technology, the popularization of mobile devices, and the phenomenon of connecting offline worlds they cause may also lead to the issue of "anxiety". Social network users may worry that they would miss important events, news, and their friends' updates if they don't have any access to the social network. Or, information obtained through interpersonal relationships on a social network may influence judgments of seriousness of issues. Thus, the relationship between social networks and anxiety is worth being further studied.

Anxiety

Anxiety is a personal feeling, a common emotional reaction of humans, and a feeling that everyone has had while growing up (Keable, 1997). Anxiety makes a person feel uncertain with unknown fear inside him (Gail, 2005). In the recent years, the social environment has changed and the pace of life become faster and faster. Plus the advancement of new technology, SNSs become very popular. Readers and audiences can retrieve information from more channels. All these make anxiety more common. Gray (1997) proposed the theory of anxiety in his study, indicating that when a person faces active avoidance or is in a positive scenario, the behavioral activation system may start functioning. If he is punished or is in a negative scenario, the behavioral inhibition system may start functioning. Under these systems, the reactions of his behaviors may include increasing attention, information processing, and fear, resulting in differences in sensitivity of behavioral inhibition or degree of behavioral activation, further increasing anxiety (Corr, Pickering, & Gray, 1997).

Lin (1999) pointed out that Collins English Dictionary defines anxiety as "a state of uneasiness or tension caused by apprehension of possible future misfortune, danger, etc." From the aspect of this definition, anxiety is a subjectively determined and expected feeling and a symptom with physical and psychological influences.

Spieberger (1966) proposed the “trait-state theory of anxiety”, categorizing anxiety into two types. The first type is trait anxiety, also known as “general anxiety” (Alpert & Harber, 1960). It is merely a stable and long tendency of anxiety. It is a long-term emotional state and is not caused by external environment. Objectively, there is no threat existing. Subjectively, one may feel being threatened and thus become anxious (Yang, 1991). The second type is “state anxiety”, also known as “specific anxiety”. It is a tendency of becoming anxious in a specific moment or situation. This state is very short, not lasting. When the threat disappears, the degree of anxiety also decreases.

It can be seen in previous studies that the use of SNSs is related to anxiety. However, most of the studies focus on social anxiety instead of information from SNSs. The anxiety this study aimed at was closer to the “state anxiety” proposed by Spieberger (1983). Generally, anxiety is a warning for people, a warning of present danger. It can be used to evaluate if one has the capability to deal with the coming threat. This study aimed to find out whether SNS users’ knowledge of a social issue would be influenced by the SNSs, even causing anxiety and panic. Thus, based on the food safety events since 2003, this study proposed the following hypothesis.

H1: Stronger intensity of Facebook use leads to users’ higher anxiety related to the issue Intensity of Interpersonal Relationship

This study focused on the degrees of spreading and fermentation of the food safety events in Taiwan on Facebook. With Facebook being the intermediating mechanism that tie users to their social networks, this study assumed that users’ interpersonal relationship strength would be one of the key factors influencing their knowledge of, attitude toward, and behaviors related to the food safety issue. Sullivan (1953) once proposed the “Interpersonal Theory”, seeing personality development from the view of interpersonal interactions, suggesting that studies of personality cannot merely focus on individuals’ internal trait differences or external behavioral performances. Thus, this study did not attempt to separate individuals from interpersonal situations for independent discussions. Instead, this study replaced “individuals” with “interpersonal relationships” as the main research unit.

Furthermore, previously, Granovetter (1973) used strong ties and weak ties to describe the interpersonal relationship strength. A person with strong ties is a person with close relationships with his families and friends. A person with weak ties is a person lack of interdependency on others and is less likely to offer strong emotional support. Putnam (1995) used the term “social capital” to cover the “living network, regulations and trust, sense of participation, etc.” in interpersonal relationships.

Then, Wellman (2001) defined the three aspects of social capital as “network capital”, “participation capital”, and “community trust”. Network capital is the companionship, emotional support, services or information, and sense of belonging provided by interpersonal network. Participation capital is the involvement in political or voluntary organizations which offer chances for people to satisfy their needs and desire. Community trust is that when people have more motivation and a stronger sense of belonging, their social capital can become stronger and more powerful.

The concepts above can be put in today’s context. Due to the use of technology and SNSs, people can manage and maintain their “network capital”, “participation capital”, and “community trust” at the same time. The development of interpersonal relationship is facing an unprecedented change. Facebook helps to maintain the interpersonal relationships of those of weak ties. That has been supported by many previous empirical studies. For example, study by Lewis and West (2009) with the university students in the UK indicated that Facebook users efficiently improved the interpersonal relationships of users of weak ties through browsing friends’ latest news. Pempek, Yermolayeva, and Calvert (2009) believed that Facebook provides an unofficial and relaxing method for interactions for people of weak ties to manage their interpersonal relationships easily.

Zhang and Chia (2006) summarized some previous studies and further integrate the concept of social capital into the areas of citizen participation and political participation, seeing political participation as the result of social capital instead of the content of it. Zhang and Chia (2006) also indicated that people with higher social capitals have more behaviors of citizen participation and political participation. This concept also points out the viewpoint this study wanted to extend. If replacing the behaviors of citizen participation and political participation by attention paid to the food safety issue and degree of anxiety in the concept, we can see that social capital and tie strength are important factors behind individuals’ connection to social issues. Individuals with higher social capital and tie strength have a higher-degree connection to social issues. Lee and Draper (2001) believed that degree of social connections can be measured by the aspects of interpersonal relationships, including sense of belonging, activeness, intensity of emotion, degree of closeness, etc. This study used Facebook as the carrier to be studied and integrated the previous results of the discussions of various aspects (strong and weak ties and social capital) into interpersonal relationship strength to measure the influence of the interpersonal relationship strength on Facebook on degree of attention paid to the social issue (the food safety issue) and further causing users’ anxiety. This, this study proposed the following hypothesis.

H2: Higher interpersonal relationship strength on Facebook leads to users' higher anxiety related to the issue

Mere Exposure Effect

This research began in 1876 by Fechner, who believed that familiarity may create a warm feeling, which can further lead to favor. Most people may have this kind of experiences. After contacting someone or something more frequently, one may start to like or become familiar with that person or that thing. This psychological state change is called mere exposure effect.

Tang (2007) suggested that this effect had been widely applied in research regarding mass media and advertising. This means people may become familiar with stimuli which show up repeatedly. For example, when a record company is going to introduce a new singer, it usually advertise this singer through media such as TV channels and the Internet, in order to make audience more familiar with this singer. It is the same for business opportunities online.

Therefore, website designers all want to create portal websites for clients for portal websites mean high exposure. When users turn on their computer, they see these sites right away. Of course, high exposure leads to advertisers' interest and thus higher income from advertisement space sold out (Tang, 2007, page 17).

The mere exposure effect was proposed by Zajonc (1968). In an experiment, Zajonc asked some university students to look at some faces. Some students looked at those faces for 25 times, some only 1 or 2 times. It was found that the subjects with higher exposure frequency would like those faces more. This is the mere exposure effect. In other words, as long as the same person or the same thing shows up before your eyes repeatedly, the chance that you may like this person or this thing is higher. According to Bornstein's (1989) summary, there are for main factors that may influence the mere exposure effect, which are: type of stimulation (complexity, direction of stimulation (positive or negative), presented difference (frequency, order, time, and recognition), adopted measuring method (bipolar scale and forced broadcasting choice), and participant variable (individual difference and age) (cited from Huang and Chi, 2009).

In Bornstein's (1989) summary, he found that any type of measurement could reflect the mere exposure effect, while the measurement of "degree of preference" was the one that can reflect the mere exposure effect the most. In the study by Kunst-Wilson and Zajonc (1980) with the university students, the experiment contained two phases. In the first phase, the subjects watched only two sets of graphs without awareness in 1/1000 second. In the second

phase, all the graphs were presented clearly, and it was found that they significantly preferred the graphs which were shown to them in the first phase than those which weren't.

Thus, it was concluded that even under a psychological state without awareness, the mere exposure effect still exists (Kunst-Wilson & Zajonc, 1980).

Lian (2000) performed a test using watching films to stimulate vision and found that the degrees of familiarity with and preference for the target faces of the experimental group were higher than those of the control group. When the images of the target faces were placed in the positive film, the degree of familiarity of the experimental group was even higher. In the aspect of the degree of preference, compared with the negative and concentrated film, the degree of preference for the target faces in the positive film was higher. And Lin (2010) also found in his experience that the moderating effects of complexity on the mere exposure effect on brand preference and brand choice were both significant. In the study by Huang and Chi (2009), it was also found that the degree of change in the attitude toward brand with more frequent exposure was higher than that with less frequent exposure. This means the influence of frequency of exposure on attitude toward brand was significant.

In addition, although the mere exposure effect was broadly applied in various fields, there are still limitations. Lian (2000) indicated that, though previous studies had shown repeated exposure would lead to higher preference for the stimulation, if the frequency is too high, over-exposure could cause declining degree of preference. There are three points which require extra attention below:

1. The exposure effect does not work with someone or something one already dislikes in the beginning.
2. If two people already have had some conflicts or if they are incompatible in nature, more frequent meeting may instead increase their conflict.
3. Over-exposure may lead to boredom (Tang, 2007, page 19)

With the development of the digital age, Facebook, blogs, etc. have become important channels for modern people to retrieve information and express their opinions. Logging into a SNS seems to be something modern people must do in their everyday life. No matter what they do on SNSs, such as updating their news, adding locations, posting their photos, or browsing other people's pages or fan pages, their interpersonal relationships are built through the website. Information distributed through SNSs has become more and more personalized and convenient. SNSs are even the main channel for some users to retrieve information.

This study would like to examine whether passively receiving information of an issue displayed through the news feed, whether posed by a friend or shared from a fan page, would increase users' degree of familiarity with that issue, and if yes, whether the anxiety would increase as well.

Thus, this study used the food safety issue as an example to explore whether the SNS users' degree of familiarity and anxiety increased when receiving food safety related information through the SNSs.

This study by referencing Lin's (2012) study regarding the mere exposure effect and political participation aims to use a news event as an example to explore the mere exposure effect on Facebook from the aspects of "degree of media exposure" and "degree of media attention", with the focus on users' attention to and preference for the unorganized and unexpected information. In addition, SNS users may unconsciously expose to their friends' actions (e.g. clicking on "like" and leaving a message) through the communities built on the interpersonal relationships extended from their friends, it is important to investigate whether their sense of familiarity would increase through the contact of information they were not aware of (Lin, 2012). Based on the same concept, this study would like to explore whether Facebook users' contact with information related to food safety through sharing, liking, and responding while browsing Facebook pages in their friend circles built with their interpersonal relationships without awareness would influence their sense of familiarity with that issue, sometimes even causing anxiety and panic, without them knowing. This study also aimed to explore whether users' degree of involvement in that issue would change their perception and further influence their behaviors (e.g. liking, leaving a message, sharing, and tracking). Thus, this study proposed the following hypothesis.

H3: Higher mere exposure effect of an issue on Facebook leads to users' higher anxiety related to that issue

Involvement

Previous studies indicated that different product involvement would lead to significant differences in constructs including learning model, cognitive response, information processing, and brand preference. The earliest related study was conducted in 1947 by Sherif and Cantril, who proposed the concept of "ego-involvement" to predict the influence of people's position or role on their persuasive (or dissuasive) attitude toward others.

Involvement has been broadly used in marketing strategies. It is considered to have influence on consumers' reception and processing of information.

Consumers of different involvement have significantly different purchasing behaviors (Zaichkowsky, 1986). Zaichkowsky (1986) suggested that involvement is one of the important factors behind advertising effects. Consumers may have different behavioral patterns when they perceive other factors.

The concept of involvement is a person's involvement in a certain issue. When a person's involvement in the issue is high, the room for him to accept opposite opinions would be rather small. The concept of involvement was first used to study the individual attitude issue in social events. For example, Skumanich and Kintsfather (1996) believed that issue involvement is the belief in the importance of the issue in nature or that the issue would lead to an important consequence in his life. It is the key factor for the process of persuasion. Petty and Cacioppo (1979) defined involvement as the "the extent to which the attitudinal issue under consideration is of personal importance" for readers or audience. That theory was later applied to explore consumers' behavioral issues. Krugman (1965) applied involvement in his study of advertisement. This is the first time involvement was considered as the strength of information processing. The measurement of involvement was based on the number of connections between information and individual.

Generally, involvement is considered as a mental state. Its strength is influenced by the degrees of correlations between an issue and individual demands, values, and goals to be achieved in a certain situation. High correlation leads to high degree of perceived self-concern, and thus high involvement, further causing a series of follow-up behaviors derived from the concern of that issue.

Zaichkowsky (1986) suggested that strength of involvement is formed by the relationship among individual value, goal, and self-concept. Involvement may directly influence consumers' reception and processing of information. Consumers with different levels of involvement may have significantly different purchasing behaviors. He also indicated that involvement is the degree of association perceived by an individual between a product and his internal needs, interest, and value (Zaichkowsky, 1986). It can be seen that the concept of ego is one of the important factors influencing involvement. A person's mental state is influenced by individuals, products, situations, or other stimulations and then he perceives the importance of issues to him and its association with him, leading to different degrees of concern about those issues.

In sum, involvement is about an individual deciding whether to conduct a series of related follow-up behaviors based on his perceived importance of an issues or the influence of that issue on himself.

This study used the food safety issue in Taiwan as an example to explore whether the SNS users' involvement in that issue would influence their SNS usage, interpersonal relationship, and the relationship between the mere exposure effect and anxiety when receiving information related to the food safety issue through the social network website.

According to the previous studies regarding information exposure and involvement, it can be found that the influence of information exposure on information receivers' perception of that information. Hu (1997) found in his study of election news that, in the case of a public issue, people with better educational background or higher involvement tended to require more related information through mass media or interpersonal communication channels. Petty, Cacioppo, and Schuman (1983) believed that when a person is highly involved in an issue, he would seriously evaluate the information he received related to this issue, and this kind of information processing behavior may lead to attitudinal changes. In addition, Grunig (1983) also found that readers and audiences who are highly involved in an issue are more likely to actively collect related information to help them determine what action to take in different situations. Besides aiming to explore whether SNS use would influence users' anxiety regarding an issue, this study also took degree of involvement into consideration to find out whether the relationships of information exposure and other variables with anxiety would change according to involvement. Thus, this study proposed the following hypotheses.

H4: Higher issue involvement leads to users' higher anxiety related to that issue

Method

Sample

The respondents who were not Facebook users were filtered out by mySurvey system. Fifty-six percent of the respondents are female. Most of respondents have been using Facebook for several years; 54% have used the Internet for more than five years. These demographic characteristics are in line with the population characteristics of Facebook user base and representative of our target population.

Instrument and Measures

The survey instrument was constructed based on a combination of established scales and original items from the past studies on Facebook use formation. The survey covered Social Connectedness Scale-Revised, Facebook Usage Intensity, mere exposure effect (including cognitive and behavior items), Issue Involvement, State Trait Anxiety Inventory, and demographic questions. Summary statistics for each variable are reported in Table 2.

Table 2.

N=374					
	M	SD	Reliability Analysis-Alpha	Correlation Analysis-Pearson	Correlation Analysis-P
the intensity of Facebook use	3.35	0.72	.84	.14	.006
interpersonal ties	2.88	0.73	.87	.11	.038
anxiety	3.04	0.66	.87	-	-
mere-exposure effect –degree of exposure	3.87	0.5	-	.05	.363
mere-exposure effect –degree of notice	2.88	0.7	-	.29**	.000
degree of involvement-cognition	3.13	1.2	.82	.29**	.000
degree of involvement-behavior	3.57	0.8	.80	.34**	.000
age					
the number of year to use FB	4.07	1.46	-	-	-

Facebook use intensity. Facebook use intensity was measured through two dimensions. The first was called use mode and consisted of two questions: “Approximately how many TOTAL Facebook friends do you have?”, ” In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook?”. The second dimension was called degree of dependence and consisted of six items modified from Boyd & Ellison(2007):

(a) Facebook is part of my everyday activity, (b) I am proud to tell people I'm on Facebook, (c) Facebook has become part of my daily routine, (d) I feel out of touch when I haven't logged onto Facebook for a while, (e) I feel I am part of the Facebook community, (f) I would be sorry if Facebook shut down. Respondents were asked to rate their level of agreement with each statement on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree.

Social connectedness. Respondents were asked to rate a set of items adopted from Social Connectedness Scale which measuring social connectedness on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree.

These items were revised from social connectedness research (Lee, Draper & Lee, 2001) try to examine how social ties (strong tie& weak tie) influence on anxiety. We used 10 positively worded items to capture respondents' sense of closeness with others, including their maintaining and seeking connections on Facebook. Sample items include" I feel close to my Facebook friends," "I am able to connect with other people on Facebook." Ten negatively worded items are applied to capture one's experience of distance and isolation from others, for example, "I feel distant from most Facebook user," "I don't feel related to my Facebook friends." The way we arrange for those item can decrease the negatively skewed responds distribution.

Mere-exposure effect. There are two dimensions of mere exposure effect: exposure level and media attention level. Exposure level was measured by the question—how often do you receive the information about food safety issue on Facebook ? ” Media attention level was measure by the question: "I focus on the message about food safety issue on Facebook". Respondents were asked to rate their level of agreement with each statement on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree.

Issue involvement. Previous research mostly focused on Internet advertisements (Su Jian Zhou, 2010) and products (Lin Chun Ru, 2011) to build the scale of involvement among those dimensions. We revised and used this established scale to measure if individuals' knowledge, attitude toward food safety issue would lead to a different result to this study, which may enhance or mitigate the anxiety that the issue bring. Issue involvement scale was consisted of two dimensions: cognitive and behavioral. Cognition was measured by several questions about attitude toward food safety issue, behavior was measured by the actual behavior individuals adopt (e.g., share, comment or follow the information about food safety issue on Facebook).

Respondents were asked to rate their level of agreement with each statement on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. Negatively worded items were reverse coded.

Anxiety. State trait anxiety inventory was created by Spielberger et al (1983) which can be used to measure respondents' anxiety in the state of exposure on food safety issue when they use Facebook. The state trait anxiety inventory was broken into two dimensions: anxiety by state which individual encounters (STAI-S) and anxiety by individual's trait (STAI-T). This study adopt the STAI-S to measure individual's level of anxiety, concerns and worries on the state of food safety issue rather than use STAI-T to measure individual's trait of anxiety in daily life. To measure the anxiety towards food safety issue, we adopted twenty original items included "I'm anxious after reading the messages about food safety issue on Facebook," "I feel nervous after reading the messages about food safety issue on Facebook," etc. Respondents were asked to rate their level of agreement with each statement on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. Negatively worded items were reverse-coded.

Result

Table 3 presents the findings from correlation analysis between the intensity of Facebook use and anxiety. The correlation coefficient was 0.143, which meant weak Correlation. And it got significant level ($p=0.006<0.05$) that explained those two variable is positive correlation. According to the result, the hypothesis 1 is valid.

Table 3.

N=374					
	M	SD	Reliability Analysis-Alpha	Correlation Analysis-Pearson	Correlation Analysis-P
the intensity of Facebook use	3.35	0.72	0.835	0.143**	0.006
interpersonal ties	2.88	0.73	0.87	0.107**	0.038
anxiety	3.04	0.66	0.871	-	-
mere-exposure effect –degree of exposure	3.87	0.5	-	0.047	0.363
mere-exposure effect –degree of notice	2.88	0.7	-	0.286**	0.000
degree of involvement-cognition	3.13	1.2	0.821	0.287**	0.000
degree of involvement-behavior	3.57	0.8	0.8	0.34**	0.000
age					
the number of year to use FB	4.07	1.46	-	-	-

We had mentioned that we consulted the results of factor analysis of Lee, Draper & Lee (2001) to choose the 1 to 6 items to run the statistical analysis in last chapter. The correlation coefficient between interpersonal ties and anxiety was 0.107, which meant weak correlation.

It got significant level ($p=0.038<0.05$) that presented those two variable is positive correlation. In terms of these results, the hypothesis 2 is valid.

We chose “degree of exposure” and “degree of notice” from mere-exposure effect to run the statistical analysis. The correlation coefficients of those two variables with anxiety were 0.047 and 0.286, which were weak correlation. The significance of mere-exposure effect – degree of notice with anxiety got significant level ($p=0.000<0.001$). The “degree of notice” showed positive correlation with anxiety, but “degree of exposure” wasn’t. Therefore, the hypothesis 3 is half valid.

We separated the issue involvement into parts of cognitive and behavior. We could find the correlation coefficient of those two variables with anxiety were 0.287 and 0.34, which were weak correlation. Both of them got significant level ($p=0.000<0.001$). Hence, the hypothesis 4 is valid.

Finally, we found explanation between those variable from the result of regression. We added the degree of involvement-cognition and degree of involvement-behavior in model 5. It showed R^2 was 0.189 and $F(6,367) = 14.287$. We only added degree of involvement-cognition in model 4 and its R^2 was 0.144 and $F(5,368) = 12.363$. The intensity of Facebook use was affected. It turned out of the significant level. Thus it could see that the issue involvement have higher explanation.

Table 4.

	R Square	Adjusted R Square	Beta	F	ANOVA-P	Factor-P
● the intensity of Facebook use	0.02	0.018	0.143	7.775	0.006	0.006
● the intensity of Facebook use	0.037	0.032	0.163	7.19	0.001	0.002
● interpersonal ties			0.131			0.011
● the intensity of Facebook use	0.038	0.03	0.158	4.187	0.003	0.003
● interpersonal ties			0.132			0.011
● mere-exposure effect –degree of exposure			0.017			0.746
● the intensity of Facebook use	0.108	0.099	0.11	11.218	0.000	0.035
● interpersonal ties			0.137			0.006
● mere-exposure effect –degree of exposure			-0.039			0.447
● mere-exposure effect –degree of notice			0.279			0.000
● the intensity of Facebook use	0.144	0.132	0.099	12.363	0.000	0.054
● interpersonal ties			0.131			0.008
● mere-exposure effect –degree of exposure			-0.048			0.344
● mere-exposure effect –degree of notice			0.209			0.000
● degree of involvement-cognition			0.203			0.000
● the intensity of Facebook use	0.189	0.176	0.08	14.287	0.000	0.109

● interpersonal ties			0.151			0.002
● mere-exposure effect –degree of exposure			-0.062			0.214
● mere-exposure effect –degree of notice			0.147			0.007
● degree of involvement-cognition			0.139			0.008
● degree of involvement-behavior			0.243			0.000

Discussion and Limitation

These findings provide support for the influence on Facebook users anxiety which food safety issue bring about, this study also turn formerly social anxiety (interpersonal interaction on Facebook) research into state anxiety (receiving the information on Facebook) in particular.

First, we find that individuals with high Facebook use intensity they are more anxious for food safety issue, proving Facebook use could be the specific state for increasing individuals' anxiety. However, we can't doubt the possibility that existing anxiety lead to Facebook use, need further experimental method to confirm the cause relationship.

Furthermore, people in social network are inter-subjective, adding on the filter-bubble effect in which a website algorithm selectively guesses what information a user would like to see by Facebook. As a result, Facebook user becomes separated from information that disagrees with their viewpoints, effectively isolating them in their own anxiety bubbles. Facebook user who has strong tie in social network may increase their anxiety through sharing the information and anxiety simultaneously. This study has successfully predicted by initially correlation analysis. In the other side, we suggest that researcher can deeply describe filter-bubble effect in social network, investigating the relationship between the filter-bubble effect and social connectedness work on individuals' anxiety.

As regards the mere-exposure effect, this study proves that mere-exposure effect exist in hard issue by survey rather than the former experimental researches. Certainly our assumption should add more adverse effect items on survey to further examine the mere-exposure effect and its' efficiency.

This study proves that the issue involvement-cognition and behavior is cognitive with anxiety. It also presents that the issue involvement has correlation with the anxiety of users' behavior and the way to deal with message. There are some suggestions that could be further carefully researched: 1. The issue involvement has several definitions. Cho Chia & Lenite (2012) and Cho Chia & Boster (2005) divided it into two parts: value-relevant, feedback-relevant. 2. The relationship between the issue involvement and the variables of this study still has to be further discussed.

Reference

Alpert, R., & Harber, R. N. (1960). Anxiety in academic achievement situations. *Journal of Abnormal and Social Psychology*, 61, 207-215.

- Bornstein, R. F. (1989). Exposure and affect: Overview and meta-analysis of research, 1968,–1987. *Psychological Bulletin*, 106(2), 265.
- Corr, P., Pickering, A., & Gray, J. (1997). Personality, punishment, and procedural learning: A test of J. A. Gray's anxiety theory. *Journal of Personality and Social Psychology*, 73, 337-344.
- Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer, & Mediated Communication*, 13(1), 210-230.
- Feezell, J. T., Conroy, M., & Guerrero, M. (2009). Facebook is... fostering political engagement: A study of online social networking groups and offline participation. *papers.ssrn.com*(805).
- Gail, W. S. (2005). *Handbook of Psychiatric Nursing 6th edition*. St. Louis: Mosby.
- Granovetter, M. S. (1973). The Strength of Weak Ties. *The American Journal of Sociology*, 78(6): 1360–1380.
- Huang, W. & Ji, T (2009). The News of Public relationship is Out of Focus: The Mere Exposure Effect on Brands. *The Annual Conference of the Chinese Communication Society*.
- Hu, Y. (1997). The Third-Person Effect of Election News. *The Annual Conference of the Chinese Communication Society*.
- Keable, D. (1997). *The Management of Anxiety*. New York: Churchill.
- Krugman, H. E. (1965). The impact of television advertising: Learning without involvement. *Public Opinion Quarterly*, 29, 349-356.
- Kunst-Wilson, William R; Zajonc, R. B. (1980), “Affective Discrimination of Stimuli that cannot be recognized,” *Science*, 207, 557-558.
- Lian, H. (2000). *Subliminal Exposure Effect*. The Psychology thesis of Fu Jen Catholic University.
- Lin, I. (2010). *The Impact of Mere Exposure Effect on Product Placement*. The Business Management thesis of National Central University.
- Lin, C. (1999). *The Impact of Self-Instructional Training Group on the Children from Elementary School Grade Three by Effect of Social Anxiety Guidance*. The Education thesis of National Hsinchu University of Education.
- Lin, S. (2012). The Social Networks are political: The Impact of Social Network Sites Usage on Political Participation by Mere Exposure Effect. *The Annual Conference of the Chinese Communication Society*.
- Lewis, J., & West, A. (2009). ‘Friending’: London-based undergraduates’ experience of Facebook. *New Media Society*, 11(7), 1209-1229.
- Lee & Draper (2001). Social Connectedness, Dysfunctional Interpersonal Behaviors, and Psychological Distress: Testing a Mediator. *Journal of Counseling Psychology*, 48(3), 310-318.

- Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology, 37*, 1915-1926.
- Putnam, R. D. (1995a). Bowling alone: America's declining social capital. *Journal of Democracy, 6*, 65-78.
- Putnam, R. D. (1995b). Tuning in, tuning out: The strange disappearance of social capital in America. *Political Science and Politics, 28*(4), 664-683.
- Pempek, T. A., Yermolayeva, Y. A., Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology, 30*, 227-238.
- Sherif, M., & Cantril, H. (1947). *The psychology of ego-involvements: Social attitudes & identifications*: Wiley New York.
- Skumanich, S. A., & Kintsfather, D. P. (1996). Promoting the organ donor card: A causal model of persuasion effects. *Social Science and Medicine, 43*(3), 401-408.
- Spielberger, C. D. (1966). *Anxiety and behavior*. New York: Academic Press.
- Sullivan, H.S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Tang, Q. (2007). *The Psychology You Must Know*, 12-20, Psychology: Taipei.
- Wellman, B., Haase, A. Q., Witte, J., & Hampton, K. (2001). Does the internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist, 45*, 436-456.
- Yang, L. (1991). *The Impact of Skill of Society and Cognition, Behavior Training Group For Higher Social Anxiety*. The Psychology thesis of National Taiwan Normal University.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of personality and social psychology, 9*(2p2), 1.
- Zaichkowsky, J. L. (1986). Conceptualizing Involvement. *Journal of Advertising, 15*(2).

ICSSAM-665

Teachers' Awareness and Knowledge about Students' Media Literacy in Pratumthani Province, Thailand

Prapaipit Muthitacharoen

Journalism and Mass Communication Faculty, Thammasat University

pmuthitacharoen@gmail.com

Abstract

The objective of this study is to examine teachers' awareness and knowledge about media literacy of their students as well as their knowledge about students' media literacy in Pathumthani province. This study employs qualitative method, using Depth-interview 10 teachers in Pathumthani province. Finding on the first objective reveals that there are 4 issues reflecting teachers' response in the same directions. They show that all teachers are aware of the necessity for students' media literacy knowledge and skills. However, the study reveals two more issues that contrast with what the teachers' response. Most schools have no concrete policy on creating media literacy classes or activities. Finding on the second objective reveals that all teachers' do have media literacy knowledge and skills in some levels.

Their knowledge and skills mostly come from experiences such as observing and perceiving their students' behavior when consuming media.

We all live in a so-called "*Consumerism Society*", in which the media plays a vital role in shaping people's attitudes and lifestyles. To illustrate this more clearly, Thai children are the group that are affected by the power of media since they lack literacy skills when consuming media. Suchada Chakpisud's study of Thai children's media consumption in Bangkok in 2012 shows that Thai children use online media up to 45.5%. The media that ranks second is television at 36%, third is radio at 4% and fourth are newspapers at 5%. When they were asked about tools used to access online media, the answers are personal computers, mobile phones, and notebooks, respectively. The primary reason children use online media is for entertainment and pleasure. Her study also shows a number of negative effects that online media has on children such as addiction to games and facebook 66%, short eye-sight 18% and online children missing 15%

The Mirror Foundation, a non-governmental-organization has emphasized the deficiencies of children's media literacy in Thailand by collecting facts and statistics on missing children via internet, which is on the rise.

These situations, therefore, reflect the importance of children's media literacy skills more and more. However, studies on media literacy in Thailand mostly focus on content or receivers but rarely concentrate on "*teachers*" as a sender or a media literacy coach.

"*Teachers*" are both students' opinion leaders and role models. If they are well-aware of the importance of media literacy, as well as deliver their knowledge and skills to their students effectively, the problem of children lacking skill in media literacy will soon be eliminated. Consequently, there are 2 research objectives in this study: First, to study the teachers' awareness about children's media literacy in Prathumthani province. Second, to study the teachers' knowledge of children's media literacy in Prathumthani. This study is conducted by using qualitative method and in depth-interviews of 10 teachers who have at least 2 years experience in teaching students ages 10 -15 years old around Prathumthani province.

The findings of this study are categorized into 2 parts according to the objectives.

1. Teachers' awareness of children's media literacy; there are 6 issues concerning teachers' awareness of children's media literacy as follows:

1.1 The most influential media for Thai children

Findings reflect that all teachers see internet as the most influential media for children in both positive and negative ways. However, television is the second most popular and the third one is smart phones. Teachers all agree that the students pay too much attention to accessing social media like Facebook, YouTube, chatting, playing games online etc.

Teachers found that there are both positive and negative consequences of using online media, such as helping their students to search for information for their studies more efficiently.

However, negative consequences are as follows: using aggressive speech, addiction to games and social media, and using social media to find girlfriend or boyfriends etc.

There is also an interesting point in that all the teachers' answers show that internet, Facebook, YouTube, advertising, computers, televisions, mobile phones etc. are the kind of media that influence their students. All these answers reflect that many of them don't have enough knowledge about the characteristic of media which will lead to the effectiveness of their teachers to help create their students' media literacy.

1.2 Teachers' opinions on the necessity of children's media literacy.

All teachers agree that media literacy skills are necessary for their students by citing various reasons, such as it could help students analyze what's happening in the future. This finding directly relates to Barry Dancan's idea that said media literacy skills will help passive receivers of the message turn to active receivers. (Potter, 2004, pp. 62-63)

However, some have said that girls should have more media literacy skills than boys since girls are more likely to be fooled by the media than boys. Additionally, most teachers see the importance of analytical skills. Some added that children should have synthesis and evaluation skills as well. Interestingly, there is one teacher who has no idea what type of media literacy skills their students should have.

1.3 School policy concerning children media literacy

Most of the teachers identify that there are no concrete school policies on advocating children media literacy knowledge and skills. This finding directly relates to Good who explains that the awareness process come from involvement with the stimulus (Good, 1973), which in this case is the school administrators who do not have direct experience with the students' negative impacts from consuming too much media. Therefore, their awareness to create a concrete policy can hardly occur. However, the teachers themselves try to create other activities that help build media literacy skills such as discussing with students about daily news in homeroom classes. Additionally, there are two teachers from Thairath Wittaya school, founded by Thairath foundation, who state that their school has created a program called "Media Study", which focuses on practicing analytical skills, news production etc.

The teachers' effort in creating related activities and program are directly related to previous research (Scheibe & Row, 2008, cited in Warat Karujit 2554, P. 90-108) in that teachers do not need to teach so-called "Media literacy" content. But, they can instill "Media literacy skills" such as observational skills, critical thinking skills, reading skills, production skills, and evaluation skills in other classes. However, the teachers must have the true knowledge of media literacy before applying them to other classes.

1.4 Are there any school activities concerning media literacy and activity evaluation?

Most of the teachers mentioned that there are no activities concerning media literacy directly except for the teachers from Thairat Wittaya School. Also, the teachers from Thairath Wittaya School both agree that they also evaluate their students for each activity by scoring pass/ non-pass.

However, there are efforts by other schools that try to create activities that help students practice analytical skills. Some teachers do evaluate their students by observing students behavior and some don't have any kind of evaluation methods at all.

1.5 Issues concerning teachers' opinions about the most important media literacy knowledge and skills

Most teachers agree that analytical skills are the most important skill for media literacy; however, some teachers had some interesting remarks that it's hard for them to teach and convey knowledge about analytical skills to their students because they were taught in the old system.

When considering the media literacy development concept, there are 2 ways of looking at media literacy. The first is counting media literacy as "Knowledge"; for example, mass media characteristics, types of mass media etc. The second, is counting it as "Skills"; for example, analysis, interpretation, evaluation, critical thinking etc. When comparing the finding with this concept, the study reflects that most teachers see media literacy as "Skills" since many of them claim that analytical skills are the most important skills that students should practice.

1.6 Are there any media literacy activities or programs that teachers themselves create for students?

Most teachers try to create activities that help building students' analytical skills such as school plays and daily news presentations; however, it depends on each person's determination. Most teachers said that schools should add media literacy programs in the high school curriculum.

Teachers' efforts in providing activities mostly come from the awareness of students' inefficient media literacy skills. They have experienced their students' negative behaviors resulting from consuming too much media. However, the experiences they share are different from each other. Consequently, that leads to their understanding of the problems and evaluation of the problems which differ from each other; for example, most teachers believe that children lack love and warmth from the family and that is the main factor that causes children to pay too much attention to the media. However, some agree that children do not have proper analytical skills; therefore, they are easily fooled by the media. There are different activities that teachers provide for their students depending on their understanding of the problem; for example, setting up meetings with the parents to discuss the problem with parents and children, adding news analysis sections in Thai language class, home rooms and in sociology class. Moreover, there are quite a few interesting programs such as "Friends Help Friends Campaign" "Reading Campaign" "Bunkum Channels" etc.

The above finding indicates four out of six issues concerning teachers' awareness of children media literacy. Most teachers see internet as the most influential media which directly relates to the Mass Media and New Media Characteristics in that internet helps the exchange of information from "many to many basis" (Roger,1995). Apart from that, new media such as the internet allows people to interact and respond more than any other tools of communication do. (Neuman, 1991) It also turns receivers to senders.

Moreover, when considering the "awareness" process and definition according to previous research (Schmid,1990) (Bloom,1971) (Good, 1973), the finding shows that teachers' awareness of children's media literacy occur when they experienced students' negative consequences from the lack of media literacy, or so-called direct stimulus. That leads to teachers' awareness and understanding of the students problems; for example, teachers spent so much of their time with students that they realize too much internet consumption is causing their students to act aggressively in many ways such as talking harshly, copying inappropriate behavior, etc. The finding also reflects that the teachers' ability to understand and evaluate their students' media literacy depends on their experience and the time they spend with students. This then will lead to teachers' strong awareness of children's media literacy; for example, most of them believe that media literacy skills and knowledge are necessary to the children, the analytical skills are the most needed skills for children media literacy, also the teachers all agree that they should create activities or programs that help build students media literacy knowledge and skills.

2. Teachers' knowledge of children's media literacy in Prathumthani; there are 4 issues concerning teachers' knowledge about children's media literacy.

2.1 Definition of "Media" according to the teachers' perceptions.

Finding for media definitions can be categorized into 6 groups as follows;

- *Media as a Process:* the process of communication from senders to receivers.
- *Media as a medium or channel:* Television, newspaper, radio, computers, posters etc.
- *Media as innovation or technology:* Internet, smartphone, tablet, etc.
- *Media as an exposure:* Watching TV, listening to radio, searching internet.
- *Media as a profession:* Reporter, DJ, etc.
- *Media as a tools and activities that supplement study environments:* Field trips

(Bloom, 1956) categorized knowledge into 6 levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. The findings reflect that teachers' categorization of media definition is in the "knowledge" level since they learn the definition through observation, collecting facts and data, and direct experiences with their students.

The findings also reflect that teachers understanding of media definition are from their own perceptions and direct experiences. To illustrate it more clearly, they cannot tell the differences between media and mass media. Apart from that, some teachers claim that media can help students be more interested in classes. This shows that teachers still don't have enough knowledge about mass media's nature and characteristics.

Moreover, the finding has shown that all teachers mention the new media, such as the internet, as the first tool instead of mentioning newspapers, magazines, radio, and television. This has clearly shown that they have direct experiences and perceptions of students using internet more than any other forms of media.

2.2 Teachers' understanding of the "Media literacy" concept

Most teachers agree that "media literacy" is the ability to understand the objective that the media is trying to convey to receivers. Moreover, it also includes the ability to analyze the content and credibility by comparing various sources. Some of them cited that media literacy is the production skills such as creating online news.

The finding clearly shows that teachers understanding of media literacy is limited only to "the skills" since their answers come only from their observation and direct experiences, which may not be enough. Therefore, teachers could add more mass media knowledge and increase more activities concerning media literacy. This will help create guidelines and knowledge for the teachers before they pass on the media literacy knowledge and skills to their students.

2.3 Training and workshops for teachers to increase media literacy knowledge and skills.

Most of the teachers claim that they have never entered any media literacy trainings or workshops. Many of them learn thorough direct experiences. However, there are 2 teachers from Thairath Wittaya school that enter a media literacy workshop every year.

2.4 Teachers' perception of children's media literacy skills.

All of them emphasized that analytical skills are the most important media literacy skills that their students must increase. Additionally, some of them mentioned that reading and writing skills are needed. The finding illustrates that all the teachers are intensively aware of the need for media literacy. However, teachers themselves lack true knowledge of the media and media literacy skills as well as the skills to teach their students. Therefore, in the long run, school administrators need to put a lot of energy and support into increasing media literacy knowledge to the teachers. By doing so, children's media literacy skills and knowledge will be more efficient in the future.

Recommendations

1. Governmental organizations or related organizations must endorse the media literacy courses in every school as well as providing trainings and workshops to the teachers.
2. Teachers must practice media literacy skills as lifelong skills.
3. Schools should endorse formal evaluation of media literacy activities of teachers and students in a concrete manner.

References

Books

- Atkin, C.K. (1973). *New model for mass communication research*. New York: The Free Press.
- (1996). *Perception*. New York: Oxford University Press.
- Buckingham, D. (1993). *Reading audiences: young people and the media*. Manchester: Manchester University Press ;
- Baran, S.J. & Davis, D.K. (2009). *Mass communication theory: Foundation, ferment, and future*. Canada: Thompson Wadsworth.
- Burnett, R. and David P. M. (2003). *Web Theory*. London: Routledge.
- Christ, W. G. (1996). *Media education assessment*. Mahwah, N.J.: L. Erlbaum.
- Danesi, M. (2009). *Dictionary of media and communications*. Armonk, N.Y.: M.E. Sharpe.
- Dearing, James W., Rogers, Everett M. (1996). *Agenda-setting*. California: Sage.
- Fidler, Roger. (1997). *MediaMorphosis: Understanding New Media*, Pine Forge Press. UK
- Rogers, E.M. and Svenning, L. (1969). *Modernization among peasants: The impact of communication*. New York: Holt Rinehart and Winston.
- Kawamoto, K. (1997). *10 things you should know about new media: a user-friendly primer* : released at the Seminar for Technology Educators, the Freedom Forum Pacific Coast Center, San Francisco, April 13, 1997. San Francisco: Freedom Forum Pacific Coast Center.
- Manovich, L. (2000). *The language of new media*. Cambridge, Mass.: MIT Press.
- Martin Lister. 2003. *New Media : A Critical Introduction*. London : Routledge Publishing.
- Neuman, W. R. (1991). *The future of the mass audience*. Cambridge [England: Cambridge University Press.
- Potter, W. J. (1998). *Media literacy*. Thousand Oaks: Sage Publications. (2004). *Theory of media literacy a cognitive approach*. Thousand Oaks, Calif.: SAGE Publications.
- Shapiro, A. L. (1999). *The control revolution: how the Internet is putting individuals in charge and changing the world we know*. New York: PublicAffairs.
- Weiner, R. (1990). *Webster's New World dictionary of media and communications*. New York: Webster's New World.

ICSSAM-944

The Impact of Brand-to-Brand High-Similarity on Purchase Intentions

Shu-Hsun Ho

Providence University, Taiwan

ho.shuhsun@gmail.com

Yen-Hsin Juan

Providence University, Taiwan

mita.yasinj@gmail.com

Abstract

In today's competitive business environment, brands play a major role and are key resources sustaining company's competitive advantages. However, when the brand is similar to the leading brand in any way such as the logo or design, it is liable to trademark infringement (Horen and Pieters, 2012a). Those brand imitators try to take advantage of the leading brand's positive associations and marketing efforts by imitating the name, logo, package, or even the jingles of the leading brand. In this research, we examine the similarity among brands, in which new products are introduced with similar style and brand symbols. The purpose of this article is to find out whether the antecedents of consumer purchase decision toward high or low similarity product and in the context, consumer preference tend to price, brand or popular goods. This study investigates whether the appearance of high and low similarity products will influence consumer's purchase intention. In the condition of preference and price difference we distinguish two groups of consumers: one group was informed with brand names and the other wasn't. The results support our hypotheses that constructs relating to price impact between high and low similarity group, but the strength of some of these relationships differ. This effect is derived from a brand-to-brand similarity, in addition to the product-to-product and brand-to-product similarity identified.

Keywords: Similarity, Preference, Price, Purchase Intention

Introduction

Imagine when you are shopping, you want to buy shoes that appearance of product have not decorated and pattern style design in department store. Each brand has introduced similar style, and look like the same. You are searching for the more famous brand and the highly similar brand next to it: The basic style has a similar appearance of product. You encounter product that include items from different price tiers. How would you choice this "high-similarity" product?

In today's competitive business environment, brands play a major role and are key resources sustaining company's competitive advantages. However, when the brand is similar to the leading brand in any way such as the logo or design, it is liable to trademark infringement (Horen and Pieters, 2012a). Those brand imitators try to take advantage of the leading brand's positive associations and marketing efforts by imitating the name, logo, package, or even the jingles of the leading brand. Previous studies most investigated similar of brand and knockoff, or similarity of brand's logo, package, color. But less studies investigates the brand to brand similarity of appearance of products.

When the common appearance of a high similarity of goods, regardless of the nature and appearance of the product so similar, and not knockoff in market. What the factors of lead to concern that consumers are willing to spend time to stop and look at product, in time clerk have opportunity to introduce the product for customers.

Researchers indicated apparent imitate package appear in one-third of the 75 consumer packaged product categories (Sayman, Hoch, and Raju, 2002). Scott-Morton and Zettelmeyer (2004) surveyed on package in color, size, and shape found that half of the store brands were similar to a national brand in a United States. Most imitator particularly perceptive traits of the leader brand, such as the color and shape, it represent other brands that package, logo and sounds of the brand name (Planet Retail, 2007). Therefore, counterfeiting is common (Horen and Pieters, 2012b). In the study we investigate high and low similarity product how to effect consumer purchase decision.

Literature Review

Similarity

When the similarity product are placed on the same block (e.g., shoes area) on the department store, or placed next to each other on the store shelf and are in the same visual field consumer purchase decision is more likely to occur difference. However consumers make choice with difference level of uncertainty about the similarity product purchase intention.

In the condition of uncertainty will lead to unpleasant feeling and emotions (Kahneman & Tversky, 1982; Loewenstein, 1994). Most consumers have no knowledge of the product that are on the market, and consumer don't know how to choose, and how to compare with other brands sales of product, thus in the condition of uncertainty similarity product have advantage (Downey & Slocum, 1975; Howell & Burnett, 1978; Lipshitz & Strauss, 1997).

On the other hand most consumers will search for additional information, such as through clerk's advice seeking, comparison, or request sample / try-on, can sometimes reduce uncertainty (Dowling & Staelin, 1994; Urbany, Dickson, & Wilkie, 1989).

Base on feeling and emotion that can guide consumer how to decision in the uncertain of "feeling of familiarity." (Jacoby, Kelley, & Dywan, 1989; Jacoby, Kelley, & Brown, 1989;

Whittlesea, 1993). A feeling of familiarity attain from seem and exposed, these visual stimuli is again and again and frequently be seem (Zajonc, 1968). Because of consumer often seen similarity product on market frequently, these incentives make consumers feel safe and relieved (i.e., popular styles, current fashion trends, avoid mistakes and conflict-free), which increases positive affect. (Schwarz, 2004; Winkielman et al., 2003).

In conditions of uncertainty this “feeling of familiarity” represent trust and security (De Vries, Holland, Chenier, Starr, & Winkielman, 2010; Litt, Reich, Maymin, & Shiv, 2011). In the condition of uncertain the factors of psychological means similarity product on consumer purchase intention.

H1 The higher level of similarity, the higher level of purchase intention.

Preference

When consumers are searching for a particular style of product are specifically likely to become more perceived of the highly similarity between difference brands and will perceived that their decision might by positive emotion from the preference brand to purchase intention. Previous research has shown that product display on the shelves can effect of consumers' preferences and purchase possibility (Buchanan, Simmons, and Bickart 1999; Simonson 1999; Simonson, Nowlis, and Lemon 1993). In the context, clerk promote product might effect of consumer decision.

Studies about in the uncertainty of influence on cue-utilization demonstrate consumers rely on brand name (Dodds, Monroe, & Grewal, 1991) and prefer well-known brands to replacement (Muthukrishnan, Wathieu, & Xu, 2009).

Marketing literature suggests that price can play a significant role in influencing consumers' purchase intention. Researchers have argued that price may have the most influence among all the sources of information that consumers turn to before making a purchase decision. Consider about price can help consumers recognize the products that conform their trait. These response including sales staff how attract consumers to buy similar product (Boush, Friestad, and Wright 2009).

H2 The higher level of consumer preference, the higher level of purchase intention.

Price

The concept of price image is likely to price perception that reaction price of product. Price perception is usually used in considerate about consumer purchase decision (e.g., Berkowitz and Walton 1980; Janiszewski and Lichtenstein 1999). Therefore, price sense include compare between specific price and reference price (Monroe 1973). Thus, Consumer acceptance of the price might be able to from the psychological value.

Classification has been effect of consumer decision (Whitfield and Slatter 1979). It is important when product into price classification, because price classification can effect consumer's decisions (Rosch 1975; Smith and Medin 1981).

We build on the view of sorting as a basic process underlying consumer decision making. We indicate that consumers often categorize items into price level.

To classify with a single product as expensive or cheaper can be define two types of comparisons. In the same product category distinguish one of that sorting compare with a part of price relative to the average price of the part (Elio and Anderson 1981; Rosch and Mervis 1975). For example, a \$100 tissue may can be classify as expensive because it costs actually more than the average tissue, but a \$100 leather shoes may can be classify thought of as inexpensive because it costs much less than the average leather shoes.

Base on the opinion definite averaging, we suppose when distinguish price level are mixed, and consumers whole present the combination's monetary value will reflect product value instead of total price.

As a result, we propose two category of price difference will be evaluated in similarity product purchase intention. In this study we setting high level of price difference is less than NT\$300; otherwise, low level of price difference is more than NT\$1000. The characteristic of decision increase consumer on similarity product with positive perceived instead of adding consumers' subjective value of the product.

H3 This influence is moderate by product price.

Methodology

The goal of our study investigates high versus low degrees of similarity between product and product. It tests two groups (high-similarity and low-similarity) whether consumer preference and price difference can positive effect consumer purchase intention when subjects in the context of whether they have been informed brand name or not.

Method

Participants and design

The total of 134 female subjects were participated in a 2 (similarity: low, high) × 2 (price difference: low, high) design. In which 72 college students (35 students didn't inform brand name; 37 students were informed brand name) were participated in the condition of high-similarity product. In the condition of low-similarity product have 62 participants (31 participants didn't inform brand name; 31 participants were informed brand name). In low-similarity condition, we use mySurvey website (<http://www.mysurvey.tw/index.htm>)sent Questionnaire on internet.

In the study we used the similarity of product category was “high heel shoes,” and with the brand name was “Miss Sofi” and “iki²”. These two brands have the high visibility, strong brand image, and similar brand positioning in Taiwan.

In the condition of high-similarity study, we used black high heel shoes and its exterior had not any decorated and pattern. We used two pictures that same product but different way’s display (Appendix. A). Its fundamental style design, and majority of women’s must-have one.

In the condition of low-similarity study, we used Miss Sofi and iki² launched products in 2013 second half of this year (Appendix. A). The product of brand’s logo has been image manipulate in retouching software.

Procedure

All participants must have seen two product pictures before the questionnaire, and distinguish the difference between high and low similarity groups to inform the brand name or not. The measure as question items (Appendix. B) in the study, using seven-point Likert scale (1= “strongly disagree,” and 7= “strongly agree”).

Results

Influence of Similarity on Purchase Intention. According to ANOVA analysis distinction significant difference in two groups of between high and low similarity product of perceived similarity. The results of analysis show high-similarity (M=5.1) and low-similarity (M=3.39) groups have significantly difference (F=85.32, $p < 0.001^{***}$). Distinction difference in high and low similarity on purchase intention, the result shows high similarity purchase intention (M=4.60) have significantly higher of low similarity purchase intention (M=3.74) (F=19.681, $p < 0.001^{***}$). This evidence supports hypothesis H1 (Table 1).

Table 1. Result of similarity on purchase intention analysis

variables	situation	Mean	F	p-value
Similarity	High	5.11	85.322	.000 ^{***}
	Low	3.39		
Purchase Intention	High	4.60	19.681	.000 ^{***}
	Low	3.74		

($p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$)

Influence of Consumer Preference on Purchase Intention. According to Regression analysis (independent variables: preference, dependent variable: purchase intention) shown consumer purchase similarity product tend to brand ($p < 0.01^{**}$), price ($p < 0.001^{***}$) and popular commodities ($p < 0.001^{***}$). The coefficient of preference is significant and positive which suggests that the association between preference and purchase intention is positive, thus, supports hypothesis H2 (Table 2).

Table 2. Result of consumer preference on purchase intention analysis

Preference	Beta	T	p-value
Brand	0.259	3.079	.003**
Price	0.361	4.450	.000***
Popular commodities	0.590	8.398	.000***

($p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$)

Influence of Price Difference on Purchase Intention. According to Regression analysis (independent variables: price difference, dependent variable: purchase intention) shown the coefficient of high-price difference is significant ($p < 0.001^{***}$) and positive which suggests that the association between high-price difference and purchase intention is positive, thus, supports hypothesis H3 (Table 3).

Table 3. Result of price difference on purchase intention analysis

Price Difference	Beta	T	p-value
Low	0.013	0.151	.880
High	0.293	3.42	.000***

($p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$)

Discussion

In the study we findings that brand perceptions can affect consumer purchase intention. Clerk's advice can stimulate sales. Consumers increase attention from popular commodities.

Theoretical Implication

Consumers can thus have a clear understanding of what similarity product represents in the market. It is paramount to develop visual marketing, degrees of similarity between appearance of product design and decoration. Consumers receive visual stimuli and then caused purchase intention. However, high-similarity product would not be so frequently appear in the market.

When consumer purchase appearance of Similarity product that be likely to have a prevention focus preference feeling of familiarity of product or brand on purchase decision. Therefore brand awareness is also important factor of decision.

Limitations and Further Research

There are many other variables that also influence consumer purchase intention and preference. For example, in the condition of consumer preference that quality is one of important factor. In the study doesn't consider about it. Further research could explore other influence of preference.

In the study we only explore similarity of high heels shoes future research could explore other product categories. In the price difference context that questionnaire design of question items didn't explain clearly. Thus, participants might lead to confused in further research

needs to improvement that. Further research could also investigate the influences of difference brand name, and not limited to one country.

Appendix. A

High-similarity

No brand name		Brand name	
Figure A	Figure B	Figure A	Figure B
			

(Source Image: Retrieved March 22, 2014, from Taiwan Yahoo online shopping center, <http://tw.buy.yahoo.com/gdsale/gdsale.asp?act=gdsearch&gdid=4635887>.)

Low-similarity

No brand name		Brand name	
Figure A	Figure B	Figure A	Figure B
			

(Source Image A: Retrieved March 22, 2014, from Taiwan Yahoo online shopping center, <http://tw.buy.yahoo.com/gdsale/gdsale.asp?gdid=4742707>.)

Source Image B: Retrieved March 22, 2014, from Taiwan Yahoo online shopping center, <http://tw.buy.yahoo.com/gdsale/gdsale.asp?act=gdsearch&gdid=3785030>.)

Appendix. B Measures

Similarity (Bhat & Reddy, 2001)

- I think the two products in the pictures above have... similar style.
- I think the two products in the pictures above have... similar function.
- I think the two products in the pictures above have... similar quality.

Likert seven-point scales (1= “strongly disagree,” and 7= “strongly agree”)

Price (Zeithaml, 1988)

- If the price of these two similar products is different... I prefer the brand name.
- If the price of these two similar products is different... if the price difference is less than NT\$300, the brand name is not a big issue.
- If the price of these two similar products is different... if the price difference is more

than NT\$1,000, the brand name is important to me.

Likert seven-point scales (1= “strongly disagree,” and 7= “strongly agree”)

Preference (Lee, Jung & Lee, Jae Nam, 2009)

- Brand names are important to me.
- Price is important to me.
- If I want to buy highly similar product, brand name is important to me.
- I prefer to be like others using the highly similar and popular products.

Likert seven-point scales (1= “strongly disagree,” and 7= “strongly agree”)

Purchase Intention (Dodds, Monroe & Grewal, 1991)

- I had experience buy the highly similar product.
- I would like to buy highly similar goods if they often appear on the market.
- If I see the “highly similar products” very often, I would like to try and buy them.
- I would like to buy highly similar goods.

Likert seven-point scales (1= “strongly disagree,” and 7= “strongly agree”)

References

- Berkowitz, Eric N. and John R. Walton (1980), Contextual Influences on Consumer Price Responses: An Experimental Analysis, *Journal of Marketing Research*, 17, 349-58.
- Bhat, Sobodh & Reddy, Srinivas K. (2001). The impact of parent brand attribute associations and affect on brand extension evaluation, *Journal of Business Research*, 53, 111-122.
- Boush, David M., Marian Friestad, and Peter Wright (2009), *Deception in the Marketplace: The Psychology of Deceptive Persuasion and Consumer Self-Protection*. New York: Routledge/Taylor & Francis.
- Buchanan, Lauranne, Carolyn J. Simmons, and Barbara A. Bickart (1999), “Brand Equity Dilution: Retailer Display and Context Brand Effects,” *Journal of Marketing Research*, 36 (August), 345–55.
- De Vries, M., Holland, R. W., Chenier, T., Starr, M. J., & Winkielman, P. (2010). Happiness cools the warm glow of familiarity: Psychophysiological evidence that mood modulates the familiarity-affect link. *Psychological Science*, 21(3), 321–328.
- Dodds, William B., Monroe, Kent B. & Grewal, Dhruv (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations, *Journal of Marketing Research*, Vol. 28 (3), 307-19.
- Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of Consumer Research*, 21(1), 119–134.
- Downey, H. K., & Slocum, J. W. (1975). Uncertainty: Measures, research, and sources of variation. *Academy of Management Journal*, 18(3), 562–578.

- Elio, Renee, and John R. Anderson (1981), "The Effects of Category Generalizations and Instance Similarity on Schema Abstraction," *Journal of Experimental Psychology: Human Learning and Memory*, 7 (6), 397–417.
- Hall R. The strategic analysis of intangible resources. *Strat Manag J* 1992;13(2):135–44 February.
- Horen, Femke Van and Pieters, Rik (2012a). When High-Similarity Copycats Lose and Moderate-Similarity Copycats Gain: The Impact of Comparative Evaluation, *Journal of Marketing Research*, Vol. 49, 83 – 91.
- Horen, Femke van & Pieters, Rik (2012b). Consumer evaluation of copycat brands The effect of imitation type, *Intern. J. of Research in Marketing*, 29, 246–255.
- Howell, W. C., & Burnett, S. A. (1978). Uncertainty measurement: A cognitive taxonomy. *Organizational Behavior and Human Performance*, 22(1), 45–68.
- Jacoby, L. L., Kelley, C. M., Brown, J., & Jasechko, J. (1989). Becoming famous overnight: Limits on the ability to avoid unconscious influences of the past. *Journal of Personality and Social Psychology*, 56(3), 326–338.
- Jacoby, L. L., Kelley, C. M., & Dywan, J. (1989). Memory attributions. In H. L. Roediger & F. I. M. Craik (Eds.), *Varieties of memory and consciousness: Essays in honour of Endel Tulving* (pp. 391–422). Hillsdale, NJ: Erlbaum.
- Janiszewski, Chris and Donald R. Lichtenstein (1999), "A Range Theory Account of Price Perception," *Journal of Consumer Research*, 25 (4), 353-68.
- Kahneman, D., & Tversky, A. (1982). Variants of uncertainty. *Cognition*, 11, 143–157.
- Lee, Jung & Lee, Jae-Nam (2009). Understanding the product information inference process in electronic word-of-mouth: An objectivity-subjectivity dichotomy perspective, *Information & Management*, 46, 302-311.
- Lipshitz, R., & Strauss, O. (1997). Coping with uncertainty: A naturalistic decision-making analysis. *Organizational Behavior and Human Decision Process*, 69(2), 149–163.
- Litt, A., Reich, T., Maymin, S., & Shiv, B. (2011). Pressure and perverse flights to familiarity. *Psychological Science*, 22(4), 523–531.
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75–98.
- Monroe, Kent B. (1973), "Buyers' Subjective Perceptions of Price," *Journal of Marketing Research*, 10 (February), 70-80.
- Muthukrishnan, A. V., Wathieu, L., & Xu, A. J. (2009). Ambiguity aversion and the preference for established brands. *Management Science*, 55(12), 1933–1941.
- Planet Retail (July). Private label trends worldwide. E-intelligence on global retailing Retrieved from www.planetretail.net.
- Rosch, Eleanor (1975), "Cognitive Reference Points," *Cognitive Psychology*, 7 (4), 532–47.

- Rosch, Eleanor, and Carolyn B. Mervis (1975), "Family Resemblances: Studies in the Internal Structure of Categories," *Cognitive Psychology*, 7 (4), 573–605.
- Sayman, S., Hoch, S. J., & Raju, J. S. (2002). Positioning of store brands. *Marketing Science*, 21(4), 378–397.
- Schwarz, N. (2004). Metacognitive experiences in consumer judgment and decision making. *Journal of Consumer Psychology*, 14(4), 332–348.
- Scott-Morton, F., & Zettelmeyer, F. (2004). The strategic positioning of store brands in retailer–manufacturer negotiations. *Review of Industrial Organization*, 24(2), 161–194.
- Simonson, Itamar (1999), "The Effect of Product Assortment on Buyer Preferences," *Journal of Retailing*, 75 (3), 347–70.
- Simonson, Itamar, Stephen M. Nowlis, and Katherine Lemon (1993), "The Effect of Local Consideration Sets on Global Choice Between Lower Price and Higher Quality," *Marketing Science*, 12 (4), 357–77.
- Urbany, J. E., Dickson, P. R., & Wilkie, W. L. (1989). Buyer uncertainty and information search. *Journal of Consumer Research*, 16(2), 208–215.
- Whitfield, T. W. Allan, and Philip E. Slatter (1979), "The Effects of Categorization and Prototypicality on Aesthetic Choice in a Furniture Selection Task," *British Journal of Psychology*, 70 (1), 65–75.
- Whittlesea, B. W. A. (1993). Illusions of familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19(6), 1235–1253.
- Winkielman, P., Schwarz, N., Fazendeiro, T. A., & Reber, R. (2003). The hedonic marking of processing fluency: Implications for evaluative judgment. In J. Musch & K. C. Klauer (Eds.), *The psychology of evaluation: Affective processes in cognition and emotion* (pp. 189–217). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9(2), 1–27.
- Zeithaml, Valarie A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence, *Journal of Marketing*, Vol. 52, 2-22.

ICSSAM-762

**How Media Source And Personal Opinion Jointly Affect Voters'
Perception Of Press Bias When Public Polls are Reported**

Stella C. Chia

Dept. of Media & Communication, City University of Hong Kong Tat Chee Ave., Kowloon,
Hong Kong

E-mail: cychia@cityu.edu.hk

Abstract

Public opinion polls have become indispensable in modern elections. However, the public often feels ambivalent or even hostile about polls reported by news media. In this study, we examined where the hostile perception comes from. We conducted an experiment based on the judgment-heuristic explanation and the attitude-influenced explanation. The judgment-heuristic explanation suggests that a person's perception of media characteristics would affect their judgment of news bias; the attitude-influenced explanation, on the other hand, argues that a person's issue involvement and attitudes towards the issue may influence their evaluation of news article slant (Chia & Cenite, 2012). We found that news source and personal opinion would produce joint effects on audiences' judgment of news bias when public polls are reported in news stories.

Society & Social Science I

AV Room

09:00-10:30

Thursday, May 8

Session Chair: *Prof. Chi-Yo Huang*

ISEPSS-1869

Corporate Social Responsibility and Employee Satisfaction: A comparison of the Adoption and the Non-adoption of SA8000

Jui-Ling Hsu

Feng Chia University

ISEPSS-1772

Mexico and Its Incorporation into the Process of Global Constitutionalization of Human Rights

Janeth Hernández Flores

National Autonomous University of Mexico

ISEPSS-1762

Gender Differences in Intimate Partner Homicide

Tsung-Chieh Ma

Soochow University

ISEPSS-1729

Deciphering Mongolian Womens' Rhetorical Analysis

Lin-Lee Lee

National Kaohsiung Normal University

Hui-lin Hsieh

Wenzao Ursuline University of Languages

ICSSAM-674

Simple Model of Using Social Networking for Information Services of University Libraries

Prisana Mutchima

Suan Dusit Rajabhat University

Nattha Phiwma

Suan Dusit Rajabhat University

ISEPSS-1869

Corporate Social Responsibility and Employee Satisfaction: A comparison of the Adoption and the Non-adoption of SA8000

Jui-Ling Hsu

Associate Professor, Department of International Trade, Feng Chia University
100, Wenhwa Rd., Seatwen, Taichung, Taiwan, 40724, Republic of China
E-mail addresses: jlhsu@mail.fcu.edu.tw

Abstract

The purpose of this paper is to identify whether Corporate Social Responsibility (CSR) initiatives boost employee satisfaction through SA8000 adoption. Although that SA8000 has been introduced as a universal standard tool to improve employees' working conditions, some researches pointed out that no empirical studies verify this code could affect business outcomes.

Maintaining employee satisfaction has been confirmed as an effective method to reduce organizational turnover and absenteeism. Therefore, this study integrates Decision Making Trial and Evaluation Laboratory (DEMATEL), Kano, and Importance-Performance Analysis (IPA) methods to establish a revised approach for exploring the average impact of CSR initiatives on employee satisfaction and dissatisfaction. The traditional IPA has hidden assumptions that the factors and employee satisfaction has a linear relationship, and the dimensions are independent and have no causal relationship. The revised model combined DEMATEL method not only considers the nonlinear relationship between factors in dimensions and employee satisfaction, but also concerns the casual relationship between dimensions. Thus, the proposed model is used to analyze satisfaction and dissatisfaction of employees in the SA8000 companies and without SA8000 ones in order to increase the effectiveness and accuracy of employee satisfaction evaluations and to compare the difference between the both.

Finally, the result shows that SA8000 companies have a higher satisfaction level compared to that without SA8000. This proves that CSR-SA8000 implementation can influence employee satisfaction. This paper also investigates that the following items are the main needed improvements for raising employee satisfaction: caring from managers and companies, reasonable annual incomes, reasonable working hours, career planning or vision and no unusual overtime or reducing salary. Finally, the finding also contributes to provide a useful approach to audit the gap between CSR engagements and employee satisfaction for helping managerial management in maintaining employee satisfaction.

Keyword: Corporate Social Responsibility (CSR), Employee Satisfaction, SA8000, Kano, Importance -Performance Analysis (IPA), Decision Making Trial and Evaluation Laboratory (DEMATEL)

ISEPSS-1772

**Mexico and Its Incorporation into the Process of Global
Constitutionalization of Human Rights**

Janeth Hernández Flores*

Faculty of Political and Social Sciences at the National Autonomous University of Mexico,
May 5th Avenue #15, State of Mexico, Mexico, Zip Code 54770
janethpumaher@hotmail.com

Abstract

The global constitutionalism of human rights recognizes the United Nations (UN) Charter and the various covenants and declarations of human rights as a "global Constitution" (Diggelmann and Altwicker, 2008, p. 624, Dupuy, pp. 4-6, 15) which requires Member States to align substantially and interpretively to its precepts and its jurisprudence. This constitutionalism influences the process of global constitutionalization of human rights through which national constitutions have incorporated explicitly and progressively from the last quarter of the twentieth century -this process began with the Portuguese Constitution of 1976-, the international human rights treaties. Global constitutionalism of human rights is a historical construction and a shared discourse, is a bet in where human rights arise as instruments of political action, whose purpose is solve a basic problem of international politics. Thus, human rights are validated by the international community as the highest values of all societies, therefore, must be guaranteed to all people and supported by national and international legal systems across all developed mechanisms to this effect. This is an insert movement in International Law and International Relations, which impacts the constitutional structures in many parts of the world. Mexico is no stranger to this event, the June 10, 2011 the country joined the global constitutionalization of human rights, through a constitutional amendment. The Political Constitution of the United Mexican States also recognized the inherent principles of international human rights: progressive realization, indivisibility, interdependence, and universality, all with the intention of promoting a political-social transformation and operationalize human rights in the country. Far is the constitutional recognition of some few isolated human rights. In this context, the purpose of this paper is to analyze how the phenomenon of globalization has spread impacting constitutional structures, and an example is the explicit inclusion and recognition of international human rights treaties in many national constitutions, also briefly examine the history of this constitutional process in Mexico and how it has impacted on the protection and guarantee of human rights.

Keywords: global constitutionalism, constitutionalization, human rights, constitutional structures, international treaties

1. Introduction

This article describes the process of global constitutionalization of human rights from the last quarter of the twentieth century and its impact on the Mexican context through a constitutional amendment of June 2011. This process is an international construction originated when many countries and individuals –as social entities– explicitly recognized certain international standards that contribute to the moral and material progress of the people, trying to harmonize their constitutional requirements to the highest standards protection of human dignity. Such incorporation serves to legitimize domestically and internationally to the national government, and to impose new limits on public authorities (Wiener, 2011, p.2).

In this regard, Mexico has joined other countries around the world to the process of global constitutionalization of human rights that seeks to ensure full and effective implementation of these rights in national policy contexts. This process has put at the center of political, legal and social debate the issue of human rights in Mexico, and it has led to a breakthrough in the development of specific guarantees for its defense, and overall protection in accordance with international standards in the field. In fact, an attribute of contemporary constitutions is to have a catalog of human rights, but this is no longer limited to a few rights, the principles of universality, progressive realization, interdependence, and indivisibility impose size them holistically. Hence, through the constitutional incorporation of international instruments in this field, on one hand, is fully recognized human rights and its most advanced hermeneutical development and, on the other, the international law of human rights is integrated into domestic law in each country, making these mandatory rights to all authorities and, therefore, directly enforceable.

Thus, human rights used as instruments of transformation, can be one of the tools that will allow replacing national classical models based on welfare and charity, for other models based on respect for the dignity of individuals and peoples, justice and equity.

2. Constructing the Global Constitutionalism of Human Rights

2.1. Idea of Constitution and Global Constitutionalism of human rights

The work of the constituent assembly is to establish core values. Such values include those represented by human rights. Today, very hardly a constitutional State could waive ensure such rights. Therefore, the Constitution is not only a legal document comprising rules for the organization and demarcation of the power of the State, but is at the same time the expression of a specific level of cultural development and the illustration of a country's cultural heritage

(Häberle, 1998, p. 151). So, a Constitution also appears as "a new beginning" (Ackerman, 2006, p. 9) and a symbolic sign of great transition in the political life of a nation. Now, the concept of Constitution derives the idea of constitutionalism which is a movement that strives to promote and defend the dignity and human rights, based on limited government.

In other words, the Constitution and the idea of constitutionalism differ significantly. While the Constitution refers to a constitutive rule and limit of power, the idea of constitutionalism expresses the specific way of understanding and practicing the Constitution in a given system of relations.

However, to develop the idea of global constitutionalism should be from a flexible conception of Constitution. For example, Simma (1994, p. 260) suggests that the concept of Constitution must be considered as a combination of the formal element of supremacy over the "ordinary law" and substantive element of the basic rules of a community. This definition of the Constitution makes an adaptable concept internationally. Tomuschat (1993, p. 241) provides another meaning of Constitution; he argues that any modern system of governance has a Constitution that contains the rules for making of laws, of the judicial function y on the approval of the Executive. When defining a Constitution in this way, the author makes the constitutional language applicable to the international community, comprising a system of governance.

Now, Diggelmann and Altwicker (2008, p. 640) argue that global constitutionalism refers to "the constitutional structures" in international law or even the "International Constitution" or "Constitution of international law" and emphasize that this concept has the value a "realistic utopia" for our time. Jacobo Angulo (2006, p. 16) says that the global constitutionalism is the legal and institutional organization of an international character that has the power and means to demand respect for human rights. Ferrajoli (1998, p. 178) argues that the embryonic global Constitution exists in the UN Charter and the various covenants and declarations of human rights. In addition to this idea, Dupuy (1997, p. 15) mentions that the UN Charter can be considered an International Constitution regarding the substantive dimension, despite its incompleteness, because it establishes the main principles of the international community.

Dunoff and Trachtman (2009, p. 4-5) argue that the purpose of global constitutionalism is reshape international relations changing our perception of them, rather than give a precise explanation of international legal issues. Further indicate that in terms of social constructivism, the concept of global constitutionalism can be seen as a specific legitimating "institution" that originates from intentional human action.

Its value lies in having a constitutive effect, which form a shared identity and the development of common objectives.

Thus, the main task of constitutionalism is to connect the different levels of governance, from the local to the global level, then it is "building a house with different stories" (Cottier and Hertig, 2003, p. 261).

A further object of international constitutionalization is to complement national constitutions that have been reduced due to the effect of globalization. Thus, human rights are mechanisms associated with the functions of constitutionalization. Diggelmann and Altwicker (2008, pp. 226-227) mention that a functional approach to questions of international constitutionalization may be particularly fruitful, because this approach provides a set of conceptual elements and queries that the academics can use to identify and assess the constitutional developments in various international domains.

Consequently, global constitutionalism recognizes the UN Charter and the various covenants and declarations of human rights as a "global Constitution" (Diggelmann and Altwicker, 2008, p. 624, Dupuy, pp. 4-6, 15) which requires Member States to align substantially and interpretively to its precepts and its jurisprudence. This constitutionalism influences the process of global constitutionalization of human rights through which constitutions national have incorporated explicitly and progressively, from the last quarter of the twentieth century the international human rights treaties.

2.2. The influence of global constitutionalism of human rights in the constitutional theory

The theoretical basis for this research is in the contemporary constitutional theory. This is the field of knowledge that deals with the constitutional design. The constitutional theory deals with a set of principles, norms and political-legal techniques that according to constitutionalism, determine the universal validity of the concept, characteristics, content and purpose of the Constitution of any State. Therefore, the constitutional theory does not concern the analysis and evaluation of the supreme law of a particular State, the issue is of general application (Covián Andrade, 2004, p.1). Evidently this theory is founded and developed within the parameters of constitutionalism, in other words, within a movement that strives to promote and defend the dignity and human rights, on the basis of limited government. So this theory is constructed deductively and inductively, both pathways simultaneously, because in it we find certain principles which have universal validity trait and also find other principles resulting from historical experience, as is the empirical aspect derived from the political and legal processes.

In addition, the constitutionalization of human rights involves the transformation of human rights to positive rights legally protected and inviolables. Therefore, the Constitution is a "law of guarantees" because it prescribed limitations on political, social and individual powers and makes effective the control mechanisms.

In short, the idea of global Constitution attempts to reconfigure the international reality that originated after the Cold War and the globalization process. This concept provides to constitutional theory of an attractive framework for analysis in the absence of a theory of international law or alternative concepts for understanding the complexity of the vertical integration of substantive law and the fragmentation of international law. So, by the recognition of the constitutional parameters in the international sphere are avoided disintegration trends that exist in international relations and international human rights organizations.

2.3. The importance of the constructivist approach to understanding global constitutionalism

The constructivist approach is the method chosen to conduct a socio-political analysis, which allows, from Theories of International Relations and historical research, highlight the contingent meaning and evolution of the constitutional process as an international practice, a process and a social structure constructed internationally (Reus-Smit, 2012, p. 63).

Thus, the constructivism offers an interesting proposal as regards individuals as actors -and not population groups or States-, in other words, consider those as social entities whose identities are constituted by the social environment in where they operate (Gardbaum, 2008, p. 20). Then, the interest of the actors is a result of their identity and the interaction they have with other actors. This emphasis on the relationship between actors is important for our analysis of the process of global constitutionalization of human rights because this is an international movement, socially and politically constructed in a specific historical context.

Therefore one of the constructivist stamps is the claim that the identities and interests of actors are constituted by social structures, particularly the systems of values, beliefs and intersubjective ideas. Such structures are produced and reproduced by the practices of the social and political actors.

Accordingly, the human rights should be seen as constructs, although not as "simple constructions" but as constructions that have a "reason" that can not be denied intersubjectively. Such human rights are constructs that must be recognized by the authorities to all individuals, because they have no reason to deny them.

So the moral and political constructivism legitimizes to the human rights to be universally valid and accepted by all States and world cultures.

The importance of human rights in international relations in the last three decades in particular has led to some questions about the "good" and "bad" in international agendas. This has led to the rise and persistence of human rights as a normative ideal that brings perception of States as actors and constructors of those standards of international morality.

Therefore, one of the purposes of constructivism is not only to understand the world but to change it. Moral standards are relevant to the design of practical politics is why the moral arguments and moral choices today will shape the world to come. Thus the study of history is linked to the constructivist project that aims to reintroduce in International Relations from the idea that individuals, as moral agents, have important political capacities and that the future is not limited.

Hence, international actors have constructed the human rights, and now they are culturally, socially, politically and legally enforceable to be part of the constitutions of many countries. John Ruggie says: "constitutive rules define the set of practices that make up a particular class of consciously organized social activity, that is to say, they specify what counts as that activity." (Ruggie, 1998, p. 871). Therefore, the constitutions embody constitutive rules despite being virtually ignored in international relations in general (Lui, 2008, pp. 3-4).

3. The Process of Global Constitutionalization of Human Rights and Its Impact in Mexico

3.1. The process of global constitutionalization of human rights

Decalogue's rights and guarantees provided in national constitutions were insufficient to safeguard the human rights of all people. Then, there arises the need for national governments to issue international documents that recognize human rights by way of an international standard also created supervisory and control institutions. This was evident after the suffering of humanity after the Second World War (Ferrer Mac- Gregor, 2012, p. 345).

Then, the international law of human rights arises. So, the interaction between international law, constitutional law and procedural law is evident, causing new understandings with the traditional concept of "sovereignty" and nation States (*idem*). But those international human rights were unrelated from the contexts national.

Then at the end of the 20th century with the neoliberal ideas, the process of "globalization" emerged as a new phase of the development of capitalism, so, human rights suffer from a phenomenon of integration that brings with it a series of innovative ideas regarding the nature of inter-State relations, their motivations and the nature of its institutions.

In fact, the idea of global village brought with it the idea of global constitutionalism. Until then constitutionalism was a phenomenon that bore the stamp of statehood , but that modernity characterized by globalization made the civil society extend far beyond the borders of the initial political agreement , and governance processes will be more beyond the borders of modern States. Thus, constitutionalism today represents a theoretical and conceptual challenge for the world community.

Consequently, many Constitutions begin to incorporate international human rights standards, not in isolation, but recognizing its supreme character of constitutional norms. This trend was initiated by the Portuguese Constitution of 1976 and has been followed by countries such as Spain (1978), Chile (constitutional amendment, 1989) El Salvador (1983), Guatemala (1985), Nicaragua (1987), Romania (1991), Colombia (1991), Czech Republic (1991), Russia (1993), Peru (1993) , Argentina (constitutional amendment, 1994), Venezuela (1999) and México (constitutional amendment, 2011).

Such incorporation requires a political identification in favor of human rights and a direct involvement in local and national transformation processes to generate new political and social contexts that favor the exercise of human rights. Obviously, this attitude is contrary to the doctrines that defended most of the possible impartiality and non-interference of the international actors in local and national issues.

Thus, the inclusion of international treaties on human rights in the Supreme law as a fundamental political decisions, aims to regulate the interpretation of the provisions on these basic rights of the human being and make manifest duty to protect them by the State, and ultimately, by international organizations for the protection of human rights. Logically, the mechanism for protection must be efficient, reliable and fair, or can cause more harm than good.

Human rights have been widely developed from international instruments. Today, in the words of Langford (2009, p. 1), the main function of the international law of human rights is to provide a "light on the Hill". These multilateral agreements are the legal formulation of the inter-State project which has to be developed over time, depending on a model prized by countries to govern their relations.

This recognition gives human rights the appearance of being able to transcend to constitutionalism and act as a source of political legitimacy. In this joint project the international community must commit to promote political and social transformations, it seeks to analyze how the participation of society in processes of constitutional transformation can develop the necessary conditions that require human rights to be protected and safeguarded.

3.2. The incorporation of Mexico to the globalization process of human rights

In February 2008 was released the "Proposal of constitutional amendment in the field of human rights, prepared by Civil Society Organizations and academic experts in human rights", which resulted from the work of the Office of the High Commissioner for Human Rights (OHCHR) of United Nation in Mexico. This proposal was a forum for plural and interdisciplinary discussion that served as facilitator of the discussions and proposals raised by the organizations of the society Civil and the academics. In addition, this exercise was part of the collaboration agreement signed in December 2006, between the OHCHR and the Congress of the Union, whose aim was to contribute to strengthen compliance with constitutional and legal functions that incumbent to the federal legislature in respect of human rights and also contribute to the harmonization of Mexican law with international instruments accepted by the Mexican government on human rights (Proposed, 2008).

This important intersubjective vision on human rights and their protection allowed go about building a suitable social, political and discursive environment, so the resulting ideas will be considered in various proposals for constitutional amendment in the field of human rights.

Thus, on June 10, 2011 was published in the official journal of the Federation the constitutional amendment on human rights. The amendment changed the name of the chapter first, title first: human rights and their guarantees; articles 1 °; 3 °; 11; 15; 18; 29; 33; 89; 97; 102 and 105 constitutional. The Constitution incorporates all the human rights recognized in international treaties signed and ratified by Mexico, as privileges recognized to all persons on the national territory. It also stipulates conditions for unrestricted observance of those international rights by all the authorities of the country.

The constitutional article 1 ° indicates that the interpretation of human rights shall be in accordance with the Constitution and the international human rights treaties promoting at all times people the more extensive protection through the “principle *pro homine*”.

This principle "... It is a hermeneutical approach that informs all the law of human rights, under which should go to the broadest standard, or the more expansive interpretation when it comes to recognizing rights protected, and conversely, the standard or more restrictive interpretation when it comes to establishing permanent restrictions on the exercise of the rights of extraordinary suspension." (Abregú, 1997, p. 163).

Also in this article prescribes the "principle of harmonious interpretation" that is configured as a guarantee clause and protection of human rights, the interpreter must resort to the rules of international human rights treaties when problems arise in interpreting the constitutionally recognized rights, that is, when there are interpretive difficulties regarding human rights should be saved in favor of the interpretation that supply international human rights treaties, provided they are more favorable to the person (Castañeda Otsu, 2002, p. 225). The two preceding principles provide a "harmonizing tuning" (Bidart, 1994, p. 25) between domestic law and international law.

In addition, such article provides that all authorities within the scope of their legal competence have the obligation to promote, respect, protect and guarantee human rights in accordance with the principles of universality, indivisibility, interdependence and progressive realization. Universality refers to all of the individuals of the Earth, so, all human rights are for all individuals. Interdependence alludes to that all rights are articulated. The realization of a right is a necessary condition for the realization of some others. (Ramirez Hernandez, 2010, p. 3). The indivisibility means that human rights should not be taken as elements isolated or separated, but as a whole (Vazquez, 2012, p. 143). All human rights are important. No right is superior to another. All human rights have the same hierarchical level (Ramirez Hernandez, 2010, p. 3). The progressive realization refers to the phenomenon whereby the regime of international protection of human rights tends to expand its scope of mode continuous and irreversible, in regards to the number and content of the rights protected and with regard to force effectiveness and procedures (Nikken, 1987, p. 309).

These principles involve the training and knowledge of the authorities of all this conceptual background, which from human rights based approach sets out the general obligations towards human rights and the characteristics that are intrinsic to it.

Article 1 also provides that the State shall prevent, investigate, punish and repair violations of human rights, in the terms established law. Thus, the amendment allows that international human rights treaties and its jurisprudence may be retaken by legal operators and social actors, who must be careful to know this accumulation of rights that have the same legal status as delimited rights in the Constitution.

Currently, it has begun to observe the impacts that have those standards in the domestic context and the possibility of that its compliance can become the cornerstone of the Mexican public policy.

In short, here are some actions that federal authorities in Mexico have implemented in relation to the constitutional amendment of 2011.

Executive Branch:

- a) National Development Plan 2013-2018
- b) National Human Rights Plan

Legislative Branch:

- a) General Victims' Law
- b) Amparo Law
- c) Education Reform
- d) Committee on Government Policy on Human Rights

Judicial Branch:

- a) The Supreme Court of Justice of the Nation, by interpreting constitutional amendment on human rights and the judgment of the Inter-American Court of Human Rights in the case *Radilla vs. United Mexican States*, determined the conventionality control (diffuse control) and the judicial review of legislation (diffuse control).
- b) Protocol for those who administer justice in cases involving children and adolescents.
- c) Protocol for those who administer justice in cases involving rights of individuals, communities and indigenous peoples.
- d) Chair "Human rights, ethics and jurisprudence."
- e) Actions to implement the constitutional amendment on human rights.
- f) Course justiciability of human rights.
- g) Course for training in human rights. Includes the methodology for teaching constitutional amendment on human rights.

In this regard, Color mentions that it is: "an amendment that impacts way substantive in the work of all the authorities of the country, for they must give effect to the implementation of all obligations recognized constitutionally." (Color, 2013, p. 4).

4. Conclusions

The national and international legal order are not separated, on the contrary, exert a reciprocal and complementary influence. Indeed, as was explained, the Constitution is intimately linked to power relations as well as international human rights. These rights provide a legal basis for emancipation, justice and human freedom. Its denial of state authorities is an affront to the dignity of all and the human condition.

Thus, the constitutional amendment in reference serves to provide legal certainty and promotes a sensitive and participatory citizenship that is interested to know and fully exercise the constitutional human rights. At the same time, this constitutional inclusion ends with the legal debate that for decades was raised on hierarchy of international treaties and determines the obligations of Mexican authorities in relation to human rights.

In fact, the issue of human rights has permeated the political and social environment and also has influenced so that there is an irradiation effect to other topics until then were forbidden for discussion and the detailed analysis, as the educational area that was characterized by the inflexibility of the political actors involved in this issue.

References

- Ackerman, B. (2006) The Rise of World Constitutionalism. *Legal Criteria*. Department of Legal Science and Policy. Pontifical Xavierian University, 9.
- Angulo Jacobo, L. F. (2006) Global Constitutionalism. SCJN, 16.
- Bidart Campos, German (1994) Dogmatic Constitution of human rights (natural law in constitutional law of human rights). *Journal of the Chair Frederic Fario*, Valencia, 6, 25.
- Castañeda Otsu, S. (2002) The principle of interpretation according to the human rights treaties and their importance in the defense of the rights enshrined in the Constitution. In Silva Méndez, R. (coord.), *International Law of Human Rights*, IIJ-UNAM, 225.
- Cottier Th. Y Hertig M. (2003) The Prospects of 21st Century Constitutionalism, Netherlands: Max Planck, UNYB, 7, 261.
- Covián Andrade, M. (2004) Constitutional Theory. *Center for Policy Studies and Constitutional Engineering A.C. (CEDIPC)*, 2004, I, 1.
- Diggelmann, O. y Altwicker, T. (2008) Is There Something Like a Constitution of International Law? A Critical Analysis of the Debate on World Constitutionalism. *ZaöRV*, Max-Planck-Institut für ausländisches öffentliches Recht und Völkerrecht, 640.
- Dunoff, Jeffrey I. y Trachtman, Joel P. (2009) *Ruling the World?: Constitutionalism, International Law, and Global Governance A Functional Approach to International Constitutionalization*, Cambridge University Press, 4-5.
- Dupuy, P.M. (1997), The Constitutional Dimension of the Charter of the United Nations Revisited, Max Planck UNYB, 15.
- Ferrajoli, L. (1998) Beyond sovereignty and citizenship: a global constitutionalism.. (pp. 178, 179-182.). México: ISONOMIA.
- Häberle, P. (1996) “Elementos teóricos de un modelo general de Recepción”, en *Derechos Humanos y constitucionalismo ante el tercer milenio*, Pérez Luño A. E., (coord.), Madrid: Marcial Pons, pp. 151- 186.

- Langford, M. (2009) *The Constitutional Variable in the Domestic Influence of International Human Rights Treaty Law, Legal, Constitutional and National Institutional Consequences*, University of Oslo, 1.
- Lui, A. (2008) *Human Rights, Constitutionalism and Comparative Foreign Policy: An Analytical Framework for Canada, the United States and China*, Department of Political Science McMaster University, Canadian Political Science Association, 3-4.
- Nikken, P. (1987) *International Protection of Human Rights: Its progressive development*. IIDH-Civitas, 309.
- Proposed constitutional amendment on human rights, drafted by the civil society organizations and academic and academic specialists on human rights (2008) UNHCHR , CADES , CENCOS ; FLACSO Mexico, 9.
- Ramirez Hernández, G. (2010) *Conceptual approach and history of human rights*. In *Workbook UNESCO Chair in Human Rights*, UNAM, 3.
- Reus-Smit, Christian (2012) "Leyendo la historia con una mirada constructivista", en *Revista de Relaciones Internacionales*, GERI-UAM, México, número 20, junio, 63.
- Ruggie, John Gerard (1998) "What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge", in *International Organization* 52, número 4, 871.
- Simma B. (1994), *From Bilateralism to Community Interest in International Law*, France: *Recueil des Cours*, pp. 260.
- Tomuschat, Ch., (1993) *Obligations Arising for States Without or Against Their Will*, France: *Recueil des Cours*, pp. 241.
- Vázquez, Luis Daniel y Serrano, Sandra (2012) *Los principios de universalidad, interdependencia, indivisibilidad y progresividad. Apuntes para su aplicación práctica*, IIJ-UNAM, México, 143.
- Wiener, Antje (2011) *Global Constitutionalism: Mapping an Emerging Field*, Conference *Constitutionalism in a New Key?*, Cosmopolitan, Pluralist and Public Reason-Oriented, Berlin, University of Hamburg, 2.

ISEPSS-1762
Gender Differences in Intimate Partner Homicide

Tsung-Chieh Ma
Soochow University
tcma@scu.edu.tw

Abstract

The purpose of this research is to compare the profiles and motives of women versus men charged with murder or attempted murder of their intimate partners. Content analysis was used as research method. The data was collected from the database of the Taiwanese Department of Justice; all court verdicts of intimate partner homicide and attempted homicide cases from 1998 to 2009 were reviewed by the researcher. The cases were coded with regard to relationship status, relationship state, location of the murder, history of violence, weapon used, motives, mental illness, and killed others beside partners. The total number of the cases was 224, including 198 male and 26 female offenders. Since the female offenders sample is relatively small (11% of the total), descriptive statistics and Chi-Square have been used in this analysis.

The significant result of this study regard to gender differences of intimate partner homicide were as follow: (1) Women were significantly more likely to have actually killed their intimate partners, (2) Males were more likely to have murdered or attempted murder when the relationship were over and separated, however, women generally killed the intimate partners while still in a relationship with them. (3) Male attempted to killer their partners in public places, however, women only killed partners at home. (4) 40% of men (but just 10% of women) had abused their partners before killing. 42% of the women had been victims of battery prior to killing their intimate partners. (5)Among men, the risk of partner abandonment, sexual jealousy, and economic issues were the major motivations to kill; however, self-defense was the most common motivation among women. (6) Regarding to killing method, only men used beating and only women use poison. Because of the gun controlled policy, gun is not easily accessed, knife is the major weapon for both man and women. (7) And 20% man also killed someone who were not their partners, they were parents, children, sibling, boy friend and suspected boyfriends.

Keywords: intimate partner, homicide, gender difference

ISEPSS-1729
Deciphering Mongolian Womens' Rhetorical Analysis

Lin-Lee Lee

National Kaohsiung Normal University

linleelee@nkn.edu.tw

Hui-lin Hsieh

Wenzao Ursuline University of Languages

82007@wzu.edu.tw

Abstract

The paper aims to explore the Mongolian rhetorical oration practiced by female poets in and outside of Mongolia. The purposes of this paper are four-folded. First, it attempts to uncover the mysterious illusions of Mongolian female rhetorical oral tradition. Second, it centers on rhetorical element of Mongolian women's rhetoric, drawing on analysis and explication of representative examples instead of weaving an inclusive narrative. Third, as an archival research, it contemplates rhetorical issues, hoping to synthesize Mongolian women's rhetoric to document rhetorical implications. Forth, it attempts to integrate how archival database and rhetorical analysis of women's rhetoric can work hand in hand.

Research questions are delineated as follows:

- Q1. What constitutes Mongolian women's rhetorical tradition?
- Q2. How gender functions in the Mongolian rhetorical tradition and to what extent gender influences and helps constitutes distinctive genres if any?
- Q3. What composes contextual ramifications for the women's rhetorical tradition in Mongolia?
- Q4. How to synthesize and analyze rhetorical practice of female orators?

This paper embeds many valuable contributions to the field of Chinese rhetorical studies. First, tremendous advances have been made in the archiving and availability of women's texts. It involves probing the availability of texts for women's rhetorical analysis and pedagogy. Second, it is a ground-breaking effort, aiming to demonstrate the very existence of a women's rhetorical history in Mongolian discourse; to seine from the archival depths primary and secondary evidence that demonstrated the very existence of a history of Mongolian female oratory. Third, it deviates and eliminates from the mainstream, western-oriented rhetorical tradition by looking into other ethnic groups. Fourth, this paper is a crucial study with strong focus to broaden the scope of recovery and criticism to these

wider contexts such as the remote area of Mongolia. This transnational approach attempts to respond to rhetorical ramifications and comparisons across national boundaries and the permeability of those boundaries.

Finally, the current study embarks on a project to make available primary and secondary documents related to the female oral tradition of remote and mysterious but rich and abundant Mongolian oral discourse. Recovering texts of oration to public discourse scholars and feminists rhetoricians, it is hoped that this research proposal will make possible the rhetorical study of Mongolian women's rhetorical tradition, thereby rendering it more accessible to the future research.

ICSSAM-674
**Simple Model of Using Social Networking for Information Services of
University Libraries**

Prisana Mutchima

Department of Library and Information Science, Faculty of Humanities and Social Sciences
Suan Dusit Rajabhat University, Bangkok, Thailand, 10300
Email address: prisanut@hotmail.com

Nattha Phiwma

Department of Computer Science, Faculty of Sciences and Technology, Suan Dusit Rajabhat
University, Bangkok, Thailand, 10300
E-mail address: teacher_nattha@yahoo.com

The corresponding author: Prisana Mutchima

Abstract

Social networking is a social structure that lets the user interact and work collaboratively with other users, including the ability to browse, search, communicate and announce information.

Although social networking is used in many libraries for information services, they do not have suitable guidelines for using it. Therefore, the objectives of this study were to study social networking usage behaviors of users and staff in libraries and to develop a model of using social networking for information services of university libraries in Thailand. We evaluated quantitative data by online questionnaire and EDFR (Ethnographic Delphi Future Research) technique and qualitative data obtained through focus group. Research results were as follows: 1) Facebook was the most commonly adopted tools in university libraries for information services and 2) A model of using social networking for information services of university libraries is SIMPLE Model that consists of service, information, management, personnel, leader and equipment. After implementing the model, results show that our proposed model can perform efficiently.

Keyword: Social Networking, Information Services, University Libraries

1. Introduction

A social network site is a web-based service that allows individuals to present a profile within an organized framework, create a list of other users with whom they share a connection, navigate their own list of connections, and view those made by others within the system [1].

In the past, libraries have begun to examine the possibilities available to them through social networking sites like Twitter and Facebook as a tool for library awareness and marketing. As Facebook has come to dominate the social networking site arena, more libraries have created their own library pages on Facebook to create library awareness and to function as a marketing tool. This has spurred a large number of how-to articles about the uses for Facebook in libraries as well as research about how librarians and libraries use Facebook [2].

For example, Miller and Jensen offered advice on how libraries can best make use of their Facebook presence. They suggest that success depends on an understanding how the News Feed (a core Facebook feature) operates. Essentially, whenever a page is updated (with a brief news item, photo album, interesting link, etc.), this is displayed in the News Feed of all the fans of the page. It has been asserted that students rarely seek out information on Facebook, rather they allow Facebook to bring information to them via their News Feed [3].

Thus, having access to the News Feed of their users can become a powerful marketing tool for the library, as many students have developed a habit of checking their Facebook account on a daily basis. Once a student is a fan of the library's page, library updates will regularly be brought to their attention. Currently, the most popular type of literature is "How-To" based.

Included in this category are also articles relating to best practices as well as ideas for the use of Facebook. This area includes a study by Charnigo and Barnett-Ellis, in which they survey academic librarians to understand their knowledge of Facebook use on campus as well as the potential it has to be used as an academic resource. Their study found that librarians were cautious about the actual academic purpose of Facebook with "54 percent of those surveyed" stating that it did not serve an academic purpose [4]. Mathews' article describes the author's experience in contacting students via Facebook and the results of his "friend requests". The author found that it helped in "promoting the library" and prompted some questions about library resources [5]. Furthermore, Melanie and Yvonne suggest the use of Facebook for "content delivery, reference assistance, outreach, and information literacy instruction" and suggest that students may be willing to communicate with organizations via Facebook, although their research showed that students were reluctant to communicate with faculty this way [6]. Another type of study concerning the use of Facebook in libraries is the service provided analysis. This looks at a particular service that the library is attempting to provide. The study by Mack and others follows the implementation and promotion of reference services via Facebook. The study found that from September through the end of the semester in December, 126 reference questions were received via Facebook out of the 441 total reference questions tracked. This was the highest of all areas, prompting the authors to recommend that libraries create a Facebook page to connect with their patrons [7].

Social networking is a social structure that lets the user interact and work collaboratively with other users, including the ability to browse, search, communicate and announce information. Although social networking is used in many libraries for information services, they do not have suitable guidelines for using it. Therefore, the objectives of this study were to study social networking usage behaviors of users and staff in libraries and to develop a model of using social networking for information services of university libraries in Thailand. We evaluated quantitative data by online questionnaire and EDFR (Ethnographic Delphi Future Research) technique and qualitative data obtained through focus group. The remainder of this paper is organized in the following manner. In Section 2, the research methodology is described. Results are presented in Section 3. In Section 4, conclusion is described to show benefit of the Model.

2. Research Methodology

2.1 Data collection

The quantitative data were collected by questionnaires from 37 samples of personnel who work at 37 university libraries that use social networking for information services, 384 samples of users who use social networking of libraries and 17 experts in the related fields by EDFR (Ethnographic Delphi Future Research) technique. This technique was combined of Ethnographic method and Delphi technique. The EDFR technique consisted of 3 steps. Steps 1, in-depth interviewed in all experts. Data were analyzed by using content analysis. Steps 2, develop questionnaires using Likert scale. Statistics used for data analysis were median and interquartile range. Step 3, questionnaires were sent to experts for confirmation of item rating.

The qualitative data were collected by conducting interviews of 17 experts and focus group discussion from 9 key informants who have the experience about developing social network in libraries. Data were obtained over a period of seven months; between January to July 2013 from university libraries in Thailand.

2.2 Data analysis

Percentage, mean, standard deviation, One Way ANOVA, t-test, median and interquartile range were adopted for data analysis. The data include a review of the peer-reviewed literature, in-depth interviews to gain experts' perspectives, mini-Delphi techniques questionnaires, focus group discussions, and model evaluation. Qualitative data were transcribed and analyzed using content-analysis.

The research procedures comprised of four stages. Figure 1 was developed by the researcher and it depicts all of the research procedure stages.

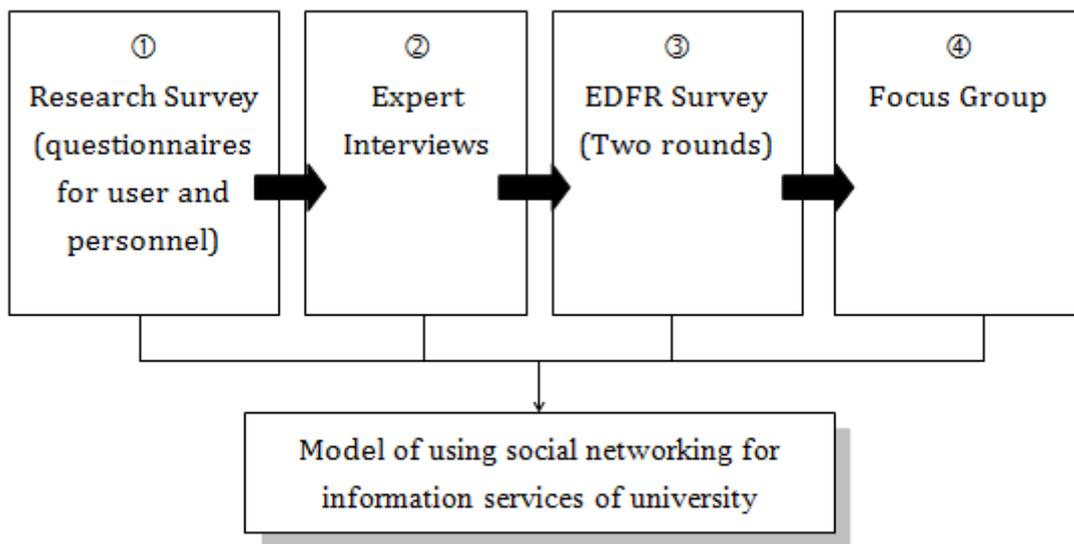


Figure 1 The conceptual framework based on research procedures.

3. Results

The results of the study were presented in survey results and SIMPLE Model.

3.1 Survey results

For usage social networking for information services of university libraries, research results were as follows: 1) Facebook was the most commonly adopted tool in public university libraries for information services, as shown in Table 1. 2) Most users used social networking of libraries for reference service, as shown in Table 2 and knowledge finding, as shown in Table 3. And 3) Users and personnel with differences in gender, age, education, working experience in library and experience of using social networking were not statistically different in using social networking for information services of university libraries.

Table 1 Mean and standard deviation of tools in university libraries for information services

Tools in libraries for information services	\bar{X}	S.D.
Facebook	4.26	1.13
Twitter	1.40	1.43
Hi5	1.53	1.47
Blog	1.93	1.61
YouTube	3.77	1.41
MySpace	1.11	1.39
Wikipedia	2.40	1.67
Multiply	1.23	1.38

Table 2 Mean and standard deviation of using social network for information services of university libraries

Using Social Network for Information Services	\bar{X}	S.D.
Reference Service	4.16	1.16
Current Awareness Service	3.81	1.30
Referral Service	4.08	1.08
Electronic Document Delivery Service	2.29	1.77
Commercial Search Service	1.21	1.56
Information Retrieval Service	3.40	1.60
Content Copying Service	1.62	1.67

Table 3 Mean and standard deviation of using social network for general services of university libraries

Using Social Network for General Services	\bar{X}	S.D.
Information or Activities Following of the Library	3.25	1.40
Information and Knowledge Sharing	3.62	1.35
Information Dissemination	3.50	1.39
knowledge finding	3.80	1.26

3.2 SIMPLE Model

A model of using social networking for information services of university libraries is SIMPLE Model that consists of service, information, management, personnel, leader and equipment, as shown in Table 4. After implementation, users satisfied this model in moderate level. They satisfied format and presentation, continuous news of the organization and attractiveness of contents, respectively.

Table 4 SIMPLE Model for information services of university libraries

Model Components	Procedure
S: Service	- Reference Service - Referral Service - Current Awareness Service - Public Relations (PR)
I: Information	- Academic Information - Activity - Book Suggestion - Festival - Community
M: Management	- Content Management

Model Components	Procedure
	<ul style="list-style-type: none"> - Human Resource Management - Library Collaboration Management
P: Personnel	<ul style="list-style-type: none"> - Enthusiasm - Knowledge - Skill - Attitude - Teamwork - Service Mind
L: Leader	<ul style="list-style-type: none"> - Establishing Policy, Goals, and Objectives - Determining Social Media Administrator
E: Equipment	<ul style="list-style-type: none"> - Facebook - Wikipedia - Blog - Twitter - Hi5 - MySpace - Multiply

4. Conclusion

The objectives of this research were to: 1) study and compare social networking usage behaviors of users and staff in libraries by age, sex, education, work experience in library and experience of social networking using and 2) develop a model of using social networking for information services of public university libraries. Research results were as follows: 1) Facebook was the most commonly adopted tool in public university libraries for information services. 2) Most users used social networking of libraries for reference service and knowledge finding. 3) Users and personnel with differences in gender, age, education, working experience in library and experience of using social networking were not statistically different in using social networking for information services of public university libraries. 4) A model of using social networking for information services of university libraries is SIMPLE Model that consists of service, information, management, personnel, leader and equipment. After implementation, users satisfied this model in moderate level. They satisfied format and presentation, continuous news of the organization and attractiveness of contents, respectively.

5. Acknowledgement

This work was assisted by Suan Dusit Rajabhat University for supporting the scholarship. Additionally, the invaluable recommendation and supervision from the anonymous reviewers are much appreciated.

6. References

- [1] Ellison, Nicole B., et al. Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 2007, 13(1): pp.210-230.
- [2] Jacobson, Terra B. Facebook as a library tool: Perceived vs. actual use. *College & Research Libraries*, 2011, 72(1): pp.79-90.
- [3] Miller, Sarah Elizabeth; Jensen, Lauren A. Connecting and communicating with students on Facebook. *Computers in libraries*, 2007, 27(8): pp.18-22.
- [4] Charnigo, Laurie; Barnett-Ellis, Paula. Checking out Facebook. com: the impact of a digital trend on academic libraries. *Information technology and libraries*, 2013, 26(1): pp.23-34.
- [5] Mathews, Brian S. Do you Facebook? Networking with students online. *College & research libraries news*, 2006, 67(5): pp.306-307.
- [6] Chu, Melanie; Meulemans, Yvonne Nalani. The problems and potential of MySpace and Facebook usage in academic libraries. *Internet Reference Services Quarterly*, 2008, 13(1): pp.69-85.
- [7] Mack, Daniel, et al. Reaching students with Facebook: data and best practices. *Electronic journal of academic and special librarianship*, 2007, 8(2): p.4.

Law I

Room B

10:40-12:10

Thursday, May 8

Session Chair: *Prof. Aiman Sulaiman*

ICSSAM-493

Privacy Under Threats: An Analysis on the Online Risks and Legal Measures in Protecting Privacy of Children Online.

Juriah Abd Jalil

International Islamic University Malaysia

ICSSAM-634

Dilemma of Nominee Directors: Finding the best Practice

Halyani Hassan

AIKOL, International Islamic University

ICSSAM-748

Competition Law and the Shipping Industry: the Case of the Malaysian Block Exemption on Shipping Liners

Nasarudin Abdul Rahman

International Islamic University Malaysia

Haniff Ahamat

International Islamic University Malaysia

ICSSAM-606

Property Tax Reform in China— Sustainability and Implication on China's Property Law

Gengzhao CHEN

Hang Seng Management College

ICSSAM-635

Shareholders Empowerment in Malaysia:- Crafting Rules for the Concentrated Shareholding Structure and Cultural Dimension

Aiman Sulaiman

International Islamic .University Malaysia

Shanty Rachagan

Monash University Sunway Campus

ICSSAM-493

Privacy Under Threats: An Analysis on the Online Risks and Legal Measures in Protecting Privacy of Children Online.

Juriah Abd Jalil

Legal Practice Department Ahmad Ibrahim Kulliyah of Laws, International Islamic
University Malaysia
Email: juriah@iium.edu.my

Abstract

Privacy, either personal or informational, is increasingly under threats in this digital age. Adult and children alike are victims of prying eyes in the virtual world and without us realising it, a private message or photograph that is posted even within a password secured transaction, can become a public matter within seconds with detrimental effects on the owner.

As a result our looks and personality as well as our private and personal information may be used, abused, manipulated and exposed to online dangers such as theft of identity, cyber stalkers, cyber bullying and victims of ridicule. Children, as regular and active Internet users, are constantly exposed to severe online risks. They can become the target of paedophiles, sexual groomers, and perpetrator of child pornography who often trespass into the privacy of the children's email, Facebook address or short message service (SMS), even chatroom by faking identity to pursue their criminal intent. Children are also found to be receiving inappropriate online commercial advertising in their emails. In some jurisdiction, cyber bullying, online ridicule and involvement with paedophiles had led to the death of several youth victims. In all the instances, Social network service (SNS), youtube, instant message (IM) and SMS have been identified as the common modus operandi of the manipulator or the criminals. As a result jurisdiction like the US, UK and South Korea have either extended the application of paper based law that protect privacy to online world, or enacted specific internet law or imposed legal liability on the Internet Service Providers (ISPs) to ensure privacy of children are protected. This paper therefore aims to highlight the threats of online risks on the privacy of children and discusses the legal measures and approach adopted in some jurisdictions to protect privacy of children in line with the United Nation Convention on the Rights of A Child. This paper submits that the protection of privacy of children online is crucial and all means especially legal measure is an important tool to ensure the protection is guaranteed.

Keywords: online privacy, cyber stalking, rights of children, online safety sexual solicitation.

1. Introduction

Privacy is like oxygen and we really appreciate it only when it is gone. (Skyes, 1999) In this digital world our privacy are being threaten every time we use the Internet. Our habits, taste and preference are being tracked by modern technology particularly with the use of cookies.

Through cookies, web operators can tell where we have been, which sites we have visited and other information about us. It is worst when technology allows for gathering and collection of personal information every time we key in our personal information in commercial and non-commercial websites and social network service. Thus invasion of online privacy threatens every Internet users including children.

Article 16 of the United Nation Convention of the Right of a Child (UNCRC) protects privacy of a child, his or her family, home or correspondence. It also protects a child from unlawful attacks on his or her honour and reputation. This protection covers both online and offline world. According to Dr. Hamdoun Toure, the Secretary General of International Telecommunication Union (ITU), the information communication technology particularly the Internet brought with it various risks and threat that undermine security, safety and privacy of children as keen Internet users and the duty to protect children is our responsibility. This paper will discuss the issue of online risks in relation to privacy of children as internet users and will highlight the measures taken in the US, UK and South Korea in addressing this issue.

2. Children and Online Privacy Risks

Children in this digital age are keen users of Internet. They use Internet and new technologies for educational, social interaction and leisure purposes. Chatting, social networking, preparing for school assignment and play games online are among the major activities of youth online. In fact ITU recognized ICT as a digital infrastructure that has given the young people the potential to learn, publish and communicate on an unprecedented manner scale. (ITU, 2008) On this point Internet and technology plays important role in revolutionizing childhood. Nevertheless the Internet, the social networking services, content-sharing sites, gaming sites, chat rooms and youtube provides avenue for intrusion of privacy of the children as Internet users.

Physical bullying is now taking place in the cyber world undermining privacy of children through cyber bullying. Social Network sites such as Facebook and MySpace allow users to posts comment on each other's profile page, upload photos and videos, organized group event and joint interest group. (Kwan & Skoric, 2013) The same tool could be used for cyberbullying.

Bullying is defined as mistreatment by a persons harbors with malicious intentions and who is perceived to be more powerful than the victim. (Hinduja & Patchin, 2007) According to Willard, there are eight forms of cyberbullying namely flaming which refers to angry and vulgar online exchanges, harassment, denigration by spreading, rumours and gossiping about a person online to damage his/her reputation, impersonation, outing or sharing humiliating information of another person on the internet, trickery by convincing someone to share humiliating information and making the information available online, exclusion or excluding someone from the group in order to cause hurt to the person and lastly cyberstalking. (Willard, 2014) The act of bullying on cyberspace has more detrimental effect on the victims since it can take place at anytime, at any place and may cause severe humiliation since it can be made known to many people. The privacy of the victims are being threatened every time cyberbullying took place. This has potential to cause serious mental and psychological effect on the victims and most of the time the victims suffer in silence and several of them took their own life. (National Centre for Missing & Exploited Children, 2000)

Social network service and other popular communication sites also provides tools for children to share too much personal information, posting false information about themselves and others and this type of behaviour or conduct put their privacy at risks. (O’Keefe & Clarke-Pearson, 2011) Lack of proper understanding on the importance of privacy also drive the children to post inappropriate messages, pictures and videos without understanding that “what goes online stays online.” (O’Keefe & Clarke-Pearson, 2011) This may jeopardize future potential job since the Internet is increasingly becoming the resume for job reference. Further websites visited by children leave behind a digital footprint that allows their activity to be tracked down, profiled and become the subject of fraudster and theft of identity.

Identity theft is a problem involving personal information where the culprit obtains personal information and uses it in a variety of fraudulent ways to impersonate the victim. (Solove, 2002) In the US consumer fraud on identity theft constitute 42% of consumer complaint to the Federal Trade Commissions (FTC) in 2001 resulting to \$5 billion in losses to financial institutions and other companies. (Dreazen, 2002) According to a survey conducted by the FTC in 2003, younger consumer and women face the high risks of identity theft. (Anderson, 2006)

Apart from this, children’s privacy are being threatened by the intrusive conduct of sexual predator and pedophiles who have access and contact to countless of children through email address, chat room, facebook and others in an anonymous environment. (Palfrey, 2008) In 2007, MySpace has located and deleted the profiles of 29,000 convicted sex offenders from its website after it was sued by the families of several teenage girls who were sexually

assaulted by MySpace members. (Reuters, 2007) The sexual predator and pedophiles invade or manipulate the privacy of the children by gradually sending sexual messages as a process of grooming the young victims before request for a face to face meeting. In fact it has been reported that everyday around 50,000 sex offenders are on the Internet lurking in chat rooms and on sites where kids and teens congregate. (Whitman, 2008) This affirms that the predator invades and manipulates the privacy of children in order to get access to potential sexual abuse victims. (Craven, Brown & Gilchrist, 2007) This may also lead to luring the children into the making and producing of child abuse materials or child pornography, an offence, which is condemned worldwide.

Privacy of children can also be threatened by video containing the children's image on youtube or posted on other video sharing network. Convergence technologies has created smartphone and other devices that can take photo, make video recording which are able to be sent or post on youtube and video sharing sites as well as on social network service. Such digitally recorded photos and videos may be manipulated to ridicule victim's images with the intention to embarrass the victims and for revenge purposes. In the state of Victoria, in Australia, banned the video Web site YouTube from government schools as a measure to crackdown on cyber-bullying. (NBC News) Youtube was banned from 1,600 government schools after a gang of male school students videotaped their assault on a 17-year-old girl on the outskirts of Melbourne. The incident was uploaded in youtube. As a result the schools and their Internet service providers filtered the Web sites that were available to students, and YouTube had been added to a list of blocked sites. Apart from not tolerating bullying in schools this is also to protect the privacy of the victim.

Children are also consumer for online product and services and have the power to convince their parents to acquire goods for them. The child and teen market for online content and product are huge. In 1997 it was estimated in the US that children between the ages of 4 to 12 spent USD 25 to USD 50 billion of their own money online whereas teenagers between the ages of 13 to 19 spent between USD 92 and USD 122 billion of their own money. (Aftab & Savitt, 1999) As a result they become the target of online advertisers and marketers through 'behavioral marketing' especially in relation to kids product such as favorite cartoon character and toys product. Such advertising is specifically tailored to suit the age, gender, interest and activities of the children. (Burke, 2001) For commercial purposes, many of these websites require the children to give personal information by entering into an online contest, quizzes, as exchange of free gifts and visit their favorite cartoon character online. The personal information collected by the websites may then be sold to other company for profits purposes.

As a result the children may be contacted or received spam email and commercial advertising for product that they do not need or suitable for them. Consequently the interactive world of cyberspace is becoming highly seductive and potentially manipulative environment for children. (Givens, 1999) In addition with ‘geo-location services’ the companies can track where the children go in both physical and virtual world. (Common Sense Media, 2010)

According to the Working Group of Canadian Privacy Commissioners and Child and Youth Advocates, children may not be able to understand the meaning and value of privacy but awareness of its importance, consequence and value is crucial for their natural progression in life since it linked to the formation of identity and the ability to enter into healthy relationship with others. No doubt the Internet and information communication technology provides tremendous opportunities and benefits but it also provides channel for others, with commercial and criminal interest, to target our children. On the basis of the above discussions, the privacy of children as Internet users must be protected.

3. Measures to protect privacy of children online

In acknowledging the risks in relation to online privacy, many jurisdictions such as the United States, United Kingdom and South Korea have adopted several measures, either legal, technical and administrative to protect children online. At the same time social measures particularly educational and awareness campaign, is carried out to instill and create awareness on the online risks particularly from freely disclosing personal information.

In the United States, the court in the case of *Griswold v Connecticut*, 381 U.S 479, 486 (1965) held privacy is protected under the constitutional framework and the right to privacy extends to children as ruled in the case of *Planned Parenthood v Danforth*, 428 U.S 52, 74 (1976).

Concerns about protecting children personal information from being targeted by advertisers and marketers has prompted the enactment of several principles and statutes. In 1997 the FTC Consumer Protection Bureau issued a broad principles classifying collection and sale of information from children without due disclosure and parental consent to be ‘unfair practice’ under section 5 of the FTC’s Act. The Act further requires web operator to disclose the intended uses of the information gathered from the children and to obtain the consent from the parent if the information is to be disclosed to third parties. However a survey conducted by FTC in 1998 shows that about 89% of child oriented website collect personally identifiable information directly from children but only half disclose their information collection practice and less than 10 obtain parental consent. (Whitman, 2008) Lack of industry compliance has resulted in the enactment of Children’s Online Privacy Protection Act 1998.

The Act aims to protect children's private information. It prohibits purchasing of children's personal information without parental consent and the companies must disclose to parents the source and content and intended use of personal information about their children. The main requirements of the Act that a website operator must comply with include:

- Incorporation of a detailed privacy policy that describes the information collected from its users.
- Acquisition of a verifiable parental consent prior to collection of personal information from a child under the age of 13.
- Disclosure to parents of any information collected on their children by the website.
- A Right to revoke consent and have information deleted.
- Limited collection of personal information when a child participates in online games and contests.
- A general requirement to protect the confidentiality, security, and integrity of any personal information that is collected online from children.

The Act however is limited to personal information of children under thirteen and it applies only to commercial website directed toward children. In August 2012, COPPA was revised and new rules were introduced. According to Electronic Privacy Information Centre (EPIC) the new Rule expands the definition of personal information to include geo-location information and persistent identifiers (or cookies), and prevents third-party advertisers from secretly collecting children's personal information without parental consent for behavioral advertising purposes. The revised rule was based on FTC's finding that many child-directed mobile apps did not disclose their data practices. In 2011 a new Act was proposed known as Do Not Track Kids Act. The Act prohibited targeted marketing to children and minors age between 13-17. It also introduce 'Eraser Button' or "Right to be Forgotten" building on the idea that user should be able to remove information about themselves from the Internet including removal of data posted online. (Llanso, 2013)

In relation to protection of privacy of children from predators and pedophile in social networks service, the Attorney General of forty-nine states in the US has entered into an agreement with MySpace to address the issue of sexual predators engaging minor users of MySpace. (McCarthy, 2008) In the 2008 agreement, MySpace has agreed to investigate the possible implementation of age and identity verification by creating an email registry that contains the email address of minors. Nevertheless concern has been raised in relation to who will control the registry especially when third party is involved in maintaining the registry and such verification will not be able to adequately protect the safety of children online.

The recent FTC concern is on the consumer privacy in relation to mobile tracking devices in stores, which allows the stores to track individual smartphones and other networked devices. (G.S Han, 2014) This matter is still an on going debate between the business and consumer representative. In another development, the Future of Privacy Forum has introduced a Mobile Location Analytics Code of Conduct as a measure to encourage businesses to proactively protect individual privacy and security. The Code adopted the Fair Information Practice Principles (FIPPs), which were codified by OECD in its 1980 guidelines on the protection of privacy in transborder data flows. The principle among other things require the companies to provide users with notice and choice about what data companies will collect, use and retain, including to create meaningful security and redressability measures.

In the UK, the Data Protection Act 1998 (DPA) regulates online privacy. But it does not explicitly deal with protecting child's privacy. (Stanaland, Lwin & Leong, 2009) Nevertheless the Information Commissioner's Office (ICO) acknowledged that protecting children's privacy must be addressed and that a stronger safeguards must be placed to make sure any processing of collected data from the children is fair. The language must also be clear and parental consent is needed unless it is reasonable to believe the child clearly understands what is involved and they are capable of making an informed decision. (ICO, 2006) In related to the age and procedure, the standard practiced by Trust UK was adopted namely children need to be treated different from adult, they should not be exploited and collection of information from children below 12 can only be made after obtaining the parent's permission. In brief, the following provisions are crucial when collecting data from children:

- Explicit parental consent must be obtained to collect personal data from children under 12.
- prior consent is needed if the collector wish to publish that personal data publicly, or post an image of the child somewhere that anyone can see it.
- If a child/young person is under 16, the collector should not try to obtain information about others including parents and peers unless that information is minimum required to make a recommendation for a product and that is not used for a significantly different purpose from that originally consented to, and you can demonstrate that the collection of that information was suitable for the age group targeted.
- Contact details may be collected for a parent to verify the age of the child and to seek parental consent.
- Need to consider the degree of risk that the collection or use of the personal data poses to the child or others.
- For collecting personal data from children online, posting a privacy policy note on the site is necessary. The policy should be easier to understand and noticeable.

Such provisions are embodied in Industry self-regulatory such as the Committee of Advertising Practice (CAP) and Code Of Practice of the Direct Marketing Association (DMA). On this aspect the Advertising Association of UK has launched the Children's Ethical Communication Kit, a site, which allows advertisers and agencies to compile their own list of regulatory demands depending on the kind of communications they are planning.

According to the DMA Director of Communication, nobody gains from irresponsible marketing where children are concerned, and that ,it is damaging for client relationships, for brands, for the industry's reputation and for the person that gets it wrong. With the launching of the website the director of the Interactive Advertising Bureau (IAB) believe this will help to ensure that the integrity of digital marketing is upheld and that children can continue to enjoy the digital environment in a trusted manner.

In South Korea, privacy is constitutionally protected under Articles 16 (intrusion into place of resident), 17 (individual privacy) and 18 (secrecy of correspondence) of the South Korean Constitution. Such protection includes physical and online privacy. Nevertheless widespread cyber defamation and cyber contempt are constantly threatening the privacy of online users in this country. (Leitner, 2011) In 2007, the Korean police reported 10,028 cases of online libel. (Choe, 2008) In school, cyberbullying is quite rampant among school children and has occasioned several suicide cases. The widespread attack on privacy online, cyberbullying in schools and the death of a famous actress has prompted the government to introduce legal reform to combat online anonymity and to deter the posting of insulting comments. The government first introduced the Real Name Registration System (RRN) requiring the service provider to verifying the identity of online users before allowing online access. The system imposed on the Internet service providers (ISPs), by virtue of Art 44-5 of the Act on Promotion of Communication Network Utilization and Data Protection (CNA) and Articles 29 and 30 of the Enforcement Decree of the CNA, to verify the identity of the internet users before allowing access to internet. The reasons for introduction of such system were among others to stop baseless rumors, cyber bullying, cyber defamation and privacy invasion. The law and the system were however criticized and challenged for restricting freedom of speech.

In 2012 Constitutional court ruled the provision of CNA to be unconstitutional. Nevertheless the court considered the purpose of the Real Name Registration system as legitimate since it aims to contribute to a sound Internet culture by preventing users from posting illegal or defamatory messages online. In relation to cyberbullying in school, interestly the Korean society has established a "*Sunfull*" Movement or "Good Reply" led by Prof. Min Byung Chul from KonKuk University.

The movement aims to counter bullies by flooding online forum with positive and cheerful comments with the hope that those comment will discourage others from making vicious and negative online remarks.

In relation to data and personal information, the privacy and confidentiality of personal information relation to children is regulated under the Personal Information Protection Act 2011, and the Act on Promotion of Information and Communication Network Utilization and Information Protection. Both Acts contained provision protecting personal information of children. The Acts require consent from legal representative before data user could collect and process any personal data of minors below 14 years old. Apart from these two Acts, the Framework on Education Act and the Elementary Secondary Education Act has been enacted to protect students data. To manage students' data, the government introduced the National Education Information System (NEIS) and Rules on Operation of National Education Information system.

As addition the Government enacts laws to protect the privacy and personal data protection for child victims. There are three relevant laws governing this matter namely the Act on Punishment of Sexual Crimes and Protection of Victims (Art 21) protects privacy of child victims by prohibiting divulgence of identity of child victims by public official. Art 68 of the Juvenile Act prohibits any report in the media on investigation and trial of juvenile and Art 38 of Child Welfare Act - prohibits social welfare personnel from divulging any secret involving children under the welfare service.

4. Conclusion

As online users, privacy of children and adult are constantly threatened by those with criminal intention and interest. While technology and the internet provide tremendous benefits and opportunities to children to develop positively, the same tools provide avenue for invasion of their privacy which could endanger and threaten their early life. Vulnerability of children to online privacy risks has prompted governments to strengthen the existing laws or enact new law to protect children's privacy online Industry and society also play important role in protecting the privacy of children. The approach may be different but the ultimate aim is the same that is to ensure for the safety, security and privacy of children as Internet users in line with the requirement of the United Nation Convention on the Rights of a Child.

5. References

- Sykes J.C. The end of privacy. St. Martin Press. 1999, New York. P. 4.
- International Telecommunication Union (ITU), Use of information and communication technologies by the world children and youth: A statistical compilation. ITU, 2008

- Kwan G.C.E, Skoric M.M. Facebook bullying: An extension of battles in school. *Computers in Human Behaviour*, 2013, 29, pp16 -25.
- Hinduja,S.Patchin, J.W. Offline consequences of online victimizations: school violence and delinquency. *Journal of School Violence*, 2007, 6(3), pp 89-112.
- Willard, N. Educator 's Guide to Cyberbullying an dCyberthreats. <<http://www.Cyberbullying.org/cyberbullying/docs/abcteducator.pdf>. Retrieved on 4/3/2014
- National Centre for Missing & exploited Children (2000). Online victimization a report on the nation youth. http://www.missingkids.com/en_US/publications/NC62.pdf retrieved on 4/3/2014
- O'Keefe G.S & Clarke-Pearson K. and Council on Communication Media. The impact of social media on children, adolescent and families. *Pediatrics*, 2011, 127. p. 800.
- Solove D. J. Identity theft, privacy and the architecture of vulnerability. 54 *Hastings LH* 1227 (2002-2003).
- Dreazen JY. US is cracking down on thefts of identity, arresting about 130. *WALL St J*, 2002, May 3.
- Anderson K. B. Who are the victims of identity Theft? The Effect of Demographics. *Journal of Public Policy & Marketing*. Fall 2006, 25(2). pp 160-177.
- Palfrey, John et al. Berkman Centre for Internet & Society, Harvard University. Enhancing child safety and online technologies: Research Advisory Board Report for the internet safety technical task force (2008).
- Reuters, My space deletes 29,000 sex offenders, July 24, 2007
- Whitman M. Is my space a good kid's space? A look at the implications of the January 2008 My Space – Attorney General Agreement Concerning Online Age Verification. *ISJLP*, 2008-2009, 4, p 731.
- Craven S, Brown S, and Gilchrist E. Current response to sexual grooming: implication of prevention, *The Howard Journal* 2007, 46(1), pp 60-71.
- NBC News. Australian Ban Youtube in School. Available at http://www.nbcnews.com/id/17397882/ns/technology_and_science-tech_and_gadgets/t/australian-state-bans-youtube-schools/#.UxfzUtyQfjQ
- Aftab P & Savitt N. Protecting children's privacy and regulating cybertot marketing practices online. *Children's Legal rights Journal*, 1999, 2.
- Burke. A.H. Information harvesting on the internet: A consumer's perspective on 2001 proposed legislation restricting the use of cookies and information sharing. *Loy. Consumer L. Re*, 2001-2002, 14, p.125
- Givens B. Children in cyberspace: A Resource Guide. *Human Rights*, Winter 1999.
- Common Sense Media. Protecting our kids' privacy in a digital world. A Common Sense Policy Brief. Dec 2010.

- Lianso E. Do not track kids bill revives minors online privacy debate. November 26, 2013. Center for Democracy & Technology, available at <https://www.cdt.org>. Retrieved on 8/3/14.
- McCarthy C. My space agrees to social-networking safety plan, *CNET News*, Jan.14 2008. Available at http://news.cnet.com/830113577_3-9849909-36.html
- Hans GS. Privacy Concerns Arise with Mobile Tracking in Stores. February 26, 2014. Center for Democracy & Technology, available at <https://www.cdt.org>. Retrieved on 6/3/14.
- Stanaland, A.J, Lwin, M.O & Leong, S., Providing parents with online privacy information: approaches in the US and the UK. *Journal of Consumer Affairs*, 2009, 43(3), pp 474-494 at p 480.
- Information Commissioner's Office (ICO). Protecting children's personal information: ICO Issues Paper. 2006
- Leitner JM. To post or not to post: Korean criminal sanctions for online expression. *Temple Int'l & Comp. L.J*, 2011, 25, p. 43
- Choe Sang-Hun. Korean star's suicide reignites debate on web regulation. N.Y. Times, 2008, Oct 13. Available at <http://www.nytimes.com/2008/10/13/technology/internet13suicide.html>

ICSSAM-634

Dilemma of Nominee Directors: Finding the best Practice

Halyani Hj Hassan

Civil Law Department, Ahmad Ibrahim Kulliyah of Laws, International Islamic University,
Malaysia

Email: halyani@iium.edu.my

Abstract

Directors as the manager and decision maker in a company are subjected to certain duties provided by the legislated act as well as the Common law. In certain companies, such as state owned companies, subsidiary companies or where the shareholders consists of institutional investors the board of directors of those companies may consists amongst them nominee director/s.

Nominee directors are appointed as representatives of their nominators. They are expected to safeguard the rights of their nominators. Generally, the provisions in the statutes governing company matters which emphasize on directors' duties do not differentiate the duties imposed on any of the directors regardless of whatever type of director that they belong to. Thus they would found themselves in a dilemma as they owe their loyalty to both the company as well as to their nominators.

This paper seeks to explore the legislation and the case laws in other countries (Singapore, Australia and United Kingdom) besides Malaysia, as regards to the duty of nominee directors.

It would be beneficial to study whether these countries had provided any specific provisions to the nominee directors in order to guide them in discharging their duties or to neutralize their dilemma. The paper would conclude by suggesting the best practice for the nominee directors in performing their duties and to strike a balance between their duties to the company and to their nominators.

Keywords: nominee directors, directors' duties

1. Introduction

Directors are the managing organs in a company. They have control and greatly involved in company's decision making. In certain situation the board of directors of a company may comprise of nominee directors. The nominee directors are normally appointed to represent certain party/parties.

Having the huge responsibility to manage the company, directors are subjected to certain duties, among others, duty to act in good faith in the best interest of the company and duty to avoid conflict of interest. This article intends to elaborate the dilemma faced by the nominee directors in discharging these duties. Though they definitely owed duty to the company, it raised concern as regards to their position as nominee directors who owe a task to safeguard the interests of their nominators. Should they act only for the interest of the company, could they consider the interests of their nominators and what would be the situation in case of conflict between the interests of company and the interests of the nominators, are the dilemma faced by this category of director. The discussion would be based on the statutory provisions and case law in Malaysia, with reference to UK, Australia and Singapore. This would be necessary to provide the best practice which could be adopted.

2. Nominee Directors

Nominee director has not been specifically defined in most jurisdictions. The term however considered to be included in the definition of 'director' which states '...any person occupying the position of director...whatever name called...' Nominee directors can be defined as directors who are nominated to the board by an individual or class of shareholders, or certain group such major creditors or employees of the company (Companies and Securities Law Review Committee, Australia, 1987). It is common for major shareholders, holding companies or institutional shareholders or in a joint venture company to have a director as their representative in the board. Since they are representing an individual or group of persons, they can be described as a trustee for their nominator (*Re Syed Ahmad Alsagoff 1960 1 MLJ 147*). They are the 'watchdog' for their nominator in ensuring that the rights (of their nominators) are properly safeguarded.

3. Duty to Act in the Company's Best Interests

As persons who are responsible in holding the stewardship of a company, directors are subjected to certain duties. These duties which are known as fiduciary duty are to guide the directors in performing their task and to prevent any abuse of power (Alan Dignam, 2011). Despite the fact that nominee directors are representatives of certain parties in the board, their duties are similar as any other directors.

The very fundamental duty which is the focus of this article is concerning duty to act in good faith in the best interest of the company which has been expressly provided in Malaysian Companies Act 1965 (section 132(1)). Best interest of the company refers to interests of the shareholders as a whole. This was explained by Evershed M.R, that the phrase ‘the company as a whole’ does not mean as a commercial entity, distinct from the corporators; it means the corporators as a general body (*Greenhalgh v Arderne Cinemas Ltd* [1951] Ch.286). Nevertheless in certain situation interests of certain parties such as suppliers or employees could also be taken into consideration (Companies Act 2006, section 172). The interest of certain shareholders should be taken into consideration when the directors are acting as an agent (*Allen & Ors v Hyatt & Ors* (1914) 30 TLR 444).

The presence of nominee directors in the board may create difficulties upon them in performing the duty to act bona fide in the interest of the company. Being the chosen one to that position (as director) the nominee directors will feel obliged that they should be looking out for their nominators’ interests. Some believe that the nominee directors are subjected to a certain extent loyalty to the nominator other than to the company (Ford et al.2001, Paul Redmond)

3.1 Malaysia

In Malaysia, the Companies Act 1965 has been silent regarding the duty of nominee director until 2007 when section 132(1E) was introduced. Previously the duties of nominee directors have been implied based on the provisions which discussed directors’ duties. According to section 132(1E):

A director, who was appointed by virtue of his position as an employee of a company, or who was appointed as a representative of a shareholder, employer or debenture holder, shall act in the best interest of the company and in the event of any conflict between his duty to act in the best interest of the company and his duty to his nominator, he shall not subordinate his duty to act in the best interest of the company to his duty to his nominator.

The provision has in a way provides a general duty of nominee directors and a guideline when there is a conflict between company’s interest and nominators’ interest. This means nominee directors are not bound to act in accordance with the instruction of the nominator when it is against the interest of the company. Cases concerning nominee director are lacking in Malaysia. Thus in discussing on this issue the case of *Industrial Concrete Products Bhd v Concrete Engineering Products Bhd* [2001] 2 MLJ 332 would be relevant. In this case Choo was nominated to the board of Concrete Engineering Products (CEPCO) by CEPCO’s substantial shareholder.

Choo had entered into a management agreement with Industrial Concrete Products (ICP) for ICP to acquire CEPCO's core business as well as for ICP to manage CEPCO's business. The principal issue in this case centered on the appointment of ICP to take over the management of CEPCO core business. CEPCO argued that the management agreement was entered by Choo without the authority of the board.

The court held that although Choo had implied authority to enter into the management agreement, Choo was not acting in the best interest of CEPCO. Thus Choo's decision to dispose the company's core business whilst it was profitable was breach of fiduciary duties. James Foong J held that:

"...I find that Choo had not acted bona fide in the interest of CEPCO and neither did he promote and advance CEPCO's interest nor considered the relevant facts before committing the acts as alleged. His entire action throughout this period as a director was solely towards the benefit and interest of the group that nominated him to the board. Such interest not only conflicted with those of CEPCO, but was also disastrous to CEPCO. Its assets were nearly stripped and its core business was on the verge of being annexed by its main competitor. For this, Choo is guilty of CEPCO's accusation of being in breach of his fiduciary duty."

It should be noted that *Cepco's* case occurred before the insertion of section 132(1E). Though the duty of nominee director has not been expressly spelt out, the position of Choo fit the description of a nominee director.

In a High Court case of *Sundai (M) Sdn Bhd v Masato Saito & Ors* [2013] 9 MLJ 729, the court cited section 132(1E) and held that the defendant, who was considered to be a nominee director had a duty to act in the best interest of the plaintiff. The court averred that Saito should not subordinate his duty to act in the best interest of the company to his duty to his nominator.

With the existence of section 132(1E), the position of nominee director is clear in Malaysia. However to what extent it would be viable is questionable since there is dearth of court's decision on this issue.

3.2 United Kingdom

Under the English law directors must act in good faith to promote the success of the company and owe a duty to exercise independent judgment (Companies Act 2006, sections 172, 173).

The position of nominee director can be referred to *Scottish Co-operative Wholesale Society Ltd v Meyer* [1959] AC 32. In this case ‘Society’ formed a subsidiary known as ‘Textile’ because it could not obtain the license without the experience of Meyer and Lucas (who were the minority shareholders and directors of ‘Textile’). As majority shareholders ‘Society’ appointed three directors in Textiles as its nominees. When the license was no longer required Society transferred Textile’s business to its own departments. The nominee directors in Textile supported this decision which was wholly opposed to the company’s best interests. Lord Denning in his judgment mentioned that:

“... the duty of the three directors was to do their best to promote its business and to act with complete good faith towards it... They put their duty to the society above their duty to the company in this sense, at least, that they did nothing to defend the interests of the company against the conduct of the society... They probably thought, ‘as nominees’ of the society, their first duty was to the society. In this they were wrong.”

Later, the duties of the nominee directors have been further explained by Lord Denning in *Boulting v Association of Cinematograph Television and Allied Technicians* [1963] 1All E.R 716 where his lordship clarified that a nominee director should be free to exercise his judgment in the interests of the company and is not bound to act in accordance with his nominator. He emphasized that it would be unlawful if a nominee director is bound to act in accordance with the directions of his nominator. He also stipulated that it would be unlawful for a nominee director to enter into an agreement which would subordinate the interest of whom he must protect (i.e. interests of the company).

In addition, in *Re Southern Counties Fresh Foods Ltd: Cobden Investment Ltd v RWM Langport Ltd* [2008] EWHC 2810 (Ch) the position of a nominee director has been further elucidated. In this case a joint venture company was formed to serve the interests of Cobden & Heffer families. Each has the right to appoint three directors. The nominee directors of Heffer were alleged to have acted in breach of duty for preferring the interests of other group and this amounted to be unfair and prejudicial. According to Warren J.:

- A nominee director owes the same duties to the company as any other director.
- He owes his duties as a director to the company alone.
- The company is entitled to expect from the director his best independent judgment.
- These duties can be qualified expressly or impliedly by the unanimous agreement of the shareholders, but not completely abrogated

These cases could be construed to mean that nominee directors may consider the interests of the nominators so long as it will not subjugate the interests of the company. Even in *Cobden Investment* the court held that interests of the company could be qualified if there is a unanimous consent of the shareholders but not to abrogate the duties owe to the company.

It would be interesting to note that Sec 173(2) of Companies Act 2006 elucidates that directors would not be in breach if they act in accordance with an agreement duly entered into by the company that restrict future exercise of discretion by its directors or if they act in a way authorized by the company's constitution. Thus based on UK Companies Act 2006, directors' duties could be qualified by an agreement or by the company's constitution and this to a certain extent might lessen the dilemma of the nominee directors.

3.3 Australia

Similarly in Australia, the Corporations Act 2001 has not mention about the definition or duty of nominee directors. However their cases are more accommodating compared to the strict rule in the English cases in relation to the duties of nominee directors. The first and most cited case when explaining the duty of nominee directors is *Levin v Clark* [1962] NSW 686.

According to Jacobs J the shareholders' agreement may modify directors' duties of nominee director and thus nominee director may act in the interests of his nominator. In this case two directors were appointed as nominees of a mortgagee of shares in the company. Later, Levin (the mortgagor) claimed that the two directors were not acting in the best interest of the company but acting solely in the interest of the mortgagee. It has been viewed that directors must act in the best interests of the company but this duty may be modified by the company's document (in this case the articles of association) and by the wishes of all those to whom the fiduciary duty is owed (Elizabeth Boros). In this case there was an express provision in the articles making the activation of the powers of directors who were nominee of a mortgagee contingent upon default by the mortgagor.

Warren J in *Cobden Investment* viewed that *Levin's* should not be construed to mean that a nominee director can subjugate the interest of the company in favour of the interest of its nominator. It has been commented that Levin's case proposed that nominee director may act in the interests of his nominator if the act will not be contrary with the interests of the company (Deirdre Ahern, 2011). Ahern referred *Levin's* as the authority for the proposition that it is possible for a company to modify a nominee director's duties so as to allow broad cognizance to be taken of the nominator's interests subject to the qualification that this does not allow directors to act contrary to the interest of the company as a whole.

This is supported by the facts that the acts of the directors in that case were not contrary to the interests of the company. In that case the acts in question involved the removal of the plaintiff and his associates as directors, a direction to the bank to only honour cheques by two name signatories, and the termination and renegotiation of a contract of an employee.

These acts have been construed by the court were not contrary to the interests of the company.

Later Jacobs J had also acknowledged that it was commercially unrealistic to expect that nominee directors would act without regard to the nominators' interests (*Re Broadcasting Station 2GB Pty Ltd* [1964-65] N.S.W.R 1648). Jacobs J (the judge in *Levin*) affirmed that a nominee director should prefer interests of the company rather than their nominator however the nominee director may act for the interests of the nominator if there is no conflict.

It is important to note that in this case the nominee directors believed that there was a coincidence between the interests of the company and the interest of the nominator and therefore it was held that the conduct of the directors was neither oppressive nor improper.

In *Bennetts v Board of Fire Commissioners of New South Wales*(1967) 87 WN (NSW) 307 (EqD), Street J held that a board member must not allow himself to be compromised by looking to the interests of the group which appointed him rather than to the interests for which the board exist. His Justice explained that such director is most certainly not a mere channel of communication or listening post on behalf of the group which elected him. This case was about a nominee director who represented the union and he believed that he was obliged to disclose the company's information to the union.

In *Harkness v Commonwealth Bank of Australia Ltd* (1993) 12 ACSR 165, Young J asserted that though a person is elected by a special interest group, considered to be a representative of one group on another group, or a nominee director, the situation does not alter the fact that the person owes the duty of confidence to the board to which he has been appointed. In this case Mr C a senior officer in a Bank was a representative in Austraclear's Dispute Committee and the court held that Mr C did not owe a duty to the Bank to divulge the information he received as an officer of Austraclear.

These cases showed that nominee directors owe their duties to the company. However in situation where the interests of company and the interests of nominator are not in conflict, it would not be wrong for them to serve the interests of their nominators.

As for the Corporation Act 2001, though there is no provision discussing specifically about nominee director, section 187 has impliedly concerns with the issue. According to the section a director of a wholly-owned subsidiary may act in the best interest of the holding company if:

- The constitution of the subsidiary expressly authorizes the directors to act in the best interests of the holding co;
- The director acts in good faith in the best interests of the holding company; and
- The subsidiary is not insolvent at the time the director acts and does not become insolvent because of the director's act.

The above provision allows a nominee of a holding to act in the best interests of the holding whilst acting as a director in a subsidiary by fulfilling certain requirements.

3.4 Singapore

The position of nominee directors in Singapore is similar with England where the courts applied the strict rule founded in the English cases. However later cases had highlighted that when there is no conflict the nominator's interests are equally important. Winslow J in *Raffles Hotel Ltd v Rayner* [1965] 1 MLJ 60 asserted that a nominee director should exercise his best judgment in the interests of the company he serves and not in accordance with the directions of his nominator as the company is entitled to the undivided loyalty of its directors. Such decision puts the nominee directors in a difficult situation since they might at the same time hold a position as senior executives of the nominators who were given a responsibility to keep an eye on their nominators' investment (Walter Woon, 2009).

The decision in *Scottish Co-operative Wholesale Society Ltd* that the nominee directors cannot place the interests of their nominators above the company was affirmed in *Kumagai Gumi Co Ltd v Zenecon Pte Ltd* [1995] 2 SLR 297. In addition the Singapore Court of Appeal explained that it is uncontroversial that a nominee director may not prefer the interests of his nominator over his duties to the company, nevertheless, when there is no conflict of such interests with his duty, he may take into account the interests of his nominator. The court also emphasized that nominator had an interest in how the nominee director carries out his duties as a director of the subsidiary, as well as how he serves the interests of the nominator.

Subsequently in *Oversea- Chinese Banking Corp Ltd v Justlogin Pte Ltd* [2004] 2 SLR 675, the Singapore Court of Appeal in describing the duty of nominee director's held that:

“It is settled law that every director owes the same responsibility to the company as a whole...A nominee director should exercise his judgment in the best interest of the company and should not be bound to act in accordance with the direction or instruction of his appointor... He must not put the appointor’s interests before those of the company... A nominee director may take into account the interest of his appointor if such interest does not conflict with the interest of the company...”

Though there is no provision on nominee director’s duty in Singapore Companies Act, there is a provision allowing the nominee directors to disclose to his nominators, information obtained by him as director of a company. Section 158 states that a nominee director may disclose information to his nominator provided:

- The director must declare at a meeting of the directors of the company the name and office or position held by the person to whom the information is to be disclosed and the particulars of such information; sec158(3)(a)
- The director receives prior authorization by the board of directors to make the disclosure; sec 158(3)(b)
- The disclosure will not be likely to prejudice the company; sec 158(3)(c)

The existence of this section is approved as it may ease the dilemma faced by the nominee directors especially when their nominators inquire certain information. However, it would not be easy for the board of directors to authorize the disclosure and it is also not easy to ascertain whether the information would prejudice the company or not (Kala & Foo,2004). Hence the applicability of the provision is doubtful.

4. Observation

Based on the above discussion it is clear that in cases involved nominee directors their utmost loyalty should be the company. It is possible to listen to the views of the nominator as to where the interests of the company lie provided that these are consistent with the interests of the company as a whole (Deirdre Ahern,2011).This has involved judicial acknowledgement of the special position of the nominee director while respecting the overriding duty owed to the company to act in the best interests of the shareholders as a whole(*Cobden Investment,Re Broadcasting Station 2GB Pty Ltd. Oversea- Chinese Banking Corp Ltd v Justlogin Pte Ltd*).

It was also viewed that the nominee directors may at a very least consider the interests of their nominator which could be agreed expressly or impliedly (Salim & The, 2008).

In *Levin's* case, there was an agreement that the nominee directors should act for the interests of their nominators and the acts were also in the company's best interests and thus there was no issue of subordinating the company's interests. This has also been accepted in *Cobden Investment* where the court held that the nominee directors' duties could be qualified by a unanimous agreement of the shareholders. Besides these cases the provisions in section 187(Corporation Act) and section 158 (Singapore Companies Act) have shown that in certain situation by fulfilling certain requirements the nominee directors are given a freedom to act in favour of their nominators.

It is therefore observed that Section 132(1E) of Companies Act 1965 can be perceived as a well-described position of nominee directors, however certain exceptions might be required to enhance the law as it is general in nature. Thus it would be wise to consider the exceptions provided by the case laws and statutory provisions in other jurisdictions.

5. References

- Alan Dignam, *Hicks & Goos Cases and Materials on Company Law*, 7th edition, Oxford University, 2011
- Ford, H.A.J., Austin, R.P. and Ramsay I.M., *Ford's Principles of Corporations Law*, 10th ed, Butterworths, Australia, (2001)
- Paul Redmond, Nominee Directors, UNSW Law Journal, Vol 10, pp 194-214
- Elizabeth Boros, The Duties of Nominee and Multiple Directors, *The Company Lawyer*, Vol10 No11, pp 211-219.
- Deirdre Ahern, Nominee directors' duty to promote the success of the company: commercial pragmatism and legal orthodoxy, L.Q.R. 2011, pp 118-146
- General editor Tan Cheng Han, *Walter Woon on Company Law*, Revised Third Edition, Sweet & Maxwell, 2009.
- Kala and Foo, <http://.law.gazette.com.sg/2004-3/March04-feature4.htm>
- Mohamed Rizal Salim and Tai Yong The, *International Journal of Law and Management* 50, (2008), pp 168-188

Competition Law and the Shipping Industry: the Case of the Malaysian Block Exemption on Shipping Liners

Nasarudin Abdul Rahman^a and Haniff Ahamat^b

Civil Law Department, Faculty of Laws, International Islamic University Malaysia

^anasarudin@iium.edu.my, ^bahaniff@iium.edu.my

Abstract

Competition law seeks to protect the process of competition in the market by prohibiting anti-competitive behaviors such as conspiracy to fix price and capacity, and abuse of dominant position. However, large sectors of the transport industry have been historically exempted by many competition authorities. The reason for this is that transport networks rely on a great degree of cooperation among market players making competition rather difficult to function effectively. This paper seeks to explore the application of competition law in shipping industry in the light of a newly Block Exemption on shipping liner. This paper argues that the economic rationales upon which many economist relies to justify the exemption is still relevant to the Malaysian context. However, since the law is still at its nascent stage, the efficacy of the block exemption in promoting and protecting this strategic sector is still untested. Further development in other developed jurisdictions should be closely observed and additional requirements should be employed should the exemption regime fail to achieve the desired objectives.

Keyword: Competition, Competition law, shipping industry

Introduction

Competition law enforcement is part of a broader policy that protects the process of competition in the market. However, whether the law should be applied to the shipping industry has been subject to intense debate because not all sectors are structured in a manner that correspond with market principles. The unique characteristic of liner shipping had forced countries around the world to shield activities in shipping industry from competition law. The Malaysia shipping industry is tailored to the country's national policy. This sector is viewed as a strategic sector not only because it encourages export and provides greater connectivity within Malaysia and to global trades, but also increases the domestic capability to participate in logistic services market. Previously, there was no law that regulates the conduct of the shipping operators in the market.

However, with the introduction of the Competition Act 2010, many activities that were unregulated in the past have now been exposed to the competition law enforcement. The main objective of this paper is to analyze the economic rationales behind the grant of the block exemption and the scope of the Malaysian exemption regimes with respect of shipping industry.

An Overview of the Maritime Sector in Malaysia

Shipping is an integral part of the Malaysian economy. Since Malaysia economy is largely dependent on external trade, the shipping industry plays an important role to facilitate imports and exports connecting the Malaysian economy to the global market as well the entire national transport system. The shipping commercial line started in 1960s as a result of the government effort to address the problem of severe outflow of freight payments to foreign carriers due to the absence of national carriers (MITI, Industrial Masterplan, 2010). In 1968 the Government introduced a national carrier Malaysia International Shipping Corporation in which the government has equity participation. MISC commenced its operation to provide liner services in 1970. In 1997 MISC came under the management of the Petronas another government link company who purchased a 29% stake in MISC (Nazery Khalid, 2005).

Another established company is Global Maritime Ventures Bhd (GMV) which had entered into joint venture with other companies such as Wawasan Shipping Sdn Bhd and Malaysian Bulk Carriers Sdn Bhd. (Sgouris P. Sgouridis, 2003). The government cabotage policy has led to the emergence of a few number of local companies with Bumiputera ownership such as Malaysian Merchant Marine, Halim Mazmin, Nepline, Global Carriers and PDZ (Firdausi suffian et al, 2013).

The cabotage policy was introduced in 1980 as part of the government policy to encourage the participation of the domestic players especially Bumiputera (indigenous) community into trade and logistic industry. The term cabotage refers to “reservation to a country of traffic (coastal) water operation within its territory” (Firdausi suffian et al, 2013). The policy can be considered as a protectionist policy and non-tariff barrier which limits market access.

Unconditional license is granted to a Malaysian entity in respect of Malaysian flagged vessel on the condition that it qualifies to own a Malaysian flagged vessel according to the law stipulated for owning a Malaysian ship; has 30% Bumiputera participation in terms of equity, directorship and office staff and employs Malaysian citizens as ratings on the vessel in question to the tune of 75%.

Despite the rapid growth in the shipping industry, the size of the Malaysian merchant fleet is still small by global standards. Less than 20% of the country's trade was carried by national carriers (Firdausi Suffian et al, 2013). Foreign shipping lines continue to dominate the shipping market. The players in the global shipping market can be considered as an oligopoly and have strong market power. The top ten shipping companies handle 56% of global containerized cargo in 2001 (Sgouris P. Sgouridis, 2003). In the global arena, there is a different scenario. Global shipping industry is considered as overcapacity partly due to the low cost of purchasing new ships. This may result in lower freight prices and may reduce the profits of the shipping operations (Sgouris P. Sgouridis, 2003). In order to survive, MISC has to operate in space-sharing alliances (PDP Australia Pty Ltd/Meyrick and Associates, 2005).

The objective of the alliance is to foster cooperation among members to increase efficiency by reducing costs and increasing the quality and frequency of services.

The application of the Competition Act in shipping sector

Competition law in Malaysia is still at its infant state. The law was introduced in 2010 by virtue of the Competition Act 2010 and came into force in January 2012. The main objective of the Competition Act is to protect the process of competition by preventing anti-competitive conduct such as price fixing, market allocation (section 4) and abuse of dominant position (section 10). The Competition Act applies to any commercial activity transacted both within and outside Malaysia. This means that activities in the shipping sector are subject to the enforcement of the competition law. However, the Act provides a way in which parties to an anti-competitive agreement may be exempted from the application of the law. Section 8 allows the Malaysia Competition Commission to grant a block exemption on particular category of agreement if it fulfils the criteria laid down in section 5 of the Act.

Shipping Liner Block Exemption in Malaysia

On 16 December 2011, MyCC received an application for a block exemption order submitted by the Malaysia Ship-owners Association (MASA), the Shipping Association of Malaysia (SAM) and the Federation of Malaysia Port Operators Council (FMPC) for and on behalf of the liner shipping operators (MyCC Proposed BOE, 2013). The application was made in pursuant to section 8 of the Competition Act 2010. The parties sought to exempt certain activities arising out of two main important agreements, namely, Vessel Sharing Agreements (VSA) and Voluntary Discussion Agreements (VDA) entered into by liner shippers. After a series of public consultation the MyCC was finally issued a Block Exemption Order (BOE) in pursuant to section 8 of the Competition Act in 2013.

The main economic rationale behind this application was the high operational cost that the national carriers had to face. This includes operating costs such as fuel, crew costs, supplies and stores, administration cost such as capital and interest repayments charges in case where the ships are not completely amortised, and other related cost such as charter rates in the case where the ships are not owned by the liner service providers (MyCC, Proposed BOE, 2013).

In order to avoid from being incurred with additional cost of operation due this problem, the shipping liner operators tend to form a conference under which they coordinate price and enter into scheduling cooperation and arrangement (MyCC, Proposed BOE, 2013). This is clearly illustrated in the case of the largest national carriers, MISC. Due to global overcapacity and the inability to meet the local demand, MISC has no option but to enter into cooperation agreement (Sgouris P. Sgouridis, 2003 & PDP Australia, 2005). The scheduled service is also important to carter for unbalanced demand on various trade routes due to overcapacity. Furthermore, relaxation of the competition rule in shipping liner industry is important to meet the demand of small shippers to carry their cargo on a regularized basis without the need to charter a whole ship for their small cargo lots (MyCC, Explanatory Note, 2013).

The Block Exemption (BOE) defines a liner operator as “an enterprise which provides liner shipping services and is a party to a Vessel Sharing Agreements (VSA) and Voluntary Discussion Agreements” (VDA). Liner shipping services are defined as “the containerized and other scheduled transport of goods by ocean carriers on a regular basis on any particular route between ports and in accordance with timetables and sailing dates advertised in advance and made available, even on occasional basis, by such operators to any transport user against payment” (MyCC, Block Exemption, 2013). Based on this definition, it clearly indicates that the BOE will apply to all forms of liner shipping agreements and is not limited to a particular form such as container cargo. This may encourage liner operators to participate in all forms of liner shipping to collaborate with a view of bringing about technical and operational efficiencies and improvement in their services (CCS, Explanatory note, 2012).

Based on the definition also the BOE only covers arrangements such as sharing of vessels, joint operation of vessel services, exchange or charter of vessel space between the liner operators (MyCC, Block Exemption 2013).

Liner shipping is different from other non-liner shipping such as tramp shipping. Liner shipping is a scheduled carriage of goods based on allocated frequency of calls at predetermined routes or ports. Tramp involves normally the charter of full vessel for a given voyage transporting goods in bulk and break-bulk.

Another distinctive feature is that liner shipping involves the carrying of variety of goods such as manufactured and semi-manufactured whereas tramp shipping carry one and the same goods such as dry or bulk liquid in large quantities (Francesco Munari, 2009/2010). In the Malaysian context “full vessel chartering arrangements with customers, such as tanker and bulk vessel operations are excluded from this BEO”.

Criteria under Section 8 of the Competition Act 2010

Section 8 of the Competition Act allows the Commission to grant a block exemption on particular agreement if it fulfills the criteria set out in section 5 of the Act. One of the criteria is the agreement in question produces efficiency, technological or social benefit (sec 5 (a)).

Efficiencies can be categorized into two: cost efficiency and qualitative efficiency. Cost efficiencies include for example, synergies gained from integrating of existing assets, economies of scale and scope etc. Qualitative efficiencies cover new or improved products and services created By R&D agreements, licensing agreements or joint production (Watson, Farley & Williams, 2007). For example, the EU Commission recognized that shipping liner agreement or consortia brings about economies of scale that allow the operation of vessels and utilization of port facilities. It also promotes technical and economic progress by encouraging greater utilization of containers and by using vessel capacity more efficiently (EC Regulation, 2009).

In the Malaysian context, liner shipping industry involved high investment and operating cost. By entering into VSA and VDA shipping liner operators are able to provide shipping services with lower cost while maintaining the quality of the service as the agreements allow the operator to provide frequent and regularized shipping services (scheduled service) between various ports around the world. Lower cost at the end can be translated into lower price of goods and services which benefits the consumers.

The agreement may also bring about social benefits such as protecting the national industry and promoting the participation of *Bumiputera* (indigenous) community into the logistic industry. It provides an incentive for shipping liner operators to make large investment in new ship, shipping liner services as well as shipping infrastructure. It helps the existing shipping operators with *Bumiputera* equity to reduce cost and increase frequency of service.

The shipping liner will become national policy and instrument to promote equal participation in the industry (Francesco Munari, 2009/2010).

The BOE does not specifically state the requirement that the agreement exempted should allow the consumer to get a fair share of the benefit. However, under the Guidelines issued by MyCC, the parties claiming for this relief are required to prove that the benefits gained are passed on to the consumers (MyCC Guidelines, 2012). For example, if the cooperation lead to higher price, it must at least compensate the consumers in term of increased quality or other benefits or the net effect on consumers (transport users and end consumers) is at least neutral (Watson Farley & Williams, 2007). In the EU Block Exemption, it is clearly mentioned that a fair share benefits from the efficiencies should be passed on to consumer, namely, the transport users in the form of an improvement in the frequency of sailings and port calls, or an improvement in scheduling as well as better quality and personalized services through the use of more modern vessels and other equipment including port facilities (EC Regulation, 2009). Whether a competition law system takes into consideration the consumer interest depends on whether it adopts total welfare or consumer welfare. If the law enforced solely based on efficiency, it does not matter who gains and who loses. The benefit of cost-savings to producers may be passed to the consumers, but not necessarily especially when services operated mainly by foreigners (Ho Tin Nixon Fong, 2011).

The agreements that fall under the block exemption should pass the test of “indispensability” (sec 5 (b)) and “proportionality” (5 (c)). On this point, MyCC found that the efficiency and technological benefits cannot be realized by the parties without entering into agreements (VDA and VSA) that have the effect of preventing and restricting competition. The parties to the agreement have to prove that there is no other less practical (Ho Tin Nixon Fong, 2011) and restrictive means to achieve the benefits under the agreement.

Historically, price fixing and control of supply was exempted based on several economic reasons such as to stabilize price which will lead to reliability of services to shippers. Maintaining of price stability is important to ensure that the shippers know in advance the cost of transporting good and in the same time allows the shippers to forecast their profit. This in turn allows them to provide a reliable and efficient transport and shipping services (Watson et.al, 2007). However, the costs structure of the shipping industry is not different from that of other regulated industries (Watson et. al, 2007) which justifies price fixing arrangement. In addition, price stability – price fluctuations reflect the economic reality. The interference with the price may result in distortion in the true price signal and confuse the market (Ho Tin Nixon Fong, 2011).

Under the Malaysian BOE, the parties to VSA and VDA are prohibited to include any provision on price fixing or price recommendation on the transport users (MyCC Block Exemption, 2013).

This is in line with the practices of most of the competition law jurisdictions. The Singapore BOE does not allow any adherence to mandatory a tariff (CCS, Block Exemption Order, 2006). In the EU Regulation, the Block Exemption shall not apply to the fixing of price when selling liner shipping services to third parties, and the limitation of capacity or sales except for the capacity adjustment in response to fluctuations in supply and demand (EC, Regulation, 2009).

It is unlikely that price arrangement is indispensable to achieve the efficiency benefits such as cost-saving and increase of frequency. There is other less restrictive means of achieving these benefits, namely, by sharing of vessels, joint operation of vessel services, exchange or charter of vessel space between the liner operators. Further price-fixing is considered as hardcore restriction of competition. It has negative effect on the domestic economy and consumer in Malaysia in the form of high freight rates. Lack of competition in the market gives opportunity for cartels to control price. For example, there were numerous complaints over the current practice of price fixing in the shipping industry. Freight charges are not regulated by the government and subject to mandatory and ad hoc fees by logistics service providers along the value chain (Interview, 2010). The price is not only unreasonable and unnegotiable, but also imposed in a non-transparent and arbitrary manner.

Section 5 (c) laid down the requirement of ‘proportionality’. It requires the parties to the agreement to prove that the benefits brought about by the agreement are proportionate to its negative effect on competition. This in fact differs from the EU and US practice which prefer that the benefits flowing from an agreement must outweigh its detrimental effects. The pro-competitive and anti-competitive effects created by the agreement must be balanced against each other and the pro-competitive effects must outweigh the anti-competitive effect (EU Guidelines, 2004 & Manpreet Kaur, 2008). It was argued that ‘the Commission has declined to accept that an agreement produces an improvement if, in practice, its effect is a disproportionate distortion of competition in the market in question’ (Whish, 2009). On this point, MyCC satisfied that the detrimental effect of the agreements on the competition is balanced by or proportionate to the efficiency benefits brought about by the agreements. The agreements entered by the competitors to provide regularized and scheduled services ensure the stability in trade to meet the demand of shippers for the service regardless of size. It allows the shippers with small lots of cargoes to use the services to various ports destination with lower cost.

Under section 5 (d) of the Competition Act any agreement sought to be exempted should not allow the parties the enterprise concerned to eliminate competition completely in respect of a substantial part of the goods or services.

This means that some form of competition must be preserved. This can be achieved by making sure that price competition is not eliminated and right to withdraw from the agreement is guaranteed.

Though the VSA and VDA allow for regularized and scheduled services, it does not allow competition to be eliminated completely. This is because the BOE granted prohibits any form of price fixing or tariff agreements and allows any party to the agreement on the basis of an individual to offer his own service arrangements and pricing (MyCC Block Exemption, 2013).

Liner operators are free to set rate for services provided. It allows the competitors to operate independently and compete on pricing. The BOE requires the particular agreement to allow the party to withdraw from the agreement and become a competitor and shall not punish the party who want to depart from the agreement (MyCC Block Exemption, 2013). This is to ensure an element of potential competition is retained and allows service providers to adapt to changing market conditions (CCS, Block Exemption, 2006). However, unlike the EU, the Malaysian BOE does not stipulate the notice period within which the parties can withdraw from the agreement. The stipulation of the notice of withdrawal is important to protect the initial investments made by the conference/consortium (EC Regulation, 2009).

Another important point that in order to qualify for the exemption, the agreement should not include any exchange of confidential information especially in relation to service contract between the operators. Sensitive information including market shares, output and prices – members are able coordinate their competitive conduct on the market (Watson et al, 2007). Under the BOE, the VDA shall only allow exchange of information relating to the industry (such as review market data, supply and demand forecasts, international trade flows and industry trends and any similar commercial issues). Any exchange of information should be done in a voluntary and non-binding basis.

The BOE is only applicable to ocean transport and does not cover inland carriage of goods as part of through transport including services provided by logistics providers, forwarders, depot operators, truckers, railroads, off-dock consolidation facility service providers, and off-dock storage and warehousing service providers, whether or not such entities are affiliated with liner operators (MyCC Block Exemption, 2013). It differs from the Singapore BOE where the latter covers inland carriage of good occurring as part of through transport. The reason for this is to encourage the development of efficient integrated systems and future development of the international cargo industry (CCS Media Release, 2006).

The absence of the coverage on the inland carriage of good may cause disadvantage to the local companies that are fully integrated. For example, MISC operates as a logistic service provider offering haulage, trucking and warehousing (Sgouris P. Sgouridis, 2003). This also will impede the government's initiative to encourage logistics service providers to consolidate or integrate their activities and become Third Party Logistics Service Providers.

However, it is important to note that through transport or inland carriage may involve a single amount charged by ship-owners (especially those who have integrated business) to users.

Numerous complaints had been lodged against the imposition of excessive price and various ancillary charges by logistic service providers along the value chain. There was lobby from the users to restrict the BOE to ocean transport only.

Unlike the EU, the Malaysian BOE does not require the determination of market shares of the parties to an agreement. This provides an opportunity for all local shipping companies with low or high market shares to enjoy the benefits arise from the block exemption, thus further enhances the development and growth of shipping industry in Malaysia. Market share may be determined based on volumes carried out by a member not only within a conference in question but also within another conference to which the member is a party, be it on the member's own vessel or on third party vessels (CCS, Block Exemption 2006; EU Regulation 2009). This involved a complicated and tedious process and time-consuming. For example, the market share determination in the context of the Singapore BOE is only for the purpose of filling of documents and publication of information (CCS, Block Exemption 2006) This will also increase administrative burden for the competition authority.

In addition, the BOE does not exempt any conduct that considered as abuse of dominant position under section 10 of the Act. This important given that the shipping industry is still dominated and controlled by large foreign shipping operators. For example, there are numerous complaints that the foreign shipping conferences handling most of the Malaysia cargo charged high rate for shipping line services (PDP Australia Pty Ltd Meyrick & Associates, 2005). Liner conference may also create market power that practices predatory pricing against competitors using the same route whereas losses from predatory behavior will be shared among members, or offering loyalty rebates on tariff to shippers for grant of exclusivity to the conference. (Francesco Munari, 2009 & 2010). The interesting part to note here is that section 10 of the Act does not only prohibit the abuse of dominant position 'independently' but also 'collectively'. The mutual dependence between firms in the oligopolistic market creates market power that may harm consumer (Faull and Nikpay, 2007).

Consequently, in oligopolistic and integrated markets, where there are few firms in that market, collusion can be easily facilitated and monitored. The rule against abuse of dominant position can be a powerful tool to combat anti-competitive conduct through tacit collusion and collective dominant. It gives the Commission power to investigate a wider range of conduct by firms in the market.

Conclusion and Recommendations

This paper explores the development of competition in Malaysia in the light of recent block exemption granted by the Malaysian Competition Commission. This paper illustrates that the shipping liner agreements, namely, the VSA and VDA, fulfill the conditions laid down under section 5 of the Act which warrants the exemption. MyCC granted a limited scope of block exemption to minimize the extent of anti-competitive behavior in the market. The structural problem of the Malaysian shipping industry is not only due to global overcapacity but also as a result of the existing of policy (cabotage) that limits competition in the domestic routes to local players. It creates a monopolistic or oligopolistic market structure which increases the possibility of concerted action or tacit collusion among domestic players. Even though the BOE does not cover price fixing arrangement and sensitive information sharing, voluntary discussion itself may facilitate collusion among players which may be difficult to detect in the absence of an agreement.

Instead, the BOE encourages capacity sharing among players. It may result in manipulation or over and under supply. For example, a conference liner may involve in fixed quota or reservation of fixed portion of capacity (Francesco Munari, 2009 & 2010). In order to limit the extent of anti-competitive conduct and to minimize the negative effect of joint service provision on competition, Malaysia may learn from the experience of the EU in enforcing its exemption with regard to shipping liner or consortia. The EU 2009 Regulation incorporated an additional requirement with regard to capacity reduction or adjustment that is allowed under the regulation i.e. so long as it is undertaken in response to ‘fluctuation of supply and demand’ (EU Regulation, 2009). This clarifies the justified reason for capacity reduction and to ensure any such reduction is indispensable for the provision of an improved joint service (Antje Prisker, 2010). Finally, the size of the Malaysian merchant fleet is still small by global standards. The market is still dominated by foreign shipping operators who may ignore local and consumer interest. Therefore, the enforcement of the BOE should take into consideration the ‘pass-on’ element, namely, the benefit of the agreements must be passed to local shippers and end consumers.

References

1. Antje Prisker, Commission adopts new block exemption regulation for liner shipping consortia, EU Commission, Competition Policy Newsletter, Number 1 – 2010, 11. <http://ec.europa.eu/competition/publications/cpn/2010_1_4.pdf
2. CCS Explanatory Note on the Block Exemption for Liner Shipping Agreements.
3. Commission Regulation (EC) No 906/2009 of 28 September 2009, on the application of Article 81 (3) of the Treaty to certain categories of agreements, decisions, and concerted practices between liner shipping companies (consortia) L 256/32 Official Journal of the European Union, 20.9.2009.
4. Competition Act (Chapter 50 B) Competition (Block Exemption for Liner Shipping Agreements) Order 2006.
5. Competition Act 2010 (Act 712) Competition (Block Exemption For Vessel Sharing Agreements And Voluntary Discussion Agreements In Respect Of Liner Shipping) Order 2013.
6. *EU Communications from the Commission: Notice: Guidelines on the application of Communications Article 81(3) of the Treaty* (2004) OJ C 101/08
7. Explanatory Note COMPETITION (BLOCK EXEMPTION FOR VESSEL SHARING AGREEMENTS AND VOLUNTARY DISCUSSION AGREEMENTS IN RESPECT OF LINER SHIPPING) ORDER 2013.
8. Faull J. and Nikpay A., *The EC Law of Competition* (Oxford University Press, 2nd ed, 2007).
9. Firdausi Suffian, Mohammed Rahezzal Shah Abdul Karim, Abdul Karim Rosline, and Kamal Solhaimi Fadzil, Policy fiasco : the sabotage of cabotage policy in Malaysia, *International Journal of Social Science and Humanity* (2013) 3 (6) 514
10. Francesco Munari, *Competition in Liner Shipping, the Hamburg Lectures on Maritime Affairs 2009 & 2010*.
11. Ho Tin Nixon Fong, Exemption Of Liner Shipping From Competition Law A& NZ Mar LJ (2011) 26, 191.
12. Manpreet Kaur, 'The Interface between Competition Law and Intellectual Property Rights' (Working Paper, National Law School of India University, Bangalore, 31 July 2008) 10.
13. Minister of Trade and Industry Issues Block Exemption Order (BEO) for liner Shipping Agreements in the Maritime Industry, Media Release, 14 July 2006.
14. Ministry of International Trade and Industry, Third Industrial Masterplan, 2010.
15. MyCC, "Overview on the Proposed Block Exemption for Liner Shipping Agreements by the MyCC".
16. MyCC Guidelines on Chapter 1 Prohibition 2012.

17. Nazery Khalid, The Development of Ports and Shipping Sector in Malaysia, Maritimes Institute of Malaysia, 2005
<<http://www.mima.gov.my/mima/wp-content/uploads/nazery-LPJ%20article.pdf>
18. PDP Australia Pty Ltd/Meyrick and Associates, Promoting efficient and competitive Intra ASEAN shipping services- Malaysia Country Report, REPSF Project No. 04/001, Final Report March 2005.
19. Richard Whish, *Competition Law* (Oxford, 6th ed, 2009)
20. Sgouris P. Sgouridis, Ports: Importance, Institutional Status and Growth Prospects (The Malaysian Transportation Enterprise – Port Report, AY 2002/2003 Inception Report, Massachusetts Institute of Technology.
21. Watson, Farley & Williams, The EU’s New Competition Regime for Maritime Transport: Options and Opportunities for Shipping Industry (Third Edition) (January 2007).

ICSSAM-606
**Property Tax Reform in China— Sustainability and Implication on
China’s Property Law**

Gengzhao Chen

Hang Seng Management College

gengzhaochen@hsmc.edu.hk

Abstract

China’s property tax used to make exemption on individual-owned property but this trend is about to change. Property tax reform has been experimented in several major cities including Chongqing and Shanghai in China, and its nation-wide implementation is under discussion.

However, policy debates surrounding legality, feasibility and practical difficulty in levying the tax has never ceased. Given characteristic of China’s land tenure system and current development of property law, property tax reform has significant implication on property regime and the corresponding legal framework. This paper addresses the background of property tax reform, reviews local proposals in terms of overall legal design and effects of specific measures adopted, and discusses relevant legal issues. The discussion focuses on sustainability of such reform and its legal implication on China’s property law. By drawing on experience from other jurisdictions, policy suggestions were put forward at the end of paper regarding how to improve the sustainability of reform and to promote the development of property law.

Key Words Property tax reform, property law, sustainability

ICSSAM-635

Shareholders Empowerment in Malaysia:- Crafting Rules for the Concentrated Shareholding Structure and Cultural Dimension

Aiman Nariman Mohd Sulaiman

(corresponding author) Professor, Faculty of Law, International Islamic University Malaysia
email:aimann@iiu.edu.my

Shanty Rachagan

Associate Professor, *Faculty of Business and Economics*
Monash University Sunway campus

Abstract

While shareholders empowerment reform proposal is increasingly gaining prominence, it is unclear as to the extent these reform proposals are compatible within the concentrated shareholding structure. Some of the reforms proposals are more suitable for dispersed shareholding structure and thus transplanting them to emerging economies with concentrated or controlling shareholders may be ineffective. The proposal to empower shareholders is affected by the concentrated shareholding structure where there is possibility of the distortion of shareholders' approval, particularly for conflict of interest transactions. This is therefore a subject of due consideration in Malaysia and countries with similar shareholding structures. In addition, the success of the shareholders empowerment proposals is very much reliant on the shareholders ability and willingness to participate in the process. However, the cultural norms and constraints in a particular society or jurisdiction may impact on compliance with and enforcement of rules and regulation. Since corporate law rules are the products of collective action, studies on cultural norms and constraints may provide insights as to why there is active private enforcement in a particular society or jurisdiction compared to others. This article presents the evolution of shareholders' empowerment in Malaysia juxtaposing the discussion within the unique cultural dimension and shareholding structure.

Keyword: corporate governance, shareholders' empowerment, concentrated shareholding, culture, enforcement.

I. Introduction

Shareholders empowerment is in the forefront of current international corporate law and governance reform exercises. Empowerment has been defined as "the process of enhancing an individual's or group's capacity to make purposive choices and to transform those choices into desired actions and outcomes." (Alsop et al, 2006)

This involves strengthening the ability of actors to envisage and purposively choose options (largely predicted by their assets, which include property, capacity, and attitudes), and ability that is framed by the opportunity structures they face under the rules of the game (the set of rules, laws, and regulatory frameworks that govern the operation of political processes, public services, private organizations, and markets). In the context of corporate law, the actors are the shareholders who are given options to decide the level of involvement that they want in the management of a company, within the corporate law framework. ¹

The shareholders empowerment proposal is premised on the view that shareholders have been disenfranchised by having their participatory rights in managing companies curtailed by legal rules or by the practical realities in the way public companies are managed. The prevailing model of the modern public companies where there is separation between ownership and control, whilst seen as the catalyst for expansion of business due to the modern public company's ability to allow pooling and use of scarce resources, requires shareholders to cede control to directors for efficiency reasons. The dispersed shareholding structure accepted as a feature of the modern public company also gives rise to collective action problems and information asymmetry; factors that make it difficult and costly for shareholders to challenge directors' and management's power. These legal and practical constraints have made directors and managers less accountable to shareholders, enabling abuses of authority to occur and resulting in situations where directors do not consider shareholders' interests. Thus, the shareholders empowerment movement attempts to address shortcomings in law and practice that affects shareholders' participatory rights in corporate decision-making with the aim of making directors more accountable to shareholders. However, the shareholders empowerment proposal is premised on the agency problem arising out of the dispersed shareholding structure.

NOTES

¹. As shareholders participation is made possible through general meetings, shareholders' empowerment primarily refers to measures that increase or improve shareholder's participatory right at general meeting via the introduction or enhancement of the process and procedures for voting and those that expand the shareholders' right to approve or disapprove corporate transactions. Measures that redefine directors and management powers may also be considered as part of the mechanism to empower shareholders. Shareholder empowerment also considers the extent of shareholders' control power to determine membership of (board selection, nomination process and procedures) and incentives for the board (remuneration) and measures that can or should be taken by shareholders to minimize or prevent boardroom complacency.

The suitability of the reform proposals within a concentrated shareholding structure needs to be examined more carefully due to different underlying constraints, needs and institutional framework.

In addition, the success of the shareholders empowerment proposals is very much reliant on the shareholders ability and willingness to participate in the process. However, formal legal enforcement may also be lacking because the cultural norms and constraints in a particular society or jurisdictions may impact on compliance with and enforcement of rules and regulation. Since corporate law rules are the products of collective action, studies on cultural norms and constraints may provide insights as to why there is active private enforcement in a particular society or jurisdiction compared to others. An understanding of the cultural norms and constraints can unearth reasons as to poor / active private enforcement and provides alternatives to formal legal enforcement.

This research presents the position in an emerging economy; Malaysia poses an interesting case study, especially to countries with similar ownership structure as the concentrated shareholding structure raises different agency problems.

2. Controlling shareholder structure and agency problem

The separation between ownership and control, found in a dispersed shareholding structure have been shown to create misalignment of interests between the agent and the principal.

Thus where there is congruence in ownership and control, found in a concentrated shareholding structure, there is less agency costs because of the close monitoring exercisable by the owners who are themselves managers.(Ferranini et al, 2006; Kraakman et al, 2009). Unfortunately, where there is correspondence of ownership and control, there is a possibility of expropriation by the controlling shareholders who will divert funds towards the generation of private benefits, by taking a disproportionate amount of the firm's current earnings.(Braclay, et al, 1993; Claessens et al; 1999; Kraakman et al, 2009) This diversion of funds, known also as expropriation or tunnelling, have been shown in companies where block holders control significantly large proportion of shares compared to their ownership².(Lemmon and Lins, 2001; Becht and Mayer, 2002; Faccio and Lang, 2002; Krishnamurthi et al, 2005)

². Becht, M., Mayer, C.(2002) found that more than 25% of listed European companies have more than one large shareholder and Faccio, M., Lang, L. H. P.(2002) using a sample of 3,300 Western European corporations, document the presence of a second large shareholder in 46% of the corporations with at least one controlling shareholder.

Generally , the types of controlling shareholding structure are :

- (a) Control by a family group ; where a person (rather than a state, corporation, management trust, or mutual fund) can garner enough shares to assure at least 20% of the voting rights and the highest percentage of voting rights in comparison to other shareholders is a family member. (La Porta et al, 1999). A typical feature is that they tend to be controlled by relatively small parties of closely related individuals, whose control is typically dominant and uncontested, having direct participation in the management of the company, often (though not always) as members of the top management team.(Chakrabarty,2009) there is entrenchment of managers, often members of the family, to ensure succession and control by the family unit and attempts to remove them are often not successful as it lacks the support of the majority shareholders who have familial relationship with the managers.
- (b) Control by the state or the government, which is effected through the investment made in these companies by government statutory bodies (such as the state pension funds) or corporate entities (that may be private or public or listed on a stock exchange) where the government owns a controlling stake. In these companies, expropriation of minority shareholders could occur through transactions which are not commercially beneficial to the company and the minority shareholders due to the economic or political goals inconsistent with shareholder wealth maximization.(Gomez & Jomo, 2002; Kahan & Rock, 2011; Fleck & Hanssen,2013). Entrenchment of managers could occur due to political ties and connection where they are immune from financial discipline and competitive market forces.³ There could also be less accountability in these firms in particular and the market in general due to the conflict of the state as a regulator-investor.(Pargendler,2012)

³ This is also highlighted in the following articles, The New Economic Policy and the United Malays National Organisation, With Special Reference to Torii, T., (1997), “Restructuring of Malaysian Society”, The Developing Economies 35(3): 209; Shamsul, A.B., (1997), “The Economic Dimension of Malay Nationalism —The Socio-Historical Roots of the New Economic Policy and Its Contemporary Implications”, The Developing Economies 35(3):240; Heng, P.K., (1997), “The New Economic Policy and the Chinese Community in Peninsula Malaysia”, The Developing Economies 35(3):262.

(c) Control by institutional shareholders who can be financial institutions, private pension funds (or superannuation funds), unit trust and mutual funds and life insurance companies..⁴

The shareholding structure in Malaysia since 1999 has been characterized by widespread presence of the family group where the majority of public listed companies are family-controlled, followed by significant state control, widely held financial institutions and then widely held corporations. (Claessens et al; 1999; Thillinathan, 1999) 85% of public listed companies in Malaysia are owner managed where the post of CEO, Chairman or Vice-Chairman has been filled by a member of the controlling family or an employee drawn from the ranks of the controlling shareholder(Thillinathan, 1999). The average concentration of five largest shareholders in 1998 has been around 58.84% (Zulkafli et al, 1998) and in the top 150 Malaysian listed companies is 54.85% for 2006 (On Kit Tam et al, 2006). Our analysis in 2008 and 2010 showed that this is constant and unchanged; that the five largest shareholders in the top 50 Malaysian PLCs own an average of 55.09% of the total shares⁵ (Rachagan & Mohd. Sulaiman, 2013)

Of these 50 companies surveyed in 2010, 38% had one dominant shareholder (more than 40% control). 85% of these companies were GLCs and 15% were family owned companies in 2010, with approximately 50% of shares in family hands.⁶

⁴ New institutional shareholders have also emerged in recent years: hedge funds, private-equity funds are just some examples of this evolving category of institutional shareholders Some of the governance concern is the difference between institutional shareholders who are asset owners and those that are asset managers: see Mertzanis, H. , “The financial crisis and corporate governance reform” (2011) 6(1) *Int. J. Business Governance and Ethics* 83. There are also concerns about Short-termism in the investment strategies of institutional shareholders and focus on short-term returns . Institutional shareholders of the rely on proxy advisory services which also provide companies with governance ratings and are paid by these companies, giving rise to conflict of interest

⁵ Our study in 2011 was conducted by the authors, from the 50 composite index component companies on *Bursa Malaysia*. The selection was based on the market capitalisation of these companies as at 31st December 2010. This research utilises secondary data, information available in the company’s annual report. The annual reports were chosen as the Listing Requirements of *Bursa Malaysia* requires all listed companies to disclose certain information in their annual reports, including share ownership. For a full description of data see Shanthy Rachagan and Aiman Nariman Mohd Sulaiman (2013) Controlling Shareholders: Issues and Challenges for Shareholders’ Empowerment in Directors’ Remuneration in Corporate Malaysia, doi 10.1515/asjcl-2013-0020 ASJCL 2013; aop

⁶ Examples of family owned PLCs in Malaysia amongst others are Genting Bhd, Berjaya Group Bhd, YTL Berhad.

In 2009 and 2008 respectively, 32% and 36% had one dominant shareholder (more than 40% control). Of these companies, 75% and 61% of them were GLCs and 25% and 39% were family owned companies respectively. The research also shows that there are 26 GLCs with more than 5% shares in 2010, whereas there are 22 GLCs with more than 5% shares in 2009 and 25 GLCs with more than 5% shares in 2008. As for family owned companies, there are 15 with more than 5% shares in 2010, there are 20 with more than 5 shares in 2009 and there are 18 with more than 5% shares in 2008. Others including MNCs, there are 4 with more than 5% shares in 2010, 2009 and 2008. The analysis shows that GLC have a higher concentration of share ownership than family owned companies. It further shows that there are more GLCs with dominant shareholders (more than 40%) than family owned companies. The study also shows that as the shareholding gets more concentrated, there are more GLCs than family owned companies.

3. The relevance of culture on enforcement

Formal legal enforcement may be lacking because the cultural norms and constraints in a particular society or jurisdictions may impact on compliance with and enforcement of rules and regulation. Research conducted by House et al (2004) entitled *Global Leadership and Organizational Behaviour and Effectiveness Research Program (GLOBE)* - which follows and expands previous studies on culture conducted by Hofstede(2001) and Smith(1995) and Schwartz(1994; 1999)- evaluating the relationships between societal culture and organisational culture identified several cultural norms that can be found or are exhibited by a society:

power distance	assertiveness	societal collectivism
in-group collectivism	uncertainty avoidance	gender egalitarianism
future orientation	performance orientation	humane orientation

Out of the above cultural norms, Hofstede's found that Malaysia has the highest level of power distance among the societies he surveyed. GLOBE's recent study also showed that Malaysia's score in GLOBE's power distance index is 5.17 out of 10. GLOBE's survey also revealed that Malaysia's in-group collectivism score of 5.51 was above the average score of 5.13 obtained from a survey of 62 countries. . GLOBE's survey also revealed that many Asian societies have low assertiveness scores with the exception of a few. The assertiveness scores obtained in Malaysia is 3.87 and is well below the average score of 4.17. .

What does these cultural norm means and more importantly what do they mean for formal legal private enforcement of corporate law?

The concept of power distance refers to the interpersonal power of influence between two people as perceived by the less powerful. Power distance reflects the existence of unequal distribution of power and the acceptance of a person as to whether the inequality is legitimate or not. When a person is invested with power, there is a tendency to identify with this power and to increase the distance between the persons with this perceived advantage from those without. The greater the power distance between the two, the more the powerful person will try to increase it and less the powerless person will resist it. If the power distance between the two people or groups was never great to begin with, then the less powerful person will struggle more to reduce the distance.

If a culture is collectivist then it influences people to view the public and collective self more than their private self. Triandis et al (1999) states that people in collectivist cultures value in-group goals and often place these goals over their personal goals. For example, if family members are seen as in-groups, the goals of these members will take precedence over the individual's goals. Their sense of duty guides them towards observing social norms and they are less concerned with personal attitudes and values. People from collectivist cultures will invest in relationships which do not benefit them in any way and will maintain such relationships for a long time. They often do not make a rational assessment as to whether that relationship is beneficial to them. Collectivists' concept of self includes family members and friends. Collectivists generally still value in-group goals as opposed to personal goals.

This means that they are expected to behave according to the norms and interests of in-groups. People with these cultural backgrounds are interdependent because of their definition of self and they choose to accept a high level of demands from their in-groups. Social relations are more enduring and occur in large groups. A sense of belonging to an 'in-group' is important therefore conflicts are 'swept under the carpet' and in most cases face-to-face confrontations are rare. Criticism is not deemed to be constructive unlike in individualistic societies. The concept of maintaining 'face' is important in collective cultures and criticism is often seen as a weapon used by the critic to cause 'loss of face' to the person being criticized. Those who have opinions that differ from their group are expected not to air their views but to remain loyal to their own group and treat those within their own group better than those outside the group. In collectivist society, in return for unquestioning loyalty, the members can expect the in-group to look after their welfare.

One of Smith(1995) and Shwartz (1994) categories of norms is mastery/harmony. This is explained by referring to the relationship between humankind and the natural and social world. Mastery means the attitude of assertiveness to get ahead in life whereas harmony requires an attitude of fitting harmoniously into the environment.

This is similar to GLOBE's assertiveness norms. Trompenaars and Hampden-Turner (1998) studied the level of assertiveness in various societies' by observing their adaptability to their surroundings and found that societies have two orientations towards nature. They either believe that they can control and subjugate their surrounding environment or have to maintain harmony and sometimes subjugate themselves to it. Societies in the former category are 'inner directed' or internal because they look within themselves to take charge and actively control their environment. Societies in the latter category are 'outer-directed' or external as they believe in a supernatural being that controls nature. Trompenaars and Hampden-Turner(1998) found that most Asian societies fall into the group which believes in maintaining harmony and subjugating themselves to their surroundings. Their research also reveals that most people in Asian societies believe that maintaining peace and compromising in order to main peace is a sensible way to approach life, as there is no point in fighting forces over which one has no control. GLOBE's performance orientation norm can also be considered as what Trompenaars and Hampden-Turner categorised as the culture of recognising achievement as opposed to status. They suggest that most Asian societies are 'ascription' societies , i.e, societies that place more value on status than on achievement. In these societies, people are respected because of 'who they are' for example people are respected because of their age, their birth or background, and not 'what they have achieved'.

4. Impact of Malaysia's shareholding structure and cultural characteristics on shareholders' empowerment.

Shareholders empowerment reform proposals rely primarily on the 'comply or explain' approach underlying enforcement of codes. However, it is unlikely that the controlling shareholders will take steps to question non-compliance with the code particularly as the management are usually family members. The present enforcement strategy inherent in the 'comply or explain' approach is the role of monitoring played by shareholders, so that it is for shareholders to decide as to whether any action adverse to the board would follow for non-compliance with the code. (Davies, 2000; Arcot et al, 2010) Whilst the regulators look at formal compliance, the substantive compliance, in terms of ensuring that the practice that the company declares it has adopted is actually implemented, is the responsibility of the board and the company. The company has to ensure that a decision is made as to the appropriate corporate governance's process and procedures, ascertain that there is such a process followed and then discloses such information. (Mohd Sulaiman, 2007)

The response to this scenario has been mixed but the 'comply or explain' approach is unlikely to change.

The EU paper *Corporate Governance Framework* (2011) has suggested that it should be regulators, rather than shareholders, who should decide whether an explanation for non-compliance is adequate but was opposed strongly by the UK regulator and business interests. Similarly, the European Securities and Market Authority (ESMA)(2011) was not supportive of the EU proposal, preferring instead to consider better monitoring and enforcement by relying on ‘availability, completeness and quality of information and increase the level of transparency needed for effective monitoring by shareholders’.

Shareholders empowerment reform proposals also aims at enhancing shareholders participatory right in decision making. However, concentrated shareholding structure may cause distortion of shareholders’ approval, particularly for conflict of interest transactions(European Union, 2011; Securities Commission, 2010). Present reform in Malaysia relating to takeovers laws, disinterested shareholders’ voting in related party and substantial property transactions are very much guided by the concern of the impact of concentrated shareholding on governance.(Securities Commission , 2011). In a jurisdiction with concentrated shareholding where the majority shareholder is directly represented on the board, an interested director should be prohibited from voting on the transaction at the board meeting ⁷ Certain transaction can also be used by controlling shareholders to extract private benefits at the expense of the minority shareholders. This can occur through asset sales, contracts such as transfer pricing advantageous to the controlling shareholder, or enter into transactions that discriminate against minority shareholders (Johnson et all, 2003;Atanasov et all, 2011)). In this type of controlling shareholding, expropriation of minority is usually done legally through the use of the voting power at general meeting or control over voting power through corporate groups and pyramid structures. Because management is closely associated with the controlling shareholder, the controlling shareholders can easily undermine the minority shareholders’ interests. Shareholders empowerment can be reinforced by introducing statutory provision prohibiting voting by interested shareholders in public companies. This should apply to transactions involving disposal or acquisition of assets of a substantial value to or from directors or substantial shareholders or persons connected to them. This will diminish the power of the controlling shareholders to extract private benefits.

⁷ With the introduction in Malaysia of sec 132(2), *Companies Act*, in 2007, where the company is a public company or a subsidiary of a public company, an interested director is prohibited from voting in respect of the contract or transaction in which the director is interested. Provision in the articles that allow an interested director to vote in respect of the contract or transaction in which the director is interested is also invalid as being against sec 131A, *Companies Act* where the company is a public company or a subsidiary of one. Sec 131(7B) , *Companies Act* was also introduced in 2007 which states that the contract or proposed contract shall be voidable at the instance of the company except if it is in favour of any person dealing with the company for any valuable consideration and without any actual notice of the contravention.

The GLOBE scorecard on Malaysian society shows that people have pride and show loyalty to their in-groups which more often than not represent their family members and close group of friends or colleagues. This has implications for the concentrated shareholding structure such as Malaysia where there is a large number of family controlled businesses. The high level of societal collectivism and in-group collectivism means that the close relationships formed between directors and shareholders in companies make it difficult for the board and shareholders to function in their respective positions for example in preventing influential shareholders from controlling the board or the companies' assets.

Malaysian shareholders are thus a product of their culture which does not encourage confrontations. These cultural norms and constraints provide some insights as to the level of shareholders' activism in PLCs, i.e., in the sense of bringing formal legal enforcement.

It is unlikely that shareholders of companies will rely primarily upon the legal avenues to initiate legal action to enforce their rights as the distinction between shareholders and management is often blurred especially in family owned PLCs or politically connected government-linked companies. The cultural norms also provides explanation as to why there is a lack of shareholders activism in government-linked companies where the shareholdings are controlled by government investment agencies and the board of directors comprises political appointees. It is unlikely that shareholders will take legal action against the majority or the board for expropriation of their shares or where the company has entered into related party transactions that are not beneficial to the company. This is because any such action is deemed to be aimed at the politicians who appointed the board or the Malaysian government who holds the controlling shares in that company. The high score of power distance values in Malaysia indicates that the vast majority accepts the unequal distribution of power as legitimate and thus will not likely engage in conduct that will disrupt the status quo. The view is that power in Asian societies is utilised to benefit the holder of that power and their family and close friends. The relationship is based upon a patron-client relationship and even those who do not benefit from this relationship understand its implications. Therefore, there should be alternative ways for shareholders to protect their interests and ensure that companies practice good corporate governance.

Alternatives can include enhancing the role of institutional shareholders. While they have traditionally been reluctant shareowners, this is changing. In 2004, Employees Provident

Funds (EPF), which was a minority shareholder in Golden Hope challenged the merger between two plantation companies as they were not happy with the pricing mechanism.⁸ (Zaidi, 2005; Abu Bakar, 2005) Another institutional shareholder, LTAT (the Armed Forces Superannuation Fund),⁹ brought a derivative action against Prime Utilities, a company which it had 10% shareholding and board representation in *Lembaga Tabung Angkatan Tentera v Prime Utilities Berhad*. [2012] 2 AMCR 521.¹⁰ the recent 2013 consultation on Malaysian Code for Institutional Investors in Malaysia should further enhance activism by this group of shareholders.

There are also more recent reports of involvement by shareholders activism platform such as the Minority Shareholders' Watchdog Group (MSWG)¹¹ in corporate governance (Azizan & Ameer, 2010; Ameer, & Abdul Rahman, 2009) In the Golden Hope merger mentioned above, it was reported that EPF had written a letter of complaint to MSWG and MSWG had played a role in informing shareholders about the concern (Abu Bakar, 2005) Activism by MSWG could be more useful where conservative and collectivist cultural values prevail in society.

Shareholders' activism via a proxy like MSWG where there is no direct confrontation by minority shareholders could be more fruitful where there is concern about backlash due to

⁸At the meeting, EPF demanded for a poll but it was rejected by the chairman. That EGM was convened by Golden Hope to consider a resolution to approve the voluntary general offer (VGO) by I&P to acquire Golden Hope's entire 62.2 per cent stake in Negara Properties. The EPF was later successful in obtaining a high court order to restrain I&P from proceeding with the proposal to buy Negara Properties from Golden Hope. This motivated Golden Hope to seek a declaration from the courts as to the validity of the chairman's decision. The case was then subsequently settled out of court. The merger subsequently did not take place.

⁹ This is a compulsory superannuation scheme for serving members (other than officers) in the Armed Forces who are required to contribute 10 per cent of their monthly salary to LTAT with the government as employer contributing 15 percent. Participation by officers is voluntary at a contribution of a minimum of RM 25 with a maximum of RM 200 monthly : www.ltat.org.my.

¹⁰ Prime Utilities had invested a substantial amount of money, that is, RM112 million with an investment company, Boston. However, the profit on the investment was not paid to the company nor did the company take diligent steps to recover. LTAT was given leave to sue the directors on behalf of the company.

¹¹ MSWG was established as part of the governance reform agenda in Malaysia. It is a public company limited by guarantee funded by five founding organizations: Employee Provident Fund (EPF); Armed Forces Fund Board; National Equity Corporation; Social Security Organization and Pilgrimage Board. The objectives of MSWG activities are to develop and disseminate the educational aspects of corporate governance, to influence the decision-making process in public-listed companies as the leader of the minority shareholder interests, and to monitor breach and non-compliance of corporate governance practices by listed companies.

political ties and connections. There is also a need to enhance the role of and regulate proxy advisers.

5. Conclusion- The Way Forward for Malaysia

The impact of concentrated shareholding and the Malaysian culture on shareholders empowerment reform proposal is an area of immense importance to Malaysia.

Shareholders in Malaysian PLCs also encounter agency problems, which are exacerbated by family owned companies and government linked companies. The policy objective in Malaysia is to address the impact of concentrated shareholding and cultural traits on any reform aimed at empowering shareholders. It is imperative that as stated earlier, this shareholder empowerment should be promoted in tandem with tailor made laws.

References.

1. Alsop R, Bertelsen M and Holland J. Empowerment in Practice: From Analysis to Implementation, No 6980 World Bank Publications from The World Bank.2006. <http://econpapers.repec.org/bookchap/wbkwbpubs/6980.htm>.
2. Atanasov, Vladimir, Black, Bernard and Ciccotello, Conrad S. “Law and Tunneling” (2011-2013) 37 J. Corp. 1 -49
3. Ferrarini G and Moloney M.Executive Remuneration and Corporate Governance in the EU: Convergence, Divergence and Reform Perspective. In Ferrarini G, Hopt KJ, and Winter, *Reforming Company and Takeover Law in Europe*,Oxford, Oxford University Press, 2004: 309
4. Barclay, M., Holderness, C. G., and Pontiff, J. Private Benefits from Block Ownership and Discounts on Closed-end Funds. *Journal of Financial Economics* , 1993, 33(3): 263-291
5. Kraakman, R., Armour, J., Davies, P. , Enriques, L. , Hansmann, H., Hertig, G., Hopt, K., Kanda, H., Rock, E. *The Anatomy of Corporate Law: A Comparative and Functional Approach*. New York , Oxford University Press. 2009.
6. Claessens, S., Djankov, S., Fan, J. and Lang, L.,*Who Controls East Asian Corporations* (1999) Policy Research Working Paper 2054, The World Bank, February 1999.
7. Becht, M., Mayer, C.,“Corporate Control in Europe Reviewed. *Economie Politique* ,2002, 112(4): 471-498,
8. Faccio, M., Lang, L. H. P. The Ultimate Ownership of Western European Corporations. *Journal of Financial Economics* , 2002, 65 :365-395
9. La Pota , R, Lopez-de-Silanes, F., and Shleifer A. Corporate Ownership around the World. *Journal of Finance* , 1999, 54(2): 471-517;

10. Chakrabarty, S. The Influence of National Culture and Institutional Voids on Family Ownership of Large Firms: A Country Level Empirical Study. *Journal of International Management* , 2009,15(1):32-45
11. Kahan, M. and Rock, EB. When the Government Is the Controlling Shareholder. *Texas Law Review* , 2011, 89: 1293.
12. Gomez, E.T., and Jomo, K.S. *Malaysia's Political Economy, Politics, Patronage and Profits*. Cambridge, Cambridge University Press, 2002.
13. Krishnamurti, C., and Aleksandar, A. Legal Environment, Firm-level Corporate Governance and Expropriation of Minority Shareholders in Asia. *Economic Change and Restructuring* ,2005, 38(1) : 85-111.
14. Lemmon, M., and Lins, K.. *Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis*. William Davidson Working Paper No. 393, 2001
15. Fleck, R. and Hanssen, A., “When Voice Fails: Potential Exit as a Constraint on Government Quality”, (2013) 35 *International Review of Law and Economics* 26-41.
16. Pargendler, Mariana. (2012), "State Ownership and Corporate Governance", *Fordham L. Rev.* 80: 2917.
17. R. Thillainathan, “Corporate Governance and Restructuring in Malaysia – A Review of Markets, Mechanisms, Agents and The Legal Infrastructure” (1999), paper prepared for the joint World Bank/OECD Survey of Corporate Governance arrangements in a selected number of Asian countries.
18. Tam OK and Tan MG. Ownership, Governance and Firm Performance in Malaysia. *Corporate Governance – An International Review* . 2007,15(2): 208–222.
19. Rachagan S and Mohd Sulaiman AN . Controlling Shareholders: Issues and Challenges for Shareholders’ Empowerment in Directors’ Remuneration in Corporate Malaysia, *Asian Journal of Comparative Law*, 2013. doi 10.1515/asjcl-2013-0020 ASJCL 2013; aop
20. European Union, *Green Paper on Corporate Governance in Financial Institution* COM(2011) 164 final
21. Securities Commission, Public Response Paper No 3/2011, *Proposed Amendments to Bursa Malaysia Securities Bhd Listing Requirements on Privatisation of Listed Companies via Disposal of Assets*.
22. Simon Johnson et al.,Tunnelling. In Klaus J. Hopt & Eddy Wymeersch eds. *Capital Markets and Company Law* . UK, Oxford University Press, 2003: 611–618
23. Atanasov V, Black B and Ciccotello CS. Law and Tunneling. *Journal of Corporation Law*. 2011-2012, 37:1 -49

24. Davies P. *The Board of Directors, composition, structure, duties and powers, paper presented at OECD, Company Law Reform in OECD Countries A Comparative Look at Current Trends* (7-8 Dec 2000) (Stockholm, Sweden);
25. Arcot A, Bruno V and Grimaud AF. Corporate Governance in the UK: Is the Comply or Explain Approach Working?. *International Review of Law & Economic*, 2010, 30(2): 193-201 <http://dx.doi.org/10.1016/j.irl.2010.03.002>
26. Mohd Sulaiman AN .Challenges of public and/or private enforcement of the Corporate Governance Code. *Inter & Comparative Corporate Law Journal*.(2007, 6(1): 17
27. ESMA comment letter on the EU Commission Green Paper - The EU Corporate Governance Framework -2011/219 (22/11/2011), <http://www.esma.europa.eu/page/Corporate-Governance>
28. House, R.J., Hanges, P.J., Javidan, M. Dorfman, P.W., Gupta, V. *Global Leadership and Organizational Behaviour and Effectiveness Research Program* Thousand Oaks, CA: Sage Publications, 2004.
29. Hofstede, G., *Cultures Consequences: Comparing Values, Behaviours, Institutions and Organizations Across Nations*, Thousand Oaks, California, , Sage Publications 2001: 83.
30. Schwartz, S. H. Beyond Individualism/Collectivism: New Cultural Dimensions of Values. In U. Kim t al. (eds.), *Individualism and Collectivism: Theory, Methods, and Applications*. Thousand Oaks, CA: Sage Publications, 1994.
31. Schwartz, S.H.. A Theory of Cultural Values and Some Implications for Work. *Applied Psychology*, 1999, 48(1):23-47.
32. Smith, P.B. and Peterson, M.F. *Beyond Value Comparisons: Sources Used to Give Meaning to Management Work Events in Twenty-Nine Countries*. Paper presented at the annual meeting of the Academy of Management, Vancouver, Canada, August 1995.
33. Triandis, H.C. Cross-cultural studies of individualism and collectivism. In Berman, J.J., (ed.) *Nebraska Symposium on Motivation*, Lincoln University of Nebraska Press, Nebraska, 1999, 37: 47.
34. Trompenaars, F. And Hampden –Turner, C. *Riding The Waves of Culture: Understanding Diversity in Global Business*, USA McGraw-Hill, 1998.
35. Ismail, ZI, GHope fails in bid to sell Negara Prop. In *Business Times* (Malaysia) (November 22, 2005).
36. Abu Bakar, D, MSWG wants GHope to reconsider VGO for Negara Properties. In *Asia Africa Intelligence Wire* (March 18, 2005) available at http://www.accessmylibrary.com/coms2/summary_0286-19157782_ITM.
37. Azizan SS, and Ameer R, Shareholder activism in family-controlled firms in Malaysia. *Managerial Auditing Journal*, 2012, 27(8):774 – 794.

38. Ameer, R. and Abdul Rahman, R. The impact of minority shareholder watchdog group activism on the targeted firms' performance in Malaysia. *Asian Academy of Management Journal of Accounting and Finance* , 2009,5(1): 67-92.
39. Securities Commission And Minority Shareholders Watchdog Group, Joint Public Consultation Paper On The Malaysian Code For Institutional Investors 2014- No. 1/2014 (15 January 2014)(Malaysia).

Education I

Room C

10:40-12:10

Thursday, May 8

Session Chair: *Prof. Norihito Mizuno*

ISEPSS-2016

The Study of Social Outcomes of Older Adult Education in Taiwan

Lin Li Hui

National Chung Cheng University

ISEPSS-1795

Comparative Perspective in Japanese Overseas Education from the Late Nineteenth Century to the Present

Norihito Mizuno

Akita International University

ISEPSS-1880

Re-Culturing in the Curriculum Innovation Process

Letchmi Devi Ponnusamy

National Institute of Education, Nanyang Technological University

Liang See Tan

National Institute of Education, Nanyang Technological University

Alfredo Bautista Arellano

National Institute of Education

Maria Eloisa Villanueva Ramos

National Institute of Education

ISEPSS-1889

Ageing Literacy, Professional Training and Performance Evaluation on Educators for the Elderly: Perspectives from Positive Ageing.

Meng Ching Hu

Nation Chung Cheng University

Chia Ming Yen

Nation Chung Cheng University

Yi Fen Wang

Nation Chung Cheng University

ISEPSS-1878

The Effects of Peer Interaction Behavior and Attitude on Programming Learning in the Collaborative Programming Learning Platform

Shu-Wei Lin

National Taiwan Normal University

Yu-Tzu Lin

National Taiwan Normal University

ICSSAM-816

A Study Related To The Problems And Educational Applications That Pre-School Teachers' Encounter

Mehmet Fatih Karacabey

Anadolu University

ISEPSS-1758

Clashes of Interests over Bahrain: Ottoman and British Encounter

Mehmet Mehdi Ilhan

International Islamic University Malaysia

ISEPSS-2016
The Study of Social Outcomes of Older Adult Education in Taiwan

Lin Li-Hui

Associate Professor, Department of Adult and Continuing Education,
National Chung Cheng University, Taiwan
elaine5826058@gmail.com

Abstract

In order to assess the social outcomes of older adult education, this study is based on the Organization for Economic Co-operation and Development published a report entitled “*Understanding the Social Outcomes of Learning (SOL)*” (2007), which pays attention to the social outcome of learners receiving education and/or participating in learning activities and emphasizes to evaluate it by health and civic and social engagement (hereafter CSE). This study aims to investigate social outcomes of older adult learning (hereafter older adult SOL) through focusing on the impact toward health and CSE after the older adults received education and involved in learning activities. To sum up, there are two purposes in this study: (1) it is to investigate older adult SOL in terms of the learners; (2) it is to analyze older adult SOL generated by different types of older adult educational institutes.

This study use questionnaire survey. Subjects were the senior learners from three categories of older adult educational institutes which are Evergreen Academy, Senior Learning Center and Senior Learning Academy. A total of 828 valid questionnaires were collected. Valid recovery rate is 92%. The exact copies of questionnaires retrieved from each category of older adult educational institutes are 290 copies from Senior Learning Center, 271 from Evergreen Academy and 267 from Senior Learning Academy.

Four findings stand out: First, Family Relationship has the highest level of social outcomes, while Social Contribution has the lowest. Second, the female participants have higher social outcomes than the males on health status and self efficiency. Third, the better social outcomes have been presented as the participants attended classes more frequently and kept more class hours. Fourth, Senior Learning Center presented the best social outcomes. Suggestions are offered for older adult educational institutions dealing with older adults.

Keywords: older adult education, social outcomes, health, civic and social engagement

I. Background and Importance of the Issue

Aging society shown on demographic structure has been a global trend. The theory of evaluating social outcomes of learning (SOL) in the aspects of health and civic and social engagement (hereafter CSE) was proposed by OECD (2007) in the SOL project. OECD further stressed that this evaluation framework can be applied both in formal education system and lifelong learning realm which includes Andragogy and older adult education.

According to OECD (2007), investment return rate and its related issues should be primarily considered. In addition to the financial growth of the individual learner's income due to receiving education, the impact of education toward individual and social welfare should also be taken into consideration. Furthermore, addressing and clarifying the worth of the investment in education can also contribute to government budget planning. Conducting this research not only can make thorough inquiries into social outcomes on how older adult education impels individuals to pay attention to health but also investigate the investment value of older adult education. The investment value could include, for example, what social outcomes of older adult learning (hereafter older adult SOL) can contribute toward social engagement and cohesion. Accordingly, this study defines older adult SOL in both health and CSE domains after senior citizens' participating in learning activities provided by older adult educational institutes.

II. Review of the Literature

2.1 The Development of the Older Adult Education in Taiwan

According to the statistics released by the Ministry of Interior (2014), by the end of January 2014, the population in Taiwan aged 65 and above has attained to 2,704,605 which constitutes 11.57% of the national population. In preparation of confronting the aging society, the Taiwan government has already subsumed the senior citizen issue into policy making and has proposed policies responded accordingly. Senior Citizens Welfare Act therefore was promulgated in 1980 as the first policy framework. Later its Amendment Act which was released on January 31, 2007 further stipulates that the competent authority under this Act is the Ministry of Education (hereafter MOE) who are responsible for older adult education, investment in human capital for senior citizens services, education policy for aging society and its planning, promoting and supervising. The Senior Citizens Welfare Amendment Act brings about the transformation of 'welfare' to 'education' as far as the older adult education policy is concerned. In solving the potential problems and challenges in promoting older adult education, the MOE had listed older adult education as its primary administrative goal.

In 2006, the white paper titled "Towards an Aging Society: Policies on Senior Adult Education" was therefore released by the MOE in expectation of establishing a new perspective on older adult education.

There are four types of older adult educational institutes in Taiwan. They are Evergreen Academy (hereafter EA) managed by social administration division, Senior Learning Center (hereafter SLC) and Senior Learning Academy (hereafter SLA) managed by education division, Senior Community College managed by non-government organization, and Stella Mututina Evergreen College managed by a religion group (Lin, 2008). On the basis of Senior Citizens Welfare Act, EA conducts activities suitable for senior citizens in accordance with their welfare. The purposes of the activities are four: (1) it is to encourage older people's engagement in society for enriching life significance; (2) it is to advance senior citizens' life management and accommodation; (3) it is to increase social interaction and to build community supporting network; (4) it is to facilitate obtaining welfare information and to shorten the gap of information scantiness. The statistic released by Ministry of the Interior shows that there are 374 EA in total.

In order to implement the policies proposed in the white paper, MOE started collaborating with public libraries, social education organizations, community centers, civil activity centers, non-government registered organizations (e.g. community caring associations, social welfare institutions, foundations), and so forth. They work together to plan and set up SLC in villages, townships, districts and cities nationwide. The purposes of setting up SLC are: (1) it is to provide mid-aged and senior citizens learning opportunities and to build healthy body and mind; (2) it is to research and develop materials, lesson plans and curriculums for older adult education so that the teaching contents and qualities can be upgraded; (3) it is to foster professional staffs and volunteers for older adult education and to develop the older adult education on community level; (4) it is to develop innovative and diversified leaning methods and to encourage senior CSE and lifelong learning; (5) it is to consolidate community resources and to generate community-learning culture of which there is no age discrimination. Up to 2013, 271 SLC had been set up.

It should also be added that in 2008, MOE also started collaborating with colleges and universities nationwide to set up SLA programs in the hope of organizing older adult education system.

To share the resources with the senior learners from the universities would boost older adult education quality. Three purposes are found in organizing SLA programs: (1) it is to fulfill the vision of pursuing health, self-motivated and joyful learning for the senior citizens; (2) it is to increase learning opportunities for senior learners with innovative and diversified learning approaches; (3) it is to provide co-learning platforms for senior learners and university students bearing the hope of seeing intergenerational interaction. Up to the year 2013, 99 SLA had been established.

There is evidence in plenty to show that the implementation of older adult education in Taiwan is diversified and bountiful. Only by offering flexible learning approaches can the needs of peculiar learning styles for older people be met. Nevertheless we should not overlook what social outcomes have occurred to the senior learners after their participating in the programs or activities that the older adult educational institutes had provided. The study of the social outcomes has so far been neglected. This research is aimed to inquiry them.

2.2 Social Outcomes

Social outcomes is a concept published by OECD (2001) who stresses that further studies need to be done on the linkage of education to individual, society and economic growing. The findings can be conveyed to policy makers and mass society. OECD (2007) also underlines that education plays a critical role on economic development and employment obtainment.

Taking it to account that life impact from education cannot be measured by labor market benefits and economic efficiency, the analysis has moved its focus from economic efficiency in economic domain into social outcomes in social domain. Social outcomes measure and interpret how the overall impact on the individual and its environment from the result of processing activities. This is the criteria in the aspect of social domain to inquiry what impact it brings on individual and the society through specific activities, and it also seeks to provide the avenue to measure the value of the depth and width of the impact.

Two broad domains were chosen by OECD (2007) to analyze SOL work—health and CSE. Their essential hypothesis is that learning plays the constructive role to provide positive impetus for social progression and economic growing. Adding the empirical support, learning is helpful for shaping the state of both health and CSE whether or not it is on the individual learner or in the overall society. In addition to this, reading the four visions in the white paper released by MOE (2006)—lifelong learning, health and well-being, self-determination and dignity, and civic engagement, we could understand the older adult education indeed appeals to health and CSE. Therefore with the reference of OECD's framework, health and CSE are the two domains on which this study projects the spotlight over.

2.2.1 Health

Education is the main mechanism for individuals to instill health and well-being because it cuts down both the expenditure of medical dependence and the monetary loss caused by sickness. By contrast, education helps individual to keep a healthy lifestyle, to support and develop relationship, and to gradually but firmly establish well-being for individual, family and community. In brief, health benefits of education are far exceeding school education. OECD (2007) also pointed out that older adult education may give strength to health. Health is also what individual is pursuing, especially people who are at their elder age will confront health crisis as seeing his own physical mechanism dropping. This would stimulate the senior citizens to value health related issues. The phenomena can be observed in the situation as the older adults have a preference for curriculums to do with regimen and health care (Huang, Lin, & Liang, 2008). However, there is further observation to be done for seeking the individual and social outcomes as the senior citizens getting involved in these learning activities. It follows from what has been said that this study regards health as one of the domains for older adult SOL. Health Literacy and Health Status have been adopted as the dimensions for evaluating older adult SOL in this study.

2.2.2 CSE

People participating in organizations or clubs at their adolescent age are more likely to get engaged in civic and political activities when they become adults. Hence education has positive functions and effects on maintaining and rising CSE. Therefore education plays a significant role in evaluating social outcomes. Education can enhance CSE through the following means: (1) the content of education provides knowledge and experience that facilitate CSE; (2) developing competencies acquired in education help people apply, contribute and develop their knowledge in CSE; (3) encourage CSE by cultivating values, attitudes, beliefs and convictions; (4) individual can increase social status in a social hierarchy by means of CSE. OECD (2007) shows clearly that school education has its limit in carrying out CSE. It seems to work better to see CSE occurs if the following forms can be fostered—open dialogue, application of theory and ideas in practical, and group work.

On the other hand, the United Nations "Principles for Older Persons" in 1991 lists the concept of 'participation' in one of the five principles. The principle says that older persons should be able to form movements and associations with older people. It would be necessary to investigate how much impact it would bring on CSE by conducting older adult education. For this reason, this study has adopted CSE as a domain to older adult SOL. Individual, Family, Community, and Society are the four dimensions for this study in order to evaluate older adult SOL.

III. Purpose of the Study

This study aims to investigate older adult SOL through focusing on the impact toward health and CSE after the older adults received education and involved in learning activities. It is based on two reasons. Firstly, education and CSE, at present, are two core subjects attended by policy makers. Secondly, education can not only strengthen senior citizens' social welfare and life quality but also intensify ill prevention and effective remedy. Education brings in the knowledge to facilitate the older people choose a healthy lifestyle. The health dimension can reveal the social outcomes through Health Literacy and Health Status. Education also assists the senior citizens demonstrate older adult SOL in the process of CSE from the dimension of Individual toward Family, next Community and then Society.

In view of the increasing focus on older adult education in Taiwan, with the reference of OECD's framework, a local assessment inventory of older adult SOL is necessary. This inventory will help review what social outcomes have been created by the older adult educational institutes, and what perspectives the senior learners hold when viewing social outcomes. To sum up, there are two purposes in this study: (1) it is to investigate older adult SOL in terms of the learners; (2) it is to analyze older adult SOL generated by different types of older adult educational institutes.

IV. Research Design and Implementation

Based on the previous research, among all the older adult educational institutes in Taiwan, EA managed by social administration division is very noticeable either in the aspect of history or size. On the other hand, 271 SLC and 99 SLA managed by education division have been established as an innovative model within the last four to five years. Their achievement in size is quite noticeable as well. As for those which are managed under non-government organizations or religion groups, they cannot be compared with the prior two whether in history or in size. This study seeks its purpose on representativeness; therefore, learners at EA, SLC and SLA are chosen to be the subjects of the study. We are looking into the social outcomes associated with health and CSE after the senior learners' participation in the learning activities.

In order to have proportional samplings, the investigation was conducted among the senior learners from the EA, SLC and SLA located in the north, middle and south of Taiwan. In the north, 300 questionnaires were passed out to the senior learners from the three types of institutes. Those who are in the middle and south of Taiwan were also preceded likewise. Hence, there were 900 questionnaires passed out among which were 300 senior participants from each of the three categories—EA, SLC and SLA.

To attend to overall response rate, the research team members made phone calls to each EA, SLC and SLA. They explained the meanings and the value of the research to these institutes. After getting their approval, the research team visited these institutes in person, conducted the research, and retrieved the questionnaires after having been filled out by the senior learners.

The research instrument is a questionnaire aimed at "Older Adult SOL- in Learners' Perspective". The editing of the questionnaire includes three stages, the first of which was intended to compose the draft based on the framework proposed by OECD (2007). The second stage is to verify expert validity. The third stage is the pilot study stage where senior learners from EA, SLC and SLA were sampled. This instrument consists of three parts which are participative variable, health, and CSE. The participative variable refers to the participant's gender, class frequency and class hours in a week, and the category of the institutes. The social outcomes of health are made up of two dimensions, Health Literacy and Health Status. The social outcomes of CSE are composed of four dimensions, Individual, Family, Community, and Society. The Individual dimension looks into self-efficiency generated by learning. The Family dimension focuses on the transformation of the family relationship after learning. The Community dimension accentuates awareness toward community after learning. The Society dimension underlines the consolidation of social contribution.

In order to see the conscientiousness of the research instrument, SPSS 19.0 was employed to analyze the reliability and the validity. The older adult SOL includes two scales. Cronbach's α of health scale is 0.85, whereas Cronbach's α of CSE scale is 0.96. As for the validity of the scales, this study has adopted content validity and construct validity. As drafting the scale, five scholars specializing in the field of older adult education were invited to closely examine every question in order to achieve content validity. Factor analysis was also adopted to achieve the construct validity of the scale. Health scale with two dimensions explains 67.63% of total variance, whereas CSE scale with four dimensions explains 69.60% of total variance.

V. Analysis and Discussion

This study uses questionnaire survey. Subjects were the senior learners from three categories of older adult educational institutes which are EA, SLC and SLA. The research team paid visit to these institutes in person to conduct the survey and retrieve the questionnaires. A total of 828 valid questionnaires were collected. Valid recovery rate is 92%. The exact copies of questionnaires retrieved from each category of older adult educational institutes are 290 copies from SLC, 271 from EA and 267 from SLA.

5.1 Social Outcomes of Senior Learners

Means and standard deviations were used to analyze the social outcomes of senior learners. The analysis showed the data of dimensions in Health Literacy ($M = 4.15$, $SD = .56$), Health Status ($M = 4.21$, $SD = .56$), Individual ($M = 4.27$, $SD = .51$), Family ($M = 4.28$, $SD = .48$), Community ($M = 4.17$, $SD = .54$), and Society ($M = 4.05$, $SD = .56$). After the senior learners participated in the learning activities, Family dimension of the social outcomes shows the highest mean, followed by Individual dimension. Society dimension ranks the lowest. Table 1 presents the critical items with the highest mean in all six dimensions.

Table 1

Critical Item with the Highest Mean Presented by Subjects in All Six Dimensions

Dimension	Critical item	<i>M</i>	<i>SD</i>
Health Literacy	Think more highly of self physical-spiritual health	4.29	.65
Health Status	Maintain well-being	4.38	.60
Individual—Self Efficiency	Make more friends cherishing the same ideals	4.38	.61
Family—Family Relationship	Win more support from family to partake in learning activities	4.35	.60
Community—Community Awareness	Have better interaction with neighbors	4.24	.64
Society—Social Contribution	Pay closer attention to age-friendly environment issues	4.20	.65

5.2. Analysis of Variance between Participant Variables and Social Outcomes

5.2.1 Analysis of Variance between Participant's Gender and Social Outcomes

A *t*-test was employed to analyze the variance between participant's gender and social outcomes. With regard to the overall social outcomes, the *t*-test showed no significant difference after each gender of senior learners participated in the learning activities ($t = .93$, $p = .351$). Further analysis of each dimension showed that the female participants have higher social outcomes than the males on Health Status ($t = 2.38$, $p = .018$). This indicates that female learners feel more energetic daily, maintain happier mood, and are conscious that they have better physical conditions than before their participating in the learning activities.

Moreover, the female have higher social outcomes than the males in Individual dimension ($t = 1.927$, $p = .044$). This suggests that after participating in the learning activities, the female participants have increased their self-confidence, made more friends who cherish the same ideals, have obtained clearer life purposes, and feel more meaningful and valuable toward their aging life.

According to the above statements, gender difference reveals significantly different older adult SOL in the dimensions of Health Status and Individual. This is in line with the finding proposed by Creighton and Hudson (2002). The result indicates a higher rate of female's participating in adult learning activities than that of the male's. It is especially significant on non-professional related learning activities. Huang, Lin, & Liang (2008) pointed out that the most important reason for senior citizens to participate in learning activities is to pursue physical health. The next are items such as making friends, pursuing new knowledge and broadening the mind. It will be seen from these that the female older adult SOL is more significant, especially on the two dimensions of Health Status and Individual—Self Efficiency.

5.2.2 Analysis of Variance Associated with Class Frequency, Class hours and Social Outcomes

This study lays out options of class frequency in a week as follows, one to less than two days, two to less than three days, three to less than four days, four to less than five days, and more than five days. As far as overall social outcomes are concerned, the social outcomes generated by different class frequencies are significantly different ($F = 3.468, p = .008$). A post-hoc Scheffé test revealed the social outcomes of the classes subject to more than five days in a week are more significant than either four to less than five days or three to less than four days. This result shows the best social outcomes are from the classes subject to more than five days in a week.

As far as the dimensions of social outcomes are concerned, the analyses of variances show that the dimensions of Family Relationship and Community Awareness are non-significant, whereas all the other four are significant—Health Literacy ($F = 3.514, p = .007$), Health Status ($F = 5.174, p = .000$), Self Efficiency ($F = 3.479, p = .007$), Social Contribution ($F = 2.603, p = .035$). A post-hoc Scheffé test revealed that the social outcomes of having class more than five days a week are more significant than having four to less than five days and three to less than four days. This explains that senior learners, after attending classes, show significant difference on Health Literacy, Health Status, Self Efficiency, and Social Contribution. The social outcomes of attending classes more than five days a week are the best.

On the other hand, this study lays out options of class hours in a week as follows, one to less than six hours, six to less than 12 hours, 12 to less than 18 hours, 18 to less than 24 hours, and more than 24 hours. As far as overall social outcomes are concerned, the social outcomes generated by different class hours are significant different ($F = 2.745, p = .027$).

A post-hoc Scheffé test revealed the social outcomes of attending classes more than 24 hours a week are higher than that of attending classes 18 to less than 24 hours a week and six to less than 12 hours a week. This result shows the best social outcomes are from the class hours of more than 24 hours a week.

In terms of the dimensions of social outcomes, the analyses of variances show that the dimensions of Health Status and Family Relationship are non-significant, whereas all the other four are significant—Health Literacy ($F = 4.699, p = .001$), Self Efficiency ($F = 3.306, p = .011$), Community Awareness ($F = 2.885, p = .022$), Social Contribution ($F = 2.792, p = .025$). A post-hoc Scheffé test revealed that the social outcomes of having class more than 24 hours a week are more significant than having classes 18 to less than 24 hours a week. This means that senior learners, after attending classes, show significant difference on Health Literacy, Self Efficiency, Community Awareness and Social Contribution. The social outcomes of attending classes more than 24 hours a week are the best.

Better social outcomes can be generated when the senior learners took more hours of classes and went to classes more frequently. This appears especially on Health Literacy, Self Efficiency and Social Contribution. This obtained result conforms to what Cross (1986) pointed out. That is, learning has additive effects. By means of participating in learning activities, senior learners can advance not only their health literacy but also their self-esteem. They can, therefore, proceed to contribute themselves to the society.

5.2.3 Analyses of Variance between Institute Category and Social Outcomes

Subjects of this study came from three categories of older adult educational institutes — EA, SLC and SLA. Subjects are studied to investigate the social outcomes generated from different categories of institutes. In the perspective of the overall social outcomes, different learning institutes are significantly different ($F = 8.786, p = .000$). A post-hoc Scheffé test revealed SLC has higher level of significance than EA and SLA. This results shows the social outcomes of learners attending SLC are the best.

As for the dimensions of social outcomes, the analyses of variances show that the dimensions of Health Status and Family Relationship are non-significant, whereas all the other four are significant—Health Literacy ($F = 36.292, p = .000$), Self Efficiency ($F = 3.393, p = .034$), Community Awareness ($F = 10.405, p = .000$), Social Contribution ($F = 6.602, p = .001$). A post-hoc Scheffé test revealed that the social outcomes of the learners from SLC are higher than those of EA and SLA on Health Literacy, Community Awareness and Social Contribution, whereas on Self Efficiency, the social outcomes of SLC are higher than those

of SLA and EA. Table 2 shows older adult SOL variance analyses across subjects from different older adult educational institutes.

Table 2 Older Adult SOL Variance Analyses across Subjects from Different Older Adult Educational Institutes

Dimension	Institute	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	Post-hoc Scheffé Test
Health Literacy	SLA (1)	267	3.93	.60	36.292** *	.000	2>3>1
	SLC (2)	290	4.29	.50			
	EA (3)	271	4.23	.52			
Health Status	SLA (1)	267	4.18	.58	1.473	.230	n.s
	SLC (2)	290	4.26	.52			
	EA (3)	271	4.20	.57			
Individual	SLA (1)	267	4.25	.50	3.393* *	.034	2>1>3
	SLC (2)	290	4.33	.50			
	EA (3)	271	4.23	.52			
Family	SLA (1)	267	4.24	.50	1.937	.145	n.s
	SLC (2)	290	4.32	.47			
	EA (3)	271	4.28	.48			
Community	SLA (1)	267	4.07	.56	10.405** *	.000	2>3>1
	SLC (2)	290	4.27	.53			
	EA (3)	271	4.17	.52			
Society	SLA (1)	267	3.98	.55	6.602** *	.001	2>3>1
	SLC (2)	290	4.14	.57			
	EA (3)	271	4.04	.54			
Overall SOL	SLA (1)	267	4.11	.47	8.786*** *	.000	2>3>1
	SLC (2)	290	4.27	.45			
	EA (3)	271	4.19	.46			

p* <.01, *p* <.01, ****p* <.001

To sum up, the social outcomes of SLC are higher than those of EA and SLA. Conducting older adult education relies on the establishment of older adult educational institutes, while curriculum is the most important cultivation in older adult education (Lin, 2008). Based on McClusky (1971) Margin Theory of Needs, the curriculum of SLC is designed and planned fitting in with the older people's learning trends domestically and abroad. The curriculums include five categories which are core feature, political propaganda, essential life, recreation, and contributive service.

The curriculums offered by EA are intellectual, entertaining and sporting programs, which conform to senior citizens' need and interests, coordinate with distinguishing local features and match up community lifestyle. The curriculums presented by SLA fall in four categories which are aging related issues, health recreation, school specialties, and latest life knowledge.

Thus in light of the above descriptions, theory oriented curriculums are tend to show more obvious social outcomes. Figure 1 shows the social outcomes generated from the three categories of older adult educational institutes.

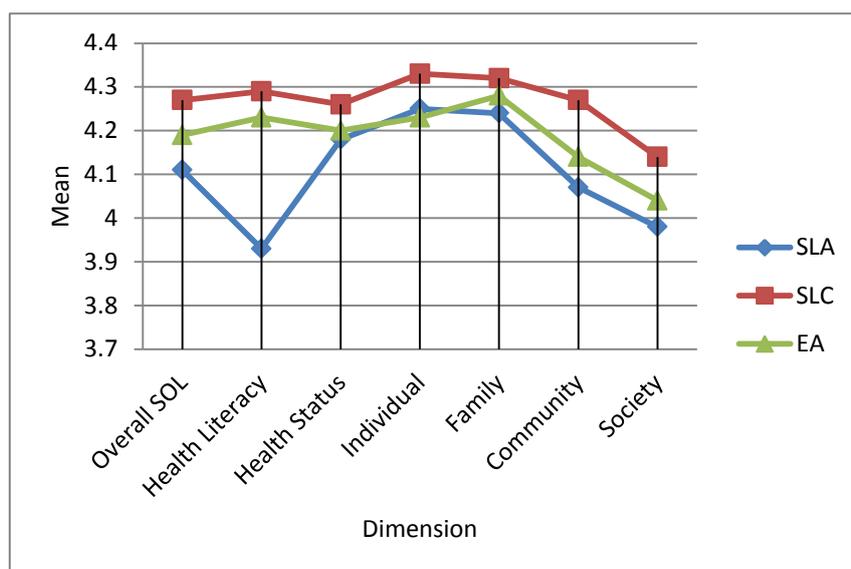


Figure 1 SOL of three categories of older adult educational institutes

VI. Conclusions and Recommendations

6.1. Conclusions

6.1.1 Family Relationship has the highest level of social outcomes, while Social Contribution has the lowest

Older adult SOL includes two domains—health and CSE. The health domain consists of two dimensions: Health Literacy and Health Status. The CSE domain consists of four dimensions: Individual (Self Efficiency), Family (Family Relationship), Community (Community Awareness) and Society (Social Contribution). The critical items among the six dimensions obtained the highest means would be worth of being followed closely. After participating in the learning programs, the senior learners present the highest social outcomes in the dimension of Family, followed by Individual, and Society has the lowest.

6.1.2 The female participants have higher social outcomes than the males on health status and self efficiency

Data analysis of both gender dimensions reveals that the female learners have higher social outcomes on Health Status and Self Efficiency. This indicates that after participating in the learning activities, female learners feel more energetic daily, maintain happier mood, and are conscious that they have better physical conditions than before. Besides that, the female participants have also increased their self-confidence, made more friends who cherish the same ideals, have obtained clearer life purposes, and started feeling more meaningful and valuable toward their aging life.

6.1.3 The better social outcomes have been presented as the participants attended classes more frequently and kept more class hours

Better social outcomes can be generated when the senior learners take more hours of classes and went to classes more frequently. This is especially true on Health Literacy, Self Efficiency and Social Contribution. By building up the habit of learning, the more numbers of days and class hours the senior learners participate in, the easier they can present social outcomes.

6.1.4 SLC presented the best social outcomes

On the whole, the social outcomes of learners attending SLC are the most significant. As for the dimensions of social outcomes, the learners from SLC show the best social outcomes on Health Literacy, Community Awareness and Social Contribution, followed by those who are from EA. Learners from SLA have the lowest social outcomes. On the dimension of Self Efficiency, the learners from SLC also have the best social outcomes, followed by those from SLA, and the lowest social outcomes are generated by learners attending EA.

6.2. Recommendations

6.2.1 Assist older adult educational institutes in setting up community or society dimension related classes

According to 6.1.1 and 6.1.4, the lowest older adult SOL has been shown on Social Contribution, followed by Community Awareness. As we can see the fact that encouraging CSE has always been the critical purpose of setting up older adult educational institutes, this study therefore suggests offering courses more related to boosting Community Awareness and emphasizing Social Contribution with the hope of carrying out older adult CSE ultimately.

6.2.2 Set up classes in accordance with the topics which have the highest level of means in each dimension

According to 6.1.1 and 6.1.2, in each six dimensions of older adult SOL, there is a critical item which has the highest means. In addition, the female learners have higher social outcomes on Health Status and Self Efficiency than the male learners. These results suggest that older adult educational institutes may deliberate upon some critical items for the future curriculum planning. In other words, the topics could cover the issues such as physical-spiritual health, emotion management, social support, family relationship, social interaction, age-friendly, and so forth in order to see the expansion of older adult education.

6.2.3 Comprehend the value of older adult SOL and accustom to cultivating lifelong learning

According to 6.1.3, better social outcomes can be generated when the senior learners take more hours of classes and went to classes more frequently. This conclusion implies that older people should be encouraged to comprehend the importance of the social outcomes so that they can better scheme their own learning roadmap. By cultivating lifelong learning habits, senior citizens can gradually extend their class hours and increase their class frequency so that they can advance their social outcomes later.

6.2.4 Stimulate the male participants' social outcomes

According to 6.1.2, we have acquired that the female participants have higher social outcomes than the males on Health Status and Self Efficiency. This study therefore proposes that males should pay more attention to issues about senior citizens' self-health or self-integration after lifting the career roles off their shoulders. They can also enhanced by learning about Individual and Family dimensions.

Reference

- Cross, K. P. (1986). *Adult as Learner*. San Francisco: Jossey-Bass.
- Creighton, S. & Hudson, L. (2002). *Participation Trends and Patterns in Adult Education*. NCES Publication Washington, DC: National Center for Educational Statistics.
- Huang, F. S., Lin, L. H. & Liang, J. S. (2008) *Research of Investigation on Learning Intention for Senior Learners in Taiwan from Compulsory Retiring*. Ministry of Education Entrusted Research Project.
- Lin, L. H. (2008). Older Adult Education Institutes and Implementation. In Huang, F. S. (Ed.), *Educational Gerontology* (pp. 161-182). Taipei: Wu-Nan Book Inc.
- McClusky, H. Y. (1971). *Education: Background and Issues*. Paper presented at the White House Conference on Aging. Washington, DC: U.S. Government Printing Office.

Ministry of Education (2006). *Towards an Aging Society: Policies on Senior Adult Education*. Taipei: Author.

Ministry of Interior(2014). *Monthly population statistics of household registration*. Retrieved February 17, 2014, from <http://sowf.moi.gov.tw/stat/month/list.htm>

OECD(2001). *The Well-Being of Nations*. Paris: OECD.

OECD(2007). *Understanding the Social Outcomes of Learning*. Paris: OECD.

ISEPSS-1795

Comparative Perspective in Japanese Overseas Education from the Late Nineteenth Century to the Present

Mizuno Norihito

Global Studies Program, Akita International University (Akita, Japan)

nmizuno@aiu.ac.jp

Abstract

This article purposes to discuss the continuous challenges which overseas Japanese schools have continued to struggle with for over one hundred years since the late nineteenth century. Japanese overseas education started and developed in parallel with the country's opening to the outside world and overseas expansion in the late nineteenth and early twentieth century.

The expansion of overseas Japanese population strengthened demand for various kinds and levels of educational institutions for their children. As a result of the collapse of the Japanese empire in the Second World War, the Overseas Japanese communities and schools also expunged. However, the country's economic miracle and resurgence as a great economic in the postwar power promoted overseas economic expansion and the increase of the Japanese population overseas again, and the number of Japanese schools simultaneously increased.

Even after the collapse of the economic bubble reduced Japanese economy to long-term stagnation and decline in the early 1990s, the number of overseas Japanese residents and schools has never stopped increasing. This article argues that the postwar Japanese overseas education has certainly demonstrated progress in some aspects but still shared problems with the prewar overseas education.

ISEPSS-1880
Re-Culturing in the Curriculum Innovation Process

Letchmi Devi Ponnusamy

National Institute of Education, Nanyang Technological University
letchmi.p@nie.edu.sg

Liang See Tan

National Institute of Education, Nanyang Technological University
liangsee.tan@nie.edu.sg

Alfredo Bautista Arellano

National Institute of Education
alfredo.bautista@nie.edu.sg

Maria Eloisa Villanueva Ramos

National Institute of Education
maria.ramos@nie.edu.sg

Abstract

School reform has become an important way of ensuring that education is able to keep up with changing needs. Fullan (2007) stresses that school reform is not just about putting policy in place but about changing the culture of school and that this is highly dependent on the relationships between different stakeholders in educational enterprise. Given that re-culturation is an imperative of educational reform, research has consistently focused on studying the relationships that exist between the different stakeholders in the school (Dimmock & Lee, 2000; Hairon & Dimmock, 2011). However, the crucial question of the curriculum differentiation process is not as well documented. This has become more important as curriculum developers are increasingly moving away from the perspective of curriculum as transmission to that of curriculum as transformational (Miller & Seller, 1990). In this new perspective, curriculum is best seen as a cultural and social construct, and therefore how the teachers are involved in curriculum differentiation is indeed about praxis, where they link practice and theory in their professional work (Grundy, 1987).

This paper investigates the ways that teachers in a specialized school go about managing the task of differentiating curriculum to ensure that it is suited to students needs and fulfilled the vision laid out by the school as an arts-anchored learning environment. The data was gathered from semi-structured teacher interviews from multiple disciplines over a period of six years.

Teachers who volunteered were involved in crafting the school's curriculum for students in a six-year programme, who would ultimately take the IB examinations. The teachers were also involved in creating other curricular experiences that would enable learners to fully appreciate the vision of a connected curriculum, with the interdisciplinary and real world links that would make the knowledge less fragmented (Perkins, 1993). The teachers' approach to the process of curriculum differentiation is best described as a constant iterative collaboration between the fixed and fluid curricula, where the former involved the exploration of the codified knowledge in the discipline and the latter involved an adaptive transformation of ideas in the discipline. The process required teachers to be routine experts as well as adaptive experts, as they were constantly challenged to think adaptively and critically about what their learners would need to know and be engaged by.

This paper maintains that approaching curriculum differentiation as working with both the fixed and fluid curriculum develops a greater 'fit' of curriculum to learners needs and contexts— and energizes teachers and teaching. The process can lead to a change in the teachers' internal capacity, an important factor that is vital in developing and sustaining the teacher and organizational learning necessary to promote and enhance student learning Stoll (1999).

References

- Dimmock, C., & Lee, C.-K. J. (2000). Redesigning school-based curriculum leadership: A cross-cultural perspective. *Journal of Curriculum and Supervision, 15*(4), 332-258.
- Fullan, M. (2007). *The new meaning of educational change*. New York and Oxon: Teachers College, Columbia University.
- Grundy, S. (1987). *Curriculum: Product or praxis*. East Sussex: Falmer Press.
- Hairon, S., & Dimmock, C. (2011). Singapore schools and professional learning communities: teacher professional development and school leadership in an Asian hierarchical system. *Educational Review, 64*(4), 405-424. doi: 10.1080/00131911.2011.625111
- Miller, J., & Seller, W. (1990). *Curriculum: Perspectives and practice*. Toronto, Canada:: Copp Clark Pitman Division, Longman.
- Perkins, D. N. (1993). The connected curriculum. *Educational Leadership, 51*(2), 90-91.
- Stoll, L. (1999). Realising our potential: Understanding and developing capacity for lasting improvement. *School Effectiveness and School Improvement, 10*(4), 503-532.

ISEPSS-1889

Ageing Literacy, Professional Training and Performance Evaluation on Educators for the Elderly: Perspectives from Positive Ageing.

Meng Ching Hu^{*} , Chia Ming Yen ,Yi Fen Wang

Nation Chung Cheng University

*adumch@ccu.edu.tw

Abstract

Due to the arrival of aged society in Taiwan, it has shown the lacks of insufficiency of knowledge, skills, on-the-job trainings and the type of assessment that base on the performance and future training needs among the elderly education teachers in Taiwan.

Hence this study urges, for elderly education teachers in particular, to construct a group of indicators that are driven from ageing concepts, teaching knowledge and skills for the elderly in order to enhance teacher's performance. Also by the end this study leads to establish a set of professional performance assessment among the elderly education teachers.

The aims of this study is used focus group interviews and Delphi technique questionnaire to construct a set of core competence indicators that base on the concepts of important ageing concepts, teaching knowledge and teaching strategies; then applying that group of indicators, a survey is conducted to understand the performance and further needs among teachers from different types of elderly education organizations in Taiwan (The Evergreen Colleges and

The Active Learning Centers in particular). The differences and relations among teachers from the two organizations are examined in terms of teaching performance and training needs in the fields. Also the results will provide the types of suggestions that lead to further on-the-job professional training among the teachers.

The results of this study constructed 「The Content of Core Competence Indicators among the Teachers from Elderly Education and the Needs of On-the-Job Training and Outcomes Assessment In Taiwan」, it total 132 indicators are developed. The indicators of core competences among the teachers cover two aspects: 1) teacher's current and further needs of teaching knowledge and 2) teacher's current and further needs of teaching skills. The previous is categorized into six (Physical Ageing, Psychological Ageing, Spiritual Ageing, Societal Ageing, Creative & productive Ageing, Transcendence Ageing), the latter is categorized into two (Teaching implement and Skills Assessment, Skills of Teaching Design).

And the results of survey as follow: 1)the background of teachers between the two organizations are different; 2)there are lacks of adult or elderly education training programmers; 3)most participants gain knowledge from the workplace while government policy has played an important role in terms of participations among the teachers; 4)performances and needs are vary between the two organizations; 5)the performances of participants are associated with the needs in terms of “ageing knowledge and teaching skills”.

Lastly, this study provides four advices include: 1) the enhancement of “non-participants” led by government in the elderly educational training programmers; 2) ageing concepts and teaching skills are needed to be emphasized in the training programmers, and creative and productive ageing knowledge is considered to be the prior; 3) the increases of exchanged professional experiences in workplaces; 4) the delivery of advanced training programmers are recommended in the future.

Key words: Elderly education teachers, ageing teaching knowledge and skills, training needs

ISEPSS-1878

The Effects of Peer Interaction Behavior and Attitude on Programming Learning in the Collaborative Programming Learning Platform

Shu-Wei Lin^{a,*}, Yu-Tzu Lin^b

^{a,b}Graduate Institute of Information and Computer Education, National Taiwan Normal University, No.162, Sec. 1, Heping E. Rd., Da-an Dist., Taipei City 10610, R.O.C

^aE-mail address: 60108021E@ntnu.edu.tw

^bE-mail address: linyt@ntnu.edu.tw

Abstract

This study explores whether and how peer interaction in the collaborative learning platform fosters programming learning. We conducted an empirical study on an undergraduate programming course. An interactive online learning platform was implemented to facilitate programming learning. Fifty-three students were asked to use this platform to practice computer programs in and after class. Besides writing programs, students had to observe peers' programs, give comments to them, reflect and revise the programs according to peers' comments. All interactive learning behaviors were recorded and stored as the system logs, based on which the relationships between peer interaction behavior/attitude and learning achievement were analyzed. Based upon the experiment results, we have several research findings: (1) students who reflected their programs and comments frequently performed better, (2) feedbacks provided by peers could slightly help learning, and (3) students who agreed with the effectiveness of the peer review in the learning platform could submit fewer wrong programs before the final correct one was submitted. The findings imply that reflection and peers' feedbacks were important factors for programming learning. Therefore, the instructors or researchers should design a more interactive learning environment to guide and inspire more reflection and feedback.

Keywords: peer interaction, programming learning, reflection, observation.

1 Introduction

1.1 Programming Learning

Computer programming is challenging for most students. One of the important learning strategies is to practice writing actually rather than just watching. Students who have more hands-on programming experiences have better programming performances. Therefore, fostering students' motivation of practicing coding to enrich their hands-on experiences is critical in programming instruction (Jenkins, 2001). Students could receive constructive feedback while practicing coding (Wang, Su, Ma, Wang, & Wang, 2011).

Designing suitable feedback for students is important for learning, especially for complex learning tasks (e.g., programming) (Kordaki,2010) ◦

1.2 Peer Interaction in Collaborative Learning

Collaborative learning activities have been applied in education and paid attention by many researchers. Much research proves that peer interaction fosters learning. Students could develop their thoughts and finish their work through peer interactions in collaborative learning activities (Chou & Tsai, 2002). By interactive discussion and peer evaluation, students' learning performance could be improved (Liu & Tsai, 2008). In interactive learning environment, students present and explain their ideas or try to argue against negative ideas to foster higher-level thinking (Yackel, Cobb, & Wood, 1991). In addition, the opportunity of observing divergent opinions in the collaborative learning environment encourages students to learn more actively (Hew & Cheang, 2003). The frequency of peer interaction is also related to learning performance. The students actively participating interactive learning activities performed better than the passive ones. Besides interaction frequency, the interaction pattern was also important for learning. The learners who attended discussion activities actively performed better than lurking learners (Gerber, Grund†& Grote, 2008).

Reflection plays an important role in learning. It also should be embedded into the peer interaction activities in the collaborative learning activities. The teacher should design adaptive instructional strategies to guide students to reflect during learning. Higher reflection level could be achieved through peer assessment and prompts (Chen, Kinshuk, Wei, &Liu, 2011). Reflection is an internal cognitive activity, therefore students rarely observe or learn from others' reflection. In collaborative learning, students have opportunities to observe others' reflection and in turn help selves' reflection (Yang, 2010). While students are controlling their problem solving strategies, their reflection abilities would be enhanced (Van den Boom, Paas, & Van Merriënboer, 2007). Students would provide more information to peers and learn from each other in the process of reflection on self-correction and peer review (Phielix, Prins, & Kirschner, 2010). Although reflection fosters learning, the instructor should guide students to conduct proper reflection (Chen, Wei, & Liu,2011).

In addition to reflection, peer review is another important issue in collaborative learning. Students not only can present their own thoughts, but also can review others' viewpoints and give comments in the interactive learning environment (Wilfred & Allan, 2011). Existing research argued that students who shared their thoughts, provided feedbacks to peers' opinions, and integrated others' ideas to their previous knowledge, would have higher learning achievements. On the other hand, low achievers tended to reject or ignore peers' contributions (Oliveira, Tinoca, & Pereira, 2011).

1.3 Research Questions

On the basis of the existing research, reflection and peer review are two important factors influencing performance in collaborative learning, especially for complex and higher-level learning tasks. Although there have been several works developing collaborative programming learning platform to improve students' programming skills, the discussion about the effects of peer interaction was seldom conducted. Therefore, in this research, we explore the effects of peer interaction (including behavior and attitude) on learning achievement. Two types of peer interaction behaviors are discussed: (1) reflection, and (2) peer review in the collaborative learning platform. The major research issues addressed in this research include:

- To study the effects of peer interaction behaviors, including reflection and peer review, on learning achievement.
- To understand the effects of attitude toward peer interaction on learning achievement.

2 Method

2.1 Research Design

This research conducted an empirical study to investigate the effects of peer interaction on programming learning achievement in the collaborative programming learning platform, in which the peer interaction behaviors discussed in this research include reflection and peer review. Figure 1 shows the research model. The relationship between peer interaction and learning achievement, or between interaction attitude and learning achievement was examined by the Pearson correlation.

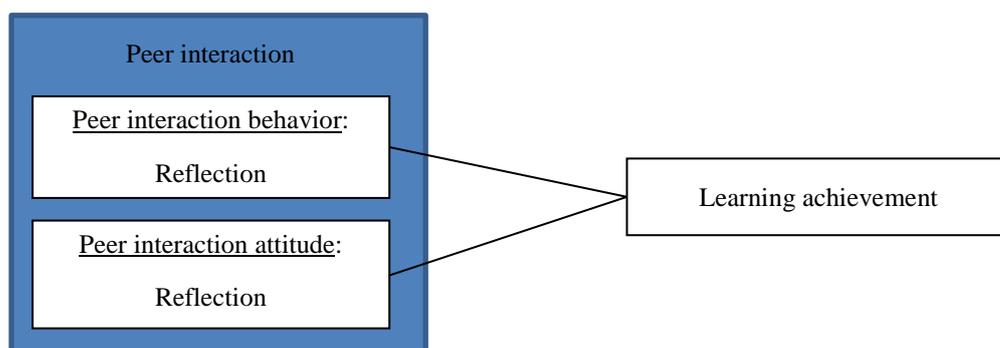


Fig. 1: The research model

2.2 Collaborative Programming Learning Platform

In order to implement a collaborative learning environment, in which students can conduct reflection and peer review for improving their programming skills, we designed and developed an interactive programming learning platform for facilitating students' programming learning.

The web-based platform was implemented by PHP 5.4.12 and MySQL 5.6.12. Each student was assigned an account for using the platform. Their learning behaviors, including events and the corresponding time, were recorded and stored in the system database.

The user interface of the collaborative programming learning platform is illustrated as Figure 2. Students can write their programs in the coding area and write down their thoughts in the discussion area according to their reflection on each program chunk. They can also review peers' programs and give feedbacks to peers about problem solving strategies, and any other comments except the source codes in the discussion area.



Fig. 2: The user interface of the proposed collaborative programming learning platform

2.3 Participants

There are totally 53 students participating in the experiment of our study, including 26 males and 27 females. The participants are all undergraduate students in the department of information management of a university, and most of them have been studying computer programming for one year.

2.4 Research Instrument

In the experiment, students studied JAVA programming with the assistance of the proposed collaborative programming learning platform. The peer interaction behavior was recorded by the system. Learning achievement was examined by the programming implementation test. The attitude toward peer interaction was then examined by a questionnaire.

2.5 Procedure

The experiment was conducted in the Computer Programming course for ten weeks. The instructional goal was to learn the implementation of the sorting and recursive problems by JAVA. In each class, the students were asked to practice writing the programs on the proposed interactive learning platform repeatedly following the learning steps for each turn:

(1) Coding

Students have to write the program to solve the problem or revise the programs according to peers' comments.

(2) Reflection

Students have to reflect on their programs or peers' comments and then write their thoughts about that.

(3) Peer review

Students have to review peers' program and write comments.

In addition to the in-class activities, students could login the learning platform after class and revise their programs or comment on their own or others' programs. After the 10-week learning activities, students' learning achievements and their attitudes toward peer interaction were examined by the achievement test and the questionnaire.

3 Results

The experiment results were analyzed and discussed as the following:

(1) The effects of peer interaction on learning achievement

• Reflection

The amount of time spent on reflection and reflection frequency are both highly correlated with learning achievement (the achievement test score), the Pearson correlation values are .379 ($p < .01$) and .428 ($p < .01$), respectively. That is, students who spent more time on reflection learning better in programming skills.

• Peer review

Both the amount of time spent on peer review and review frequency are not correlated with learning achievement, the Pearson correlation values are $-.071$ ($p = .612$) and $.230$ ($p = .097$), respectively. However, the total number of feedbacks given by peers is weakly correlated with learning achievement ($r = .244$, $p = .078$). It seems that reviewing others' program did not help improve learning achievement. It might be because students in this experiment usually did not care about others' codes very much. They were just "enforced" to give comments to others without much thinking. On the other hand, feedbacks provided by peers could slightly improve learning achievement.

(2) The effects of peer interaction attitude on learning achievement

Although the correlation between peer interaction attitude and learning achievement was not significant (peer review: $r=.018$, $p=.899$, reflection: $r=-.096$, $p=.494$), an interesting result was that students who agreed with the effectiveness of peer review could submit a little fewer wrong programs before the final correct one was submitted ($r=-.263$, $p=.057$). The possible reason was that if students paid more attention to peers' feedbacks, they might read the comments more carefully, and avoid the possible mistakes based on peers' advice.

4 Conclusions

This research investigates the effects of peer interaction on learning achievement in the collaborative programming learning environment. We have several research findings: Students who spent more time on reflecting their programs performed better on programming.

In addition, peers' feedback or the agreement on feedback was also beneficial for programming learning. Instructors should design a more interactive learning environment to guide and inspire suitable peer interaction, especially reflection and peer review, to provide more opportunities of higher level thinking and observing divergent viewpoints to foster programming learning.

5 References

- Chen, N.-S., Kinshuk, Wei, C.-W., & Liu C. C. (2011). Effects of matching teaching strategy to thinking style on learner's quality of reflection in an online learning environment. *Computers & Education*, 57(1), 53–64.
- Chou, C. & Tsai, C. C. (2002). Developing web-based curricula: issues and challenges. *Journal of Curriculum Studies*, 34, 623–636.
- Gerber, M., Grund, S., & Grote, G. (2008). Distributed collaboration activities in a blended learning scenario and the effects on learning performance. *Journal of Computer Assisted Learning*, 24, 232–244.
- Hew K. F. & Cheung W. S. (2003). Models to evaluate online learning communities of asynchronous discussion forums. *Australian Journal of Educational Technology*, 19(2), 241-259.
- Jenkins, T. (2001). The motivation of students of programming. In *Proceedings of ITiCSE 2001: The 6th annual conference on innovation and technology in computer science education*, 53–56.

- Kordaki, M. (2010). A drawing and multi-representational computer environment for beginners' learning of programming using C: design and pilot formative evaluation. *Computers & Education*, 54(1), 69–87.
- Liu, C. C. & Tsai, C. C. (2008). An analysis of peer interaction patterns as discoursed by on-line small group problem-solving activity. *Computers & Education*, 50, 627–639.
- Pereira, A., Oliveira, I., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. *Computers & Education*, 57, 1348–1357.
- Phielix, C., Prins, F. J., & Kirschner, P. A. (2010). Awareness of group performance in a CSCL-environment: effects of peer feedback and reflection. *Computers in Human Behavior*, 26(2), 151–161.
- Van den Boom, G., Paas, F., & Van Merriënboer, J. J. G. (2007). Effects of elicited reflections combined with tutor or peer feedback on self-regulated learning and learning outcomes. *Learning and Instruction*, 17, 532–548.
- Yackel, E., Cobb, P., & Wood, T. (1991). Small group interactions as a source of learning opportunities in second-grade mathematics. *Journal for Research in Mathematics Education*, 22, 390-408.
- Yang, Y. F. (2010). Students' reflection on online self-correction and peer review to improve writing. *Computers & Education*, 55, 1202–1210.

ICSSAM-816

A Study Related To The Problems And Educational Applications That Pre-School Teachers' Encounter

Mehmet Fatih Karacabey

Anadolu University

mfkaracabey@anadolu.edu.tr

Abstract

The purpose of this study is to identify the pre –school applications and problems that pre-school teachers in Şanlıurfa, Center encounter in terms of some variables like administration, physical conditions and parental issues. The other purpose is to investigate if the problems that pre-school teachers encounter differ depending upon their hometown, the service time in general and specific to their current school, their position, the situation regarding the helper in the class, marital status, educational level, taking part in in-service training, and the economic status of the neighborhood the school located. This is a descriptive- correlative study, and a survey was developed as the data collection tool of the study. The population of this study is composed of 329 teachers. The study is conducted with the participation of 220 participants. The study shows that there is a significant difference in the views of the pre-school teachers related to administration, psychical conditions of the school, and parents; while there is no significant difference in terms of other variables.

Key words: Pre-school teacher, administration, parent

ISEPSS-1758

Clashes of Interests over Bahrain: Ottoman and British Encounter

M. Mehdi Ilhan

International Islamic University Malaysia

mehmetilhan@iium.edu.my

Abstract

The Europeans always had interest in the Gulf for various reasons. The British activity in the Gulf was most of the time destructive and aggressive. The island of Bahrain, strategically very important and very rich in pearl industry, was held in turn by Portuguese, Persians, and Muscatis. The island eventually came under the British influence in 1820 when an independent Arab Sheikdom made a treaty with Britain against external enemies. The competition in the Gulf thus started between the British and the Ottomans when the latter established its rule on the opposite mainland. The British intensified their influence over Bahrain and succeeded bringing Bahrain under their protection despite the counter Ottoman activities in the area.

The British were after exploring the Gulf and trying to win the areas rich in either pearl or petroleum for their alliances while the Ottomans trying to keep the areas that fall within the boundaries of the Empire. Bahrain, very rich in pearl trading, became a competitive ground for clashes of interests between Britain and Ottoman, the former supporting the ruling and the latter the opposing family. This paper deriving information from Ottoman Archival documents and Ottoman newspaper articles as well as secondary sources will explore the reasons behind the clashes of interests and will come up with some vital conclusions.

Culture

AV Room

10:40-12:10

Thursday, May 8

Session Chair: *Prof. Gwyntorn Satean*

ICSSAM-533

Harmony, Holocaust and Hope: the Cathartic Narration in Indian Partition Novels

Chinchu Chang

National Cheng Kung University

ICSSAM-545

Boat Racing: the Cultural Creative for Community Health Promotion in Wiang Sa District, Nan Province, Thailand

Gwyntorn Satean

Naresuan University

Patcharin Sirasoonthorn

Naresuan University

Rattanaporn Thongkiew

Naresuan University

ICSSAM-667

An Anglophone Völkerkunde: the Origin of Ernst J. Eitel's Missionary Ethnography

Hung-yi Chien

National Taiwan Normal University

ICSSAM-778

The Origin of "Geo-Body" and The Modern Area in Chiang Mai in the Reign of King Chulalongkorn and King Vajiravudh

Dome Kraipakorn

Srinakarinwirot University

ICSSAM-627

Culture of slam people in Dhaka City: From Poverty to Terrorism

Mohammad Bashir Mia

University Of Dhaka

Khadem

ICSSAM-934

Agro-Colonialism in the Less Developed World

Da Eun Lee

Keimyung Adams College

Steven Shirley

Norwich University

ICSSAM-533
**Harmony, Holocaust and Hope: the Cathartic Narration in Indian
Partition Novels**

Chinchu Chang

National Cheng Kung University
bluebelle208@gmail.com

Abstract

This article aims to explore how Indian partition novels, especially authors who had personal experience, achieve an effect of catharsis by means of a compelling narrative structure.

Diverse religious communities had existed side by side on the subcontinent for centuries since ancient times despite occasional frictions. When British India was divided and two religion-based dominions, secular India and Islamic Pakistan, were built in 1947, there was violence—massacre, rape, looting and arson—against people from the other religion.

Millions of internal refugees, whose religious identity was considered to be incompatible with their new citizenship, were forced to set out on a journey for the land on the other side of the national border.

Writing hence becomes cathartic treatment of this national trauma, as in Bapsi Sidhwa's *Cracking India*, Manohar Malgonkar's *A Bend in the Ganges*, Khushwant's Singh's *Train to Pakistan*, Bhisham Sahni's *Tamas* and Chaman Nahal's *Azadi*. Events in these novels are portrayed in three phases: pre-partition coexisting harmony, partition genocidal holocaust and post-partition reconciled hope. Symbolically, friendship and love signify symbiotic peace and cultural integration between Muslims and non-Muslims in the nostalgically golden past.

When these inter-communal friends and lovers break up due to the political division, the subcontinent also plunges into social pandemonium. Individual tales of woe allegorize the national tragedy. Although ethnic cleansing prevails over fellowship, there are always people with hearts of gold willing to lend the other community a helping hand amid communal barbarities. Newborn babies at the end of the novels or the acts to cross the border suggest a brand new beginning and moving forward. Re-enacting partition stories thus completes a birth-death-rebirth cycle. By emphasizing the importance of love and forgiveness, the novelists implicitly point out the key to heal the wounds and to purge individuals and the nations of sin.

ICSSAM-545

Boat Racing: the Cultural Creative for Community Health Promotion in Wiang Sa District, Nan Province, Thailand

Patcharin Sirasoonthorn

Department of Sociology and Anthropology, Faculty of Social Sciences, Naresuan University
patcharins76@gmail.com

Gwyntorn Satean

Department of Sociology and Anthropology, Faculty of Social Sciences, Naresuan University
gwyntorn@gmail.com

Rattanaorn Thongkiew

Department of Sociology and Anthropology, Faculty of Social Sciences, Naresuan University
nuna3777@gmail.com

The Corresponding Author: Patcharin Sirasoonthorn

Abstract

This article identified values and creative culture for community health promotion through the use of boat racing in Wiang Sa district, Nan province, which is located on Northern Thailand as the case study. The author applied qualitative method to reveal the possibilities of community based health care. The in-depth interview and participatory observation were adopted to investigate context, problems and current situation from stakeholders during May and October 2013.

The results showed that Wiang Sa district hold the traditional boat racing for more than 177 years. In the past, before 1979, the boat racing was traditional village collective activities. After that, the tradition has transformed into sport game in which the promotion of health culture and tourism has been introduced.

Values of the boat racing on the people in the community include (1) Aesthetic value - the characteristics of the regatta are unique (2) spiritual value - religious rites which is the source of the regatta and the rituals relating to the regatta (3) social value - participation in the various stages from mutual thinking, practicing, and benefits among the group of villagers at various ages.

The regatta is characterized of creative culture in many areas; promoting a cooperation, creating a harmony, valuing the role of women, creating new activities for the youths and the elderly, etc. The health promotion, even though it only occurs in a short time of 1 month racing course, especially the rowers, it is considered a beginning of building a positive attitude towards health promotion through the use of the regatta as social innovation.

Keywords: Boat Racing, Cultural Creative, Community Health Promotion

1. Introduction

The regatta is an annual festival held accordingly with the main stream and wet land, which has emerged more than 400 race courses in 65 provinces throughout Thailand [1, 2]. The famous regatta race courses are culturally unique as distinctive feature in the promotion of domestic tourism. The tournaments have been broadcasted through television station, ThaiPBS, which in 2012 there are 15 races on live broadcasting. One of the famous regatta venues is Wiang Sa district, Nan province [3].

The regatta is intended to enhance the quality of life of local people, rooted in the human relationship in the community, shared values and religious beliefs, and ways of living that has been in harmony with the natural environment and culture until it became part of the “community innovation”. Today’s boat race has been closely linked to the tourism business and many parties have involved from the preparation stage before the match, during the competition, and at the end of the competition; including the contest organizer, businessmen, community participated and spectator, rowers, tourists who contribute a fund to advertise the products and sponsor the event, thereby resulting in the hidden benefits and impact in the socio-cultural and economic dimension, for instances, advertising / consumption of alcohol and refreshments, gambling and inappropriate moral behavior among the youth groups , etc. [4]. Several regatta race courses has been partly funded by Thai Health Promotion Foundation (ThaiHealth) to hold a competition under the conditions that it must be free of alcohol, but result in the change of attitude, values, and behavior of people in the community; that is to say; to reduce the intake of alcohol to a certain extent during the match, especially in the prototype area in Nan province [4]. However, in the social dimension, it found that culture of the regatta is clearly separated from the Kathin, Buddhist tradition during the end of Buddhist lent, into sports games until the racing boat which contains a heavy weight has been modified to the light and slimmer boat that is typical of the central part [5]. Consequently, the regatta as creative culture has been diminished in value to a loss of identity of the boat.

Under such a situation, the aim of this article primarily examined the creative culture and values of the regatta tradition in Wiang Sa district, Nan province. As the Wiang Sa is the only one race course in the province which it still maintains the uniqueness of the bow, body, and tail of the boat in entry to the contest while that of other race courses has been modified in its hull and rules according to the changing age. In addition, the Wiang Sa has been renowned nationally comparable to the traditional regatta “Khuen Khon Ching Thong” of Lang Suan district, Chumphon province, which is traditionally used to promote tourism under the “Unseen Thailand” scheme. It is expected that the result of the study will be further useful in health promotion at community level.

2. Study Methodology

This research applied the qualitative method. The areas studied covered 3 villages; including Ban Lai Nan, Ban Na Sa, and Ban Boon Rueng. Wiang Sa district, Nan province was chosen because it is a community where boats are taken to join the boat race during the regatta festival on October 18-19, 2013. (2) community demands and is aware of the liquors, and (3) community involvement in activities related to traditional regatta. In this study, the author explored the context in general, problem conditions, and spiritual value, social values, aesthetic values, creative cultural of the boat racing tradition. The instrument used included the unstructured interview. Data was collected between May-October 2013. The in-depth interviews was made with 15 social actors by using the purposive sampling technique, including the regatta village committee, trainer, dean, rower, vessel-digging technician, and cheerleader, provided that they must be involved in the traditional boat race at least one time. For data analysis, the content analysis was used.

3. Result

3.1 Background of Traditional Regatta

No historical documentary evidence has been shown the origin of the regatta tradition of Nan province began. Nevertheless, it has long been a tradition succeeding to the present day. It assumes that the regatta of Nan province was likely to occur simultaneously with the building of the city in the 18th Buddhist era, or round 1282 [6]. The regatta in Wiang Sa district is a tradition that annually happens during the Lent Festival in October, estimating that it lasted for more than 177 years as evidenced by the race boats named “Old Tiger Boon Rueng” which was dug in 1837 and continues to be used in today’s competition.

The regatta before 1954 had no separation in boat category. The competition depended on the voluntariness of each village for purpose of fun, harmony, beautifulness, speed of racing boats while award is merely rice, fish food and liquor. Until 1954, it started matching the racing boats and splitting water stream.

The competition was held on the completion of the Kathin ceremony held at Boon Yuen temple, Wiang Sa district ever since. The regatta festival is usually held in conjunction with the Kathin tradition on the end of the Buddhist's Lent. Until the 1979, the rules for sports games have been set forth, for examples, alternating the streams of the West and the East, classifying the racing boats into three categories by number of rowers; including small boat of 25-30 rowers, medium boat of 35-45 rowers, and large boat of 45-55 rowers in addition to beautiful ship category and cheering team contest which the cup and money prize is a consideration. Wiang Sa municipality serves as host for contest in conjunction with the District Administrative Office, government and private agencies both inside and outside the province.

Unlike the other boat racing, the distinctive identity of the Wiang Sa district regatta is the pattern or style of the bow, hull, and tail of a dragon boat according to the culture of Nan province. There is also a boat race of the Nan identity with dancing and singing in the boat.

Today's Regatta is intended to (1) preserve and promote the culture to remain forever (2) strengthen love and the unity of the people (3) create public awareness among the youth to exercise and away from drugs (4) promote the public policy on tourism, promote the reputation of Wiang Sa district, and Nan province to be recognized among the general public and foreigners.

The regatta for the year 2013 was held on 18-19 October 2013 at the Nan River Bridge. (Ban Pakauy Waterside), consisted of a total of 48 boats competed in four categories: (1) small ship (2) medium ship (3) large ship (4) ship of Nan identity. Ban Lai Nan came with the ship named "Thep Prathanporn" competed in small boat category. Ban Na Sa came with the ship named "Goddess Soi Wa Ree 2" and "Goddess Soi Wa Ree 14" competed in the middle ship category. Ban Boon Rueng came with "Old Tiger Boon Rueng" competed in Nan identity category. It turns out that At the end of the contest, "Goddess Soi Waree 2" of Ban Na Sa won No.3 for the middle ship category.

3.2 The value of traditional boat race

1. Aesthetic Value - boats joining the contest the Wiang Sa racing course has to be unique based on the culture of Nan; that is to say; it must look like a dragon with 4 major components; (1) the bow of the boat is made of carved wood containing fang, chin, eyes, and other (2) the junction of the ship must consist of bow as junction to the bow of the boat with the name of the ship that is clearly visible, and tail part that is junction to the tail of the ship, provided that bow and tail must look slender and curved consistently with the hull (3) the hull must be made of the single timber with Thai pattern throughout the hull and painted

beautifully (black, red, orange, green, yellow, white) , but not gradient (4) boat tail – the end of the boat attached to tail, be higher than the bow, carved and painted beautifully.

Additionally, before the race, there also presents an expressive dance called “Fon Long Nan” , a traditional performance of Nan province which women wear local dress, line up and dance on the beautifully decorated boat accompanying with a slow music in Thai instruments like drum, gong, oboes.

Such features are distinctive of the Wiang Sa racing course, representing the aesthetic values inherent in the process of tradition and perceived as a mechanism to instill the attitude of the beauty and pride in the community's identity. On the other hand, other racing courses in Nan province have not been strict with the identity of the ship, these results in the devaluation of the uniquely beautiful contestants.



Figures 1 Bow and tail that looks like a dragon; a unique symbol of racing boats in Wiang Sa

2. Spiritual Value - the boat race is associated with rites and beliefs in 6 rituals (1) tree cutting ceremony requires the iron wood, which it is believed to be the dwelling of the nymph. Thus, to cut wood to make a boat, it needs to undergo the ritual apology (2) inviting ceremony of the Nang Takian or boat nymph; a spirit that keeps a tree. It is believed that if the cut trees down, it requires inviting the Spirit remaining at the tree stump to come upon with wood that will be brought to build a boat (3) ritual apology for Nang Takian before digging the boat, so that the digging will be achieved conveniently and enhance prosperity (4) inviting ceremony of Nang Takian to dwell on the ship when constructing is completed. (5) wrist-binding ceremony is to encourage Nang Takian who dwells at the hull. The villagers bring various components of the ship, including Kanya bow and Kanya tail, bow and tail to be assembled, and the ceremony operator hands over the gifts to Nang Takian (6) inviting ceremony of the boat into the river before the match as notice to boat nymph that the boat will discharge down to the river to practice or compete, if the boat brings a victory, the reward will render.

All 6 rituals are held to encourage the villagers who owned a boat. This reflects the Buddhist belief, combined with the ordinances of the Brahmins. Any implementation of the trees that will be made a boat will show respect to the spirit dwelling in the boats. Although rituals contain a lot of details, namely; both ceremony devices and traditional hymns, the community still preserved them by conveying to children and youth through programs at the local level.

As long as the boat which is a representative of the serpent rides on the river, the villagers believed that it will make a seasonal rain and peaceful country. Beliefs and rituals in the traditional regatta thus act as a symbol representing the spiritual value.

. **Social value** - every race has refined the process of people's mind from sharing of ideas and common practices in building a hull which requires all labors, materials and capital and management. The stakeholders include community leaders in the lead role, priest in the role of craftsmen or ritual operator, the elderly in the role of the ritual operator, men in the role of labor or rower, women in the role of catering and cheering, children and youth in the role of observers to inherit the tradition to the next generation and others in the community who contribute by donation or dried foodstuff to contribute building a racing boat. Lastly, shared benefit that have not focused on the return of the money prize, but social value of traditional boat races in the form of fun, helping each other, promoting health, valuing the elderly, creating a harmony to cultivate the morals of the younger generation and historic and cultural value that is locally unique. Therefore, the boat races become the social mechanism bringing a strong sense of community participation.

3.3 Cultural Creative

Cultural creative is a term coined by sociologist Paul H. Ray and psychologist Sherry Ruth Anderson [7] to describe a large segment in Western society that has developed beyond the standard paradigm of Modernists versus Conservatives. According to the concept of cultural creative, it has to make the difference between tradition and modernity. They are trying to make a cultural synthesis, and also transcend the others. Their most important values include: ecological sustainability and concern for the planet; liking what is foreign and exotic in other cultures; what are often called “women’s issues” by politicians and the media (i.e., concern about the condition of women and children both at home and around the world, concern for better health care and education, desire to rebuild neighborhoods and community, desire to improve caring relationships and family life); social conscience, a demand for authenticity in social life and a guarded social optimism; and giving importance to altruism, self-actualization and spirituality as a single complex of values. [8]

In this study, a number of cultural creative has been chosen in 18 areas as guide to the analysis. The details are as follows:

Table 2 Characteristics of Cultural Creative

No	Characteristics of cultural creative	Characteristics of Longboat Traditional
1	Love nature and are deeply concerned about its destruction	A ritual that shows respect to the nature, especially cutting trees that are used to make a hull.
2	Strongly aware of the problems of the whole planet and want to see more action on them	Place an importance on solid waste management during the event. PR activity is to inform people to throw the garbage in the designated point.
3	Pay more taxes or pay more for consumer goods if that would help cleaning up the environment and stopping global warming	No financial support or product support on the environmentally friendly activities.
4	Give a lot of importance to developing and maintaining community relationships	Regatta activity contributes a relationship and the strength of community, such as discharging a boat down to the river, it requires the cooperation of many people in the village.
5	Give a lot of importance to helping other people and bringing out their unique gifts	Regatta activity draws skills and abilities of the community people; for examples, rowers, cheering members, and housewife group to be utilized in a constructive way.
6	Volunteer for one or more good causes	In certain activities, those participate in the regatta must possess the volunteer mind, for example, sacrifices manpower to tow the boat, and food preparation for rowers and cheering teams.
7	Care intensely about both psychological and spiritual development	It represents the unique identity and values of local people to maintain them. It is a strategy to strengthen a unity and train the minds of people in the community by the virtue of the role of community leaders or clergy.
8	See spirituality or religion as important in your life	Inherit the rituals, such as indemnification on ship, and beliefs towards boat nymph to encourage morale and show respect to the vessel.
9	Equality for women at work, and more women leaders in business and politics	Women's groups in the community participate in activities such as the food preparation for the rowers, assuming role of cheering members or boat race committee.

- | | | |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | Concerning about violence and abuse of women and children around the world | Focus on organizing the alcohol-free boat racing to avoid controversy and accident. |
| 11 | Want politics and government put more emphasis on children's education and well-being, on empowering neighborhoods and communities, and on creating an ecologically sustainable future | Local organizations encourage affiliated schools apply knowledge relating to the regatta to be a part of education at elementary and secondary education level, such as learning (1) social studies, religion, and culture (2) health and physical education (3) foreign languages |
| 12 | Unhappy with both the Left and the Right in politics, and want a to find a new way that is not in the mushy middle | Regatta activity contributes a unity of the community and thereby reducing the different attitude on politics. |
| 13 | Optimistic about the future, and distrust the cynical and pessimistic view that is given by the media | Maintain the traditional regatta and the local uniqueness, such as the use of white-red flags. |
| 14 | Involved in creating a new and better way of life in community | In the regatta, rowers must be 60 years or older in order to promote the health and activities of the elder in the community. |
| 15 | Concerned about problems emerged from big corporations in the name of making more profits: downsizing, creating environmental problems, and exploiting poorer countries | The hosts are invited as organizers, proclaim as policy for alcohol-free event finding out other marketing channels without relying on patron capital both directly and indirectly from alcohol. |
| 16 | Spending under control, and not overspending | Funds are spent under the supervision of the boat racing committee. |
| 17 | Dislike all the emphasis in modern culture on success and "making it," on getting and spending, on wealth and luxury goods | The paddlers are required not to drink alcohol before the race and during the race, permit the ship with identity of Wiang Sa to join the race and the competition method has not been modified to be modern. |
| 18 | Like people and places that are exotic and foreign, and like experiencing and learning about other ways of life | Provide a unique dance show called "Fon Long Nan," a dance by the girls line up on the "Boat Show", a unique identity that creates a new experience to the audience. |

As shown in Table 2, the regatta of Wiang Sa has been characterized of cultural creative in 17 areas. It found that only 3 areas; support the tax on goods and activities that are environmentally friendly have not been executed seriously. Characteristics of creative culture from the in-depth interviews showed that people in the community focused on area 7 and area 8 because they were obvious that creativity demonstrated historic value and unique local cultural value while health issue is of minor importance. Therefore, focusing on health issues (area 10) and prevention of violence against children and women and reduced accidents (area 10) should be considered as the first priority to consider the nature of creative culture in tradition format.

The regatta of Wiang Sa has been used as a tool to promote community health. In the pre-race, the paddlers have to keep practicing. This includes the prohibition and penalties for those who violate and drink alcohol. During the competition, Wiang Sa municipality as the major organizer of the regatta formulated a “Free-Liquor Race” policy on regatta, which it has set forth in the regatta regulations and publicity through various media. The youth group went on a campaign in order that the attendees would be aware of such prohibition; for examples, no alcohol drinks, no sales of alcohols, alcohol is prohibited to take into the area where the event is held strictly. Consequently, the number of accidents and controversy reduced. According to 2013 observation, there was no alcohol drinking, no sales of alcohol, and carrying alcohol into the event space during the day.

4. Discussion and Conclusions

The development of the regatta of Wiang Sa lasted for over 177 years. In the past, the regatta before 1979 was a game that represented the way of life inseparably with Buddhist rituals during the Buddhist Lent in October, which has been still traditional (traditional festival). Later in 1979, once the rules have been stipulated, the tradition has transformed into sports games and to promote tourism like the dragon boat festival in Macao, China as investigated by Glen McCartney & Linda Osti [9] and changes in the dragon boat festival in Hong Kong, China, investigated by Trevor H.B. and Atara Sivan [10], which it was found that cultural community event was changed into the International Dragon Boat Festival. The difference is that the regatta of Wiang Sa has not been developed to the international competition because it requires that the rowers must have a domicile in Nan province only.

Boat racing has been inherited until today and it represents the value that society desires to make it happen (preferred), including (1) aesthetic value is based on the unique characteristics of the racing boat and activities occurred, for instances, trophy parade, boat show with dance on board, establishment of cheering team (2) spiritual value recognizes a part of a religious ceremony, rituals associated with the regatta to encourage a support and

steadfast anchor for people in society, and (3) social value recognizes a participation in the various stages from cooperatively thinking, practicing, and benefits among people at different ages in the community from youth to the elderly. Participation in the regatta resulted in a unity and good relationship among people in the community. All three aspects of values have regulated the boat racing activities which the interpersonal relationship has been emphasized (Living together in society), people and nature (Utilization and respect for natural resources) and people and moral. Based on theory of value [11], it found that the traditional regatta is intrinsic value because it shows the uniqueness of the local culture as well as extrinsic value as means that leads to other things, including health promotion and tourism, and so on.

According to Paul H. Ray and Sherry Ruth Anderson [8], the regatta is cultural creative because out of 18 areas, it is constituted of 17 areas of creative culture. However, this concept was examined in American society during the year 1986-2008, which social condition is quite different from the agricultural society of Thailand. So, some variables could not be analyzed, for examples, paying taxes because most Thai people are engaged in agriculture and has been granted the exemption of taxes [12] or support products that help reduce global warming because awareness of rural society to global warming has been small and variables on the Left and the Right in politics due to the political instability.

The culture creative is an initiative in Thai society. Term “Culture Initiative” appears in the culture root project undertaken by the Ministry of Culture [13], which includes 11 indicators as criterion. They include (1) dominant identity (2) contain social , mental and community livelihood value (3) is traditionally practiced until to the present (4) a form of practice, clear methods and procedures (5) establish a rapport and pride to the community, (6) attractive presentation format (7) the involvement of the community in maintaining traditions (8) generates revenue to the community (9) is continuously developing, innovative, and adjustable (10) include agency/organization/group/personal care support (11) outreach through various media which is intended that culture has been chosen to create social value and economic value as well, consistent with the concept of the Paul H. Ray and Sherry Ruth Anderson [8]. However, the obvious difference is that the criterion for the culture root project has not focused on ecological sustainability and quality of life.

Today’s regatta is used as a tool to promote community health, especially the rowers, who must abstain from alcohol during training and during the race. However, it is applicable for only during training and during the race of about 1 months. However, since the competition has changed into sport race, particularly in Nan which includes up to 10 racing courses despite there are other courses in Northern provinces such as Phichit, Phitsanulok, which the race is scheduled at the same time.

Also, these boat racing courses have the regatta policy on non-alcoholic drinks under the support of ThaiHealth. Thus, it is interesting to further examine whether the prolonged duration of the regatta has impact on the control of alcohol drinking among the group of rowers, and how the rowers are likely to induce the close people such a family members, relatives, neighbors to cut down on alcohol or not.

5. Acknowledgement

This article is part of the development of social process for community health promotion in the traditional boat racing in Nan, Thailand under grant support year 2013 from National Research Council of Thailand.

6. References

- [1] Siamnava. *Panel of Championships, Traditional long-boat races across the country*. January 10, 2013, Retrieved from <http://www.siamnava.com/>
- [2] Thailongboat. *Program Results*. January 10, 2013, Retrieved from <http://www.thailongboat.com/>
- [3] Look East. Lanna Boat Races. *Look East Magazine*. January 10, 2013, Retrieved from <http://www.lookeastmagazine.com/2012/10/lanna-boat-races/>
- [4] ThaiHealth. *Lesson Learned from Long boat Races without alcohol*. 2010, Stop Drink Network.
- [5] Saksee Polsantikun. *Rumored Boat Racing, City of Black Ivory*. *Art and Culture Magazine*, 2013, 34(9), pp. 42-49.
- [6] Documents and Archival Committee, the Steering Committee Organizing the Celebration to Honor His Majesty the King. *Culture, Historical Development, Identity and Local Wisdom of Nan*. 2013, Bangkok: The Fine Arts Department.
- [7] Paul H. Ray and Sherry Ruth Anderson. *The cultural creatives: how 50 million people are changing the world*. 2000, New York, N.Y.: Three Rivers Press.
- [8] Paul H. Ray. *The Potential for a New, Emerging Culture in the U.S*. January 10, 2013, Retrieved from <http://www.wisdomuniversity.org/>
- [9] Glen McCartney & Linda Osti. From Cultural Events to Sport Events: A Case Study of Cultural Authenticity in the Dragon Boat Races. *Journal of Sport & Tourism*, 2007, 12(1). pp.25-40.
- [10] Trevor H.B. and Atara Sivan. From Cultural Festival to International Sport – The Hong Kong Dragon Boat Races. *Journal of Sport & Tourism*, 2003, 8(1). pp.9-20.
- [11] Michael J. Zimmerman. *Intrinsic vs. Extrinsic Value*. January 10, 2013, Retrieved from <http://plato.stanford.edu/entries/value-intrinsic-extrinsic/>
- [12] The Revenue Department. What Assessable Income that is tax-exempted? January 10, 2013, Retrieved from <http://www.rd.go.th/publish/554.0.html>.

[13] Ministry of Culture. *The Cultural Roots Project*. 2013, No place: Office of the Permanent Secretary, Ministry of Culture.

ICSSAM-667
**An Anglophone Völkerkunde: the Origin of Ernst J. Eitel's Missionary
Ethnography**

Hung-yi Chien

National Taiwan Normal University

80026001L@ntnu.edu.tw

Abstract

Ernst J. Eitel (1838-1908) was a German protestant missionary. After his graduation from Tübingen Universität in the Kingdom of Württemberg, he joined the Basel Mission and arrived at Hong Kong in 1862. Eitel spent three years in a Basler mission station and transferred to the London Missionary Society in 1865. From 1867 to 1869, he wrote a series titled “Ethnographical Sketches of the Hakka Chinese” in English to report on the people to whom he was preaching. Several Basler missionaries followed Eitel to write their own observations of the Hakka, which became an academically acknowledged ethnic group because of their studies. However, Eitel’s “Ethnographical Sketches,” published in the 1860’s, is methodologically dissimilar to today’s ethnography; it belongs to an older tradition that is rarely acknowledged in contemporary research, which only recognizes the canonical studies published in the 1920’s as its scholarly ancestors. The German *Völkerkunde* and British ethnology were the two possible frameworks that Eitel could have adopted to write the “Ethnographical Sketches.” Although both disciplines shared the same scholarly scope, the *Völkerkunde*, which stemmed from the German late Enlightenment, was already a mature science in the mid-nineteenth century, whereas British ethnology was a newly institutionalized science of race. I compare Eitel’s Hakka ethnography with that of the German *Völkerkunde* and British ethnology and conclude that he adopted the former to describe the Hakka people. Moreover, the two German words *Völkerkunde* and *Ethnographie* were regarded as synonyms that designated the same discipline, and both could have been translated into English as “ethnography” in the nineteenth century. Therefore, Eitel’s “Ethnographical Sketches of the Hakka Chinese” should be understood as a description of the Hakka Chinese in English within the framework of the *Völkerkunde* tradition.

Keywords: Ernst J. Eitel (1838-1908), missionary ethnography, *Völkerkunde*, Hakka

ICSSAM-778

The Origin of “Geo-Body” and The Modern Area in Chiang Mai in the Reign of King Chulalongkorn and King Vajiravudh

Dome Kraipakorn

Srinakarinwirot University

domek.ra@hotmail.com

Abstract

This article aims to study the origin of “Geo-body” and the modernity in upper Lanna in the era of King Chulalongkorn and King Vajiravudh. The study finds out that, before Lanna was annexed to Siam, Buddhist beliefs, especially Trai-Phum Katha, that divided the world in 31 layers alongside with the “hierarchy of towns and cities” in Lanna, had set the influences on the origin of Geo-body. When the Elites of Lanna made contacts to the Westerners and several modernized buildings were then built in the center of the city, the previous sense of Geo-body was not much affected. However, during the time of King Chulalongkorn, Lanna was ultimately annexed to Siam, and Siam thus attempted to form a new Geo-body for Lanna. This new Geo-body was formed to fit as a part of Siam, which was created after the Western concept. The new Geo-body was also shaped by the settlement of Christian Missionaries in Chiang Mai. As a result, the city became a new area under a new Geo-body.

Introduction

Thongchai Winichakul, the renowned Thai historian, describes that Siam, or Thailand, has geographical shape looks like an ancient axe on the modern map. This presently known map is the production of the confrontation of the modern <Westerner’s> geographical knowledge and conception of state territoriality with indigenous knowledge. The triumph of modern knowledge enabled Siamese geo-body defining concurrently with Thai nation history construction in order to explain the background of Siam’s geo-body and to communicate the royal nationalism to the citizens (Thongchai 2008: 86-88).

This article applies Thongchai’s explanation to interpret a brief history of the geo-body of Lanna and to demonstrate that the geo-body of Lanna was defined by Siam state and British imperialist among the modernization trend in Chiang Mai, the center city of Lanna, rendered by various characters including Lanna’s kings, Royal Siamese Government, and Christian missionaries who operated in Lanna territory.

1. The Geo-body of Lanna Subsequent to the Arrival of British Imperialism and Royal Siam Government

Many scholars indicate that, before the arrival of modern geographical knowledge and mapping technology in Siam, people in ancient states of the Kingdom of Siam (refers to the presently used modern map drawn in King Chulalongkorn era), such as Sukhothai state and Ayutthaya kingdom, viewed the world as the Buddhist cosmology known as the Traiphum cosmology. This view describes the creatures are hierarchically classified and arranged by their merit. For humans, their living location is designated according to Buddhist priorities or the stories related which towns or cities are the Buddhist important places. This cosmological view also points that the territory of states in human world may be expanded and shrunk depend on power and prestige of the kings (see Thongchai 1994: 20-36; Thida 1994: 335-339).

In 1873, the signing of Royal Siam Government and Britain in the Treaty of Chiang Mai entailed Lanna transformed its status of tributary state, which Lanna rulers still played an important role on politics and government, into a part of Siam, which was under the Bangkok centralization. Before that year, to say, Lanna kingdom was placed on the Traiphum cosmology. Sarassawadee Ongsakul, the expert of Lanna history, states that the ancient Lanna had ambiguous boundary. When the kingdom developed, its power was also expanded extensively and had many vassal states. But when the Lanna became weak, those vassals would become independent state or shift to subordinate to other powerful states (Sarassawadee 2005: 13).

An ancient Lanna's historiography, called *Tamman Phrachao Leab Lok*, displays that Lanna prioritized towns in its mandala in order of importance of the Buddhist sites in each town (Thianchai 2003). The influence of Buddhist beliefs toward space perception and management of Lanna kingdom can be also seen in the explanation of establishment and decline of towns in the kingdom. For instance, the establishment of Mueang Hariphunchai or Lamphun describing in Chamathewiwongsa's *phongsawadarn* of Mueang Hariphunchai that the city was established according to prophecy of the Lard Buddha saying that after his decease, a town would be settled in such region (Ruang Chamathewiwongsa *Phongsawadarn of Mueang Hariphunchai* 2011: 1-52). And the establishment of Mueang Suwannakomkham or Mueang Chiang San describing in *Tamnan Suwannakomkham* relates the origin of the town according to Buddhist beliefs about the town establishment after the holocaust and great flood disaster. The story also describes that Mueang Suwannakomkham collapse because the ruler had deceived a moral man. As a result, the town was destroyed by the King of Naga (Phiset 2012: 42-44).

The turning point of Lanna advanced when Britain vanquished Burma in the first Anglo-Burmese War in 1826. This event allowed Britain to expand the boundary into Shan State and to attempt the territorial claims in the five Shan Mueang (Mueang Hang, Mueang Sat, Mueang Tuan, Mueang Tha, and Mueang Chuat or Chawat) and the Eastern Karenni Mueang which were the peripheral area of Lanna. Furthermore, there were disputes on the benefit of forest that located along the border of Lanna-Burma between British Subjects and Lanna's elites, as well as the bandit struggles in the Chiang Mai – the tributary stat of Siam – and British Burma boundary. Therefore, Britain desired Siam to finely demarcate the boundary of Lanna and to solve the occurred problems. This resulted in the signing of the Treaty of Chiang Mai between the Royal Siam Government and Britain in 1873. When the Treaty was signed, the Royal Siam Government sent the commissioner of three regions – Chiangmai, Lampang, and Lamphun – to administer and suggested Lanna's king to comply

with the Treaty of Chiang Mai (Sarassawadee 2005: 167-173, 179-183; Asa 2006: 43-55).

MAP 1. MAP OF LAN NA



Picture 1: Map of Lanna (Sarassawadee 2005: xvi)

hat is to say, the Treaty of Chiangmai signing between Siam and Britain was the beginning of certain boundary mapping of Lanna according to Western geography. In 1874, the Royal Siam Government and British India had officially signed the agreement to mark the boundary between Lanna and Tenasserim Province before Siam and Britain attempted to repeat mapping the boundary mark between Northern Lanna and Upper Burma in 1885,

because Britain expanded its power after the victory over Ava. For that reason, both Siam and Britain inquired local officers about the boundary of the region and/or requested the document affirming the boundary of each community in the frontier between Lanna and

Upper Burma. Most answers indicated that the local people did not give precedence over the certain boundary as concerned in modern geography (Thongchai 1994: 73-74).

A fixed geo-body form of Lanna had not been defined according to modern state conception until the late 1880s to the early 1890s, when the Royal Siam Government and Britain had agreed to survey their boundaries in order to prevent the potential territorial dispute between Siam's Lanna and British Burma. Siam sent Phra Wipakphuwadon (James F. McCarthy), the director of Royal Survey Department, and his team to survey the boundary and to draw a map of the Kingdom of Siam in the five Shan Mueang regions and the Eastern Karenni Mueang, as well as Mueang Singha and Mueang Chiang Kang, located close to Mueang Nan. The Siamese survey team did not only survey the boundary, but they also persuaded the Siam Subjects to convince the nearby cities to become under Siamese rule. Britain used the similar method to convince small towns to be under British rule (see McCarthy 1902; Nuaon 2010: 180-185).

It is noteworthy that the certain Lanna geo-body defining was simultaneous with the power expanding of Siam in Lanna which had been gradually rendered for almost two decades, since the Treaty of Chiangmai in 1873. The geo-body creation became successful when Siam completely annexed Lanna into its rule. Siam also used the Thesaphiban System of Monthon Administration in 1884 and had continuously improved for 49 years of applying this system (see Sarassawadee 2005: 179-213). Additionally, another factor that affected the Lanna geo-body defining, not less than British influence, was the expansive power of France in upper Mekhong valley. This entailed Britain and Siam had to hasten their boundaries mapping and Siam had to give territorial rights on the right hand side of Mekhong River, in Mueang Nan, to France in 1903 (see Asa 2006: 48-54; Sarassawadee 2005: 173-178; Thongchai 1994: 113-127).

2. The Modern Territorial Conception in Lanna during the Geo-Body Creation

In this point, I would like to argue that all the 50 years of Lanna geo-body formation, it was created among the confrontation between Siam and British imperialism. Both of them desired to define the boundary of Lanna to be their required size. The area inside Lanna boundary was not distinctively stable. It was still a place where Lanna's kings, Royal Siam Government, and Christian missionaries contended for modernizing in order to dispose their status in Lanna society.

This argument is what I obtained by studying many sources of information. The modern territorial conception in Lanna can be seen in Chiang Mai, the administrative city of the Kingdom of Lanna. It is found that King Inthawichayanon, the seventh Lanna's king from Kawala royal family, who succeeded to the throne in the late era of Siamese King Mongkut

until the beginning of King Chulaongkorn, ordered to build Khum Luang or King's Palace in the center of Chiang Mai. The palace was built in integrated style of Chinese-Lanna-European architecture and decorated with European-style furniture. The significance of this modern-built palace of King Inthawichayanon might be the representation of more fashionable and outstanding than other aristocrats of Lanna who were still living in traditional Lanna-style architecture Khum or Palace.¹

Meanwhile, after Lanna was quite completely annexed to Siam, the Royal Siam Government administered Lanna in the form of *internal colonialism*. The Government of Bangkok would control the local colonies by the Royal Siam Government order. The important or sacred places of indigenous beliefs were changed because the Government said it was appropriate (see Thongchai; Suthep). In the case of Lanna, the Royal Siam government changed the Khum Luang of Lanna's kings to be a government official place, such as Monthon Phayap office building and the prison. This transformation of center area of the city into modern official places of the Government of Bangkok was not stated in Yonok Chronicle, the historiography written by Siamese elites to construct "Thai nationhood" history (Dome 2013-2014).



83. The Chiang Mai women's prison, built on the site of Khum Wiang Kaeo, which used to be the main royal residence of the Mangrai dynasty. (PUA, c. 1910)

Picture 2 The Chiang Mai Woman's Prison (Sarassawadee 2005: 203)

Besides the official places building in Lanna area, the Royal Siam Government, in the reign of King Chulalongkorn, also built another edifice, which played an important role to convert

¹ The brief story of Khum Luang of Lanna's kings is explained in Dome 2013-2014: 10-18. For the issue of modern Khum Luang construction of King Inthawichayanon as the representation of more fashionable and outstanding than other Lanna's aristocrats is argued by adapting the identity conception of modern Siamese elites in Thongchai 2000 and Peleggi 2012.

Lanna, more extensively than the time it was not annexed to Siam, into modern capitalist economy system, the Northern railway of Bangkok-Chiang Mai (see Sarassawadee 2005: 235-247; Wasin 1999: 75-86).

In addition to Lanna's kings and the Government of Bangkok, the Western Christian missionaries who operated services in Lanna also played a role in modern territoriality conception. In order to exchange with the Royal Siam Government support, American missionaries in Lanna built modernized schools and hospitals as sources to pass on the Western knowledge to Lanna citizens, simultaneously with Thai language education that could be used as a cultural instrument to annex Lanna to Siam. In this moment, American missionaries built the "Chiang Mai Gymkhana Club" as a recreational area for Westerners in Chiang Mai. This club was regarded for European elites who were "civilized men" and some nobles of Lanna and Siam who were permitted, from the club committee, as VIP members. In other words, the Chiang Mai Gymkhana Club was the special place for "civilized men" only. It was not a place for ordinary Lanna's or Siamese citizens who were still called as barbarians (Chali 2012).

Moreover, it has to be said that the modern territorial conception in Lanna, created by American missionaries, did not only occur in the center of Chiang Mai, but it was spread in many areas. As it was found that, American missionaries also established the Christian Community in Mueang Nan and Mueang Chiang Kam.²

Epilogue

When the geo-body of Lanna was completely created in the reign of King Chulalongkorn, King Vajiravudh, King Chulalongkorn's son who succeeded the throne, continued the modernization in Lanna. It was found that, in King Vajiravudh's reign, the Royal Siam Government built the road connected Lam Pang – Chiang Rai – Mae Sai to facilitate the transportation, among the environment of mountain and forest, inside Lanna territory (Phra Khammawimolmoli 2005). This case was regarded as the landscape renovation of Lanna, to be more modernized and advanced from what the Government of King Chulalongkorn had initiated, as the roads and bridges are the elements of a civilized city.

² Mueng Chiang Kam is situated between Mueang Nan and Chiang Rai and shares the frontier with Laos.

Bibliography

- Asa Kumpha. 2006. **Lanna and the Shan States: the Changes under Centralization Process and the Colonial Age at the end of 19-20 Centuries**. Master of Arts Thesis (regional studies). Chiang Mai University.
- Chali Aeupaiboon. 2012. สโมสรนิยมคานา: บทสะท้อนของอำนาจ ความศิวิไลซ์และความเป็นชนชั้นนำโพ้นทะเลของมิชชันนารีในเชียงใหม่ระหว่าง พ.ศ. 2441-2484. **Journal of Social Sciences, Walailuk University** 5:5 (December): 171-205.
- Dhida Saraya. 1994. **The Ancient State in Mainland Southeast Asia: The Origin and Development**. Bangkok: Mueangboran.
- Dome Kraipakorn. 2013-2014. King of Chiang Mai's "Khum Luang"/ "Wiang Khaew" in the era of King Chulalongkorn: The Untold Story in Siam-Chronicle and traces founded in other sources. **NAJUA: History of Architecture and Thai Architecture** Volume 10 (September-August): 10-25.
- McCarthy, James. 1902. **Surveying and Exploring in Siam**. London: John Murray.
- Nuaon Khrouthongkhieo. **The Siamese State and Lanna, 1874-1933**. Ph.D. Thesis (History). Chulalongkorn University.
- Peleggi, Maurizio. 2002. **Lord of Things: The Fashioning of the Siamese Monarchy's Modern Image**. Honolulu: University of Hawaii Press.
- Phiset Chiachanpong. 2012. **Tamnan**. Bangkok: Matichon.
- Phra Dhammawimolmoli. 2005. บันทึกความทรงจำ การสร้างถนน-สะพานสายลำปาง-เชียงใหม่-แม่สายของขุนขบวน บกคำริห์. Payao: Kobkamkarnpim.
- Prasit Pongudom. 2007. **The American Missionaries and the Formation of Christian Communities in Lanna During the Social Transformation Period, 1867-1933**. Ph.D. Thesis (History). Chulalongkorn University.
- Sarassawadee Ongsakul. 2005. **History of Lanna**. Translated by Chitraporn Tanratanakul. Chiang Mai: Silkworm Books.
- Thongchai Winichukul. 1994. **Siam Mapped A History of the Geo-Body of A Nation**. Hawaii: University of Hawaii Press.
- Thongchai Winichukul. 2000. "The Other Within: Travel and Ethno-Spatial Differentiation of Siamse Subject 1885-1910." in Turton, Andrew (editor). **Civility and Savagery: Social Identity in Tai States**, pp. 38-62. London: Curzon Press.
- Thongchai Winichukul. 2008. "Geo-Body and History." **Fah Daew Kan** 6:3 (July-September): 84-129.

ICSSAM-627

Culture of slam people in Dhaka City: From Poverty to Terrorism

***Mohammad Bashir Mia Khadem**

Department of Public Administration, University of Dhaka, Dhaka-1000, Bangladesh

bashirkhadem2012@gmail.com

Abstract

Bangladesh is a tiny middle income country of South Asia. About half of the people of this country live below the poverty line. Among them, there are so many people who have no place to live in, no food to consume, and no garment to wear on. Most of them live hand to mouth. The Dhaka city is the capital city of Bangladesh. The total population of Dhaka City is 20 million. Here it is to be noted that 10% among them cannot afford two square meals in a day. So, these hungry folks are being involved in different sorts of criminal activities to satisfy their hunger. Among the crimes, there are pilferage, hijacking, snatching goods, taking and selling drugs and other contrabands. Some of them are committing grave crimes like-murder, bank robbery, contract killing and drug business. More than four hundred thousand people live in 149 slams in Dhaka city and most of them have no visible income source. But my research finds that many of the slam dwellers possess modern home appliances like television, refrigerator, and telephone facilities and so on. It indicates that they are involving such type of work which is unknown to the society. On the other hand, my research further shows that the surroundings of a slam are 65% more prone to criminal activities. If we could address their basic needs and make them free from the clutch of poverty then this city would be a safer place to live in, public security would be more fortified and we would be enriched as a nation.

Keyword: Poverty, Terrorism, Culture of Slum

Objective of the Study:

- To focus overall problems and physical condition of slum areas.
- To understand the real life of the slum dwellers.
- To identify the elements of 'culture of poverty' in slum areas
- To portrait a sketch of slum poverty behind terrorism.
- To assess the extent of relationship between culture of poverty and terrorism
- Recommend the state initiatives to curb the terrorist's activities by slum dwellers.

Data and Method:

This study has been conducted on the basis of primary and secondary data. The secondary sources has been used to collect the data regarding the slums, its areas, size of population, ratio of man and women and other demographic information. Perusal of secondary materials includes newspaper reports, journals, books and magazines. On the other hand information relating to living condition, poverty status, type of crime and criminal activities, and involvement in terrorist activities has been collected from primary sources. The prominent slums in Dhaka city are Agargaon slum, Tejgaon slum, Gandaria Slum, kawran Bazar Slum, Zigatola slum, Pallabi slum, Mohammadpur slum and lalbagh slum. Tejgaon slum and Agargaon slum is one of the oldest and largest slum among them. These two slums have been selected to collect data and survey area. About 15000 people live around Agargaon and Tejgaon areas. I have surveyed 200 slum people around Tejgaon and Agargaon slum area. Data have been collected through personal interviews. Some information has been collected by formal and informal discussion and some are collected from home visit and observation.

Poverty and Terrorism:

Poverty and Terrorism, these two terms are very much related to each other. If we consider it in global perspective, we find that only over populated and poverty stricken countries like: Somalia, Afghanistan, Indonesia and Pakistan have the extreme vale of terrorism. Most of the people of these countries live hand to mouth. The youth folks of these countries are unemployed, pessimistic and irritated and that's why very destructive in nature. A large number of Bangladeshi youth are also unemployed, poor and pessimistic. So, they are being involved in various criminal activities. Unemployment has made them mentally sick.

Unemployed people are involves in theft, drug supply, robbery, mugging, extortion, child trafficking and even they don't mind in committing crimes like kidnapping or even killing anybody. Income disparity is huge in Bangladesh. Rural people throng in the cities for a better life, being helpless; most of them start to live in slams. Tragic story of their lives start to pull rickshaws, or some of them do low paid jobs and among them there is a group who does the business of contraband goods and another get themselves involved in terrorist activities. There is another group of criminals who belong to 15-30 years age group in Dhaka slams.

Being unemployed, they get themselves involved in any sort of criminal activities. They hijack, grab land and houses, snatch Tender box, drug dwelling, internal violence, mugging, women and child trafficking and even can kill anybody for the sake of money. Later on, in their lives most of them evolve as terrorists. So, poverty plays a pivotal role in this respect. But we cannot blame poverty solely for terrorism, as we saw Osama-bin-Laden came of a well off family but he was a terrorist.

But, in Bangladesh poverty plays a great role, it works as a leading factor for terrorism. Hunger, want, poverty compel someone to be a terrorist rather than doctrine here in Bangladesh.

Dhaka City and the Slum:

Dhaka city is located at the centre of Bangladesh. It is a place between 24⁰ 40' N to 24⁰ 54' N Latitudes and 90⁰ 20' E to 90 30' E longitudes (Shaw & Sharma: 2011: 110). Dhaka is the capital and the largest city of Bangladesh. It sprawls across a plain spreading from the eastern bank of the Buriganga River, in the centre of the country (Streissguth: 2008:18). It is an over populated city. About 20 million people live in this city, so this tiny city cannot bear the burden of this mammoth population of 20 million. About 50 thousand people live in per square kilometer which is making it one of the unlivable cities in the world.

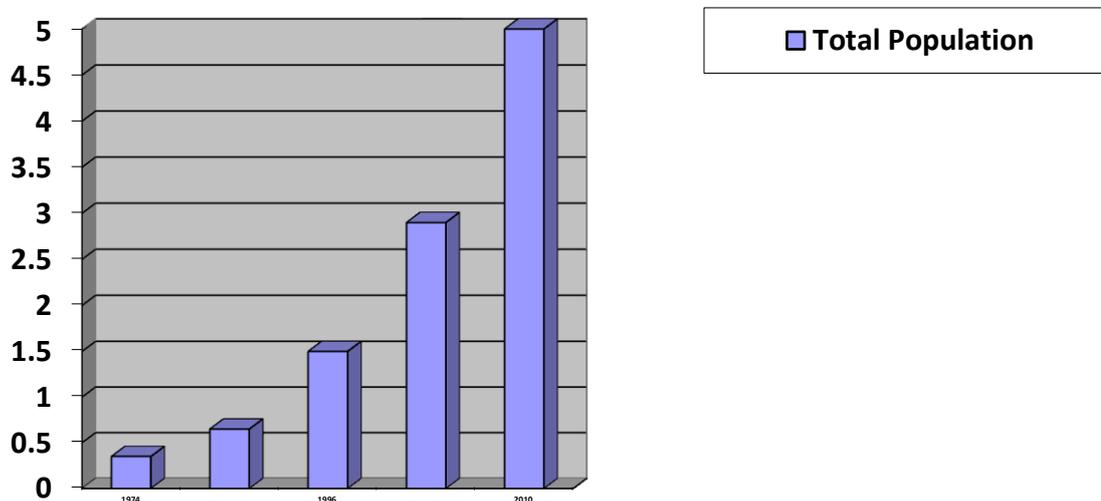
Except for a few oases like Gulshan, Dhanmondi, Baridhara, Uttara, Banani and the Cantonment, the rest of Dhaka gave the impression of slums and near slums. With uncollected and rotting garbage all over, Cave-like thatched dwellings on the roadside, railway lines flanked by squatter settlements, brackish water bodies, streets with gaping holes and no street lights, open drains and sewerage lines with malodorous spillovers often running into the thoroughfares, stagnant ponds at prominent locations filled with water hyacinth and waste; most of Dhaka City indeed offers a most dismal spectacle (Siddiqui: 2010:15). Clinard has described slum as “chaotically occupied, unsystematically developed and generally neglected, over populated and over crowded with ill repaired and neglected structures, insufficiently equipped with communication and physical comforts and inadequately supplied with social services and welfare to deal with needs and problems of families who are the victims of biological, psychological and social consequences of physical and social environments (Clinard: 1966: 00). The United Nations agency UN-HABITAT defines a slum as “a heavily populated urban area characterized by substandard housing and squalor. They are commonly seen as “breeding grounds “for social problems such as crime, drug addiction, alcoholism, high rates of mental illness and suicide (Jordan : 2008 : 27).

Majority of those living in slums are very poor and nearly 80 percent of the households have income below the upper poverty line. More than 50 percent of the slum dwellers earn less than half of the poverty line income while about 25 percent of them are in extreme poverty and destitution. More than 90 percent of the income earners are engaged in informal sector activities. They work mainly as rickshaw-pullers, transport worker, hawkers, day labourers, small factory workers; construction workers etc. (IMF: 2013: 213). The slum dwelling people have no land on their own. They live on the mercy of the government, landlords, slum lords, musclemen, extortionist and terrorist. (Gupta: 2005: 18)

The condition of slums is the worst in Bangladesh. According to the survey of the centre for urban studies in 2005, there are 3007 slums in Dhaka City with very highest population.

Their standard of living is the lowest with minimum access to the fundamental rights of the state (Islam: 2012: 1). CUS in its survey of 2005 found 4300 slums and squatter settlements and about 2.8 million slum dwellers in Dhaka City Corporation area (CUS: 2005:48). After 2005, it has been observed that the number of population in slum area increased in a geometric rate. It has been double within 5 years. The total number of population in slum area has been shown by the following diagram:

Figure 1: Slum Inhabitants in Dhaka



Source: (Anwer: 2012: 13)

In the metropolitan Dhaka, Slums of various descriptions grow up on vacant public lands, along railway tracks and around bazaars and natural lacks. They proliferate by the day, because of the ever worsening poverty level of the rural as well as urban poor. No real survey sums to have been made of the city's slums. It is estimated that about 50 percent dwellers of Dhaka city live in slums (Marinos : 1997 : 1491). The population density in slums is roughly 200 times greater and given that nearby all slum are mainly single-story structures, the figure is shocking. Approximately 80% of the slum population in Dhaka lives in dense slum clusters of between 500 and 1500 person per acre with more than 90% of slum dwellers sharing a single room with three or more people (Islam et. al 2006 : 58).

Slum and the Deviation of Culture:

Cultural harmony is a tradition of Bangladesh. Muslims, Christians, Buddhists, Hindus and other communities live side by side here. The Muslim comprises the majority here; apart from some individual religious rituals, most of the cultural programs are commonly performed. Among these common programs, there are some salient ones, like: 21st of February which is observed as International Mother Language Day. On this very day in 1952 some valiant students sacrificed their lives for the sake of their mother tongue. On the other hand 16th December is observed as Victory Day; Bangladesh got independence this day in 1971 from Pakistan. First day of Bangla new year “Naboborsho” is celebrated most pompously all sects of people celebrate these above quoted days.

But, this culture of slum dwellers is different from that of city dwellers (Rathor: 2003: 14). Actually, the culture lived with by the people in slum areas is different from the main stream culture of urban society in terms of income and consumption patterns, educational level, life style etc. The slum culture is unique in the sense that the influence of mainstream culture or it is a very minimal. As a consequence, the slum culture retains a great deal of continuity from its traditional mooring (Das: 2000: 7). Slum dwellers are often treated as untouchables or as uncultured people by the other sections of the urban population. The reason for this attitude may be due to many social factors, like the caste system (Bel: 2007: 323). This slum culture is seen by sociologists and criminologists as sub-culture or lower class culture. The lower class culture in slumps provides patterned solution or adaption to such problems as broken families, chronic or seasonal unemployment, serious physical and mental illness, inadequate and crowded housing, limited education, minority group status, such value variations as serial mating, living for the day and not planning for the future, trust in fate or luck to solve problems, emphasis often in performance to family work as compared to school ties and the poor culture having aggressive or physical (Wal, 1999 : 158). The slum people in Dhaka City are deviate of observing the mainstreaming culture of city dwellers. Percentage of Slum dwellers observing these days:

Programs	Date	Actively Participate	Don't Participate	Only Heard	Never Heard	Total
Independence Day	26 th March	26	55	50	69	200
Victory Day	16 th December	49	57	41	53	200
Mother language Day	21th February	13	39	34	114	200
Bengali New Year	14 th April	119	52	18	11	200

If we scrutinize the above information, then we get that about half of the population do not know about the programs observed by the state. So, they lag far behind from cultural main stream. As they lag behind from that of a healthy culture, they have developed their own culture. Where they only think about making people fool and enmeshed in their trap. They are deprived of all fundamental needs. So, they have a different culture, this culture may be termed as culture of poverty that leads them to dangerous way of life.

The Sub-Culture of Poverty: A Way of life

Culture is a real thing which determines individual behavior and shaped its own development is to be guilty of the fallacy of reifying an abstraction and endowing it with causal influence over the very thing from which it was originally abstracted (Hanson, 2004: 2). Of the many aspect of slum life, Lewis points out that in a “culture of poverty “, the people are disinterested, removed and apathetic towards all the problems of the outside world (Raj : 1940 :244). According to Oscar Lewis It is a “reaction of the poor to their marginal position in a class-stratified and highly individualistic society” (Lewis: 1959 :). It applies only to those who are at the bottom of the socio-economic scale, the poorest workers. The Conspicuous features of the culture of poverty are the low wage and chronic unemployment and under employment which leads to low income, Lack of property ownership, absence of savings, absence of food reserve at home, and a chronic shortage of cash (Mohanty & Mohanty : 2005 :44).

The Subculture of poverty can be defined as a way of life of poor people (I think of it in terms of families rather than individuals) who lives in urban or rural slums in countries with a cash economy, wage labor, production for profit -in short a capitalist system. The core characteristic of this sub-culture is the lack of effective participation in the major institutions of the large society and the absences of membership in any organization beyond that of the bilateral nuclear and extended family and the local slum settlement (Rigdon: 1988: 255). The culture of poverty is both on an adaption and a reaction of the poor to their marginal position in a class-stratified, highly individuated, capitalistic society. It represent an effort to cope with feeling of hopelessness and despair which develop from the realization of the improbability of achieving success in terms of the values and goals of the larger society. The culture of poverty has...its own structure and rationale as a way of life which is passed down from generation to generation among family lines (Greaves: 1971: 11).

Culture of Poverty and Terrorism:

The slum people work in the transport, industry, factory, domestic, utility service, business establishments, small shops, supermarkets, patty trading etc. sectors in the city area (Rajib shaw eds. : 2009 : 326).

The slum dwellers usually fail to avail the various public and private facilities such as health services, schooling playgrounds and park. There are frequent occurrences of unemployment and low wages among the slum-dwellers (Gupta: 1987: 110). They have no fix, secured, permanent and settled job. A group of people are unemployed and among employed are mostly low paid and Clerical service provider. Some of the people are seasonal employed. They don't get or afford even a single basic need to living. They are deprived of food, shelter, medication, education and entertainment. I'm trying to show what I got from my survey about their occupation:

Occupation	Male	Female	Number	Percentage
Rickshaw Pullers	38	-	38	19
Day laborers	10	16	26	13
Small shops	09	03	12	06
Supermarket	05	09	14	07
Transport	06	-	06	03
Maid Servant	-	32	32	16
Garments factory	12	30	42	21
Driving	06	-	06	03
Street Pedding	03	01	04	02
Cleaner	-	02	02	01
Unemployed	11	07	18	09
Total	100	100	200	100

From above table we can see about 09% people have no visible income. Notwithstanding that, they lead their lives with families. To lead their lives they have to get themselves involved in various unsocial, unethical and terrorist activities. Some of them do the business of illegal drugs and other contrabands.

From Poverty to Terrorism:

The poor have time but no money and the rich have money but no time (Brand: 2010: 42). The slum dwellers were portrayed at best as apathetic, hopeless, and disinclined to organize and participate in communal problem solving, as worst as ne'er-do-wells, violent, and crime-prone (Eckstein : 2001 : 331). Many slum dwellers are living in appalling conditions in slums that are centres of crime, malnutrition, poverty and despair (Nagle: 2004:43). There is no way out to decline the fact that poverty and slum are vehemently related to each other.

This poverty is so acute to the slum people that they don't have the purchasing power to afford two squire meals to day. So, they are getting themselves involved in unlawful activities like drugs dealing, prostitution, hijacking, kidnapping, contract killing and many other formidable activities for their livelihood. Many of them are hired for political procession.

They are doing all these only for poverty. Sort of jobs they do for their survival are - Pilferage:

Stealing is one of their prime jobs. Stating occurs regularly around slum areas. Different types of goods are stolen i.e. shirt, shoes, watch, wallet, vase, lamp post, food items from shops, mobile phone, camera, television, laptop and the list goes on. They sell these items at a very cheap rate. The following findings are found asking slum dwellers:

Question	Affirmative Answer		Negative Answer	
	Number	Percentage	Number	Percentage
Are the slum dwellers associated with stealing goods? What do you think?	116	58	84	42
Most of the goods used in the slums are stolen goods. What's your comment?	78	39	122	61

Snatching:

Snatching is one of the main sources of income of the slum dwellers. Most of the dwellers around Tejgaon railway region live on snatching. Tejgaon slum is stretched about three kilometers on both sides of the railway track. Trains pass very slowly on this track, because of the decrepit condition of the track slum people take this opportunity and snatch passenger's belonging who sit by windows. As the train being on running, passengers can't do anything. I have seen a lot of these goods in slums. The following information is taken by asking slum dwellers:

Question	Does snatching occur frequently in your locality?
Answer	<input type="checkbox"/> Yes = 85.5% <input type="checkbox"/> No = 14.5%
Question	Do you think slum dwellers are involved in snatching is your locality?
Answer	<input type="checkbox"/> Yes = 36.5% <input type="checkbox"/> No 63.5%

Illegal Drugs Business:

This business is also a pretty good source of income of the dwellers. There are some guys in the slums who are called 'Drug Emperor' who earn thousands of dollars from this heinous business. Major drug are Phensidyl, Heroine, Pathedine, Yaba and so many drugs items are dealt on by them. They sell and take drugs simultaneously. Taking drug, they do so many unlawful activities. Asking about this, I got the following information:

Question	Have you noticed any illegal drug business in your locality?				
Answer	Yes	Frequently	Sometimes	Rare	No
Percentage	13%	45%	35%	23%	14%

Use of Coercion:

Logically, slum dwellers are extremely poor. So, they are duped very easily as they want to be duped. As, they cannot afford two or three square meals, so they go hired in political programs, like taking part in procession, breaking the glasses of vehicles, torching private cars and intimidating public. One person can do all these for only 100 taka (US \$ 1.25). They get paid according to their capabilities and skills. We can take a look at the following about this—

No.	Age Group	Rent (Tk.) for one day	Demand by the Parties	Main Task
1.	5-10	50	Average	Breaking Car, Taking possession and demonstration of power.
2.	10-15	150	High	
3.	15-30	200	Very High	
4.	30-40	150	High	
5.	40+	150	Low	

If we probe the above information, we get 15-30 years group is most attractive among all others. Because this group is more fit to do accomplish the job.

Hijack:

It is very risky and dangerous to go around slum area (Karwan Bazar and Agargaon) after 11 p.m. Slum criminal oblige drivers to stop their vehicles, hijack their belongings and flee in a moment. Nobody dares to chase them. Sometimes, they put logs on road making the cars and buses stop and loot passenger's valuables.

Arson:

Slum dwellers are hired during political turmoil and stand off for torching and smashing important buildings, cars, buses, trucks, trains even rickshaws. I asked some citizens about it.

Question	If you ever witnessed car-mashing on road?
Ans.	<input type="checkbox"/> Yes -70% <input type="checkbox"/> No- 10%
Question	Have you ever been hired during Hartal days?
Answer	<input type="checkbox"/> Yes – 85% <input type="checkbox"/> No- 15%

Assault:

They assault on helpless people around slums for robbing their belongings. They demand money from small road-side vendors. If someone declines to give money, they physically attack them, loot their goods and threaten them to stop their business. I have come across some of the road side vendor at Karwan Bazar and Agargaon areas who have been oppressed by slum thugs.

Murder:

I have heard from many slum dwellers that there are a group of heinous criminals who are higher as contract killers. I asked a few dwellers about this but they did not help me out a bit about this. On 9 February, 2014 police found a dead body beside the railway line of Agargaon Slum. Police doubted the murderer to be from the slum and arrested two criminals from the slum. Notorious terrorist of all time named Kala Jahangir was also from one of these slums.

Bombing:

The proportion of young people is particularly high in slum areas, where employment opportunities are limited. This combination of youth and poverty can lead to high crime rates (Nallari & Griffith: 2011: 345). During the end of 2013, the slum young has been used for bombing in front of High court, Secretariat, Prime minister's Office, Parliament, Buses, CNGs and public places. Most of the bomb bearers are from 10 to 20 years young slum child.

Kidnapping:

Some delinquents in slum area are involved in kidnapping of school going girls and boys. After kidnapped, they demand a lot of money from the parents of victims. If the parents failed to pay the money they kill the victim. Sammi Akhter, a school going girls of class seven. She was kidnapped on 24th January, 2014 near the Karwanbazar slum. The police arrested Arman and Sohel, being involve in the kidnapped case. They kept the girls for 10 days and rapped by gang. After ten days police recover the death body of Sammi Akter from Savar Jheel and arrested Arman and Sohel for this occurrence. Thousands of examples can be made in these regard.

Conclusion:

It was suspected that all slums were the abode of crime, delinquency, prostitution and other anti-social and criminal activities which not only disturbed the normal life of the slum inhabitants but also of the surrounding residential areas. In the slums, there was absence of schools, voluntary social welfare agencies, drinking water, playground, drainage, sewerage, gas, electricity, latrines, medical facility, approach roads and arrangement for garbage and

rubbish disposal (Rahman : 2001 : 117). The slum dwellers are not covered by government electric, gas and sewerage facilities (Rahman: 2007: 160). The government attempted to bulldoze slums. “Bulldozing slums was not a solution to the problems of urban life...forcible eviction without relocation simply shifted poor people from one set of slums to another.” Fredrick Temple, the World Bank’s senior official in Bangladesh said (Bowen & Pallister: 2001: 241).

Poverty is a way of life of these people. It is true that poverty is not only one reason for being terrorism and terrorist activities in the slum area of Dhaka City but it is the leading factor in this regard. Most of the people in slum area earn such amount of money that they cannot afford two meals in a day. For the survival of their life they are being involved in anti-social, criminal and terrorist activities around their locality or the political leader used them as a human force by hiring them in political conflict and strike. About 40 percent of the total populations of slum area are children. These children are deprived of their very basic entitlements to life- shelter, food, clothing, education and medical care. On the traffic islands near and around the traffic signal points, poor children many of whom are utterly naked with no cloth and no shoes are very often seen playing (Sing. et.al:2008: 215). The political leader, influential group, terrorist, extremist or other criminal groups used them as bomb bearers, car breaker, and actors in violence etc. So, most of the child in the slum area are involved with delinquent behavior.

Bureaucrats and businessmen earn myriad sum of money and live in an aristocratic area of the city. On the other hand, mediocre middle class, most of whom are government service holders and small business men. But majority of the people are extreme poor and ultra poor or absolute poor. They are the inhabitant of the slum area. They can do anything they like for their living. More than 10% of ultra poor people have no visible income. Poverty is the centre of their culture and they cannot afford any modern amenities like healthy living place, sanitary latrine, good garments and a minimal education. It seems that they are an isolated sect in the city. These isolated have to be incorporated in the mainstreaming society, need to massive reform and poverty have to be address specially. The Government, NGOs, Social Worker, Media, Professionals, Businessmen, Political leader and other influential group have to play a great role in these reform, restructuring, reorganization process.

References

- Bel, Bernard, (2007), *The social and the Symbolic*, Vol.-II, SAGE Publication Pvt. Ltd.
- Bowen, A., & Pallister, J., (2001), *Advanced Geography for AQA Specification A*, Heinemann.
- Brand, Stewart, (2010), *Whole Earth Discipline*, Atlantic Books Ltd

- Clinard, M.B., (1966), *Slums and Community Development*, The Free Press, New York.
- CUS, (2005), *Bulletin* 48
- Das, Tulshi Kumar, (2000), *Social Structure and Cultural Practices in Slums*, Northern Book Centre, New Delhi, Best Printers, Delhi
- Eckstein, S. (ed.) (2001), *Power and Popular Protest: Latin American Social Movement*, University of California Press.
- Greaves, Thomas E., (1971), *Is There a Culture of Poverty?*
- Gupta, Kulwart Rai, (2005), *Urban Development Debates in the New Millennium*, Vol-4, Atlantic Publishers and Distributors
- Gupta, S. P., (1987), *Structural Dimensions of Poverty in India*, Mittal Publication.
- Hanson, F.A., (2004), *Meaning of Culture*, Psychology Press, Cited from Bidrey, 1994.
- IMF, (2013), *Bangladesh: Poverty Reduction Strategy Paper*, IMF, Asia and Pacific Department, IMF.
- Islam, A., (2012) *Crimes at the Urban Slum*, Lambert Academic Publishing (LAP).
- Islam et al., (2006), *Climate Change Adaption Actions in Bangladesh*, Springer.
- Jordan, David, (2008), *Apocalypse: Living Dangerously*, Chipmunka Publishing.
- Lewis, Oscar, (1959) *Five Families*, Basic Books, New York.
- Marinos, Paul G., (1997), *Engineering Geology and the Environment*, Vol-2, CRC Press
- Mohanty & Mohorty, (2005), *Slum in India*, APH Publishing Corporation
- Nagle, G., (2004), *Course mate for OCR A GCSE Geography*, Nelson Thornes
- Nallari, R., & Griffith, B., (2011), *Understanding Growth and Poverty: Theory, Policy and Empirics*, World Bank Publications.
- Rahman, H., (2001) *Nayaya Sayyad Murtaja Fazal Ali Our Hindu Vidhi*, Northern Book Centre
- Rahman, S., (2007), *Reproduction of Urban Classes in Bangladesh in the context of Globalization*, Pro-Quest
- Rao, Ratna N., (1990), *Social Organization in an Indian slum*, Mittal Publication, New Delhi.
- Rathor, A., (2003) *Slum Dwellers: Curse on Development*, Sarup & Sons, New Delhi
- Rigdon, Susan M., (1988), *The Culture Facade: Art, Science and Politics in the work of Oscar Lewis*, University of Illinois Press.
- Shaw, R., (eds.), (2009), *Urban Risk Reduction: An Asian Perspective*, Emerald Group Publishing.
- Shaw, R., & Sharma, A., (2011), *Climate and Disaster Resilience in cities*, Emerald Group publishing
- Siddiqui, K., et al., (2010), *Social Formation in Dhaka, 1985-2005: A Longitudinal Study of Society in a Third World Megacity*, Ashgate Publishing Ltd.
- Singh, A., et. al. (2008), *Governance and Poverty Reduction: Beyond the Case of Best Practices*, PHI Learning Pvt. Ltd.

Streissguth, T., (2008), Bangladesh in Pictures, Twenty-First Century Books

Wal, S., (1999), International Encyclopedia of child Development: Priorities for 21st Century,
Vol-5, Sarup & Sons, New Delhi

ICSSAM-934
Agro-Colonialism in the Less Developed World

Da Eun Lee^{a*}, Dr. Steven Shirley^b

^aKeimyung Adams College (KAC), Daegu, Republic of Korea

Email: joylee1217@gmail.com

^bNorwich University, Northfield, Vermont, USA

Email: kyushinsha@hotmail.com

Abstract

Agro-colonialism is defined as the actions taken by developed countries or foreign firms to purchase or seize lands in less developed countries, including flatlands, forests, and mountains for the purpose of meeting their domestic agricultural needs. While most studies that criticized the phenomenon have focused on the negative aspects of the current land rush for food and the areas of energy security including local food insecurity, disadvantages for local economy, and destruction of local environment, the studies have rarely looked into how agro-colonialism has harmed indigenous culture. Indigenous communities mostly are culturally associated with their ancestral lands, which are sacrificed and destroyed by agricultural activities mainly by MNCs. This paper examines and discusses how agro-colonialism damages indigenous culture by looking at diverse case studies in Africa, Southeast Asia, and Latin America.

Keyword: Agro-colonialism, Indigenous Culture, Ancestral Land

1. Introduction

In the Awassa region of Ethiopia, millions of tomatoes, peppers and other vegetables are grown in modern computer controlled conditions and picked by thousands of local women who earn around 75 cents a day. These vegetables are harvested in one of the poorest and hungriest countries of the world, but not for local consumption. This food will never satiate the hunger of the local population, nor be used to alleviate malnutrition; instead, they will be flown to the grocery stores and markets of Dubai, Qatar, and other wealthy Middle Eastern countries (Vidal, 2010).

In Cambodia, a rice farmer named Sam Pov struggles to eke out a living on the small plot of land his family owns, but he feels the clock is ticking; counting down the day his land will be taken from him by the Cambodian government, sold to wealthy foreign investors for their own use. Mr. Pov, like many in the less developed world is fighting two battles, one against

hunger and one against the encroachment of foreign interests on his ancestral land, which threatens his very way of life (IRIN, 2009).

These two stories are not isolated incidences nor are they fantasies, but represent a new trend known as agro-colonialism, which is pressing less developed countries on many fronts. Agro-colonialism is a term used to describe a phenomenon that while not new, has increased in recent years, as developed countries pave over their farmland or simply lack the agricultural resources to keep up with demand. The developed world and their Multi-National Corporations (MNCs), their NGOs, and even private citizens have the money and the motivation to seek out foreign lands¹. They buy or lease these lands, often through nefarious negotiations with corrupt governments, and harvest the agricultural bounty for their own uses. While this benefits the developed world, keeping their supermarkets stocked with fresh fruits, vegetables, and exotic products, it is slowly accelerating problems in the less developed world.

Among the problems furthered by this new form of colonialism are the widening of the gap between rich and poor within the targeted country, increased pressure on food availability and nutritional equity, and last but not least, the threatening of indigenous cultures who have existed on these lands for centuries and are in many cases left landless and hopeless as a result of agro-colonialism. The indigenous cultures are often the most overlooked variable in the agro colonial equation, their special links with the land ignored, and their way of life devalued. Indeed, as the paper will illustrate, the problem of agro-colonialism is multifaceted, but the negative effects on indigenous cultures may be the most underreported and overlooked aspect of this growing trend.

The organization of this essay is as follows: following the methodology section, a literature review will inform the reader of the current coverage of the phenomenon of agro-colonialism, including the negative consequences in terms of the local economy, food security and the environment. Next, the author will shift focus to an underreported aspect, the threat to indigenous cultures, and using three case studies from Africa, Southeast Asia, and Latin America, will attempt to inform the reader of the growing threat facing indigenous cultures across the globe from agro-colonialism.

¹ According to the World Bank, land deals in 2009 were signed for allocation of 45 million hectares, which of 70 percent was in Africa. The scope of targeted continents is rapidly being spread; Southeast Asia and Latin America (Tassabehji, 2011). Due to wealthy countries' commitments to develop infrastructure or increase jobs instead of taking land in developing countries, the host countries voluntarily welcome those deals.

2. Methodology

This study is one of qualitative analysis, gleaned from secondary and primary source material. Case studies will encompass events in three distinct regions of the globe: Ethiopia in Africa, Indonesia in Southeast Asia, and Brazil in Latin America. While many examples of agro-colonialism exist and case studies are numerous, the selection of these case studies over others was the result of the author's belief that a representative case study from distinct regions of the world is necessary to illustrate the global nature of the issue.

3. Literature Review

While not new, agro-colonialism has seen a spike in activity in the latter part of the 20th and early 21st centuries². Much of this has to do with several factors, first, the rise in global population, particularly in developing countries such as China, where consumer demand extends beyond the desire for DVD players and mobile phones, but also into the realm of food stuffs. Secondly, the cost of producing food domestically in countries that lack sufficient arable land (China, Japan, South Korea, and Persian Gulf States) has made many countries highly dependent on imported foods.

What these countries do have in abundance is cash, enough to make large scale purchases of farmland abroad. It is believed these land purchases can reduce the dependence on imported foods from other countries, making the nation more "food secure" and their food supply less likely to be affected by geopolitical upheavals in the future. For example, the United Arab Emirates is cash-rich but land-poor and has acquired 30,000 hectares in the Sudan which is land-rich but cash-poor (Weston, 2009). Egypt, another capital-rich country, has secured 840,000 hectares in impoverished Uganda (Kugelman, 2009). In these instances mentioned above,

² Agro-colonialism is not a new phenomenon. It already began in form of plantation by European powers during the colonial era of the 19th century (GRAIN, 2008). After the colonial era, in the 20th century, agricultural products became largely industrialized and small farmers, especially in developing world, were often subjected to plantation run by transnational agribusiness corporations. The best example is North American fruit companies in "banana republic" which refers politically unstable developing countries especially in Central America that are highly dependent on cash crops like bananas (Daniel & Mittal, 2009). The transnational fruit companies like United Fruit Company (UFC) acquired large-scale of lands, exploited local people in their banana plantation, and dominated banana industry in Central America such as Guatemala, Honduras, and Costa Rica during the early 20th Century (Albert, 2006). Indigenous people's land at that time was also owned by the UFC which already took most of land in Guatemala.

food security is the leading motivation of the purchases, as nation-states seek to feed their populations and meet their growing demand.

Domestic food security is not the only motivation for agro-colonialism. Environmental issues like climate change or the rise of oil prices has led countries to be concerned for their national energy security, turning their eyes to new forms of energy including biofuels, or agrofuels. The interest in agro-fuels triggered a boom in the purchase of inexpensive arable land to produce the agricultural raw materials used in energy consumption such as palm oil, maize, saw grass, or legumes (Federal Ministry for Economic Cooperation and Development, 2009). Several Korean companies like PT Daewoo Logistics Indonesia and Cheil Jedang Samsung have announced that they will jointly invest capital to grow corn for energy on 24,000 hectares in Indonesia (Daniel & Mittal, 2009). In another instance, Chinese telecommunications firm, ZTE has secured 100,000 hectares in southern Laos to grow cassava for ethanol under a partnership with Dynasty Company, a Laotian firm (Daniel & Mittal, 2010).

These land deals are not without controversy. While some view them as a positive opportunity for “host” countries to develop their agricultural sector, or national economy, others criticize that those investors are rarely concerned with the domestic good their money may produce, but are instead concerned only with the result for their company’s bottom line. The livelihoods of small land owners, farmers, or indigenous groups are not part of their profit calculations.

There are studies that show these land purchases and leasing do not contribute to poverty reduction in developing countries. While the optimists argue that the land deals should create more jobs to decrease unemployment and reduce poverty, Tania Murray Li (2011) has a different opinion. She disagreed with the idea from the World Bank’s report titled *Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Benefits?* which supports that large-scale land acquisition helps poverty reduction by better utilizing land. She argued that although agricultural production may increase, thanks to ‘highly mechanized and extensive investments,’ employing local people or compensating for land to reduce poverty is out of the investors’ minds.

A report from German Federal Ministry for Economic Cooperation and Development (FMCD) agreed with Li’s argument. It reported that the foreign investment in land may negatively affect local populations unless additional income opportunities are created. The reason is twofold; if foreign investors employ workers from their own countries or other

foreign countries, and many use mechanized production methods, the result is that local people do not get hired.

Indeed, in the case of Daewoo Logistics from South Korea, their large-scale plan for their Madagascar operation was to employ workers from South Africa instead of local people (Mongabay, 2009). There is also evidence these large scale operations are inefficient. Taylor and Bending (2009) pointed out that “family-operated farms” are economically much more efficient than large-scale plantation operated by wage workers. In other words, large-scale agricultural production does not have a strong employment effect, whereas small-scale production has a larger employment effect.

Another negative effect of this agro-colonial activity is that, while it is meant as a way to ensure food security in developed countries, it is causing local food insecurity. Martin Large and Neil Ravenscroft (2009) studied this affect on current Africa’s farmland, which has been purchased by multinational corporations (MNCs) such as Luciano Benetton or North Face. In their study, they found that those corporations harvest all the crops grown in the poor less developed South and sell them at higher prices in the rich, developed North. The writers are highly concerned that this phenomenon may lead increasingly to host-countries becoming food insecure. In other words, people in developing countries who have suffered from shortage of food or access to sufficient amount of food may be trapped in much worse food insecurity as their governments hugely sell or lend farmland to foreign companies which will export harvested agricultural products to their homeland.

Likewise, Sue Branford (2008) argued that local communities in these targeted countries were being thrown off their land by foreign companies and buyers, but sometimes reemployed as laborers. The irony did not escape the reader, as those who had been displaced were now asked to work on the land to help the developed world deal with a food crisis, all the while becoming less and less secure themselves.

Additionally, some critics pointed out that the local environment could be harmed because of monoculture³. According to an article from *Indepth Africa*, local reports blamed the transformation from family run landscapes into large-scale industrial agriculture techniques for the use of chemicals, pesticides and intensive water use, which led to destruction of local biodiversity. Likewise, Spieldoch and Murphy (2009) pointed out that depletion of nutrients in soil resulted from larger-scale industrial agriculture in the host countries. This model of agriculture tends to use fossil fuels like fertilizers, which affects degradation of arable land and after all provokes food insecurity.

³ Monoculture is a farming system to grow a single crop in a wide area.

To be sure the issues of food security and environmental damage are at the forefront of both sides of the agro colonial argument, but another equally important aspect has not been given full treatment in the literature, the effect of this activity on indigenous cultures. When mentioned, indigenous cultures are seen as the beneficiary of these foreign investments. Typical of this trend is reported by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and the International Institute for Environment and Development (IIED), which referred to land as a core to “identity, livelihoods and food security,” but then concluded while these sorts of investments have potential they do offer opportunity to local people.

Therefore, despite awareness of potential harm to local or indigenous culture, studies or reports on whether agro-colonialism damages local tradition or culture have been rare. This is not surprising considering the media that covers the issue is predominately based in the developed world, having a particular outlook or bias in regards to issues related to agro colonialism, a term they themselves would not use, and the possible effects it might have on indigenous populations.

The distance between the reporter and what is reported upon can lead to certain callousness in our own culture towards indigenous peoples who are seen as locked in the past, unable or unwilling to modernize and accept a way of life we feel is superior to their own. Because of this attitude, many fail to appreciate the significant impact of the developed world’s activities on these populations. It is for this reason that the remainder of this study will seek to address this oversight, examining the plight of indigenous cultures threatened by agro-colonialism.

4. Discussion

Estimates suggest there are currently around 370 million indigenous people representing 5,000 linguistic cultural groups in more than 70 countries around the world, composing 5.5% of world’s population but constituting 70-80% of the world’s cultural diversity (Woody, Crowley, Dey de Pryck & Carmen, n.d.).

One thing most have in common is their association with ancestral land and the essential religious, social, and cultural values that are connected to it. The relationship between the land and the people is based on their religious values, beliefs, and community identity (Vuotto, 2004). A study from the United Nations Educational, Scientific and Cultural Organization (UNESCO) has also found that culture and land are intimately connected in many societies including indigenous communities (Woody, Crowley, Dey de Pryck & Carmen, n.d.).

Case Studies

The Anuak in Ethiopia

Ethiopia is now a hotspot for agro-colonialism. The government of Meles Zenawi has introduced large-scale commercial farming and offers much of the country's fertile land to foreign investors, "at almost giveaway rates" (Daniel & Mittal, 2010).

Just recently, the government publicly announced that they are willing to offer 3 million hectares of land to foreign investors, but the sale of land comes with more than a selling price, it costs the local indigenous groups much more. Most of the land is in the Gambella Region, which is home to the Anuak Nation (Interview with Nyikaw Ochalla, n.d.)

FIGURE 2

An Anuak village



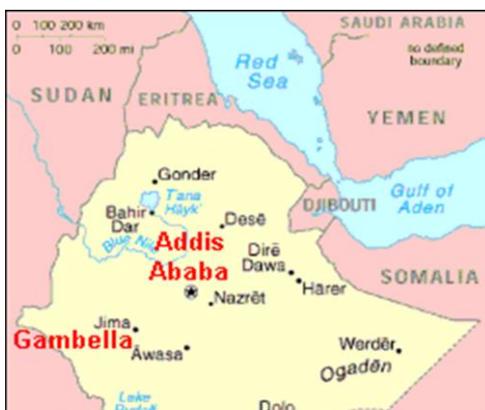
The Anuak is a nation composed of Nilotic people who live in southwest Ethiopia or southeast Sudan. Traditionally they have engaged in farming, fishing, hunting but some are also pastoralists (Interview with Nyikaw Ochalla, n.d.). Pastoralism, a farming system with people, natural resources, live stock and social relations, has

been in fact prevalent in Ethiopia.

In Ethiopia an estimated 10 million pastoralists account for almost 14 percent of the total population of the country and their areas including Oromo, Dire Dewa, and Gambella cover

FIGURE 1

Gambella, Ethiopia



about 61 percent of the country. Pastoralism has been considered a good system of production for thousands of years for Ethiopian population as it prospers in a dry environment (Pastoralist Forum Ethiopia, 2010). The Anuak's way of life will be threatened if these land deals continue.

The Anuak nation has kept their languages and customs alive, for centuries, even though periods of civil war, famines, and enslavement (Cultural Survival Organization, n.d.). However, these vulnerable people in Gambella who do not often interact with outside world are endangered by the current rush to sell their

land.

Having never been farmed on a large scale, the Anuak's land is fertile and vast. It has become a tempting target for companies and governments the world over, including Saudi Arabia and India. Just recently, Karuturi, an Indian agro-business company, leased 100,000 hectares of land and Sheikh Mohamed Al-Amoudi, a Saudi-Ethiopian investor, acquired 10,000 hectares to farm rice. As a result, the Anuak became displaced and endangered to lose their pastoralist tradition. Through a *BBC* interview, one man expressed concern that they may lose their culture and leave nothing remaining for the next generation because of this agro-colonialism (Butler, 2010).

Furthermore, the government forcibly kicked out the Anuak people from Gambella region in the name of '*villagization*,' which was planned by the government to relocate 1.5 million people in the region "where significant land investment is planned or occurring" (Human Rights Watch, 2012). Human Right Watch also reported that 42 percent of the total land in Gambella, where people have been forced to leave under the *villagization* is supplied in the market for lease or already purchased by investors.

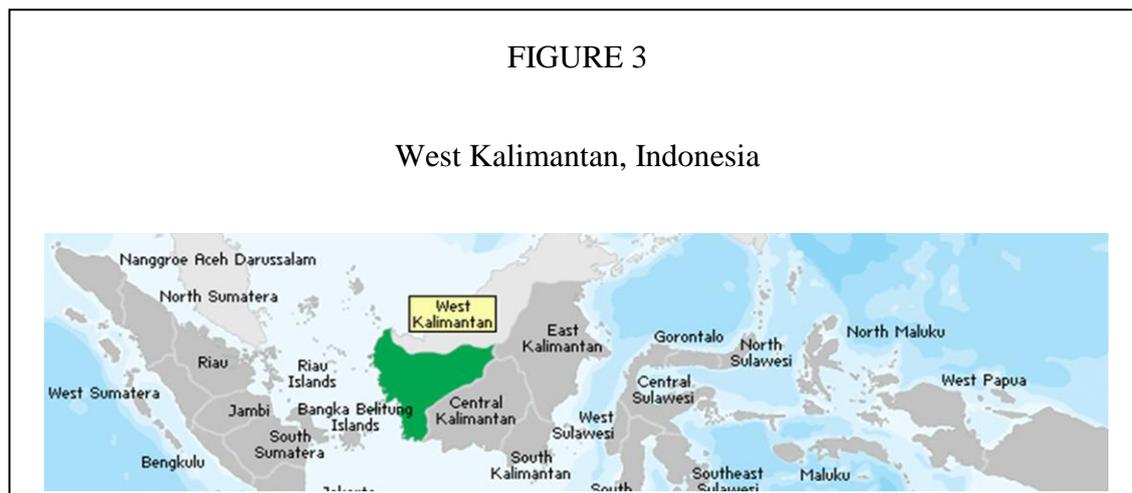
An elder of the Anuak stressed that the land is "intimately connected with the Anuak's identity of people and communities, with the past and with the future (The Oakland Institute, 2011)." Just like other indigenous people believe association between their ancestral land and their identity, the Anuak also do believe the land means a lot to them. The elder of the Anuak also added that their land is not only just economic means but also "historical, political, spiritual and very emotional place," (The Oakland Institute, 2011).

However, the Ethiopian government may reconsider their plan to lease the land to foreign investors. According to *The Hindu*, the Karuturi Global Project in Gambells has faced several challenges including debt, floods, shortage of working capital, conflict with laborers and local people. Having resulted in lower progress than the government's satisfaction, these challenges disappointed the government. Its disappointment may lead to a positive decision to give the land back for the Anuak.

The Dayak in Indonesia

Far from Africa, in the region of Southeast Asia, agro-colonialism is equally troubling to traditional cultures, threatening centuries old customs and beliefs of tribal groups in the Kalimantan region of Indonesia. The Kalimantan region of Indonesia is located on the island of Borneo, making up 2/3 of the island, which is the third largest island in the world with a very high biodiversity (IndonesiaPromo, n.d. & Setyawan, 2008). Kalimantan has specifically some of the largest remaining areas of virgin rainforest in Indonesia (Greenpeace, 2008).

The Dayak tribe, a major group of indigenous people, lives in Kalimantan, having lived for more than thousands of years in the forests (Setyawan, 2008). This community numbers around 1.26 million and makes up 33.75% of total provincial population, and within the group there are 223 sub-ethnic groups (Sirait, 2009). As forest dwellers the Dayak have relied on forest resources for everything in life. Their food, their clothing, their tools, all come from the forest, they are born in the forests, they live in the forests, when sick they draw their medicines from the forests, and when they die, they commit their spirits to the forest.



(Crevello, 2004).

This close relationship has made the Dayak people great stewards of the Kalimantan's jungles; even their agricultural practices such as *tembawang* which is a traditional forest management, strives to seek harmony with the needs of the living and the spirits of the forests (Setyawan, 2008). Although the Dayak have developed new techniques and ideologies when it is necessary, the value of its cultures remains in every aspect of their lives (Crevello, 2004). However, they may not be able to keep their core traditional values any longer, as Kalimantan's forests are being chopped down to make room for palm oil plantations (Kurniasih & Schott, n.d.). In fact, West Kalimantan has almost half of the palm oil plantations in Indonesia (Sirait, 2009)

Palm oil is big business and is getting bigger. Most plantations are located in Indonesia and Malaysia (Friends of Earth, Life Mosaic & Sawit Watch, 2008). As the demand for the oil increased, Indonesia has rapidly expanded its palm oil plantations, which now cover around seven million hectares and are managed by more than 600 foreign and domestic companies (Sirait, 2009). Indonesia has aimed at becoming the number one palm oil producer in the world (Williamson, 2007). But who is pushing the destruction of the forests? Certainly the Indonesia government is itself accountable but foreign interests are where much of the blame lies.

Benefitting from growing demand for palm oil in China, India and Europe, Indonesia's central government has planned for additional 4 million hectares by 2015, whereas its provincial governments ⁴had a plan for another 20 million hectares (Painter, 2007 & Greenpeace, 2008). In the case of West Kalimantan, according to a report from Greenpeace, oil palm concessions were granted on over 3.2 million hectares by 2007 (Greenpeace, 2008). Wilmar International, a Singapore-based transnational agribusiness company with a plantation land bank of 573,000 hectares, is a giant palm oil operator in Kalimantan. The Wilmar is still expanding its operation, or its influence in West Kalimantan (Friends of Earth, Life Mosaic & Sawit Watch, 2008).

⁴ Because of decentralization of governance to district or province in 2001, Indonesia's provincial governments had to raise their own budget on their own by encouraging investment by large companies. That is why provincial governments highly support for palm oil plantation. (Potter, 2008)

FIGURE 4

A Dayak Warrior showing his ancestral hunting grounds in the Borneo Forest



Most plantations have taken forests where the Dayak lived and where their ancestors were buried through clearing land. Like many other indigenous people, the Dayak consider their ancestral graves as sacred places. When PT Harapan Sawit Lestari (HSL), an Indonesian private company which is financed by the Commonwealth Development Corporation (CDC)⁵, a British government body, cleared and bulldozed ancestral graves of Dayak community in Manis Mata area of West Kalimantan, the community became furious (Down to Earth Newsletter, 2002).

Large-scale palm plantations also endanger the language diversity of the Dayak. According to the interview with the director of a Dayak culture institute, the interviewee expressed his concern that Dayak words may simultaneously disappear as Dayak's traditional agriculture system and traditional mixed fruit gardens have been destroyed by the encroaching plantations (Friends of Earth, Life Mosaic & Sawit Watch, 2008).

While the government continues to fell trees and foreign money continues to expand the palm oil plantations, it may already be too late for the Dayak. Each day more ancestral land is taken, more graves violated, more traditional ways of life lost (Potter, 2008). The government insists that the palm oil industry is important to build up the national economy (Williamson,

⁵ CDC was a tool for the UK government to assist private sectors in developing countries by providing loans and equity mainly for agricultural ventures. It now widely finances industrial and commercial developments in the private sector of those countries. CDC is under the control of UK government, through the Department for International Development (DFID) which owns 100% of the shares. (Down to Earth Newsletter No. 55)

2007); again the bottom line seems to matter more than Dayak traditions, and the world watches as another culture is lost.

If there is any positive development in the case of the Dayak it comes from the Wilmar Group. It was reported in *Bloomberg* (2013) that the Group would no longer do business with Indonesian palm oil suppliers who illegally fire the land. The reports state that the Group intends to comply with the principles of Roundtable on Sustainable Palm Oil (RSPO), an international multi-stakeholder organization and certification scheme for sustainable palm oil. While this is a small step in the right direction, too many corporations are ready to ignore the RSPO in search of profit, and the Dayak will continue to suffer and lose ancestral land to the palm oil plantations.

The Guarani in Brazil

Similar to the situation in Indonesia, Brazil is also a hotspot of the biofuel business. Brazil has taken advantage of the increased demand for agro fuels which has led the country to largely focus on commercial agriculture growing edible materials like sugarcane. Brazil is now the biggest producer that harvests 30% of global sugar and exporter of sugarcane and of ethanol in the world (Schlesinger, 2010).

The Royal Dutch Shell Corporation, a multinational oil company, and the Cosan group, a Brazilian ethanol company, signed a joint-venture *Raizen* in 2010. This 12 billion dollar partnership covers the producing, selling, and trading of sugar and ethanol worldwide, especially in Brazil, and developing and licensing ethanol technologies (Caronan, 2011 & Morgan, 2010). Surprisingly, the European Commission has backed their merger, letting it pass the European Union's regulation criteria. The Commission expects that the venture would not hurt the European Economic Area and affect competition in ethanol markets (Caronan, 2011). However, there is one thing that they have missed or neglected to consider: the Guarani, an indigenous Brazilian tribe endangered by this deal and destined to be displaced from its land (Survival International, n.d.).

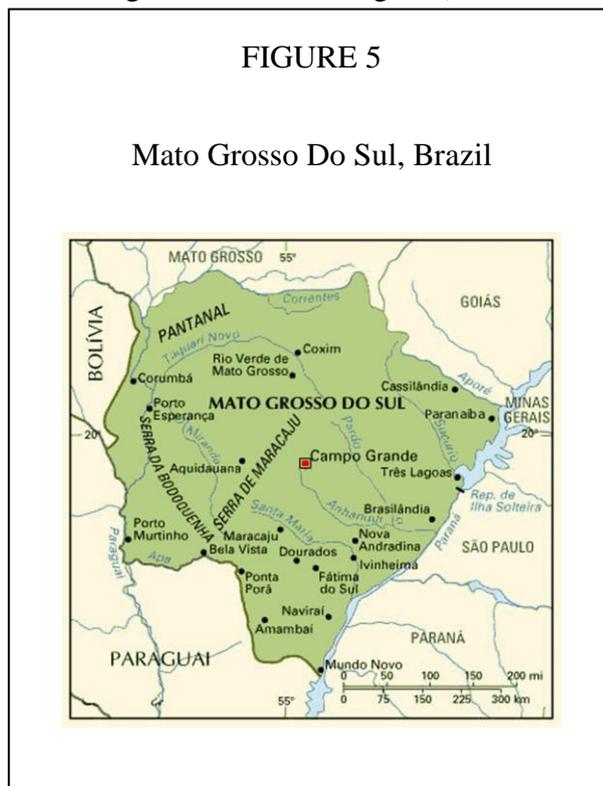


FIGURE 6

A Guarani village



There are three groups of the Guarani in today's Brazil: the Kaiowá, Nhandeva and Mbyá (Amnesty International, 2005). Among those groups, the Kaiowá, 'forest people,' is the largest group (Survival International, n.d.). According to research by the National Foundation of Health (Funasa) and the Missionary Council on Indigenous Issues (CIMI), 40,000 of the Guarani people including Kaiowá mostly live in Mato Grosso do Sul, a state located in southern Brazil (Guarani people, Great people,

n.d.). Mato Grosso do Sul is the precise area where the government's "Strategic Development Project" in 2008 reported was the most proper place to produce ethanol in Brazil due to easy mechanization, available land at competitive prices, and close distance to consumer center and state governmental supports (Biofuel Watch Center, 2009). The land is primed and ready for foreign investment and exploitation.

But for the Guarani, the land in question forms the basis on which their cultural and society is built. Guarani society calls this the *tekohá*, a term for the traditional land where they live (Survival International, 2010 & De Almeida & Mura, 2003). Bartomeu Melia, an eminent anthropologist who studied Guarani culture for more than fifty years, once explained the association between the Guarani and the *tekohá* in a seminar held by the Indianist Missionary Council (Cimi) and the Federal University of Santa Catarina (UFSC) on September 2001 in Florianópolis, capital of the state of Santa Catarina, Brazil:

For the Guarani, the land is a "*Tekohá*", the place we step on, the place where we are what we are. *Tekohá* is a word formed by the root words *teko*, which means lifestyle, a system of one's own, and "*Há*" which means the place we step on. When a Guarani speaks about the land he has a very unique lifestyle in mind. For them, speaking about the land is speaking about the body of their mother, a both mythical and practical relationship. Land is not to be sold or divided. (News Letter NR. 479, 2001)

Being treated as aliens in their own country, the Guarani have already suffered from domestic land grabbers like cattle ranchers, and owners of soybean or sugarcane plantations. (Amnesty International, 2005 & Caroline, 2010). The eviction has been accelerated and worse as

foreign companies like Shell have entered the Guarani's land for their agribusiness. The Guarani have already gone through exploitation, the highest rate of suicide, malnutrition, and even worse, violation, since they struggled with land conflicts against agro-colonialism (Survival International, 2010).

The *New York Times* recently reported that the conflict between the Guarani and the ranchers is still severe and violent. Romero (2012) reported that gunmen who were hired by ranchers intruded into the encampment of the Guarani near soybean plantations and shot one of the village leaders. They then drove away with the body forcing the village to demand its return. Given the wealth to be made off the land by large corporations, on everything from soybeans to sugar, it is unlikely that without a concerted effort the Guarani will be able to regain their lands, or at the very least, profit from it (Oxfam, 2013).

5. International Action

With the exception of minor efforts on behalf of the indigenous peoples at the domestic level, and the laudable activities of several NGOs, little is done to stop the pursuit of profit at the expense of the indigenous peoples. It could be argued that little can be done by the individual or the state, when compared to the powerful interests of the multi-nationals allied on the side of commerce and trade, against something a lot less sexy in international business, human rights. The defense of these and other indigenous groups will need to be taken up at the international level by both international governing bodies and Non-Governmental Organizations. To their credit, a number of NGOs have been active, include Human Rights Watch, who lobbied on behalf of the Anuak in Ethiopia, Survival International did the same for the Guarani in Brazil, with some success, and the Friends of the Earth Asia Pacific who organized an international conference, giving voice to the Dayak's concerns. But absent from this anemic list are the IGOs of the world.

Small steps are being taken by the UN, for example, as a FAO sub-group adopted language to protect the rights to land and prevent land grabs but considering the UN's impotence on a number of security issues, these obligations will be little more than voluntary. Public declarations by the UN are welcome but real political capital needs to be exerted by powerful member states in order for the guidelines to have any real effect on entrenched interests of MNCs and governments who are inflicting the damage on the indigenous populations.

6. Conclusion

Throughout this essay the authors have discussed the real and pressing issue of agro-colonialism and the threat to indigenous cultures around the globe. The three case studies provided demonstrate that whether it is the Anuak of Ethiopia, the Dayak of Indonesia,

or the Guarani of Brazil, the movement by the developed world to acquire the arable, ancestral lands of indigenous groups around the world is leading to their slow extinction. What is more the three case studies provided in the paper including the Anuak in Ethiopia, the Dayak in Indonesia, and the Guarani in Brazil demonstrate that this is not a fiction, but a reality which is still going on today.

It seems a race against time, for even though NGOs or civil societies argue the cause of the indigenous people and call for stopping the exploitation of their land or proper compensation for the peoples, local and state governments, as well as multinational corporations have not kept their commitments.

While agro-colonialism continues it behooves the reader to remember that while we enjoy our meals in the developed world, the origin of the food we consume may have left a sad legacy in its wake, one where peoples' ancestral lands, livelihood and culture were sacrificed.

Because of this we as consumers have a responsibility to educate ourselves on the issue of agro-colonialism, to not be implicit accomplices to its cultural crimes or ignorant of where our next meal originates or the true cost of it. Moreover, if we are champions of our own human rights, equal vigor should be given to the championing of the rights of others, and it is to our own communities, state, and international organizations we should appeal for justice.

Agro-colonialism in the less developed world may ultimately be here to stay, as a necessary way growing nation-states feed their people, but it need not mean the death and destruction of other populations in this pursuit. Future generations will judge us on how well we responded to the very visible threat posed to indigenous peoples by agro-colonialism. If we fail to save these groups today, the blame for the loss of human culture will be laid at squarely at the feet of our generation.

References

- Albert, Leila (2006). Residents of the republic: Missing lands and fingers. *Endeavor*, 2 (1), 1-10
- Amnesty International (2005). Foreigners in our own country: Indigenous peoples in Brazil. Retrieved from <http://www.amnesty.org/en/library/asset/AMR19/002/2005/en/b75901b1-d526-11dd-8a23-d58a49c0d652/amr190022005en.pdf>
- Anonymous (2010). Land grab fears for Ethiopian rural communities. *Indepth Africa*. Retrieved from <http://indepthafrika.com/land-grab-fears-for-ethiopian-rural-communities/>

- Anywaa Survival Organisation (2010). *The Ethiopian government's secret land grab deals*. Retrieved from http://www.anyuakmedia.com/Ethionews_10_3_10.html
- Bending, Tim & Taylor, Michael (2009). Increasing commercial pressure on land: Building a coordinated response (discussion paper). *International Land Coalition*. Retrieved from www.commercialpressuresonland.org/wp.../09_07_cpl_discussionpaper.pdf
- Biofuel Watch Center (2009). Sugarcane: Impacts of crops on land, environment and society. Retrieved from http://www.reporterbrasil.org.br/documentos/brazil_of_biofuels_v6.pdf
- Branford, Sue (2008). Food crisis leading to an unsustainable land grab. *Guardian*. Retrieved from <http://www.guardian.co.uk/environment/2008/nov/22/food-biofuels>
- Butler, Ed (2010). Land grab fears for Ethiopian rural communities. *BBC News*. Retrieved from <http://www.bbc.co.uk/news/business-11991926>
- Caronan, Rowena F. (2011). E.U. allows Shell and Cosan merger for European ethanol market. Retrieved from <http://www.ecoseed.org/biofuel/article/9-biofuel/8757-e-u-allows-shell-and-cosan-merger-for-european-ethanol-market>
- Cotula, L., Keeley, J., Leonard, R. & Vermeulen, S (2009). Land grab or development opportunity?: Agricultural investment and international land deals in Africa. IIED, FAO, IFAD. Retrieved from <http://pubs.iied.org/12561IIED.html>
- Crevello, Stacy (2004). Dayak land use systems and indigenous knowledge. Louisiana Forest Products Development Centre, School of Renewable Natural Resources, Louisiana State University. Louisiana, USA. Retrieved from <http://www.krepublishers.com/02-Journals/JHE/JHE-16-0-000-000-2004-Web/JHE-16-1-001-073-2004-Abst-PDF/JHE-16-1-069-073-2004-Crevello-S/JHE-16-1-069-073-2004-Crevello-S.pdf>
- Daniel Shepard & Mittal Anuradha (2009). The great land grab. The Oakland Institute. Retrieved from www.oaklandinstitute.org/pdfs/LandGrab_final_web.pdf
- De Almeida, Rubem Ferreira Thomaz & Mura, Fabio (2003). Guarani Kaiowa: localities and tekoha. Retrieved from <http://pib.socioambiental.org/en/povo/guarani-kaiowa/552>
- Down to Earth (2002). Conflicts between community and British-owned plantation company in Kalimantan. Down to Earth Newsletter No. 55. Retrieved from <http://dte.gn.apc.org/55OP.htm>
- Federal Ministry for Economic Cooperation and Development (2009). Development policy stance on the topic of land grabbing-the purchase and leasing of large areas of land in developing countries. BMZ discourse No. 015. Retrieved from www.bmz.de/en/publications/type_of_publication/.../diskurs015en.pdf
- Friends of Earth, Life Mosaic, & Sawir Watch (2008). Losing ground: The human rights impacts of oil palm plantation expansion in Indonesia. Retrieved from

- [http://www.internal-displacement.org/8025708F004CE90B/\(httpDocuments\)/FA89FA0523761115C12574FE00480313/\\$file/losingground.pdf](http://www.internal-displacement.org/8025708F004CE90B/(httpDocuments)/FA89FA0523761115C12574FE00480313/$file/losingground.pdf)
- GRAIN (2008). Seized! The 2008 land grab for food and financial security. Retrieved from www.grain.org/briefings_files/landgrab-2008-en-annex.pdf
- GRAIN (2009). The new farm owners. Retrieved from http://webcache.googleusercontent.com/search?q=cache:_CdqWR_wvkAJ:www.energybulenerg.net/node/50714+land+grab+traditional+cultures&cd=53&hl=ko&ct=clnk&gl=kr&clicli=firefox-a&source=www.google.co.kr
- Greenpeace (2008). How Unilever palm oil suppliers are burning up Borneo. Greenpeace. Retrieved from <http://www.greenpeace.org/raw/content/usa/press-center/reports4/how-unilever-palm-oil-supplier.pdf>
- Guarani people, Great people! (n.d.). Land, social organization and politics of Guarani. Retrieved from <http://www.guarani-campaign.eu/landen/england/terra.htm>
- Henriksen, John. B. (2008). Key principles in implementing ILO Convention No. 169. Retrieved from http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@normes/documents/publication/wcms_118120.pdf
- Indianist Missionary Council (Cimi, 2001). Guarani Territories are the topic of a seminar. *News Letter NR. 479*. Retrieved from <http://www.wald.org/cimi/2001/cimie479.htm>
- IndonesiaPromo (n.d.). Kalimantan. Retrieved from <http://www.indonesiapromo.com/borneo.html>
- IRIN (2009). *Asia: Land grabs threaten food insecurity*. Retrieved from <http://farmlandgrab.org/post/view/5267>
- Human Right Watch (2012). Waiting here for death: Displacement and “villagization” in Ethiopia’s Gambella region. *Human Right Watch*. Retrieved from www.hrw.org/sites/default/files/reports/ethiopia0112webwcover_0.pdf
- Kurniasih, Fitriani D. & Schott, Christina (n.d.). Ghost in the palms. Retrieved from <http://www.newenergy.info/index.php?id=1463>
- Kugelman Michael (2009). Land grab? : The race for the world’s farmland. *Woodrow Wilson International Center for Scholars*. Retrieved from www.wilsoncenter.org/.../ASIA_090629_Land%20Grab_rpt.pdf
- Large, Martin & Ravenscroft, Neil (2009). A global land-grab. *The Ecologist*. Retrieved from http://www.theecologist.org/blogs_and_comments/commentators/other_comments/268984/a_global_landgrab.html
- Li, Tania Murray (2011). Centering labor in the land grab debate. *Journal of Peasant Studies*, 38: 2, 281-298

- Listiyorini, Pakiam & Yun (2013). Wilmar to cut off palm suppliers caught burning in Indonesia. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/2013-06-30/wilmar-to-cut-off-palm-oil-suppliers-caught-burning-in-indonesia.html>
- Mongabay. (2009). *Despite violent protests and coup, Daewoo continues to hold cropland in Madagascar*. Retrieved from http://news.mongabay.com/2009/0619-daewoo_madagascar.html
- Morgan, Helen (2010). Brazil: Shell in roll over Indian land grab. *The Argentina Independent*. Retrieved from <http://www.argentinaindependent.com/currentaffairs/brazil-shell-in-row-over-indian-land-grab/>
- Murphy, Sophia & Spieldoch, Alexandra (2009). Agricultural land acquisitions: Implications for food security and poverty alleviation. *Woodrow Wilson International for Scholars*. Retrieved from www.wilsoncenter.org/.../ASIA_090629_Land%20Grab_rpt.pdf
- Painter, James (2007). Losing land to palm oil in Kalimantan. *BBC News*. Retrieved from <http://news.bbc.co.uk/2/mobile/asia-pacific/6927890.stm>
- Peterson, Garry (2009). Agro-colonialism and/ or agricultural development?. Retrieved from <http://rs.resalliance.org/2009/12/08/agro-colonialism-andor-agricultural-development/>
- Pastoralist Forum Ethiopia (PFE), International Institute of Rural Reconstruction (IIRR) & Development Fund (DF, 2010). *Pastoralism and Land: Land tenure, administration and use in pastoral areas of Ethiopia*. Retrieved from http://www.pfe-ethiopia.org/pub_files/pastoralism%20&%20Land%20full%20Book.pdf
- Potter, Lesley (2008). *Dayak resistance to oil palm plantations in West Kalimantan, Indonesia*. Paper presented at the 17th Biennial Conference of the Asian Studies Association of Australia in 2008. Retrieved from <http://arts.monash.edu.au/mai/asaa/lesleypotter.pdf>
- Rice, Andrew (2009). Is there such a thing as agro-imperialism?. *The New York Times*. Retrieved from <http://www.nytimes.com/2009/11/22/magazine/22land-t.html>
- Romero, Simon (2012). Violence hits Brazil tribes in scramble for land. *The New York Times*. Retrieved from http://www.nytimes.com/2012/06/10/world/americas/in-brazil-violence-hits-tribes-in-scramble-for-land.html?_r=3&
- Rubinstein, Carl (2009). China's eye on African agriculture. *Asia Times*. Retrieved from www.atimes.com/.../China.../KJ02Cb01.html
- Saldamando, Alberto (n.d.). *Central American native people*. Retrieved from <http://www.evolvetoecology.org/indigenouspeople.asp>
- Setyawan, Ahmad dwi (2008). Review: Biodiversity conservation strategy in a native perspective; case study of shifting cultivation at the Dayaks of Kalimantan. *Bioscience*,

- 2 (2), 97-108. Retrieved from <http://biosains.mipa.uns.ac.id/wp-content/uploads/2011/02/N020208AHMDayakSwidde+ENG+.pdf>
- Schlesinger, Sergio (2010). Sugarcane and land use change in Brazil: Biofuel crops, indirect land use change and emissions. *Friends of Earth Europe*. Retrieved from http://www.foe.co.uk/resource/briefings/sugar_cane_and_land_use_ch.pdf
- Sethi, Aman (2013). Karuturi debacle prompts Ethiopia to review land policy. *The Hindu*. Retrieved from <http://www.thehindu.com/news/international/world/karuturi-debacle-prompts-ethiopia-to-review-land-policy/article4772306.ece#lb?ref=infograph/2/>
- Siagian, Saurlin Pandapotan (2008). Third generation human rights in the palm oil industry: RSPO as a global multi stakeholder organization. *Institute of Social Studies*. Retrieved from <http://oathesis.eur.nl/ir/repub/asset/7141/Saurlin%20Pandapotan%20Siagian%20HDS.pdf>
- Sirait, Martua. T (2009). *Indigenous peoples and oil palm plantation expansion in West Kalimantan, Indonesia*. University Van Amsterdam. Retrieved from www.worldagroforestry.org/downloads/publications/PDFs/RP16385.PDF
- Smith, David (2009). The food rush: Rising demand in China and west sparks African land grab. *The Guardian*. Retrieved from <http://www.guardian.co.uk/environment/2009/jul/03/africa-land-grab>
- Spidoch, Alexandra (2009). Global land grab. *Foreign Policy in Focus*. Retrieved from http://www.ips-dc.org/articles/global_land_grab
- Survival International (n.d.). The Guarani. Retrieved from <http://www.survivalinternational.org/tribes/guarani#main>
- Tassabehji, Rola (2011). *Global land grabs: Benefits, emerging dangers, and growing anxieties*. Retrieved from <http://www.greenprophet.com/2011/04/global-land-grab-middle-east/>
- The Economist (2009). Cornering foreign fields: Land deals in Africa and Asia. *The Economist*. Retrieved from <http://www.economist.com/node/13697274>
- The Economist (2009). Outsourcing's third wave: Buying farmland abroad. *The Economist*. Retrieved from <http://www.economist.com/node/13692889>
- The Oakland Institute (2011). *Understanding land investment deals in Africa: Ethiopia*. Retrieved from http://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/OI_Ethiopia_Land_Investment_report.pdf
- Vidal, John (2010). Who is behind immense land grab in Africa?. *Ethio Quest News*. Retrieved from

http://www.ethioquestnews.com/Businessnews/Farmland/Who_is_behind_African_Land_Grab.html

Vuotto, Jonathan (2004). Awas Tingni v. Nicaragua: International precedent for indigenous land rights? *Boston University International Law Journal*, 22(1), 219-244. Retrieved from

<http://www.bu.edu/law/central/jd/organizations/journals/international/volume22n1/documedoc/219-244.pdf>

Weston, Mark (2009). *The new scramble for Africa*. *EMEA Finance*. Retrieved from <http://www.globaldashboard.org/2009/05/13/african-land-deals/>

Williamson, Lucy (2007). Plea over Indonesia palm oil plan. *BBC News*. Retrieved from <http://news.bbc.co.uk/2/hi/asia-pacific/6291516.stm>

Wittenberg, Christa (n.d.). *The banana republic: The myth of the United Fruit Company*. Retrieved from <http://users.polisci.wisc.edu/LA260/bananas.htm>

Woody, E., Crowley, E., Dey de Pryck, J., & Carmen, A. (n.d.). *Cultural indicators of Indigenous Peoples' food and agro-ecological systems*. Retrieved from http://www.fao.org/sard/common/ecg/3045/en/Cultural_Indicators_paperApril2008.pdf

Management & Marketing II

Room B

13:10-14:40

Thursday, May 8

Session Chair: *Prof. Hsiu-Tsu Cho*

ICSSAM-666

Dispositional Trait, Discrete Emotion, and Occupational Commitment

Hsiu-Tsu Cho

National Taichung University of Education

Chun-Han Yu

National Taichung University of Education

ICSSAM-672

Measuring the Efficiency of Logistic Industry in Taiwan by DEA

Ming-Chi Tsai

I-Shou University

Munkhzul Ninj

Landbridge LLC

Wen-Hsin Fang

I-Shou University

Meei-Ing Tsai

I-Shou University

ICSSAM-684

Segmentation of Lccs users Based On Their Relationship with The Tourist Establishment and Host Country

Piyasuda Archasantisuk

Chulalongkorn University

Punthumadee Katawandee

Chulalongkorn University

ICSSAM-687

Analysis of Auto Spare Parts Demand with Random Matrix Approach

Chi Zhang

The University of Tokyo

Yu Chen

The University of Tokyo

ICSSAM-702

Industrial Changes in Environmental Performance- an Empirical Overview Using Data Envelopment Analysis

Yi-Chun Kuo

Chung Yuan Christian University

Po-Hsuan Tseng

Chung Yuan Christian University

ICSSAM-962

Cost Saving Model for Freight Transportation Companies Operating in Urban Environment

Andrii Komar

*Korea Advanced Institute of Science and
Technology*

Jae Jeung Rho

*Korea Advanced Institute of Science and
TechnologyLLC*

Moon Gyu Kim

*Korea Advanced Institute of Science and
Technology*

ISEPSS-2051

Enhancing the Service Flow of SOC Design Service Providers' by Using the Fuzzy DEMATEL and the Rough Set Theory

Chi-Yo Huang

National Taiwan Normal University

Ming-Jenn Wu

National Taiwan Normal University

Yu-Sheng Kao

National Taiwan Normal University

Hsueh-Hsin Lu

National Taiwan Normal University

Qi Lu

National Taiwan Normal University

Tzu Cheng Lin

National Taiwan Normal University

Bo-Wen Hsiao

National Taiwan Normal University

ICSSAM-666

Dispositional Trait, Discrete Emotion, and Occupational Commitment

Hsiu-Tsu Cho¹

National Taichung University of Education, Department of Counseling and Applied
Psychology, 140 Minsheng Rd., West Dist., Taichung City 40306, Taiwan
Email: choht@mail.ntcu.edu.tw

Chun-Han Yu

National Taichung University of Education, Department of Counseling and Applied
Psychology, 140 Minsheng Rd., West Dist., Taichung City 40306, Taiwan

Abstract

Accompanied by growing dispatched workers in workplace, occupational commitment is more important than ever. Despite the importance of understanding the emotional aspects of occupational commitment, previous research has paid less attention to the role of emotion in occupational commitment. This article attempts to fill this gap by examining the relationship between dispositional trait and occupational commitment. The study examined how two dispositional traits —neuroticism and extroversion— influence occupational commitment through the linking of two discrete emotions including fear and enthusiasm. A survey study with questionnaires was conducted and sample consisted of 144 respondents from the home carers in Taiwan. The predictions were then tested through the SEM approach, with acceptable fit resulted. Results showed that enthusiasm mediated the effect of extroversion on occupational commitment but fear partially mediated the impact of neuroticism on occupational commitment. These findings suggest that worker with distinguish dispositional trait have different occupational commitment and support the mediating role of discrete emotion on the relationship between dispositional trait and occupational commitment.

Keywords: occupational commitment, neuroticism, extroversion, fear, enthusiasm

¹ The authors are grateful to NSC in Taiwan for assistance in financial supporting of this study. (NO.102-2410-H-142 -017 and NO. 101-2410-H-142-024)

Address correspondence and reprint requests to Hsiu-Tsu Cho, Associate Professor, Department of Counseling and Applied Psychology, National Taichung University of Education, 140 Minsheng Rd., West Dist., Taichung City 40306, Taiwan.

Email: choht@mail.ntcu.edu.tw, Phone: 886-4-22183940, Fax: 886-4-22183350.

Introduction

The present study investigates the impact of dispositional trait and extroversion and discrete emotions on occupational commitment. Occupational commitment reflects employees' emotional attachment, involvement and identification with the occupation and also positively associated with job satisfaction and negatively to turnover and performance (Lee, Carswell, & Allen, 2001; Meyer, Allen, & Smith, 1993).

A spreading body of organization research has found that several crucial factors, such as job demands and job resources (Bakker & Demerouti, 2008; Bakker et al., 2010), influence occupational commitment. For example, job demands require sustained effort and are associated with physiological or psychological costs which lead to high quit intention in workplace. Conversely, job resources reduce demands and facilitate achievement of work goals, and then, when a lack of resources tends to lower motivation and commitment at work (Fernet, Austin, & Vallerand, 2012).

There is, however, growing evidence for the job characteristics to occupational commitment, but how emotions of the worker are elaborated into commitment dimensions of the occupation is rather unclear. Previous work documented that the emotion influences occupational commitment, but the current work simultaneously examines two crucial aspect of affect including affective trait and emotions in work condition. The distinction is essential because research on emotions indicates that affective trait and emotion are different in essence. Affective trait is more a trait than a state and is defined as person's affective predisposition toward perceiving the world around him or her positively or negatively, such as an optimistic or pessimistic tendency (Lazarus, 1991). It has, however, a more long-lasting and stable affect (Watson, Clark, & Tellegen, 1988). In contrast with affective trait, emotions are affective conditions involving good or bad feelings and are shorter in duration (Frijda & Mesquita, 1994).

The present study investigates the impact of dispositional trait including neuroticism and extroversion and discrete emotions in particular, fear and enthusiasm on occupational commitment. Furthermore, we attempt to explore the mediation of fear and enthusiasm linking of the relationships between two dispositional traits —neuroticism and extroversion and occupational commitments.

Literature and Hypothesis

Occupational commitment

Occupational commitment is important because it enables an employee to develop the needed skills and relationships to involve an occupation.

Yet a number of commitment forms fall within this broad category of work commitment (Cooper-Hakim & Viswesvaran, 2005). It is essential to note the distinction between two constructs—occupational commitment and organizational commitment. The term occupational commitment encompasses one’s commitment or dedication to one’s occupation (Morrow & Goetz, 1988). Organizational commitment, conversely, is defined as “the strength of an individual’s identification with and involvement in a particular organization” (Porter, Steers, Mowday, & Boulain, 1974, p.604).

Meyer, Allen, and Smith (1993) further demonstrated the three commitment counterparts —affective, continuance, and normative— to be included in relation to occupational commitment. Specifically, affective counterparts apply when a person stays with his or her occupation because he or she desires to do so. With continuance counterparts, a person is committed to his or her occupation because it would be difficult to leave the occupation and because leaving the occupation would result in the person not receiving needed money and other benefits. With normative counterparts, people stay with their occupation because they feel that they ought to do so. However, Lee, Carswell, & Allen (2000, p.800) focused on affective component and described occupational commitment as “a psychological link between a person and his or her occupation that is based on affective reaction to that occupation”. In line with Lee and his colleagues’ (2000) view, the current article documents an examination of affective counterpart of occupational commitment.

Neuroticism and Extroversion

Neuroticism reflects the presence and effects of negative affect such as anger, anxiety, and sadness, and inability to cope with stress and pressure, as opposed to emotional stability (Costa & McCrae, 1992). Extroversion is related to optimism, personal energy and positive emotions, and the tendency to actively seek the company of others (John, Naumann, & Soto, 2008; Shiner & Caspi, 2003). Individuals high in neuroticism are thought to appraise certain work situations as threatening because they are more susceptible to anxiety-inducing environmental cues, or tend to view the world negatively (Spector et al., 2000). Whereas workers high in extroversion attract more favorable working conditions (e.g. social support), are more attuned to reward and reinforcement cues or may appraise ambiguous situations as more rewarding and challenging than introversion. Empirical findings appear to indicate that neuroticism and extroversion have been shown to correlate with aspects of occupational wellbeing and job satisfaction (Hart et al., 1995; Judge et al., 2002). However, these researchers identified a pathway from neuroticism to psychological strain via negative

workplace perceptions but indicated that extroversion was related to positive outcomes at work.

More recently, some research **incorporating dispositional trait into the attachment** model indicated different dispositional traits are related to distinctive attachment style. The related results in the literature showed that attachment security is negatively related with neuroticism, and is positively related to extroversion (Nofle & Shaver, 2006). It explained that attachment security is linked to aspects of increased sociability, such as a readiness to establish new relationships, which are in turn core constituents of extroversion (Schneider, Atkinson, & Tardiff, 2001). On the contrary individuals high in neuroticism are relatively low associated with efficient emotion regulation skills (Waters et al., 2010). Richards & Schat (2011) further posited that attachment avoidance, characterized by a lack of security, was positively related to emotional stability (low Neuroticism), whereas was negatively related to extroversion.

Prior research reported that avoidance was correlated with lower levels of organizational commitment, prosocial actions, spontaneous productive behaviors, and intention to quit (Mikulincer and Shaver, 2007). In addition, Geller and Bamberger (2009) found that attachment predicts instrumental coworker helping behavior. These results imply that workers in high neuroticism have low level of occupational commitment while workers in high extroversion are in great occupational commitment. Accordingly, Hypotheses 1a and 1b were formulated:

H1a. Neuroticism is directly, negatively related to occupational commitment.

H1b. Extroversion is directly, positively related to occupational commitment.

The mediation of fear and enthusiasm

According to Self-Determination Theory (SDT), autonomous motivation has been positively associated with occupational commitment (Fernet, 2011, 2012), organizational commitment (Lam & Gurland, 2008), and job satisfaction (Milette & Gagne', 2008). In contrast, amotivation and controlled motivation has been positively associated with negative consequences for workers, such as turnover intention (Richer, Blanchard, & Vallerand, 2002).

The worker's fear is thought to arise because workers high in neuroticism are thought to appraise certain work situations as threatening because they are more susceptible to anxiety-inducing environmental cues (Spector et al., 2000). Thus, fear feeling tends to induce amotivation or controlled motivation and then inhibits occupational commitment. Like neuroticism, according to SDT extroversion is assumed to influence occupational commitment through discrete emotion but enthusiasm.

Prior research implied that extroverts view the world positively and appraise ambiguous situations as more rewarding and challenging than introverts, which leads extroverts to experience more positive emotional states such as enthusiasm. It was hypothesized enthusiasm acts on autonomous motivation at work because it influences employees' psychological energy, and finally, enlightens occupational commitment. These inferences lead to Hypotheses 2 and 3.

H2a. Neuroticism is positively related to Fear.

H2b. Extroversion is positively related to Enthusiasm.

H3a. Fear mediates the relationship between neuroticism and occupational commitment.

H3b. Enthusiasm mediates the relationship between extroversion and occupational commitment.

Method

Sample

A total of 144 home carers were included in the study. The survey respondents were anonymous. The sample included 124 women (90.5%) and 81 participants with the certificate of the carer (59.6%). The mean of age of the participants was 44.18 ($SD=9.55$). The education level was distributed as follows: (a) junior high school and below ($n = 25, 18.5%$); (b) senior high school ($n = 80, 59.3%$); (c) college ($n = 30, 22.2%$). The average of occupational tenure was 5.91 years ($SD= 6.14$). The work hours per week were 47.87 ($SD=17.33$).

Procedure

We conducted the survey of the home carer in Taiwan **and sample consisted of 144 respondents**. The questionnaire was distributed to the participants in person or by mail. After the participants had completed the questionnaire, we asked them to return the materials by mail and gave them a gift to thank them for their participation.

Measures

Occupational commitment. Occupation commitment was assessed by four items revised from (Meyer & Allen, 1993). The items were rated by 5-likert type scale ($\alpha = .71$) and the sample item is "I regret having entered to the nursing profession (R)".

Fear and enthusiasm. We selected 3 items each from the Positive Affectivity and Negative Affective Scale (Watson et al., 1988) to assess feelings of fear and enthusiasm from on 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*) past three months. Fear feeling

was measured by averaging the scores of three items: upset, scared, and afraid ($\alpha = .78$). Enthusiasm was measured by averaging the scores of three items: enthusiastic, attentive, and active ($\alpha = .83$)

Neuroticism and extroversion. Neuroticism and extroversion were assessed with 9 and 11 items each revised from the NEO-Five Factor Inventory (Costa & McCrae, 1987). Items included “When I’m under a great deal of stress, sometimes I feel like I’m going to pieces” for neuroticism and “I like to have a lot of people around me” for extroversion. Participants rated each item on a 5-point Likert-type scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Cronbach’s alphas are .83 and .66 for neuroticism and extroversion, respectively.

Demographic variables. Past research has demonstrated that age, tenure, and work load may influence employee work mood and occupation commitment. Therefore, we collected four demographics —age, tenure, and work hours per week. However, the analyses of zero-order correlations showed that these demographics were not-significantly associated with occupation commitment (see Table 1). Therefore, demographic information was not included in the SEM analysis.

Results

Table 1 shows all variables have acceptable reliabilities with Cronbach alphas from .66 to 0.87. Zero-order correlations suggested mild and moderate relationships between predictors and outcomes. Thus, neuroticism was negatively correlated with occupational commitment ($r = -.39, p < .01$), while extroversion was positively correlated with occupational commitment ($r = .23, p < .01$). In addition, neuroticism was correlated with fear and enthusiasm ($r = .63$ and $r = -.27, p < .01$). However, extroversion was correlated with enthusiasm ($r = .39, p < .01$) but not fear mood ($r = -.15, n.s.$). Also the correlations of between two emotions including fear and enthusiasm and occupational commitment were both significant ($r = .54$ and $r = -.28, p < .01$).

Preliminary analyses indicated that demographic variables —age, tenure, and work hours per week —were not related to the main variables in the model and did not significantly affect the results in the structural equation model. Therefore, Demographic variables were omitted from further analyses.

Table 1. Means, Standard Deviations, and Correlations among Variables ($n=144$)

	Mean	SD	1	2	3	4	5	6	7	8
1. Age	44.18	9.55								
2. Occupational Tenure	5.91	6.14	.38**							
3. Work Hours	47.87	17.33	.06	.02						
4. Neuroticism	2.33	.71	-.13	.01	.06	(.87)				
5. Extroversion	3.40	.46	-.01	-.01	-.03	-.26**	(.66)			
6. Fear	2.11	.71	-.20*	-.03	-.04	.63**	-.15	(.78)		
7. Enthusiasm	3.72	.86	.09	.01	.10	-.27**	.39**	-.11	(.83)	
8. Occupational Commitment	7.43	1.83	-.01	.04	.15	-.39**	.23**	-.28**	.54**	(.71)

Coefficient alpha reliabilities are on the diagonal in parentheses.

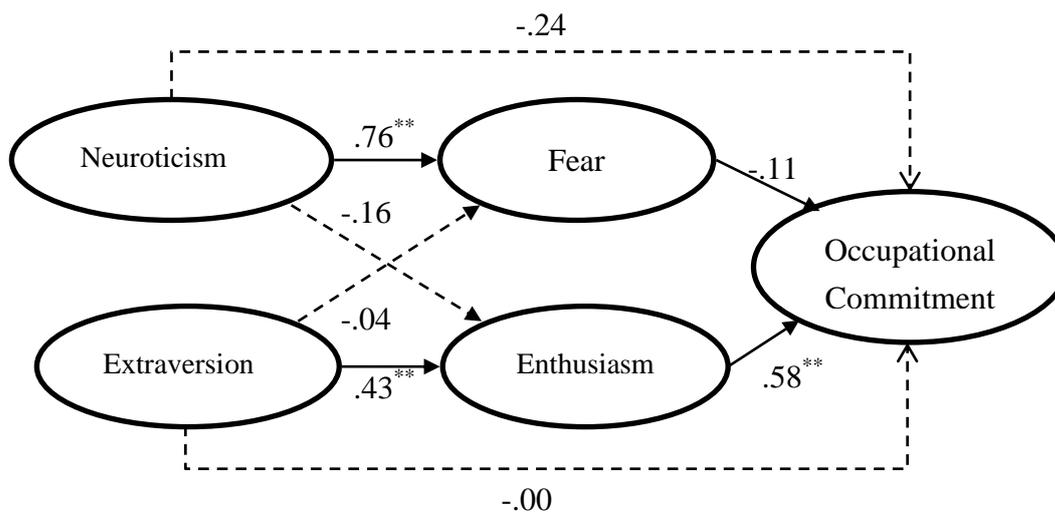
* $p < .05$, ** $p < .01$. All values two-tailed.

Test of the model

The LISEREL-output, shown in Figure 1, indicated a reasonable fit of the model to the data, $\chi^2_{(396)} = 625.48$, $p < .001$, $\chi/df = 1.58$, mean square error of approximation (RMSEA) = .06, comparative fit index (CFI) = .93, and GFI (goodness of fit) = .77.

First, the results of path coefficients revealed that neuroticism-occupational commitment and extroversion-occupational commitment were both non-significant ($r = -.24$ and $r = -.00$, *n.s.*).

Additionally, the coefficients of the path of showed that neuroticism was positively related to fear ($r = .76$, $p < .01$) and not related to enthusiasm ($r = -.16$, *n.s.*), while extroversion was positively related to enthusiasm ($r = .43$, $p < .01$) and not related to fear ($r = -.04$, *n.s.*). Furthermore, fear was negatively related to occupational commitment ($r = -.11$, *n.s.*) but enthusiasm was positively related to occupational commitment ($r = .58$, $p < .05$). These results indicated mediating effects of enthusiasm on the relationship between extroversion and occupational commitment, but not fear on the relationship between neuroticism and occupational commitment. These findings supported H2, and H3b, but not H1 and H3a.



$\chi^2 = 625.48$, $df = 396$, $\chi^2/df = 1.58$, $RMSEA = 0.06$, $CFI = 0.93$, $GFI = 0.77$, $NFI = 0.84$, $AGFI = 0.74$,

^a All path estimates are from the standardized solution. Dotted lines indicate non-significant paths. * $p < .05$; ** $p < .01$.

Figure 1. Path Estimates of the Structural Model ^a

As a further test, an alternative model was developed, which excluded two paths from neuroticism to occupational commitment and from extroversion to occupational commitment. In alternative model most fit indices were not affected by the deletion of the two paths. The chi-square test indicated that the alternative model have the similar fit as the proposed model, $\chi^2_{(398)} = 625.72$, $p < .001$, $\chi/df = 1.57$, $RMSEA = .06$, $CFI = .93$, and $GFI = .77$. However, it should be noted that the exclusion of the two direct paths influenced the results of the fear-occupational commitment path. The path coefficient increased from $r = -.11$ to $-.32$ and was significant.

Discussion

Results showed that enthusiasm mediated the effect of extroversion on occupational commitment but fear partially mediated the impact of neuroticism on occupational commitment. These findings suggest that worker with distinguish dispositional trait have different occupational commitment and partially support the mediating role of discrete emotion on the relationship between dispositional trait and occupational commitment.

The contribution of this present paper is to extend previous research efforts by testing the different mediation of fear and enthusiasm on the relationship between neuroticism and extroversion and occupational commitment.

In line with attachment theory, workers in high extroversion have high occupational commitment through enthusiasm because of attachment security.

In light of findings, there are potential implications for practical management. First, management should be more aware of emotional aspects of occupational commitment. Next, management should put in more effort toward workers in high emotional instability such as establishing management mechanisms to weaken their negative emotion at work. These mechanisms are expected to help workers high emotional instability to fit work environment and her/his occupation.

References

- Bakker, A.B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International, 13*, 209–223.
- Bakker, A. B., Boyd, C. M., Dollard, M., Gillespie, N., Winefield, A. H., & Stough, C. (2010). The role of personality in the Job Demands–Resources model: A study of Australian academic staff. *Career Development International, 15*, 622-636.
- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin, 131*(2), 241–259.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology, 54*, 853-863.
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Fernet, C. (2011). Development and validation of the work role motivation scale for school principals (WRMS-SP). *Educational Administration Quarterly, 47*(2), 307-331.
- Fernet, C., Austin, S., & Vallerand, R. J. (2012). The effects of work motivation on employee exhaustion and commitment: An extension of the JD-R model. *Work & Stress, 26*, 213-219.
- Frijda, N. H., & Mesquita, B. (1994). The social roles and functions of emotions. In S. Kitayama & H. R. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 51-87). Washington, DC: APA.
- Geller, D., & Bamberger, P. (2009). Bringing avoidance and anxiety to the job: Attachment style and instrumental helping behavior among coworkers. *Human Relations, 62*, 1803–1827.
- Hart, P. M., Wearing, A. J., & Headey, B. (1995). Police stress and well-being: integrating personality, coping and daily work experiences. *Journal of Occupational and Organizational Psychology, 68*, 133–156.

- John, O., Naumann, L., & Soto, C. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O.P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 114–158). New York, NY: Guilford Press.
- Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: a meta-analysis. *Journal of Applied Psychology, 87*, 530-41.
- Lam, C. F., & Gurland, S. T. (2008). Self-determined work motivation predicts job outcomes, but what predicts self-determined work motivation? *Journal of Research in Personality, 42*, 1109-1115.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with person and work-related variables. *Journal of Applied Psychology, 85*, 799-811.
- Meyer, J. P., Allen, N. J., & Smith, C. (1993). Commitment to organizations and occupations: extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*, 538-551.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford Press.
- Millette, V., & Gagné, M. (2008). Designing volunteers' tasks to maximize motivation, satisfaction and performance: the impact of job characteristics on the outcomes of volunteer involvement. *Motivation and Emotion, 32*, 11-22.
- Morrow, P. C., & Goetz, J. F. (1988). Professionalism as a form of work commitment. *Journal of Vocational Behavior, 32*, 92-111.
- Noftle, E. E., & Shaver, P. R. (2006). Attachment dimensions and the Big Five personality traits: Associations and comparative ability to predict relationship quality. *Journal of Research in Personality, 40*, 179–208.
- Porter, L., Steers, R., Mowday, M., & Boulin, R. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 54*, 603-609.
- Richards, D. A., & Schat, A. H. (2011). Attachment at (Not to) Work: Applying Attachment Theory to Explain Individual Behavior in Organizations. *Journal of Applied Psychology, 96*(1), 169-182.
- Richer, S. F., Blanchard, C., & Vallerand, R. J. (2002). A motivational model of work turnover. *Journal of Applied Social Psychology, 32*, 2089–2113.
- Schneider, B. H., Atkinson, L., & Tardiff, C. (2001). Child–parent attachment and children's peer relations: A quantitative review. *Developmental Psychology, 37*, 86–100.

- Shiner, R., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry, 44*, 2–32.
- Spector, A., Orrell, M., & Davies, S. (2001). Can reality orientation be rehabilitated? Development and piloting of an evidence based programme of cognition-based therapies for people with dementia. *Neuropsychological Rehabilitation, 11*, 377–397.
- Waters, S.F., Virmani, E. A., Thompson, R. A., Meyer, S., Raikes, H.A., & Jochem, R. (2010). Emotion regulation and attachment: Unpacking two constructs and their association. *Journal of Psychopathology and Behavioral Assessment, 32*, 37–47.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96*, 465-490.

ICSSAM-672

Measuring the Efficiency of Logistic Industry in Taiwan by DEA

Ming-Chi Tsai

Department of Business Administration, College of Management, I-Shou University
No.1, Sec. 1, Syuecheng Rd., Dashu District, Kaohsiung City 84001, Taiwan, R.O.C.
mct@isu.edu.tw

Munkhzul Ninj

Logistic manager, Tracing department, Landbridge LLC
6F, Seoul Business Center, Zaluuchuud Avenue-26, Bayanzurkh District 13381, Ulaanbaatar,
Mongolia
ninjmm@yahoo.com

Wen-Hsin Fang

Department of Business Administration, College of Management, I-Shou University
No.1, Sec. 1, Syuecheng Rd., Dashu District, Kaohsiung City 84001, Taiwan, R.O.C.
whfang@isu.edu.tw

Meei-Ing Tsai

Department of Industrial Management, College of Management, I-Shou University
No.1, Sec. 1, Syuecheng Rd., Dashu District, Kaohsiung City 84001, Taiwan, R.O.C.
a27898521@yahoo.com.tw

The corresponding author: Ming-Chi Tsai

Abstract

Supply-chain management (SCM) is one of the important operation strategies for organization to achieve global competitiveness. Companies are trying to find ways to improve their flexibility, responsiveness, and competitiveness by changing their operation strategies, methods, and technologies. The logistic industry in Taiwan plays an important role in supply-chain management. As global competitive environment getting more severe, how to improve their operations efficiencies to obtain the competitive advantage is a very important topic worth to investigate. Therefore, this study tries to evaluate the operations efficiency of logistic industry in Taiwan and provide directions of improvement for the inefficient companies. Data from forty-one Taiwanese companies in logistic industry including transportation and manufacturing are collected as research sample and data envelopment analysis (DEA) is used to evaluate their operations efficiency.

The DEA-CCR model and BCC model is applied to obtain the technical efficiency, pure technical efficiency, and scale efficiency of these companies. Sensitivity Analysis is also performed to find out how the evaluating variables affect the efficiency of these companies. Finally, suggestions of improvement for the inefficient companies are also provided.

Keywords: Data Envelopment Analysis, Efficiency Evaluation, Logistics, Supply-Chain Management.

1. Introduction

Supply-chain management (SCM) is one of the important operation strategies for organization to achieve global competitiveness. Companies are trying to find ways to improve their flexibility, responsiveness, and competitiveness by changing their operation strategies, methods, and technologies. To achieve this goal, many companies have decentralized their value-adding activities by outsourcing or developing virtual enterprise [1].

Integrating and developing supply-chain management is one of the most significant competitive strategies used by modern enterprises. With interactive supply-chain, providers are able to create values for their own, the customers and the suppliers. The dimension of the supply-chains strategy also includes measuring the performances of the process. Nowadays evaluation in companies based on different models which are depending on the individual organization structure, the organization of responsibilities and of course the level of used supply-chain maturity [2].

The logistic industry in Taiwan plays an important role in supply-chain management. As global competitive environment getting more severe, how to improve their operations efficiencies to obtain the competitive advantage is a very important topic worth to investigate.

Therefore, this study tries to evaluate the relative operational efficiency of logistic industry in Taiwan, to find out what variables affect their operational efficiency, and provide directions of improvement for the inefficient companies.

Data envelopment analysis (DEA) is a mathematical programming method able to evaluate the relative efficiency of decision-making units (DMUs) with multiple input and output variables [3]. In this study, data from forty-one Taiwanese companies in logistic industry including transportation and manufacturing are collected as research sample and DEA is used to evaluate their relative operational efficiency. The DEA-CCR model and BCC model is applied to obtain the technical efficiency (TE), pure technical efficiency (PTE), and scale efficiency (SE) of these companies.

Sensitivity Analysis is also performed to find out how the evaluating variables affect the efficiency of these companies. Finally, suggestions of improvement for the inefficient companies are also provided.

The content of this study is divided into four sections. First, the research background and the importance of this study are explained in section 1. Second, a survey about the relative researches and basic DEA model is introduced in section 2. Then analysis of data and discussion about the results is listed in section 3. At last, conclusions and suggestions are provided in section 5.

2. Literature Review

2.1 Supply-Chain Management

Supply-chain is focusing on the flow from supplier to final consumer and takes care of all stakeholders in the supply-chain [4]. Christopher [5] declares that the fundament of supply-chain is the relationship management to gain a better cost-effective outcome for everyone attending. SCM is the integration of the activities that procure materials and services, transform them into intermediate goods and final products, and deliver them to customers. These activities include purchasing and outsourcing activities, plus many other functions that are important to the relationship with suppliers and distributors [6].

Currently companies are forced to increase their global market share in order to survive. But at the same time, these same companies must protect their domestic market share from international competitors. The generating of competitive advantages with the object how to expand the global logistics and distribution network, in order to ship products to customers in a dynamic and fluctuating demand circumstances. Strategies positioning of inventories is indispensable, so that the products are available for the customer on-demand [7].

Supply-chain management fundamentally is based on efficiencies and effectiveness. Efficiency can be measured by delivery performance product quality and inventory level, while effectiveness can be measured by service quality and service needs. Therefore, supply-chain based on how well the company satisfies customer favorites in terms of service, costs, quality, and flexibility [8].

Professional supply-chain management has the potential to create more global organizations and to increase market share with a competitive advantage by using a consequent improvement stakeholder value approach [9]. Lee and Billington [10] specified that supply-chain management starts with the integration of activities which are taking place through a complex network of stations.

It begins with the supply of raw material, the transformation into intermediate goods till the final production and the hand over to the consumer with the help of a distribution system.

2.2 Performance Measurement of Supply-Chain

Performance measurement can be defined as the process of “quantifying the efficiency and effectiveness of action” [11]. In this definition, effectiveness affects to how well the action contributes and efficiency concerns the volume of resources used to complete the action.

Accordingly, measuring the supply-chain performance is process of quantifying the successful and effectiveness of supply-chain operations. However, multiple dimensions of input and output variables made the performance measurement of supply-chain very complex and difficult.

The performance measurement of supply-chain is a framework defining formally a model of performance for supply-chain which is based on common objectives, metrics, procedural and measurement methodologies, measurement regulations, and roles of all agents participating in the supply-chain [12]. The objective of supply-chain performance measurement is the creation of crucial information for managers. Thus, managers should be interested in this measurement, and SCM is measured and evaluated in order to give a picture on the efficiency of the SCM. There are various reasons, interest groups within the organization, and managers that need to know about the SCM performance [13].

Supply-chain measurement and evaluation is also applied in the initial stage at which the SCM is being developed. More specifically, for the development of SCM managers must have a rigorous and qualified measurement method for evaluating the performance. It is a fact that in the manufacturing industry performance measurement is crucial, especially in certain business operations and management strategies, as it sheds light on processes such as monitoring and assessment of operations management. Furthermore, it can provide managers and firms as a whole the motivation, interest, improvement, and the setting and achieving of strategic management goals [14][15].

2.3 Data Envelopment Analysis

The fundamental theory of the DEA evaluation technique is based on the concept of envelopment analysis, which was proposed by the Italian economist Pareto in 1927 [16]. This technique evaluates the relative efficiencies of a group of decision- making units (DMUs) by a production frontier, which is formed from a set of “efficient” DMUs.

Charnes et al. [3] extended the concept proposed by Farrell [17] and developed an evaluation model that can compute the relative efficiency of DMU with multiple input and output variables under the assumption of a constant returns of scale. This model is called the DEA-CCR model. DEA-CCR model restricts the ratio of the weighted sum of outputs to the weighted sum of inputs within “1”, and the values of the weights are set to be unknown variables. When computing the relative efficiency, θ_k , of DMU_k , the values of the weights were chosen to maximize θ_k . DMU_k is called “relatively efficient” if θ_k equals 1 and “relatively inefficient” if θ_k is less than 1. Generally, the efficiency value obtained from DEA-CCR model is called technical efficiency (TE). This model can provide suggestions of improvement for those inefficient DMUs through slack analysis. Using sensitivity analysis, the important variables that affect the efficiency of DMU mostly can be recognized [3].

Banker, Charnes, and Cooper [18] release the constant returns of scale assumption of CCR model and proposed an evaluation model that can evaluate the efficiency of DMUs under variable returns of scale. This model is generally called the DEA-BCC model. Using BCC model, the pure technical efficiency (PTE) of DMU can be obtained, and then the scale efficiency (SE) of DMU can be computed as $SE=TE/PTE$. The DEA evaluation technique can evaluate the efficiencies of DMUs with multi-inputs and multi-outputs, and it is flexible in practical applications. It has been applied to performance evaluation problems in many fields, such as [2][3][18-19].

3. Data Analysis

3.1 Selecting Input and Output Variables

As mentioned in the previous sector, the DEA evaluation technique can evaluate the efficiency of DMU with multiple input and output variables. This study investigates the efficiency of Taiwan’s logistic industry, which is a multitude of input and output measures. Therefore, the DEA framework is used to perform all data analysis.

DEA method requires that all input and output variables should have positive correlation. After deleting those un-suitable variables, four inputs (total assets, operating cost, operating expense, and no. of employee) and five outputs (net operating income, gross profit, operating profit, other income, and total income) variables are selected to evaluate the performance of Taiwan’s logistic industry. Data in year 2011 for forty-one transportation and logistics companies in Taiwan are collected from the Taiwan Institute of Economic Sankei database.

3.2 Efficiency Evaluation

Using DEA-CCR and BCC model, the TE, PTE, and the Returns to Scale (RTS) of all DMUs are obtained and listed in Table 1, where CRS represents constant returns to scale, DRS represents decreasing returns to scale, and IRS represents increasing returns to scale. Then the SE can be computed by $SE=TE/PTE$ and the results are also listed in Table 1.

From Table 1, twenty companies, including Shan-Loong Transportation, Chinese Maritime Transport, etc., are efficient in TE, PTE, and SE. China Airlines, THI Group, Taiwan Allied Container Terminal, EVA Airways Corporation, Her Chee Industrial, and Aero Win Technology are efficient in PTE, but inefficient in SE. China Container Terminal is efficient in SE but inefficient in PTE. Finally, the average value of TE, PTE, and SE for all DMUs are 0.95, 0.97, and 0.98, respectively. It reveals that most of the companies are under sound operation.

3.3 Sensitivity Analysis

There are two directions for sensitivity analysis in DEA framework, one is removing the efficient DMUs, and the other is removing particular input and output variables [3]. To investigate the impact of variables to the efficiency value of DMUs, this study perform sensitivity analysis by removing one input or output variable out and then recalculate new TE scores of all companies by CCR model and the results are listed in Table 2.

In Table 2, column 2 to column 9 represents the efficiency values of DMUs after removing each input/output variable. For example, column 2 lists the efficiency values of DMUs after removing the first input, X_1 . The last column lists the original efficiency values of DMUs.

From Table 2, it is easy to realize that output variables Y_2 (gross profit) and Y_3 (operating profit) are less important since the efficiency values keep the same after removing these two variables. X_1 (total assets) and Y_1 (net operating income) are the most important variables.

The number of efficient DMUs drops form twenty to eleven after removing total assets, and the average efficiency value drops from 0.95 to 0.77 after removing net operating income. Therefore, companies should focus more on these two variables if they want to increase their competitive advantage.

Table 1 The TE, PTE, and SE of all companies.

DMU	TE	PTE	SE	RTS
Shan-Loong Transportation	1	1	1	CRS
China Container Terminal	0.94	0.94	1	
Chinese Maritime Transport	1	1	1	CRS
Chung Lien Transportation	0.98	0.99	0.99	
China Airlines	0.93	1	0.93	DRS
Dimerco Express Corporation	0.92	0.98	0.94	
THI Group	0.96	1	0.96	IRS
Taiwan Navigation	1	1	1	CRS
Taiwan High Speed Rail	1	1	1	CRS
Shih Wei Navigation	1	1	1	CRS
Lily Textile	0.83	0.88	0.94	
UNI Airways	0.91	0.92	0.99	
Kuang Ming Shipping Corporation	0.80	0.87	0.93	
Tze Shin International	0.79	0.85	0.93	
Air Asia Company	1	1	1	CRS
Taiwan Allied Container Terminal	0.85	1	0.85	IRS
Kerry TJ Logistics Company	1	1	1	CRS
HCT Logistics	1	1	1	CRS
Sea and Land Integrated	0.91	0.94	0.97	
Science Park Logistics	1	1	1	CRS
Chien Shing Harbor Service	0.97	0.99	0.98	
Evergreen International	0.89	0.91	0.98	
EVA Airways Corporation	0.98	1	0.98	DRS
First Steamship	0.90	0.91	0.99	
Eastern Media International	1	1	1	CRS
San yan Industry	0.98	0.99	0.99	
Farglory FTZ Investment Holding	1	1	1	CRS
Uni-President Enterprises	1	1	1	CRS
Far Eastern Air Transport	1	1	1	CRS
Ta-Ho Maritime Corporation	1	1	1	CRS
U-Ming Marine Transport	1	1	1	CRS
Wan Hai Lines	1	1	1	CRS
Sincere Navigation	1	1	1	CRS
Yang Ming Marine Transport	1	1	1	CRS
Evergreen Marine	0.85	0.88	0.96	
CSBC Corporation Taiwan	1	1	1	CRS
Pihsiang Machinery Mfg	0.95	0.96	0.99	
Her Chee Industrial	0.88	1	0.88	IRS
Aerospace Industrial Development	1	1	1	CRS
Lein Hwa Industrial	0.94	0.96	0.98	
Aero Win Technology	0.93	1	0.93	IRS
Average	0.95	0.97	0.98	

Source: Author's calculation.

Table 2 Sensitivity analysis for all companies: removing input or output variables

DMU	X_1	X_2	X_3	X_4	Y_1	Y_2	Y_3	Y_4	Y_5	Orig.
Shan-Loong Trans	0.81	1	1	1	0.93	1	1	1	1	1
China Container Term	0.68	0.56	0.77	0.94	0.57	0.94	0.94	0.94	0.94	0.94
Chinese Maritime Trans	1	1	1	0.89	0.79	1	1	1	0.91	1
Chung Lien Trans	0.58	0.84	0.64	0.98	0.95	0.98	0.98	0.98	0.98	0.98
China Airlines	0.80	0.61	0.91	0.90	0.41	0.93	0.93	0.93	0.93	0.93
Dimerco Express	0.69	0.79	0.89	0.92	0.77	0.92	0.92	0.92	0.89	0.92
THI Group	0.77	0.87	0.94	0.94	0.84	0.96	0.96	0.96	0.96	0.96
Taiwan Navigation	0.93	1	1	1	1	1	1	1	0.95	1
Taiwan High Speed Rail	1	1	1	1	1	1	1	1	1	1
Shih Wei Navigation	1	1	1	1	1	1	1	1	1	1
Lily Textile	0.69	0.41	0.66	0.83	0.12	0.83	0.83	0.83	0.83	0.83
UNI Airways	0.70	0.56	0.88	0.89	0.46	0.91	0.91	0.91	0.91	0.91
Kuang Ming Shipping	0.71	0.60	0.72	0.80	0.60	0.80	0.80	0.80	0.72	0.80
Tze Shin International	0.68	0.46	0.78	0.77	0.43	0.79	0.79	0.79	0.79	0.79
Air Asia	0.64	1	1	1	1	1	1	1	1	1
Taiwan Allied Container	0.85	0.79	0.85	0.67	0.77	0.85	0.85	0.85	0.85	0.85
Kerry TJ Logistics	0.57	1	1	1	1	1	1	1	1	1
HCT Logistics	0.63	1	1	1	1	1	1	1	1	1
Sea and Land Integrated	0.60	0.49	0.83	0.90	0.31	0.91	0.91	0.91	0.91	0.91
Science Park Logistics	0.59	1	0.98	1	1	1	1	1	1	1
Chien Shing Harbor	0.63	0.72	0.72	0.97	0.86	0.97	0.97	0.93	0.97	0.97
Evergreen International	0.70	0.56	0.72	0.89	0.57	0.89	0.89	0.89	0.89	0.89
EVA Airways	0.88	0.87	0.97	0.92	0.63	0.98	0.98	0.98	0.98	0.98
First Steamship	0.90	0.62	0.90	0.90	0.90	0.90	0.90	0.90	0.51	0.90
Eastern Media Intern	1	1	1	1	1	1	1	0.87	1	1
San yan Industry	0.78	0.88	0.97	0.94	0.80	0.98	0.98	0.98	0.98	0.98
Farglory FTZ Invest	1	0.38	1	1	1	1	1	1	1	1
Uni-President Enterp	0.84	1	1	1	1	1	1	1	1	1
Far Eastern Air Trans	1	1	1	1	1	1	1	0.91	1	1
Ta-Ho Maritime	0.98	1	1	1	1	1	1	1	1	1
U-Ming Marine Trans	1	1	0.76	1	1	1	1	1	0.57	1
Wan Hai Lines	1	1	1	1	0.48	1	1	1	1	1
Sincere Navigation	1	1	1	1	1	1	1	1	0.41	1
Yang Ming Marine	1	1	1	1	0.35	1	1	1	1	1
Evergreen Marine	0.82	0.53	0.83	0.81	0.47	0.85	0.85	0.82	0.85	0.85
CSBC Corporation	1	1	1	1	1	1	1	1	1	1
Pihsiang Machinery	0.70	0.76	0.90	0.95	0.42	0.95	0.95	0.95	0.95	0.95
Her Chee Industrial	0.57	0.41	0.77	0.88	0.42	0.88	0.88	0.88	0.88	0.88
Aerospace Industrial	0.76	1	1	1	1	1	1	1	1	1
Lein Hwa Industrial	0.92	0.77	0.89	0.89	0.65	0.94	0.94	0.94	0.90	0.94
Aero Win Technology	0.58	0.70	0.83	0.93	0.73	0.93	0.93	0.92	0.93	0.93
Average	0.80	0.81	0.91	0.94	0.77	0.95	0.95	0.95	0.91	0.95

Source: Author's calculation.

Note: X_1 =total assets, X_2 =operating cost, X_3 =operating expense, X_4 =no. of employee, Y_1 =net operating income, Y_2 =gross profit, Y_3 =operating profit, Y_4 =other income, Y_5 =total income.

3.4 Slack Analysis

As mentioned, DEA-CCR model can provide suggestions of improvement for those inefficient DMUs through slack analysis. This study performs slack analysis and provides suggestion of improvement for inefficient DMUs. From Table 1, there are twenty-one inefficient companies. Take the China Container Terminal as an example, the results of slack analysis are $S_1^- = S_2^- = S_3^- = S_1^+ = 0$, $S_4^- = 297.8337$, $S_2^+ = 138.3476$, $S_3^+ = 144.5679$, $S_4^+ = 5.3996$, $S_5^+ = 73.7183$, and the efficiency value is 0.94. The original values of input and output variables are $X_1 = 5479.386$, $X_2 = 2170.288$, $X_3 = 97.578$, $X_4 = 569$, $Y_1 = 2388.421$, $Y_2 = 218.133$, $Y_3 = 120.555$, $Y_4 = 5.008$, $Y_5 = 20.467$. Therefore, the idea value for input variable X_1 (total assets) can be computed as:

$$0.94 * 5479.386 \cong 5130$$

The idea value for input variable X_4 (number of employee) is:

$$0.94 * 596 - 297.8337 \cong 235$$

The idea value for output variable Y_2 (gross profit) is:

$$218.133 + 138.3476 \cong 356$$

The idea values for other input and output variables can be computed in the same equation. These results can be used as important suggestions for the managers to increase their operational efficiency.

4. Conclusions

Supply-chain management (SCM) is one of the important operation strategies for organization to achieve global competitiveness. Taiwan's industrial sectors are playing an important role in the national supply-chain. The globalization of markets and rising of competition has forced many enterprises to adopt global logistics and production models. In this situation, enterprises can't ignore the potential foreign markets and must search for comparatively low cost environments all over the world. Due to the globalization of business operations, the supply-chain participants are more complex and spread all over the world.

The logistic industry in Taiwan plays an important role in supply-chain management. As global competitive environment getting more severe, how to improve their operations efficiencies to obtain the competitive advantage is a very important topic. Therefore, how to enhance the efficiency of the entire global supply-chain is an essential topic for the industries together with necessitates using appropriate logistics resources to ensure the timely reaching of the right products and services to the market.

Data from forty-one Taiwanese companies in logistic industry including transportation and manufacturing are collected as research sample and data envelopment analysis (DEA) is used to evaluate their operations efficiency. The DEA-CCR model and BCC model is applied to obtain the technical efficiency, pure technical efficiency, and scale efficiency of these companies. Results reveal that twenty companies are efficient in TE, PTE, and SE. Six companies are efficient in PTE, but inefficient in SE. China Container Terminal is the only company efficient in SE but inefficient in PTE. Finally, the average value of TE, PTE, and SE for all DMUs are 0.95, 0.97, and 0.98, respectively. It reveals that most of the companies are under sound operation.

Sensitivity Analysis is also performed to find out how the evaluating variables affect the efficiency of these companies. Results reveal that gross profit and operating profit are less important since the efficiency values keep the same after removing these two variables. Total assets and net operating income are the most important variables. Therefore, companies should focus more on these two variables if they want to increase their competitive advantage. Finally, suggestions of improvement for the inefficient companies are also provided.

References

- [1] Gunasekaran A, & Ngai E. Information systems in supply-chain integration and management. *European Journal of Operational Research*, 2004, 159(2): 269-295.
- [2] Sanei M, & Chatghayeh S M. Performance evaluation of SCM using DEA: A review. *The 3rd Conference on Data Development Analysis*, 2011.
- [3] Charnes A, Cooper W W, & Rhodes E. Measuring the efficiency of decision making units. *European Journal of Operational Research*, 1978, 2(6): 429-444.
- [4] Chibba A. *Measuring supply chain performance measures: prioritizing performance measures*. Licentiate Thesis, Lulea University of Technology, 2007.
- [5] Christopher M. *Logistic and Supply Chain Management*. Pearson Education, Inc., New Jersey, 2005.
- [6] Heizer J, & Render B. *Operations Management* (10th ed). Pearson Education, Inc., New Jersey, 2011.
- [7] Handfield R B, & Nichols E L. *Supply Chain Redesign*. Prentice Hall, New York, 2002.
- [8] Klemencic E. *Management of the supply chain: case of Danfoss District heating Business Area*. Master Thesis, University of Ljubljana, Ljubljana, 2006.
- [9] Coyle J J, Langley C J, Gibson B J, Novack R A, & Bardi E J. *Supply Chain Management: A Logistics Perspective* (8th ed). South Western: Cengage Learning, Mason, OH, 2009.
- [10] Lee H L, & Billington C. The evolution of supply chain management models and practice at Hewlett Packard. *Interfaces*, 1995, 25, 42-63.

- [11] Neely A, Gregory M, & Platts K. Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*, 1995, 15(4), 80 - 116.
- [12] Holmberg S. A systems perspective on supply chain measurements. *International Journal of Physical Distribution and Logistics Management*, 2000, 30(10), 847–868.
- [13] Waal A D. Behavioral factors important for the successful implementation and use of performance management systems. *Management Decision*, 2003, 41(8), 688–697.
- [14] Tapinos E, Dyson R G, & Meadows M. The impact of performance measurement in strategic planning. *International Journal of Productivity and Performance Management*, 2005, 54(5-6), 370–384.
- [15] Lohman C, Fortuin L, & Wouters M. Designing a performance measurement system: A case study. *European Journal of Operational Research*, 2004, 156(2), 267–286.
- [16] Pareto V. *Manuel d'Economic Politique* (2nd ed). Girard: Paris, 1927.
- [17] Farrell M J. The measurement of productive efficiency. *Journal of the Royal Statistical Society*, 1957, 120, 253-281.
- [18] Banker R D, Charnes A, & Cooper W W. Some models for estimating technical and scale inefficiencies in Data Envelopment Analysis. *Management Science*, 1984, 30(9), 1078-1092.
- [19] Charnes A, Cooper W W, Lewin A Y, Morey R C, & Rosseau J. Sensitivity and stability analysis in DEA. *Annals of Operations Research*, 1985, 2, 139-156.

ICSSAM-684

Segmentation of Lccs users Based On Their Relationship with The Tourist Establishment and Host Country

Archasantisuk, Piyasuda

Chulalongkorn University, Phyathai Rd. BKK 10330

oil_piyasuda@hotmail.com

Katawandee, Punthumadee

Chulalongkorn University, Phyathai Rd. BKK 10330

Punthumadee@cbs.chula.ac.th

The corresponding author: Katawandee, Punthumadee

Abstract

Leisure travelers have increasingly used Low-cost carriers (LCCs) on a global basis. In Thailand, LCCs have continuously seen an increasing market share of passengers. However, studies about LCC travelers have received scant attention, particularly those of leisure traveler's behaviors. The objective of this study aims to use segmentation analysis on LCC users in Thailand based on their relationship with the tourist establishment and host country.

A survey was conducted with 326 LCC users at Don Mueang International Airport, a Thai secondary airport for low cost airlines. It is found that LCC users can be classified into 4 groups; namely, Organized Mass Tourist wanting some local contact, Individual Mass Tourist, Occasional Explorer and Drifter.

Keywords: Low-cost airline, segment, relationship with the tourist establishment and host country

1. Introduction

Low-cost Carriers (LCCs) started a phenomenal change in travel behavior by offering travelers an opportunity to fly at more convenient times with low fares. The concept of LCCs originated in the United States with Southwest Airlines at the beginning of the 1970s [1]. In Europe, Ryanair, an Irish company, copied the Southwest model in 1991 by transforming itself from previously a traditional carrier into an LCC. Other LCCs in the UK, such as easyJet, followed this concept [2]. Many studies have recorded a positive economic impact of LCCs and leisure travellers who significantly constitutes the demand for LCCs [3] and [4]. However, studies about LCC users profile have been relatively limited.

The same thing can be said about Thailand where low-cost flights have prompted a travel phenomenon within the decade. Nonetheless, little is known about LCCs users who fly throughout the country.

The objective of this study is to explore the characteristics of LCC users in Thailand by evaluating their relationship with tourist establishments and the host country. Motivations of each segment are then investigated. The study should provide information useful for LCCs manager as well as destination management organizations to formulate relevant marketing strategies.

2. Literature Review

2.1 Low Cost Airlines in Thailand

Following the experiences of LCCs in the US and the EU, the wave of LCCs has emerged in Southeast Asia. In Thailand, LCCs have been operating since 2003 in response to the Thai government's open sky policy that allows Thai private companies to operate flights to any destinations in the country. Thai AirAsia was the first low cost airline to operate in Thailand, followed by Orient Thai and Nok Air. Further, a heavy demand for air transportation in Thailand has prompted the Thai government to re-open Don Mueang International Airport as a secondary airport to ease air traffic at Bangkok's primary airport, Suvarnabhumi. Thus in late 2012, Thailand's top three LCCs; namely, AirAsia, Nok Air and Orient Thai Airlines, started the operations from Don Mueang International Airport.

The Airports of Thailand reports that currently 24 low cost airlines operate flights to and from Thailand. Thai AirAsia is the biggest player with 60.11% of the total low-cost airline market share, followed by Nok Air and Orient Thai Airlines [5]. Impressive growth figures have been recorded. For instance, in the fiscal year of 2012, LCCs carried 20.34 million passengers through the six main airports in Thailand, representing 38.8% of the total 52.36 million passengers. The number of LCC passengers in 2012 rose from 17.64 million passengers of the previous year or 36.9% of 47.8 million passengers [6]. Overall, the LCC market in Thailand as well as in this region has been predicted to further expand, given such supportive factors as:

- The tourist industry in Thailand has grown continually. Ninety-two percent of air passengers in Thailand are leisure travelers [7].
- LCC operators have conducted proactive marketing strategies to expand the market, for example, launching new routes, adding flight frequency, forming partners to offer more services.

- Open Skies policy of ASEAN countries prescribes the liberalization of aviation routes between ASEAN member countries. More competitive markets that stimulate new products and new market segments are expected.
- This region has tremendous potentials for trade and investment. Thus, demand of travel is growing.

2.2 Market segmentation and tourist typologies

The goal of market segmentation is to classify consumers into homogeneous groups using different criteria or variables [8]. Many scholars have thoroughly discussed the importance of segmentation [9, 10 and 11]. To serve as a base for target marketing, segmentation is usually based on demographic, geographic, behavioral or psychographic variables. Other criteria include benefits, frequency of use and loyalty are some variables of behavioral segmentation ([12]. Psychographic segmentation is another useful criteria that classify consumers based on their lifestyles or personality [13] and [14]. This study uses Cohen's criteria, which are based on tourists' relationship with the host country, the kind of activities tourists engage in, experience sought and their attitudes towards safety. The criteria have proved useful in analyzing tourist traits [15].

The following is the summary of Cohen's tourist typology. Cohen identified four types of tourists by observing how tourists relate to the tourist establishment, which refer to those involved in the travel trade, for instance, travel agencies, travel companies and hotel chains catering to the tourist needs. Tourists were observed to fall into any of the following categories:

- **The organized mass tourist** –is known to be the least adventurous and remains largely confined to his “environmental bubble” throughout his trip. The mass tourist is highly dependent upon the travel industry infrastructure to deliver a packaged trip at a competitive price and with minimal organizational requirement on the part of the tourist. The itinerary of his trip is fixed in advanced, and all his stops are well-prepared and guided; he makes almost no decisions for himself and stays almost exclusively in the microenvironment of his home country. Familiarity is at a maximum, novelty at a minimum.
- **The individual mass tourist** - This type of tourist role is similar to the previous one, except that the tour is not entirely preplanned, the tourist has a certain amount of control over his time and itinerary and is not bound to a group. However, all of his major arrangements are still made through a tourist agency. In this sector, tourists will be partly dependent upon the infrastructure of mass tourism to deliver some elements of the tourist package, especially travel and accommodation, but will structure more of the trip to suit them.

- **The explorer** - This type of tourist arranges his trip alone; he tries to get off the beaten track as much as possible, but he nevertheless looks for comfortable accommodations and reliable means of transportation. These people are usually seeking novelty and experiences that are not embodied in concepts of mass tourism. He tries to associate with the people he visits and to speak their language. The explorer dares to leave his “environmental bubble” much more than the previous two types, but he does not immerse himself completely in his host society.
- **The drifter** - This type of tourist ventures furthest away from the beaten track and from the accustomed ways of life of his home country. He avoids any kind of connection with the tourist establishment, and considers the ordinary tourist experience phony. He tends to make it wholly on his own, living with the people and often taking odd jobs to keep going. He tries to live the way the people he visits live, and to share their shelter, foods, and habits, keeping only the most basic and essential of his old customs. He is almost wholly immersed in his host country. Novelty is here at its highest, familiarity disappears almost completely.

The first two types are called ‘institutionalized tourist role’ as they deal heavily with the travel trade. The last two types are called ‘non-institutionalized tourist roles’, in that they are open roles, at best only very loosely attached to the tourist establishment.

2.3 Travel motivators

The study also employed a framework regarding tourist motivators. McIntosh, Goeldner, and Ritchie discussed 4 types of motivators consisting of physical motivators, cultural motivators, interpersonal motivators, and status and prestige [16]. This framework of push motivations is simple; yet proves useful for this study.

3. Methodology

The study was conducted via a questionnaire consisting of four parts. The first part dealt with general information of LCC users while the second part probed into their trip characteristics.

The third part with 20 items investigated their relationship with tourist establishments and the host country. Respondents were asked to rate on a 1-7 scale (7 meaning totally agree down to 1 meaning that the behavior is not true). The last part collected data regarding their travel motivations. The goal was to examine the motivations of each segment planned to be established. Respondents were asked to evaluate how important each of a motivator was for them on a 1-7 scale where 7 signifying extremely important and 1 suggesting not important at all.

The questionnaire was distributed to both international and Thai passengers at the departure hall of Don Mueang International Airport. The fact that Chinese tourists were prominent among international passengers, a Chinese-version of the questionnaire was prepared. In total, 326 completed questionnaires were collected. Respondents comprised 35.58 % males and 64.42% females.

4. Results

4.1 Identification of segments

The main objective of this study focused on identifying LCC users segments, dependent on their relationship with the tourist establishment and host country they visit. The *K*-means cluster analysis was used to identify underlying dimensions of LCC users. Four groups were defined as shown in Table 1.

Factors	Clusters means*				F-value	Sig
	Cluster 1	Cluster 2	Cluster 3	Cluster 4		
Relationship with tourist establishment (F ₁)	0.97676	0.14404	-0.77141	-0.76441	157.041	0.000
Relationship with host country (F ₂)	0.24861	-1.41515	-0.7992	1.25399	299.930	0.000
Cluster size (number)	108	68	89	61		
Percentage of respondents (%)	33.13	20.86	27.30	18.71		

Table 1: Result of K-means Cluster Analysis (Nonhierarchical Cluster Analysis)

*The cluster descriptions are based on factor scores that have a mean of zero and standard deviation of one.

Cluster		F ₁	F ₂
1 (n = 108)	Organized Mass Tourist wanting some local contact	High	Medium-high
2 (n = 68)	Individual Mass Tourist	Medium-high	Very low
3 (n = 89)	The Occasional Explorer	Low	Low
4 (n = 61)	The Drifter	Low	Very High

Table 2: Interpretation of four clusters

The naming of the four clusters follow Cohen's construct of tourist typology. However, some other trait dimensions are also present, as discussed below:

- Cluster 1 is the largest group, representing 33.13 percent of all LCCs users. These users have a high relationship with the tourist establishment as they depend largely on an intermediary and infrastructure of the tourist industry. The score of the relationship with the host country is between moderate and high. This can be interpreted as expressing a wish to associate with local people. Therefore, cluster 1 is named the 'Organized Mass Tourist wanting some local contact'.
- Cluster 2 represents 20.86 percent of LCC users. This group has a high relationship with the tourist establishment but with a lower degree than Cluster 1. The relationship with the host of the group is also very low. Cluster 2 is named 'Individual Mass Tourist'.
- Cluster 3 represents 27.30 of all LCCs users. Members of this cluster have a low relationship with tourist establishments and a low relationship with the host country. They seem to be independent and want to be on their own. The group also wants to avoid tourist attractions visited by organized mass tourists. Occasionally, they want to venture out of the familiar environment. The group is called the 'Occasional Explorer'.
- Cluster 4 is the smallest group, representing 18.71 percent of the total LCC users. Their relationship with the tourist establishment is low and their relationship with the host country is very high. They separate themselves from the tourist industry. Their travel has a purpose to immerse themselves with the local people. This group is called the 'Drifter'.

4.2 To better understand the profile of the above segments, each cluster was cross-tabulated with demographic and trip characteristics variables. A series of chi-square tests were applied to check for any statistical difference between each LCC user group, as shown in Table 3.

Table 3: Demographic and travel characteristics of each cluster (In number and percentage)

Variables	Description	Total	Cluster 1	Cluster 2	Cluster 3	Cluster 4
1. Gender	Male	116 (35.6)	36 (33.3)	22 (32.4)	34 (38.2)	24 (39.3)
	Female	210 (64.4)	72 (66.7)	46 (67.6)	55 (61.8)	37 (60.7)
2. Nationality*	Thai	163 (50.0)	74 (68.5)	47 (69.1)	24 (27.0)	18 (29.5)
	Chinese	95 (29.1)	29 (26.9)	12 (17.6)	35 (39.3)	19 (31.1)
	Others	68 (20.9)	5 (4.6)	9 (13.3)	30 (33.7)	24 (39.3)
3. Age	16-25	79 (24.2)	27 (25.0)	20 (29.4)	20 (22.5)	12 (19.7)
	26-35	180 (55.2)	60 (55.6)	38 (55.9)	47 (52.8)	35 (57.4)
	36-45	42 (12.9)	16 (14.8)	4 (5.9)	10 (11.2)	12 (19.7)
	46-55	14 (4.3)	3 (2.8)	4 (5.9)	6 (6.7)	1 (1.6)
	> 55	11 (3.4)	2 (1.9)	2 (2.9)	6 (6.7)	1 (1.6)
4. Monthly income (USD)*	< 500	42 (12.9)	13 (12.0)	10 (14.7)	7 (7.9)	12 (19.7)
	501-1,000	125 (38.3)	50 (46.3)	29 (42.6)	24 (27.0)	22 (36.1)
	1,001-1,500	47 (14.4)	18 (16.7)	6 (8.8)	14 (15.7)	9 (14.8)
	1,501-2,000	44 (13.5)	12 (11.1)	7 (10.3)	14 (15.7)	11 (18.0)
	2,001-2,500	31 (9.5)	6 (5.6)	5 (7.4)	15 (16.9)	5 (8.2)
	> 2,500	37 (11.3)	9 (8.3)	11 (16.2)	15 (16.9)	2 (3.3)
5. Marital Status	Single	222 (68.1)	75 (69.4)	53 (77.9)	55 (61.8)	39 (63.9)
	Married	95 (29.1)	31 (28.7)	15 (22.1)	28 (31.5)	21 (34.4)
	Others	9 (2.8)	2 (1.9)	0 (0.0)	6 (6.7)	1 (1.6)
6. Education	Lower than high school	5 (1.5)	2 (1.9)	0 (0.0)	0 (0.0)	3 (4.9)
	High school	19 (5.8)	5 (4.6)	4 (5.9)	8 (9.0)	2 (3.3)
	Bachelor's degree	220 (67.5)	78 (72.2)	45 (66.2)	57 (64.0)	40 (65.6)
	Higher than Bachelor's degree	82 (25.2)	23 (21.3)	19 (27.9)	24 (27.0)	16 (26.2)
7. Occupation*	Student	37 (11.3)	14 (13.0)	12 (17.6)	7 (7.9)	4 (6.6)
	Private company employee	179 (54.9)	64 (59.3)	30 (44.1)	52 (58.4)	33 (54.1)
	Government officer	19 (5.8)	9 (8.3)	6 (8.8)	2 (2.2)	2 (3.3)
	Business owner	41 (12.6)	13 (12.0)	10 (14.7)	9 (10.1)	9 (14.8)
	Professional	26 (8.0)	5 (4.6)	5 (7.4)	7 (7.9)	9 (14.8)
	Retired	6 (1.8)	0 (0.0)	1 (1.5)	5 (5.6)	0 (0.0)
	Others	18 (5.5)	3 (2.8)	4 (5.9)	7 (7.9)	4 (6.6)
8. Frequency of using low-cost airlines*	Less than once a year	99 (30.4)	31 (28.7)	28 (41.2)	31 (34.8)	9 (14.8)
	Once a year	139 (42.6)	39 (36.1)	18 (26.5)	42 (47.2)	40 (65.6)
	Once six months	53 (16.3)	20 (18.5)	17 (25.0)	8 (9.0)	8 (13.1)
	Once a month	19 (5.8)	10 (9.3)	2 (2.9)	6 (6.7)	1 (1.6)
	More than once a month	16 (4.9)	8 (7.4)	3 (4.4)	2 (2.2)	3 (4.9)
9. Destination the respondents fly to for this trip*	Chiang mai	61 (18.7)	15 (13.9)	11 (16.2)	21 (23.6)	14 (23.0)
	Chiang rai	10 (3.1)	5 (4.6)	2 (2.9)	2 (2.2)	1 (1.6)
	Hat Yai	8 (2.5)	2 (1.9)	4 (5.9)	2 (2.2)	0 (0.0)
	Krabi	36 (11.0)	8 (7.4)	7 (10.3)	13 (14.6)	8 (13.1)
	Phuket	73 (22.4)	20 (18.5)	15 (22.1)	23 (25.8)	15 (24.6)
	Surat Thani	9 (2.8)	3 (2.8)	0 (0.0)	4 (4.5)	2 (3.3)
	Trang	14 (4.3)	5 (4.6)	1 (1.5)	4 (4.5)	4 (6.6)

	Udonthani	3 (0.9)	3 (2.8)	0 (0.0)	0 (0.0)	0 (0.0)
	Cambodia	9 (2.8)	1 (0.9)	0 (0.0)	4 (4.5)	4 (6.6)
	China	8 (2.5)	4 (3.7)	1 (1.5)	2 (2.2)	1 (1.6)
	Hong Kong	15 (4.6)	6 (5.6)	6 (8.8)	2 (2.2)	1 (1.6)
	India	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.6)
	Indonesia	5 (1.5)	2 (1.9)	1 (1.5)	2 (2.2)	0 (0.0)
	Vietnams	9 (2.8)	3 (2.8)	1 (1.5)	0 (0.0)	5 (8.2)
	Myanmar	15 (4.6)	4 (3.7)	2 (2.9)	7 (7.9)	2 (3.3)
	Malaysia	10 (3.1)	2 (1.9)	6 (8.8)	2 (2.2)	0 (0.0)
	Singapore	14 (4.3)	8 (7.4)	3 (4.4)	1 (1.1)	2 (2.2)
	Japan	17 (5.2)	11 (10.2)	5 (7.4)	0 (0.0)	1 (1.6)
	Korea	9 (2.8)	6 (5.6)	3 (4.4)	0 (0.0)	0 (0.0)
10. Length of trip*	1-3 days	68 (20.9)	32 (29.6)	19 (27.9)	11 (12.4)	6 (9.8)
	4-7 days	149 (45.7)	54 (50.0)	41 (60.3)	28 (31.5)	26 (42.6)
	8-15 days	85 (26.1)	18 (16.7)	6 (8.8)	41 (46.1)	20 (32.8)
	More than 15 days	24 (7.4)	4 (3.7)	2 (2.9)	9 (10.1)	9 (14.8)
11. Travel companion*	Alone	29 (8.9)	10 (9.3)	3 (4.4)	11 (12.4)	5 (8.2)
	Spouse / Boyfriend / Girlfriend	74 (22.7)	22 (20.4)	12 (17.6)	22 (24.7)	18 (29.5)
	Family	76 (23.3)	25 (23.1)	29 (42.6)	16 (18.0)	6 (9.8)
	Friends	128 (39.3)	43 (39.8)	17 (25.0)	37 (41.6)	31 (50.8)
	Colleague	19 (5.8)	8 (7.4)	7 (10.3)	3 (3.4)	1 (1.6)
	Organized group\club	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	Others	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
12. Travel group size*	1 person	30 (9.2)	10 (9.3)	3 (4.4)	12 (13.5)	5 (8.2)
	2 people	139 (42.6)	44 (40.7)	21 (30.9)	45 (50.6)	29 (47.5)
	3-4 people	86 (26.4)	28 (25.9)	29 (42.6)	16 (18.0)	13 (21.3)
	More than 5 people	71 (21.8)	26 (24.1)	15 (22.1)	16 (18.0)	14 (23.0)

*p < 0.05

When compared across clusters, differences in demographic variables are detected in nationality, income and occupation. That is, there are more Thais in Cluster 1 and 2 and more foreigners in Cluster 3 and 4.

The majority of lower to medium income users are members of Cluster 1 while most of medium to high income users are members of Cluster 3. For occupation, the majority of users who are students, private company employees, government officers and business owners are members of Cluster 1 while the majority of retired people and others are members of Cluster 3 and most of professionals are members of Cluster 4.

For trip characteristics, there are significant statistic differences among each LCC user group in all variables of trip characteristics after performing the Chi-Square analysis. The majority of less frequent low-cost airlines users (flying less than once a year and once a year) are members of Cluster 3 while the majority of medium and high frequent low-cost airlines users are members of Cluster 1.

For travel companion, the majority of users who travel alone are members of Cluster 3. The majority of users who travel with friends and colleagues are members of Cluster 1. The majority of users who travel with family are members of Cluster 2. Lastly, the analysis of travel group size found that the majority of 1 person and 2 people group size are members of Cluster 3 while 3-4 people group size is member of Cluster 2 and more than 5 people group size are members of Cluster 1.

The questionnaire of the study measured travel motivations of LCC users based on 4 basic travel motivators (McIntosh, Goeldner, and Ritchie, 1995) consisting of physical motivators, cultural motivators, interpersonal motivators, and status and prestige motivators. The results of the study are in the table 4

Motivator	Cluster 1	Cluster 2	Cluster3	Cluster4
1. Physical motivator 1.1) I travel to enjoy a sport activity 1.2) I travel for medical treatment 1.3) I travel to enjoy the spa and wellness 1.4) I enjoy travelling to natural sites, such as forests, wetlands, animal reserves. 1.5) I travel to enjoy beach activities. 1.6) I travel to enjoy nightlife and shopping.	4.6481 Very Important	3.7475 Important	4.1592 Important	4.2817 Important
2. Cultural motivator 2.1) I enjoy travelling to experience a different culture, i.e. food, beliefs, religions. 2.2) I enjoy travelling to experience traditional culture. 2.3) I enjoy travelling to experience modern culture. 2.4) I enjoy visiting heritage site, i.e. temples, ancient cities, palace. 2.5) I enjoy travelling to local festivals. 2.6) I love to buy local crafts and handiwork.	5.6713 Very Important	4.5025 Important	5.7828 Extremely Important	5.5409 Very Important
3. Interpersonal motivator 3.1) I travel to meet new people. 3.2) I travel to visit friends or family. 3.3) I travel to be together with family. 3.4) I travel to enjoy activities for the entire family.	4.7037 Very Important	4.0294 Important	4.0702 Important	4.3459 Important
4. Status and prestige motivator 4.1) I travel to further my knowledge. 4.2) I love sharing my travel experience to others. 4.3) I love to visit a place I can talk about when I return home. 4.4) I love going to a place my friends have not visited.	5.5880 Very Important	4.6140 Very Important	5.7584 Extremely Important	5.5330 Very Important

Table 4. Motivation's Mean Comparison of all segments

According to table 4, the results show that all motivators are in the important level. Cluster 1 has the highest important score for Physical motivator and Interpersonal motivator. Cluster 3 gets the highest score for Cultural motivator and Status and prestige motivator. For comparison among clusters, the result shows that a Cultural motivator is the main driver for Cluster 1, 3 and 4. Only Cluster 2 is driven from the Status and prestige motivator. To examine the significant difference, the One-Way Anova analysis was performed to analyze the difference of each segment. The analysis shows that the Physical motivator, Cultural motivator and Status and prestige motivators are significantly different among all LCC user segments.

Conclusion

This study classified LCC users based on Cohen's (1974) instrument to define traveler types by evaluating the tourist's relationship with the tourist establishment and host country. The method identified four types of tourists; organized mass, the individual mass, the explorer, and the drifter. The result of LCC user segmentation is a little bit different from Cohen per the details below.

Cluster 1 or 'Mass Organized Tourist associated with local community' – Referring to Cohen's study (1974), the Mass Organized Tourist has a high relationship with tourist establishments. They highly depend on tourist infrastructure and middleman who arrange their trip. According to this study, the finding shows that LCC users also have a high relationship with tourist establishments, similar to Cohen's study. LCC users are highly concerned with tourist establishments such as transportation and tourist attractions. They tend to use air transportation offering more convenience and visit tourist attractions transformed to suit the mass tourist. However, the LCC users' relationship with the host country is high, which is quite different from Cohen's study. The difference can be supported from the rising number of pedestrian streets in tourist destinations and the package tour with a free day that allows tourists to directly experience the host country even though it's still in a limited area. This corresponds to Pamela, Ken, Jiho and Phillip (2009) who explained that the majority of tourists are Thrill and Change Seekers who even look for package tours but want to arrange their own activities. Therefore, the researcher additionally described this group from Cohen's as 'Mass Organized Tourist associated with local community'.

Cluster 2 or 'Individual Mass Tourist' – The finding in this study is not significantly different from Cohen's study. LCC users in this cluster have a pretty high relationship with the tourist establishment, especially for air transportation and tourist attractions transformed, but the relationship with the host country is very low. This group relies on a middleman to facilitate the trip and prefers a familiar environment than a novel one.

Cluster 3 or the ‘Occasional Explorer’ – The result of this study is different from Cohen’s original study. Even though LCC users from this cluster have a low relationship with the tourist establishment, which corresponds with Cohen’s work, their relationship with the host country is low. This is in contrast to Cohen’s findings. The lowest score is the direct contact with local people and staying at a home stay. This means that the cluster likes to be close with the host country in a limited area. They still want some parts to be familiar. Therefore, the researcher called this group the ‘Occasional Explorer’ to represent their relationship with the host country in a lower level than Cohen’s study.

Cluster 4 or the ‘Drifter’ – This cluster also confirms Cohen’s study. The drifter has a low relationship with tourist establishments and a high relationship with the host country. They depend on tourist establishments on a low level and they have a very high score when it comes to their relationship with the host country. It means they try to immerse themselves as a local.

The finding of this study reflects that LCC leisure travelers have some different characteristics from tourists in Cohen’s study, especially in reference to the categories of the Mass Organized Tourist and the Explorer, which is where the majority group of LCC users belong. Cohen’s instrument is beneficial in categorizing tourists as it allows marketers to understand what LCC leisure travelers want when they visit each destination.

5. References

- [1] Cento, A. *The airline industry, challenges in the 21st century*. Heidelberg, United States: Physica-Verlag. 2009.
- [2] Chang, Y., Hsu, C., Williams, G., & Pan, M. Low cost carriers’ destination selection using a Delphi method. *Journal of Tourism Management*, 29, pp. 898–908, 2008.
- [3] Rey, B., Myro, R.L., & Galera. A Effect of low-cost airlines on tourism in Spain: A dynamic panel data model. *Journal of Air Transport Management*, 17, pp. 163-167. 2011.
- [4] Graham, A. Have the major forces driving leisure airline traffic changed? *Journal of Air Transport Management*, 12 (1), pp. 14–20. 2006
- [5] Airports of Thailand. Annual Report. Bangkok, Thailand. 2013.
- [6] Ibid.
- [7] Kasikorn Research Center. Being A Regional Aviation Hub: A Challenge for Thailand. K-econ Analysis. 19. 28 June 2013.
- [8] Cahill, D. J. Lifestyle market segmentation. New York: Haworth Press. 2006
- [9] Wedel, M., & Kamakura, W. Introduction to the special issue on market segmentation. *International Journal of Research in Marketing*, 19 (3), pp. 181-183. 2002

- [10] Tsiotsou, R. Using visit frequency to segment ski resort customers. *Journal of Vacation Marketing*, 12(1), pp. 15-26. 2006
- [11] Kotler P. *Kotler on marketing: How to create, win and dominate markets*. London: Simon and Schuster. 1999.
- [12] Tsiotsou, R. Using visit frequency to segment ski resort customers. *Journal of Vacation Marketing*, 12(1), pp. 15-26. 2006
- [13] Zografos and Allcroft (2007)
- [14] González and Bello (2002)
- [15] Cohen E. (1972). Toward a sociology of international tourism. *Social Research*, 39(1), 164-182.

ICSSAM-687

Analysis of Auto Spare Parts Demand with Random Matrix Approach

Chi Zhang^a

^aDepartment of Human and Engineered Environmental Studies, Graduate School of Frontier Sciences, The University of Tokyo, 5-1-5 Kashiwanoha, Kashiwa-shi, Japan
Email: c.zhang@scslab.k.u-tokyo.ac.jp

Yu Chen^{b*}

^bDepartment of Human and Engineered Environmental Studies, Graduate School of Frontier Sciences, The University of Tokyo, 5-1-5 Kashiwanoha, Kashiwa-shi, Japan
E-mail address: chen@k.u-tokyo.ac.jp

Abstract

In this study, we apply the random matrix theory (RMT) to analyze the data of auto spare parts demand based on the calculation of eigenvalues and eigenvectors of the correlation matrix.

While analyzing the fluctuations in time series data of auto spare parts demand, we have observed peculiar characteristics such as volatility clustering and heavy-tailed leptokurtic distribution, the so-called stylized facts found in financial time series. These characteristics not only reflect explicit deviations from some previous research assumptions, but also motivate us to use unconventional methods to solve the challenge in analysis of auto spare parts demand related to inventory management.

We found that RMT successfully met our analysis needs for finding the stable correlations in auto spare parts demand. In particular, we investigate the statistics of correlation coefficients and the eigenvalue distribution of the correlation matrix by comparing with a series of random matrices. Our main findings is that the distribution of components for the eigenvectors corresponding to the eigenvalues outside the RMT prediction reflects the stable deviations in time, which indicates the correlated demand in dissimilar groups. Moreover, we discuss the improvement method for the inventory location, a fundamental issue in inventory management, based on the stable correlated demand extracted by RMT.

Keywords: Random Matrix Theory, Correlation Matrix, Correlated Demand, Auto Spare Parts Demand, Inventory Management

1. Introduction

With the growth of modern logistics and modern manufacturing industry, spare parts inventory management is becoming an important research topic. We have observed several stylized facts while analyzing the fluctuations in time series data of auto spare parts demand which also could be found in financial time series data. These characteristics motivate us to use random matrix theory applied in financial researches to solve the issues in analysis of auto spare parts demand related to inventory management.

2. Data specification

The auto spare parts demand data analyzed in this paper is supported by a famous auto manufacturer in China on condition of anonymity. The type of materials $N=1516$, and the length of time series $T+1=1696$ days ranging from Jan 3rd 2005 to Oct 19th 2009.

3. Statistics of correlation coefficients

We first calculate the demand change of auto spare parts by

$$G_i(t) = S_i(t) - S_i(t - 1), \quad (1)$$

where $S_i(t)$ denotes the demand of material i . Since different materials have varying levels of demand scale, we define a normalized change as

$$g_i(t) = \frac{G_i(t) - EG_i(t)}{\sqrt{\text{var}G_i(t)}}, \quad (2)$$

where $EG_i(t)$ is the expectation of $G_i(t)$, $\sqrt{\text{var}G_i(t)}$ is the standard deviation of $G_i(t)$. In matrix notation, the correlation matrix can be written as

$$C = \frac{1}{T}GG^T, \quad (3)$$

where G is an $N \times T$ matrix, and G^T denotes the transpose of G . Thus, we construct a random correlation matrix $R = \frac{1}{T}AA^T$ with zero mean and unit variance. The comparison of correlation matrix elements showed in Fig. 1.

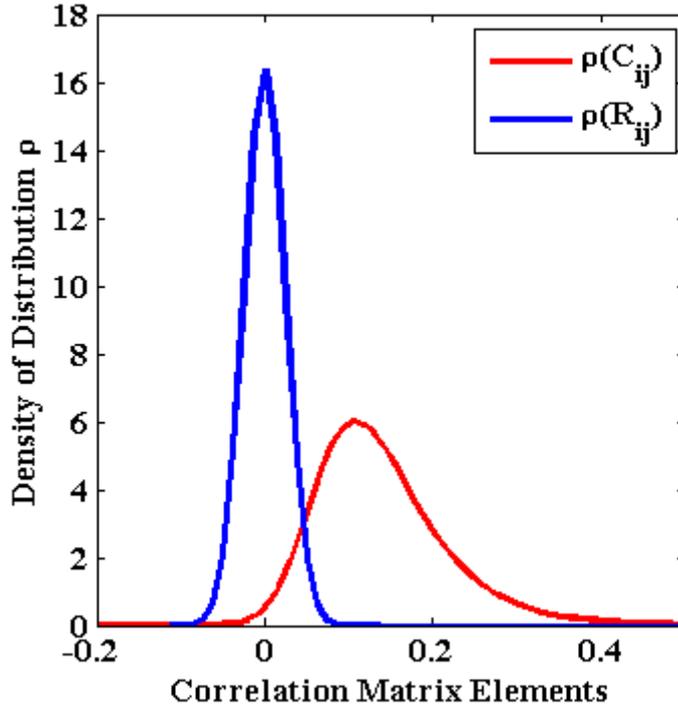


Fig. 1 Statistics of correlation coefficients. $N=1516$, mean value of correlation matrix elements is 0.1399, variance is 0.0066, skewness is 1.7259 calculated from $\sum_{i,j=1}^N (C_{ij} - EC_{ij})^n / [N^2 (\text{var } C_{ij})^{n/2}]$ when $n=3$, kurtosis is 12.9280 when $n=4$.

Fig. 1 initially showed the bulk of correlation matrix elements of auto spare parts demand is not random. Next, we test the eigenvalue distribution of the correlation matrix.

4. Eigenvalue distribution of the correlation matrix

According to random matrix theory, For matrix R , when $N, T \rightarrow \infty$ and $Q \equiv T/N > 1$, the probability density $\rho(\lambda)$ of eigenvalues λ of the random correlation matrix is given by

$$\rho(\lambda) = \frac{Q}{2\pi} \frac{\sqrt{(\lambda_+ - \lambda)(\lambda - \lambda_-)}}{\lambda}, \quad (4)$$

where the maximum and minimum eigenvalues of R , respectively, given by $\lambda_{\pm} = 1 + \frac{1}{Q} \pm$

$2\sqrt{\frac{1}{Q}}$. The distribution of eigenvalues λ of the correlation matrix C appeared obvious deviation from RMT scope as shown in Fig. 2.

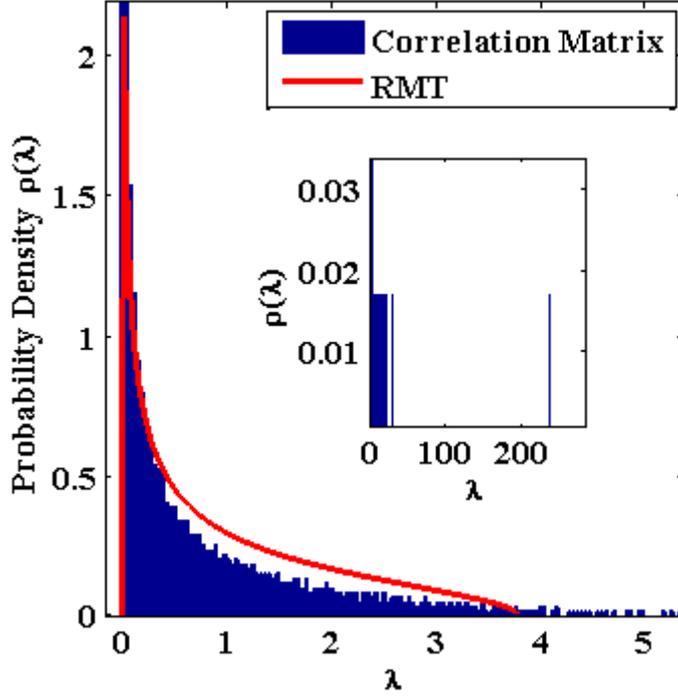


Fig. 2 Eigenvalue distribution of the correlation matrix. The largest eigenvalue $\lambda_{1516}=234.4$, $\lambda_{100} < \lambda_- < \lambda_{101}$, $\lambda_{1469} < \lambda_+ < \lambda_{1470}$, $\lambda_- = 0.0029$, $\lambda_+ = 3.7858$.

We note several eigenvalues outside the RMT upper bound λ_+ , this is a clear distinction between correlation matrix C and R. Although most eigenvalues of C are included in RMT range $[\lambda_-, \lambda_+]$, we need to further test the statistics of eigenvalue distribution inside RMT range $[\lambda_-, \lambda_+]$ to investigate whether the deviation is stable. First, we calculate the unfolding eigenvalue $\xi_i(\lambda_i)$ by

$$\xi_i(\lambda_i) = \tilde{N} \int_{\lambda_-}^{\lambda_i} \frac{Q}{2\pi} \frac{\sqrt{(\lambda_+ - \lambda)(\lambda - \lambda_-)}}{\lambda} d\lambda, \quad (5)$$

where \tilde{N} is the amount of eigenvalues inside $[\lambda_-, \lambda_+]$. Defining $s_i = \xi_{i+1} - \xi_i$ is the nearest-neighbor spacing, if the correlation matrix have the properties of Gaussian orthogonal ensemble, then the distribution of s_i is given by

$$\rho_{GOE}(s) = \frac{\pi s}{2} e^{-\frac{\pi}{4}s^2}, \quad (6)$$

the distribution of unfolding eigenvalues of correlation matrix C also appeared the similar deviation from RMT prediction as shown in Fig. 3.

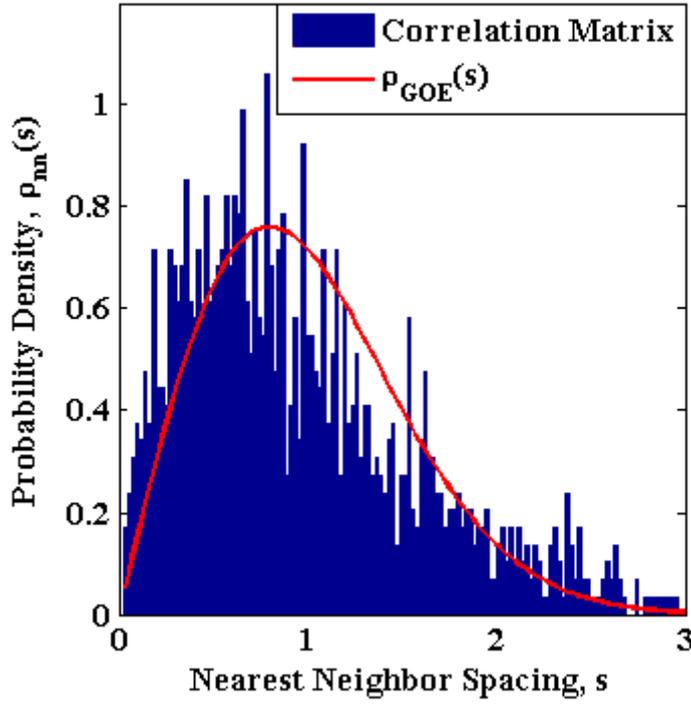


Fig. 3 Nearest-neighbor spacing distribution of the unfolded eigenvalues of the correlation matrix

Fig.2 and Fig.3 showed the statistics of eigenvalue distribution of correlation matrix, both results implied that the volatility of auto spare parts demand is not a simple random walk model. Reason of causing this result is the complexity of mechanism of auto spare parts demand, which could be influenced by individual driving habits, heterogeneous driving environment, random incidents and market share competition between manufacturers and third-party maintenance.

5. Statistics of eigenvectors

The deviations of eigenvalue distribution of correlation matrix from RMT prediction imply that these deviations should also be discovered in the statistics of the corresponding eigenvector components. According to RMT, if a random correlation matrix is constructed by zero mean and unit variance, then the eigenvector components $u_j^{(i)}$ obey Gaussian distribution

$$\rho(u_j^{(i)}) = \frac{1}{\sqrt{2\pi}} e^{-\frac{u_j^{(i)2}}{2}}, \quad (7)$$

Fig. 4 displayed the eigenvector components of corresponding eigenvalues which are outside upper bound $[\lambda_-, \lambda_+]$, inside $[\lambda_-, \lambda_+]$, and outside lower bound $[\lambda_-, \lambda_+]$.

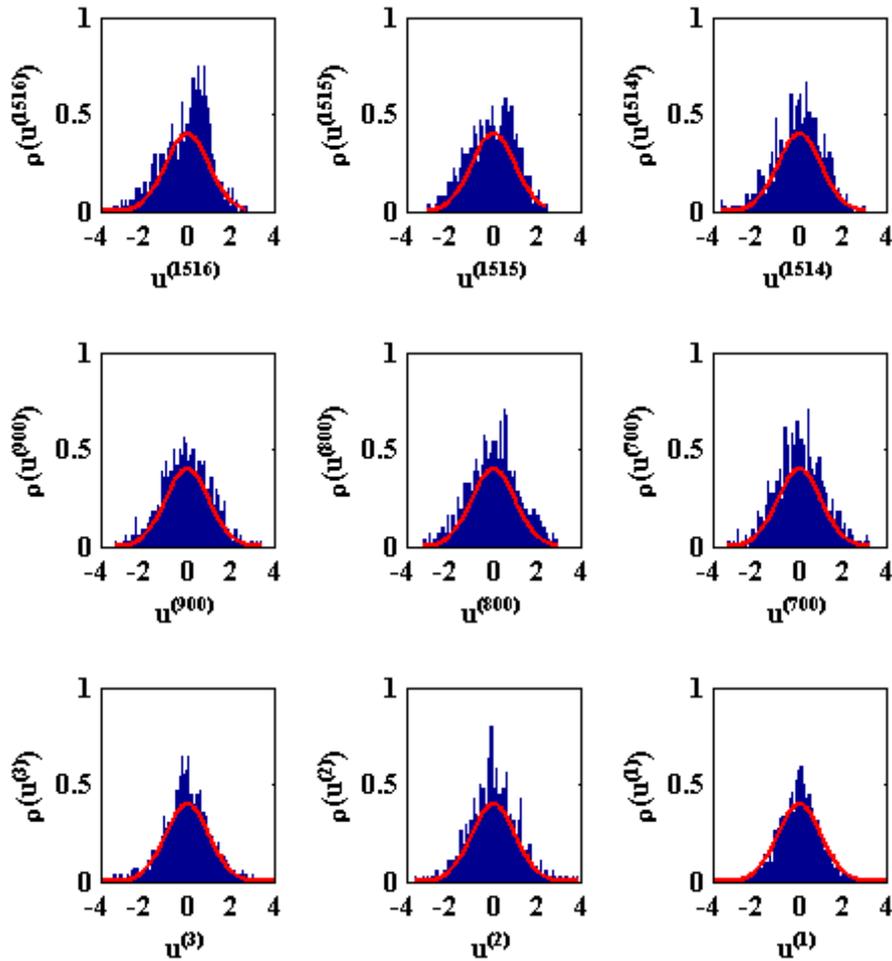


Fig. 4 Distribution of eigenvector components

The distribution of eigenvector component u_{1516} of the largest eigenvalue presented obvious deviation from Gaussian distribution. The distributions of corresponding eigenvectors of eigenvalues inside RMT bound and outside lower bound obviously obey Gaussian distribution.

To further investigating the properties of these eigenvectors, we draw the eigenvectors u_{1516} , u_{1515} , u_{900} , u_{800} , u_2 , u_1 , and sorted by descending order of absolute value of eigenvector components. Notably, the bigger weight corresponds to the higher demand, and minus means an auto spare part demand has an increasing trend, plus means a decreasing trend.

Table 1 Largest ten components of eigenvectors u1516, u1515

u1516		u1515	
Weight	Description	Weight	Description
-0.0032449	Oil filter	-0.0024243	Spark plug wire
-0.0027749	Headlamp	-0.0023792	Spark plug wire
-0.0026737	Air filter	-0.0023631	Spark plug wire
-0.0026283	Headlamp	-0.0023318	Spark plug wire
-0.0024801	Filter kit	-0.0021051	Fog lamp
-0.0024797	Air filter	-0.0020326	Headlamp
-0.0024589	Spark plug	-0.0020273	Wheel cover
-0.0024542	Radiator grille	-0.0020216	Fuel pump module
-0.0023771	Belt	-0.0020041	Wheel
-0.0023338	Brake disc kit	-0.0019921	Headlamp

Table 2 Largest ten components of eigenvectors u900, u800

u900		u800	
Weight	Description	Weight	Description
0.0028213	Wheel liner	-0.0026925	Fascia
-0.0027001	Engine thermostat	-0.0026572	Wheel liner
0.0026687	Fog lamp bracket	-0.0025808	Transmission control
0.0024993	Seal	-0.0024717	Lift window kit
0.0024495	Wheel bearing	-0.0024635	Mirror switch
-0.0024315	Tail lamp	0.0024449	Control arm
-0.0023649	Latch	0.0023620	Cylinder gasket
-0.0023123	Radiator grille	-0.0023042	Tie rod
-0.0023075	Bulb	0.0022934	Valve body gasket
-0.0022335	Seal	0.0022861	Pressure plate

Table 3 Largest ten components of eigenvectors u2, u1

u2		u1	
Weight	Description	Weight	Description
0.0032385	Spark plug wire	0.0111216	Spark plug wire
0.0030658	Spark plug wire	-0.0087486	Spark plug wire
-0.0030283	Air filter	-0.0053365	Spark plug wire
0.0028159	Headlamp	0.0041807	Oil filter
-0.0027195	Fascia brace	0.0039478	Spark plug wire
-0.0026960	Spark plug wire	0.0037874	Brake disc kit
-0.0026743	Hinge	-0.0030008	Windshield
0.0026409	Oil filter	0.0029912	Spark plug wire
0.0025925	Headlamp	-0.0029281	Spark plug wire
-0.0025223	Bulb	-0.0028364	Spark plug wire

In Table 1, the demand of filter, lamp, and spark plug has significant weight and have strong increasing trend. This is consistent with material types which are frequently damaged and burgeoning auto industry. In Table 2, the grouping property of demand is random, demand trend of increasing and decreasing exist simultaneously. In Table 3, although the demand trend of increasing and decreasing both displayed, the grouping property also showed. Results of the three tables suggested that the method of optimization of inventory location could be based on the further analysis of eigenvectors.

6. Conclusions and future work

The statistics of correlation coefficients and the eigenvalue distribution of the correlation matrix have been investigated in this paper. The deviations of distributions of eigenvalues and corresponding eigenvectors of correlation matrix have been proved to be stable in time. The eigenvector components which correspond to eigenvalues outside RMT bound presented correlated demand in different groups. The grouping property presented by eigenvector components will be further studied to establish the location strategies, and also could be applied to improve the forecasting method for auto spare parts.

References

- Bacchetti A, Saccani N. Spare parts classification and demand forecasting for stock control: Investigation the gap between research and practice. *Omega* 40 (2012) 722-737.
- Plerou V, Gopikrishnan P, Rosenow B, Amaral L A N, Stanley H E. Universal and nonuniversal properties of cross correlations in financial time series. *Phys. Rev. Lett.* 83. 7 (1999) 1471.

- Conlon T, Ruskin H J, Crane M. Cross-correlation dynamics in financial time series. *Physica A: Statistical Mechanics and its Applications* 388. 5 (2009) 705-714.
- Laloux L, Cizeau P, Bouchaud J P, Potters M. Noise dressing of financial correlation matrices. *Phys. Rev. Lett.* 83. 7 (1999) 1467.
- Mehta M L. *Random Matrices Third Edition*. Academic Press, 2004.
- Plerou V, Gopikrishnan P, Rosenow B, Amaral L A N, Guhr T. Random matrix approach to cross correlations in financial data. *Phys. Rev. E.* 65 (2002) 066126.

ICSSAM-702
**Industrial Changes in Environmental Performance- an Empirical
Overview Using Data Envelopment Analysis**

Yi-Chun Kuo

Dep. of Intl Business, Chung Yuan Christian University, 200, Chung Pei Rd, Chung-Li,
32023, Taiwan, R.O.C.

E-mail: kuoyichun99@gmail.com

Po-Hsuan Tseng*

Dep. of Intl Business, Chung Yuan Christian University, 200, Chung Pei Rd, Chung-Li,
32023, Taiwan, R.O.C.

E-mail: kiwifruit817@gmail.com

Abstract

Environmental protection has become a joint mission of enterprises globally, and several companies across the world have taken action to improve their environmental performance.

Environmental performance is an important reference index for both the consumers and the investors and also a self-check tool for the enterprise. The aim of the study was to determine the change in environmental performance over time. An environmental performance index was created using data envelopment analysis (DEA) relative efficiency scores, and the changes in efficiency were measured using the Malmquist index for four consecutive years.

To present a clear idea of corporate environmental performances worldwide, this study chose Fortune Global 500 firms as the research object. The indicators of environmental impact, environment management, and environment disclosure were applied to measure the relative efficiency of each company in the list performed. The study finds that the companies with poor environmental performance in the past have improved greatly, but the companies with better environmental performance keep themselves at the same level. Of eighteen industries, eleven industries have improved consistently, especially Materials industry and Utilities industry show more improvement than the others.

Keywords: environmental performance; data envelopment analysis (DEA), Malmquist index(MI)

ICSSAM-962
**Cost Saving Model for Freight Transportation Companies Operating in
Urban Environment**

Andrii Komar^a, Jae Jeung Rho^a, Moon Gyu Kim^{a,*}

^aKorea Advanced Institute of Science and Technology, Korea

Email: andrii.komar@gmail.com; jjrho111@kaist.ac.kr; controlme8@kaist.ac.kr*

Abstract

Traffic congestion and environmental issues resulting from the rapid urbanization as well as the lack of the appropriate infrastructure have been one of the major problems of urban societies. Although government agencies try to solve the problem by introducing various policies and innovations in city logistics, the results often do not satisfy their expectation. This paper proposes a model of collaboration between retailers and freight carriers, which increases the load factor of the freight vehicles and correspondingly reduces the number of vehicles required to satisfy the demand from retailers. Reduction of the number of vehicles results in the competitive advantage through cost savings for the logistics companies, and this gives an incentive for them to adopt the model. The key idea is to use a part of the stock space of retailers as a temporary stock point for carriers as it is meant to provide higher flexibility in the freight distribution system. The model for vehicle routing and scheduling problem with time window (VRPTW model) applied to the simulated environment is used to determine the minimum cost of deliveries for a certain freight transportation company. Then a modified VRPTW model with the temporary stock points is employed to calculate the new cost. The difference between two costs will demonstrate the potential of the model and the benefits that carriers and retailers can share, should they employ the model. Freight transportation companies and retailers can then enjoy lower operation cost while reducing traffic congestion and green house effects.

Keywords: City Logistics, Urban Logistics, Freight Transportation, Logistics cost, VRPTW model

Introduction

City logistics is the means over which freight distribution can take place in urban areas (City Logistics, 2013), which are becoming more and more sophisticated, considering the global urbanization. Currently, about 50% of the world's population live in a city, and this figure is estimated to be about 60% by 2030 (Urban Population Growth, 2013). Population density in urban areas increases and so does the rate of flow of goods. Reduction of inventory is in tendency (Antún) together with the demand for express deliveries and courier services (Global Express Delivery Market Report, 2013). All these factors make freight distribution in a city more frequent and intensive while the infrastructure for this is lagging behind (City Logistics, 2013). The consequences of this state of affairs are increasing traffic congestion and environmental pollution. Taniguchi et al. (2010) has demonstrated that there is a strong positive correlation between economic growth and demand for freight transport. The objective of city logistics is to make this correlation weaker by optimizing the systems of freight deliveries in urban areas. This paper suggests a model which will help to reduce the freight traffic in city and be of interest to logistics companies as it helps to cut the delivery cost. The objective of the current research is to offer a model which can improve traffic conditions in urban areas and be of interest to freight carriers. Since the main decision making driver in most enterprises is profit – the model has to provide logistics companies with considerable monetary benefits, should they adopt it. Cost saving effects as a result of adopting the model should outweigh the cost of model implementation. The goal which authors of this paper set for the model is to utilize retailers' temporary stock points in order to increase the load factor of freight carriers and correspondingly reduce the number of vehicles required to perform a set of deliveries in order to satisfy the demand from retailers.

Research Background

Attempts for improving the situation were taken in many cities across the globe. Various systems for improvement of transportation systems in a city were adopted, some of which were big hits in certain areas, but total fail for others. Urban consolidation center, located in Motomachi shopping district in Yokohama, Japan is a success case while a number of similar initiatives have failed in Europe (City Logistics Best Practices: a Handbook for Authorities, 2011). Stathopoulos et al. (2012) notes that most of the city logistics initiatives require collaboration between public and private parties involved in the transportation in urban areas which is not easy to achieve. Freight carriers are reluctant to employ novel solutions when the future benefits are vague and a certain portion of risk is involved. Government agencies, which are usually the initiators of initiatives, often lack funding to provide monetary incentives and the support the enterprises need to adopt one or another improvement initiative as it was the case with City Cargo initiative in Amsterdam (City Logistics Best Practices: a Handbook for Authorities, 2011). Moreover, representatives of government tend to ignore the

aspects of freight transportation process as well as about the challenges and problems freight carriers are faced with. Opportunities for effective collaboration between private and public parties are therefore limited and consequently the growing problem of city logistics are often left without required attention.

Model design

The idea is to use the clients' shipping destinations as temporary stock points so that a vehicle can pick up a load there after it was dropped at the point by another vehicle. To make things clear, let's refer to the Figure 1 and consider the following situation: A firm that works as Third Party Logistics Company has 1 depot and 3 clients, represented by destination A (dA), B (dB) and C (dC). The fleet of the firm consists of vehicles of capacity 2 imaginary

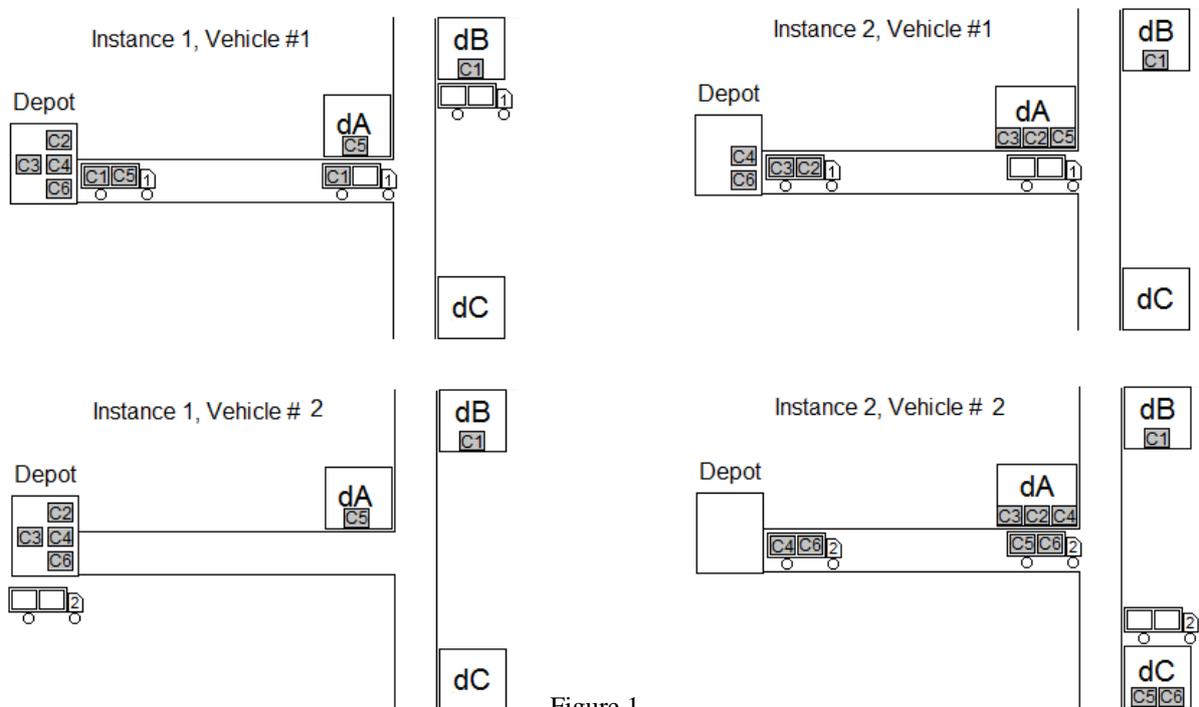


Figure 1

commodities each. At instance one, commodity 1 (C1) needs to be delivered at the dB. At the instance 2, commodity 2 (C2), commodity 3 (C3) and commodity 4 (C4) need to be delivered at dA while commodity 5 (C5) and commodity 6 (C6) need to be delivered at the dC. Without temporary stock point usage, this distribution task is impossible to accomplish with 2 vehicles because at the instance 2, 5 commodities are to be transported and the total capacity of 2 vehicles is 4 commodities. If it is possible to have a temporary storage at the destination A the problem can be solved with 2 vehicles with the following scenario. At the instance 1, vehicle #1 takes C1 to the dB but it also loads C5 before departure and drops it at the dA. At the instance 2, vehicle #1 takes C2 and C3 to dA while vehicle #2 loads with C4 and C6, drops C4 at dA and picks C5 which is there since the instance 1. Then vehicle #2 follows to the dC and drops C5 and C6 there, as it was required. This was an example how the usage of temporary stock point can optimize the routing. Not only it helps to reduce the operation

costs of the carrier but also reduce the CO₂ emission by shortening the delivery distance and reducing the number of vehicles required for delivery.

Usage of temporary stock point, however, requires the collaboration between carrier and clients and the sharing of resources as well as information. Therefore it is important to ensure the feasibility of the current collaboration and the benefits for both parties. In order to evaluate the cost savings resulting from the employment of the model it is suggested to use Vehicle Routing Problem with Time Windows (VRPTW) model suggested by Taniguchi et al (Eiichi Taniguchi, 2010). The basic idea of the model is to minimize the cost of delivery given the delivery vehicle capacity, their fixed cost, vehicle operating costs, locations of the delivery points, time-windows constraints and the penalty cost for not following the time-window agreement with customers. The model can be expressed as follows:

Total Cost = Vehicle Fixed Cost + Vehicle Operating Cost + Delay Penalties,
 where each of the equation is a function of the corresponding values. (Eiichi Taniguchi, 2010)

The mathematical interpretation of the model follows:

$$\min(C(t_0, X)) = \sum_{l=1}^m c_{f,l} * \delta_l(x_l) + \sum_{l=1}^m c_{f,l} * T_l(t_{1,0}, x_l) + \sum_{l=1}^m c_d \max\{0, t_{l,n(i)}^a - t_{n(i)}^e\},$$

where

$$T_l(t_{l,0}, x_l) = \sum_{l=0}^{N_l} [\max\{t_{l,n(i)} + d(t_{l,n(i)}, n(i), n(i+1))), t_{n(i+1)}^s\} + t_{c,n(i+1)} - t_{l,n(i)}]$$

The notations are following:

Notation	Meaning
$C(t_0, X)$	total cost
t_0	departure time vector of vehicle l at the depot
X	assignment and order of visiting customers vector for all vehicles
x_l	assignment and order of visiting customers for vehicle l
$n(i)$	node number of i -th customer visited by a vehicle
N_l	total number of customers visited by vehicle l
m	maximum number of vehicles available
$C_{f,l}$	fixed cost for vehicle l
$C_{t,l}$	operating cost for vehicle l
$T_l(t_0, x_l)$	operating time of vehicle l (min)
C_d	delay penalty cost at customer
$t_{l,n(i)}^a (t_0, x_l)$	arrival time at node $n(i)$ of vehicle l that departed from the depot at time t_0
$t_{n(i)}^e$	end of time window at customer $n(i)$
$t_{l,n(i)}$	departure time of vehicle l at customer $n(i)$
$d(t, n(i), n(i+1))$	minimum travel time at time t from customer $n(i)$ to customer $n(i+1)$
$t_{n(i)}^s$	start of time window at customer $n(i)$
$t_{c,n(i)}$	loading/unloading time at customer $n(i)$

The VRPTW model was used to analyze the effects of the cooperative delivery system in Bangkok (Ali Gul Qureshi, 2005). The cost of deliveries were calculated before the implementation of the cooperative system and afterwards. The comparison of two costs has demonstrated the effectiveness of the cooperative delivery system.

Since this research has an objective of demonstrating the cost saving effects of the proposed logistics optimization model, the VRPTW model can be used in a similar way to determine the cost difference before and after implementation of the model of temporary stock points.

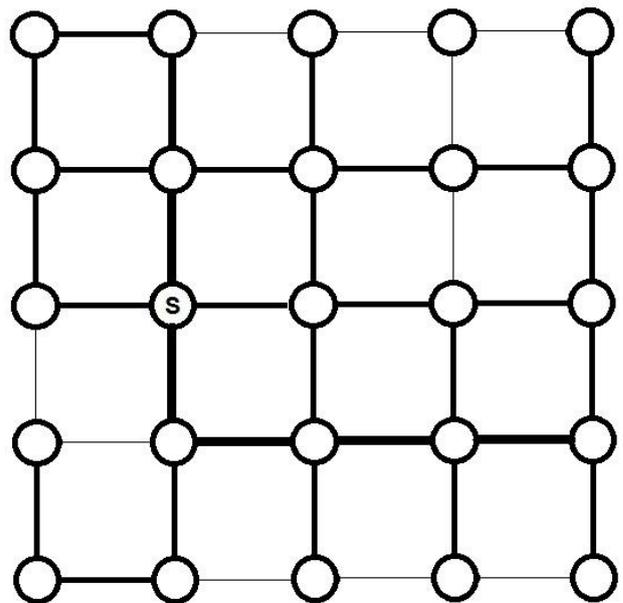


Figure 2

The model will be applied to the simulated distribution network of a carrier company. An example of such a network is represented on the Figure 2. It consists of 25 destinations, 24 of which are delivery points with different demand. One of the destinations is a stock point of the freight carrier where each vehicle begins its route. Points on the map are connected by 3 types of roads. Each type of road has its own passing time. Given the set of delivery destinations, demand at each of them, and using the VRPTW model it is possible to find the sequence of deliveries with the least cost. After this has been done the new cost resulting from the usage of temporary stock point will be calculated. The difference between two costs will demonstrate the potential of the current model. It is planned to perform the simulation for a number of different traffic networks with a number of delivery destinations. The possible influence of the size of temporary stock points will be studied as well. Moreover the number of temporary stock points and their locations will vary with every simulation which will demonstrate which case is the most effective and results in the biggest cost savings.

Methodology

Network simulation and the determination of the optimal delivery schemes as well as the corresponding costs will be made with the help of computer program written in Python programming language. The first stage is finding the determination of all possible routes between each couple of points in the network, using the Floyd–Warshall algorithm (Floyd, 1962). The second stage is finding all the possible delivery tasks a vehicle can accomplish given all the delivery points and demand at each of them (demand is always less or equal to the vehicle capacity). For example, if there is only one delivery point with non-zero demand – there is only one task which the vehicle can accomplish: delivering the order to the point and coming back to the depot. If there are two delivery points with total non-zero demand being less than the vehicle’s capacity – there are four possible tasks: delivering to each of the points separately, and do a combined delivery with different order of deliveries. Note that a single delivery point’s order cannot be fulfilled by more than one vehicle which means that packages ordered by one client cannot be delivered in a few stages. It should always be delivered at once. The next stage is calculating the time and cost of each of the tasks and sorting them based on the score in time and cost list. For instance, if a certain task has the best cost (1st position in the cost list) and 3rd execution time, the score of the task will be equal to four. In order to make the calculation possible, only a certain percentage of top ranked tasks will be considered for the next stage. As the number of delivery points increases – the percentage of task that we take into consideration – decreases in order to reduce the computing time. After the top tasks were selected, the program will execute the Depth first search algorithm (Tarjan, 1972) to check the cost of each possible sequence of deliveries considering different order of deliveries, different routes and different starting times, combined out of the tasks that we have selected earlier. In this way the minimum cost will be determined and saved for comparison with the cost after implementation of the other model.

Expected Outcomes and Future Work

Expected results of the simulations are the number of cost savings of different size for different cases, depending on the number of delivery points, locations, distance between them and the capacity of the temporary stock points. Analysis of the results will show the optimal conditions for the temporary stock points usage and the cost savings effects associated with it. Logistics companies which operate in urban areas may then use the results to consider the collaboration with their clients in order to implement the temporary stock points model. Knowing about the positive impact of the current model on the city logistics systems as well as on the congestion and environmental pollution of the city, caused by freight traffic, city planners may choose to subsidize and support the enterprises in the current initiative. It will make it easier for companies to implement the initiative and obtain the benefits that will be shared with the other stakeholders of city logistics.

The future research can be devoted to developing a detailed model of collaboration between retailers (providers of temporary stock points) and freight carriers. Sharing of benefits should leave both parties better off to ensure the interest for collaboration from each of them. Successful collaboration will result in the reducing the demand for freight transport which consequently will reduce the traffic congestion and traffic exhaust.

Bibliography

- Ali Gul Qureshi, S. H. (2005). Analysis of the effects of a cooperative delivery system in Bangkok. *The Fourth International Conference on City Logistics*, (pp. 293-306). Langkawi.
- Amanda Stathopoulos, E. V. (2012). Stakeholder reactions to urban freight policy innovation. *Journal of Transport Geography*, 34-45.
- Antún, J. P. (n.d.). *Trends in urban distribution of goods (I): Inventory reduction*. Retrieved March 23, 2014, from Inter-American Development Bank: <http://kmpfl.devgateway.org>
- City Logistics*. (2013). Retrieved 11 22, 2013, from The Geography of Transportation Systems: <http://people.hofstra.edu>
- (2011). *City Logistics Best Practices: a Handbook for Authorities*. Bologna, Italy: SUGAR.
- Eiichi Taniguchi, R. E. (2010). An evaluation methodology for city logistics. *Transport Reviews*, 65-90.
- Floyd, R. W. (1962). Algorithm 97: Shortest path. *Communications of the ACM*, 345.
- Gerardo Berbeglia, J.-F. C. (2010). Dynamic pickup and delivery problems. *European Journal of Operational Research*, 8-15.
- (2013). *Global Express Delivery Market Report*. Konzept Analytics.
- Taniguchi, E. (2012, October 29). *The Future of City Logistics*. Retrieved August 26, 2013, from Delivering Tomorrow: <https://www.delivering-tomorrow.com>
- Tarjan, R. (1972). Depth-first search and linear graph algorithms. *SIAM journal on computing* 1.2, 146-160.
- Urban Population Growth*. (2013). Retrieved February 12, 2014, from World Health Organization: <http://www.who.int>

ISEPSS-2051

Enhancing the Service Flow of SOC Design Service Providers' by Using the Fuzzy DEMATEL and the Rough Set Theory

Chi-Yo Huang*

Department of Industrial Education, National Taiwan Normal University
georgeh168@gmail.com

Ming-Jenn Wu

Department of Industrial Education, National Taiwan Normal University
t07010@ntnu.edu.tw

Yu-Sheng Kao

Department of Industrial Education, National Taiwan Normal University
sunkao1035@yahoo.com.tw

Hsueh-Hsin Lu

Department of Industrial Education, National Taiwan Normal University
g842651@gmail.com

Qi Lu

Department of Industrial Education, National Taiwan Normal University
diplox@hotmail.com

Tzu Cheng Lin and Bo-Wen Hsiao

Department of Industrial Education, National Taiwan Normal University

Abstract:

The system-on-chip (SOC) service providers always urge to increase the profitability by increasing service efficiency, reducing costs of outsourcing, including costs for semiconductor foundry, assembly and testing, as well as assuring the service quality and fast time to market. However, it is often a complicated task to uncover most influential factors which may be distributed all over the service chain. Further, how the service process consisting of manufacturing processes of foundry service providers belonging to various parts of the supply/service chain which may interact with others is worth further investigations. To explore the influential factors enhancing the SOC design service providers' service process improvement, a multiple criteria decision making (MCDM) framework based on the fuzzy Decision Making Trial and Evaluation Laboratory (fuzzy DEMATEL) as well as the Rough

Set Theory (RST) based approach will be constructed. At first, the dimensions and criteria which influence the design service processes will be collected in accordance to literature review results. Then, the causal relationship versus each dimension will be constructed by the Fuzzy DEMATEL for deriving the structure of the decision problem. To explore the knowledge being embedded in the data, the RST will be introduced to derive the associated rules with the criteria. Finally, the flow graph will be constructed for analyzing the data flow distributions. An empirical study results based on opinions being provided by Taiwanese SOC experts will be used to verify the feasibility of the proposed framework. The empirical study results can serve as a basis for enhancing the service flow of the design service providers. Further, the analytic framework being proposed and verified in this research can also be used for enhancing the service flow of other industries.

Keywords: SOC Design Service, Fuzzy DEMATEL, Multiple Criteria Decision Making (MCDM), Rough Set Theory (RST), Flow Graph (FG).

Finance & Economics I

Room C

13:10-14:40

Thursday, May 8

Session Chair: *Prof. Christian Wolff*

ICSSAM-370

Contingent Capital: the Case of COERCS

Christian Wolff	<i>University of Luxembourg, and CEPR</i>
George Pennacchi	<i>University of Illinois at Urbana-Champaign</i>
Theo Vermaelen	<i>University of Illinois at Urbana-Champaign</i>

ICSSAM-477

The Contemporaneous Relation between VIX Options Volume and VIX Index Change: A Test of the Information Hypothesis

Wei-Che Tsai	<i>National Sun Yat-sen University</i>
Dian-Xuan Kao	<i>National Taiwan University</i>
Yaw-Huei Wang	<i>National Taiwan University</i>

ICSSAM-450

Do Fund Families Take the Discrepancy Strategies toward the Best Fund Awards?

Pi-Hsia Hung	<i>National Chi Nan University</i>
Lin Lin	<i>National Chi Nan University</i>
Pei-Jhen Su	<i>Cathay Financial Holding Co., Ltd.</i>

ICSSAM-535

Proximity and IPO Underpricing

Ulf Nielsson	<i>Copenhagen Business School</i>
Dariusz Wojcik	<i>University of Oxford</i>

ICSSAM-965

Does Clean Energy Cause Economic Growth?

Jikhan Jeong	<i>Korean Electric Power Corporation</i>
--------------	------------------------------------------

ICSSAM-370
Contingent Capital: the Case of COERCS

George Pennacchi¹

¹University of Illinois at Urbana-Champaign

Email: gpennacc@illinois.edu

Theo Vermaelen^{2*}

² INSEAD

Email: theo.vermaelen@insead.edu

Christian C.P. Wolff³

³Luxembourg School of Finance, University of Luxembourg, and CEPR

Email: christian.wolff@uni.lu

We are grateful to Bernard Dumas, Denis Gromb, Mark Flannery, Pekka Hietala, George Hübner, Diny de Jong, Pascal Maenhout, Stephan Loesh, Hamid Mehran, Yves Nosbusch, Julian Presber, Suresh Sundaresan, Josef Zechner and finance workshop participants at Booth School of Business at the University of Chicago, the Tinbergen Institute and the INSEAD finance workshop for helpful comments. We would like to thank Fanou Rasmouki for research assistance.

Abstract

This paper introduces, analyzes, and values a new form of contingent convertible (CoCo) bond, a Call Option Enhanced Reverse Convertible (COERC). If an issuing bank's market value of capital falls below a trigger, COERC investors would be issued many new equity shares that would heavily dilute the bank's existing shareholders, except that shareholders have the option to purchase these shares at the bonds' par value. COERCs have low risk since investors are almost always repaid in cash, yet they reduce government bailouts by replenishing the bank's equity capital following a decline. The COERC design also avoids problems with market-based triggers such as manipulation by speculators or "death spirals" due to an unjustified panic. Relative to standard CoCos or non-convertible subordinated debt, COERCs reduce a bank's incentive to choose investments that are subject to large losses, and they also mitigate "debt overhang."

1. Introduction

This paper introduces, analyses, and values a new security named a Call Option Enhanced Reverse Convertible or COERC. It is a variant of contingent capital (also called contingent convertibles or CoCos) that addresses many of the criticisms made against standard forms of contingent capital. CoCos are bonds that convert to equity after some triggering event, such as a decline in a bank's capital below a threshold. Interest in CoCos has grown since the 2007-2009 financial crisis because other debt-like forms of bank capital such as "subordinated debt and hybrid capital largely failed in its original objective of bearing losses" (HM (UK) Treasury (2009)).

Under Basel III, the Basel Committee on Banking Supervision (BCBS) (2011) requires that for any non-common equity capital to qualify as Tier 1 or Tier 2 regulatory capital, it must be either converted into common equity or written off at the "point of non-viability," defined as the time when a bank is unable to support itself and a government resolution and/or public capital injection is imminent. Such regulatory capital instruments are referred to as "bail-in" debt or "gone-concern" CoCos. It may be unsurprising that Basel III has required that capital must "absorb losses," since prior to the crisis banks' subordinated debt was thought to have this feature.

In contrast, most academic research, including the original CoCo proposal by Flannery (2005), envisions CoCos that convert well in advance of the "point of non-viability" while the bank is still a going-concern. The potential benefit of "going-concern" CoCos is that when a bank's initial equity capital is depleted, the bank automatically recapitalizes, thereby reducing the likelihood of financial distress and a government bail-out. While the BCBS (2011) decided that such "going-concern" CoCos would not be permitted to fulfil the additional capital required of global systemically important banks (G-SIBs), it continues to review such CoCos and does support their use to meet higher national capital requirements. Switzerland has taken the lead by requiring its two major banks, UBS and Credit Suisse, to raise their capital ratios to 19% with up to 9% of this requirement being met with CoCos. A primary reason why the BCBS failed to strongly endorse going-concern CoCos was the BCBS's expressed uncertainty on how they would perform and how they should be best designed (BCBS (2011, p.18-19)).

One critical feature of going-concern CoCos is the nature of the conversion trigger. To date, the banks that have issued CoCos, including Lloyds, Credit Suisse, UBS, and Barclays, have tied conversion to a regulatory capital ratio. These banks' CoCos would convert if the bank's Tier 1 common equity ratio falls below either 7% or 5%.

In contrast, most academic proposals for CoCos envision linking conversion to a market-based measure, such as the bank's stock price or a market value of capital ratio.¹

The choice of a regulatory capital ratio trigger or a market-based capital ratio trigger is important for whether a conversion will occur. Haldane (2011) documents that regulatory capital ratios, in contrast to market capital ratios, failed to forecast the financial crisis. Figures 1.A and 1.B (Chart 5 and 7 from Haldane (2011)) show the Tier 1 capital ratios and market capital to book value of debt ratios, respectively, for two groups of major financial institutions: 15 "crisis" banks that in the autumn of 2008 failed (or required government support or were taken over in distressed circumstances) and 18 "no crisis" banks. While in Figure 1.A the average Tier 1 capital ratios for both groups remained stable and indistinguishable from May 2002 until November 2008, Figure 1.B shows clearly that market capital ratios of crisis banks anticipated their financial distress. Moreover, the market capitalization of crisis banks was much lower than that of no crisis banks, and the gap widened with the approach of the crisis.

Hence, if the crisis banks had issued a going-concern CoCos with a regulatory capital trigger, conversion would not have occurred when it was most needed. Market value-based triggers, however, would have led to conversions.

The opposite signals provided by regulatory and market capital ratios are not surprising since banks can more easily control the former: portfolio reallocations can reduce the ratio's risk-weighted asset denominator; and recognizing capital gains via selling assets that have appreciated in value while holding on to assets that have depreciated will increase the ratio's numerator. Merrouche and Mariathasan (2012) document evidence that capital ratios become subject to manipulation in the vicinity of financial distress, and banks that are more likely to receive public aid manipulate risk weights more severely. Because of such manipulation, regulatory capital ratios can be unreliable measures of a bank's financial distress.²

¹ Recent academic research on CoCos include Albul et al. (2010), Barucci and Del Viva (2011), Berg and Kaserer (2011), Bolton and Samama (2010), Calomiris and Herring (2011), Flannery (2009a, b), Glasserman and Nouri (2010), Hilscher and Raviv (2011), McDonald (2010), and Squam Lake Working Group (2009).

² A more recent case is Dexia, the French-Belgian bank that, before being rescued by the government in October 2010, reported a Tier1 ratio above 10% and was ranked 12th out of 90 banks that were subject to stress tests in the Spring of 2010 (De Groen (2011)).

Hence, most academics and some regulators have embraced market-based triggers (Haldane 2011).³

However, market-based triggers have also been criticized due to concerns of “death spirals.”⁴ As we detail below, a market-based trigger can create an incentive for speculators to short the bank’s stock and force economically “unjustified” conversions and dilution. Moreover, even without short-sellers, issuers are concerned about unjustified conversions created by an irrational market panic. Another concern, analyzed extensively by Glasserman and Nouri (2012), is that market-based triggers may lead to a “multiple equilibria” problem or a “no-equilibrium problem” where the bank’s stock value is ill-defined and, hence, may be an unreliable trigger.

The purpose of this paper is to contribute to the CoCo literature by proposing a new design, the COERC. COERCs have two main features that distinguish them from other CoCos, and these two characteristics address criticisms of standard CoCos with market value triggers. First, if conversion is triggered by a decline in the market value of the bank’s capital, a relatively large number of new shares would be issued to COERC investors such that the bank’s shareholders would tend to be heavily diluted. In other words, the market value of new shares issued to CoCo investors would very likely exceed the bonds’ par value, giving investors a capital gain and the bank’s existing shareholders a capital loss. However, the second main feature of COERCs allows shareholders to avoid this dilution because they are given the right (option) to purchase the newly issued shares at an exercise price equal to the COERC bonds’ par value.

The proposed COERC design reconciles the conflicting objectives of issuers, regulators and CoCo bond investors. First, its trigger is based on a market value capital ratio rather than a regulatory capital ratio. Second, although based on market values of capital, the design avoids one of the main criticisms of market-based triggers: conversions due to manipulation or panic that would harm the bank’s initial shareholders. That is because shareholders have the option to buy the newly-issued shares from COERC investors at the conversion price, with the proceeds repaying the par value of the COERC bond.

³ Alternatively, regulators, realizing the problem with regulatory capital ratio triggers, may want to pull the trigger themselves. This, however, makes valuing CoCos difficult as investors and credit rating agencies may find it all but impossible to estimate this “regulatory risk.” See “Credit Suisse CoCo Investors Uncertain How to Value Notes” *Financial Times* April 15, 2011.

⁴ See Hillion and Vermaelen (2004), “Stability Concerns over CoCo Bonds” *Financial Times* November 5, 2009, and “CoCo Trigger Plan Draws Wary Response” *Financial Times* April 4, 2011.

Third, by setting the conversion price significantly below the trigger price, the COERC is relatively easy to value due to its low risk. Indeed, when the conversion price is significantly below the trigger price, shareholders have a large incentive to prevent dilution by repurchasing the new shares at the COERC bond's par value. This low risk should improve the COERC's liquidity, minimize the likelihood of financial distress, and make it appealing to many fixed-income investors. Fourth, our design implies no role for regulators in pulling the trigger, which eliminates regulatory risk.

Fifth, by basing the trigger on a market value capital ratio (defined as the sum of the market values of equity plus COERCs, divided by senior debt), we avoid multiple-equilibria or no-equilibrium problems that would occur if the trigger were based solely on equity values. Last but not least, although COERCs are generally not loss absorbing, they encourage banks to issue equity and repay debt when in financial distress.⁵ Because this commitment is made ex ante, shareholders benefit through lower borrowing rates and conflicts between shareholders and debt holders are minimized.

The next section provides more specifics regarding the COERC design and gives a simple numerical example of how they would work. Section 3 describes a structural credit risk model of a bank that is used to compare the value and risks of standard CoCos, COERCs, and non-convertible subordinated debt. The results from calibrating this model to data on three large U.S. bank holding companies are given in Section 4. Section 5 extends the basic model to consider imperfect information that can allow the market values of bank stocks and bonds to deviate from the fundamental values of the bank's underlying assets, as might occur due to speculative manipulation of stock prices or an unjustified investor panic. This model generalization permits us to analyze how CoCos, COERCs, and bank shareholders' equity are affected by deviations of market prices from fundamentals. Section 6 discusses further practical issues relevant to CoCos and COERCs, while Section 7 concludes.

2. Call option enhanced reverse convertibles (COERCs)

This section illustrates the basic features of a COERC with a numerical example. The example makes several strong assumptions that are relaxed in the following section where we analyze COERCs, standard CoCos, and non-convertible subordinated debt using a more explicit valuation model.

⁵ Note that regulators and taxpayers should be indifferent whether the debt holders have to absorb a loss or are "bailed out" by equity holders. In both cases taxpayers do not incur a loss.

Assume at some initial date 0 that the market value of a bank's assets, A_0 , equals \$1,100. The bank's liabilities consist of senior deposits, COERCs, and shareholders' equity with market values D_0 , V_0 , and E_0 , respectively. It is assumed that D_0 equals the deposits' par value of \$1,000 and that V_0 equals the COERCs' par value of $B = \$30$. Finally, the initial market value of shareholders equity is $E_0 = \$70 = S_0 \times n_0$, where $S_0 = \$10$ is the initial stock price and $n_0 = 7$ is the initial number of shares outstanding. Note that, per definition, the sum of the market value of the COERC and the market value of equity is equal to $E_0 + V_0 = A_0 - D_0 = \100 . We will refer to this sum as the market value of the bank's capital.

If at any date t prior to the COERC's maturity, the market value of capital, $E_t + V_t = A_t - D_t$, falls from its initial value of \$100 to \$65 or less, the COERC's conversion is triggered. Equivalently, if we subtract off the COERC's par value of $B = \$30$, we can think of conversion being triggered when the value of initial shareholders' equity is $\$65 - \$30 = \$35$ or the equity-to-deposit ratio is 3.5%. However, we specify the trigger as a function of the value of the bank's total capital (equity plus COERCs) for two reasons that are explained further below. First, it discourages stock price manipulation to force conversion and, second, it avoids equilibrium problems when the trigger is based only on equity values.

The COERC is designed so that when conversion is triggered, COERC investors receive a large number of shares, say n_1 , that have the potential to heavily dilute the bank's initial shareholders. In this example, assume $n_1 = 30$. Thus, since the COERC's par value is $B = \$30$, the "conversion price" is set at \$1. That gives COERC investors a share of total capital equal to $\alpha \equiv n_1 / (n_0 + n_1) = 30 / 37$. If at conversion the total capital of the bank is \$65, then COERC investors would receive $\alpha \times \$65 = \52.70 and the price per share would be $\$65 / 37 = \1.76 . Hence, the initial shareholders' value would equal $7 \times \$1.76 = \12.30 .

However, another feature of the COERC is that when the market value of the capital hits the trigger, a rights issue is announced inviting the existing shareholders to buy the 30 new shares at the \$1 conversion price, with their new funds used to repay the COERC debt at its par value. Rational investors will exercise this option since the fully-diluted stock price of \$1.76 is higher than the rights issue price of \$1. If the banks' initial shareholders are financially constrained, they can sell their rights to other non-constrained investors. Consequently, the COERC investors are paid their par value of \$30 in cash, rather than receive shares, and suffer no loss on their initial investment. The bank's total capital of \$65 is now in the form of shareholders' equity, with the initial shareholders' claim of \$70 reduced to $S_t \times (n_0 + n_1) - B = \$1.76 \times 37 - \$30 = \35 . Hence, they bear all of the loss in bank capital.

The above calculations presume that after conversion was triggered, the bank's market value of capital equalled the trigger level of \$65. But what if the triggering event coincided with a sudden, severe plunge in the bank's asset value, as might occur during a financial crisis? If, instead, capital crashed from somewhere above the \$65 trigger to significantly below it, say $A_t - D_t = \$50$, would the initial shareholders' still choose to exercise their option to repurchase the shares issued to COERC investors? They will as long as the value of the new shares $\alpha \times (A_t - D_t) = (30/37) \times \$50 = \$40.54$ is above the COERC par value of $B = \$30$. Thus, only if capital plunged below $B/\alpha = \$37$ so that the fully-diluted stock price is below the conversion price would COERC investors not be repaid at par and suffer losses.

However, even in this very severe case, the COERC would act as a standard CoCo and help re-capitalize the bank by converting debt to new equity. Of course, it also may be possible that capital could suddenly decline even more severely into negative territory where $A_t - D_t < 0$ and both COERC investors and shareholders would be wiped out, likely requiring regulatory authorities to resolve the failed bank. No capital instruments, short of ones with unlimited liability, could protect against such catastrophic failure. In summary, if t_r is the rights issue date when initial shareholders must decide whether to exercise their option, the payoff to COERC investors can be written as

$$V_{t_r} = \begin{cases} B & \text{if } B \leq \alpha(A_{t_r} - D_{t_r}) \\ \alpha(A_{t_r} - D_{t_r}) & \text{if } 0 < \alpha(A_{t_r} - D_{t_r}) < B \\ 0 & \text{if } A_{t_r} - D_{t_r} \leq 0 \end{cases} \quad (1)$$

We now present a structural model of the bank that examines how the likelihood of these different payoffs, along with the triggering event, affects the risk borne by COERC investors. The model allows us to compare how different parameters of the COERC contract affect its risk, and also permits us to compare COERC's risk to that of other capital instruments. It will also provide insights on how these different capital instruments might influence the risk-taking incentives of the bank's shareholders. Finally, it allows us to study how robust these capital instruments are to deviations of market prices from fundamentals.

3. Valuation Technique

Our analysis focuses on the credit risks of COERCs and other capital instruments in a setting that allows for the possibility of sudden declines in bank asset values, as typically occurs during a financial crisis. Since bank capital is potentially most valuable in minimizing financial distress during a crisis, it is important to consider how the possibility of such events affects the relative risks of proposed capital instruments.

We employ a modified version of the credit risk model of Pennacchi (2011) which is especially suited for capturing potentially severe asset value declines. Specifically, it assumes that bank asset values follow a mixed jump-diffusion process and solves for deposit and capital instrument credit spreads in an environment where all bank debt is default risky. Incorporating jumps is critical to deriving different credit spreads for different types of capital. In most models, including ours, if asset values follow simply a standard diffusion process and convert to par then capital hits the triggering threshold, then all floating-rate debt would have zero credit spreads since investors would always receive their par value. Thus, if one wishes to generate positive credit spreads that differ across COERCs, standard CoCos, and non-convertible subordinated debt, permitting sudden declines in bank asset value is essential.

3.1 *Basic Model Assumptions*

Initially, our model follows standard structural credit risk models, such as Merton (1974), by assuming a Modigliani-Miller setting where the market value of a bank's total liabilities equals the market value of its underlying assets. Later, we loosen this assumption to allow the market prices of bank shareholders' equity and capital instruments to depart from the underlying asset "fundamentals."

Such a departure allows us to study the robustness of different capital instruments to manipulation or panic that could change the conversion triggering date from that based purely on fundamentals.

The model assumes that a bank issues short-maturity deposits (senior debt), shareholders' equity, and longer-maturity bonds in the form of COERCs, standard CoCos, or non-convertible subordinated debt. The funds raised by these liabilities are invested in assets whose date t value is denoted A_t . The change in the bank's assets equals the asset's return plus changes due to the bank's cash inflows less cash outflows. Using the superscript * to distinguish asset changes solely due to their rate of return, these assets' risk-neutral rate of return, dA_t^* / A_t^* , satisfies the jump – diffusion process:⁶

⁶ Modeling the "risk-neutral" or "Q-measure" processes for the bank's assets allows us to value the bank's liabilities in a general way that accounts for the assets' risks. The risk-neutral expectations operator is denoted $E^Q [\square]$.

$$\frac{dA_t^*}{A_t^*} = (r_t - \lambda k)dt + \sigma dz + (Y_{q_t} - 1)dq_t \quad (2)$$

where dz is a Brownian motion, q_t is a Poisson counting process that increases by 1 with probability λdt ,

$$\ln(Y_{q_t}) \square N(\mu_y, \sigma_y^2) \quad (3)$$

and $k \equiv E^Q[Y_{q_t} - 1] = \exp[\mu_y + \frac{1}{2}\sigma_y^2] - 1$ is the risk-neutral expected value of a jump. In equation (2), σ is the standard deviation of the continuous diffusion movements in the bank's assets while the parameter λ measures the probability of a jump in the assets' value. Equation (3) specifies that the jump size is lognormally distributed, where the parameter μ_y controls the mean jump size and σ_y is the jump size's standard deviation.

Because interest rates change in an uncertain manner, especially during a financial crisis, we permit the short-term default-free interest rate (e.g., Treasury bill rate), r_t , to be stochastic. Its risk-neutral process is that of the well-known Cox, Ingersoll, and Ross (1985) model:

$$dr_t = \kappa(\bar{r} - r_t)dt + \sigma_r \sqrt{r_t} dz_r \quad (4)$$

where $dz dz_r = \rho dt$.

Our model assumes bank deposits have a very short (instantaneous) maturity, but are default-risky and pay a fair, competitive interest rate. This assumption fits many large “money-center” banks which tend to rely on short-term, wholesale sources of funds, such as large-denomination deposits paying LIBOR. Assuming deposits have a short maturity also simplifies our analysis because the conversion of CoCos or COERCs does not affect the current value or yield on deposits. Conversion does not change the total amount of claims that are junior to deposits. It only changes the composition.⁷

Thus, let D_t be the date t quantity of bank deposits which are assumed to have an instantaneous (e.g., overnight) maturity and to pay an interest rate of $r_t + h_t$, where h_t is the deposits' fair credit spread. Another assumption of the model is that the bank attempts to target a capital ratio or asset-to-deposit ratio, so that its leverage tends to be mean-reverting. Much empirical evidence, including Flannery and Rangan (2008), Adrian and Shin (2010), and Memmel and Raupach (2010), finds that deposit growth expands (*contracts*) when banks

⁷ Because conversion can change the bank's cash outflows due to a reduction in coupon payments, it will, in general, change future interest rates on deposits. The model accounts for this fact.

have an excess (*a shortage*) of capital.⁸ Defining $x_t \equiv A_t/D_t$, as the date t asset-to-deposit ratio, it is assumed that the bank targets this ratio by adjusting deposit growth according to:

$$\frac{dD_t}{D_t} = g(x_t - \hat{x})dt \quad (4)$$

where the positive constant g measures the strength of mean-reversion and $\hat{x} > 1$ is the bank's target asset-to-deposit ratio.

The bank is assumed to fail (be closed by regulators) when assets fall to, or below, the par value of deposits (plus any non-convertible bonds). If failure occurs, total losses to depositors are $D_t - A_t$. While deposits are default-risky, prior to failure their value always equals their par value D_t since their short maturity allows their credit spread h_t to continually adjust to its fair value. This assumption simplifies the valuation of the bank's other liabilities since they always sum to total capital worth $A_t - D_t$. Moreover, the Appendix shows that this fair credit spread equals

$$h_t = \lambda \left[N(-d_1) - x_t \exp\left(\mu_y + \frac{1}{2}\sigma_y^2\right) N(-d_2) \right] \quad (5)$$

where $d_1 = [\ln(x_t) + \mu_y] / \sigma_y$ and $d_2 = d_1 + \sigma_y$.⁹ Note that h_t is a strictly decreasing, convex function of the bank's asset to deposit ratio, x_t .

In addition to deposits, at date 0 the bank issues subordinated bonds having a par value of B and a finite maturity date of $T > 0$. Prior to maturity or conversion, the bonds pay a continuous coupon per unit time, $c_t dt$. As we want to focus on credit spreads, we assume that bonds pay floating-rate coupons so that $c_t = r_t + s$ where s is a fixed spread over the short-term default-free rate.¹⁰ At date 0, the spread, s , is fixed such that the bond sells (is issued) at its par value, B . The method of solving for this equilibrium coupon spread will be discussed shortly.

⁸ Another structural model of a firm with mean-reverting leverage is Collin-Dufresne and Goldstein (2001). They show that allowing leverage to mean-revert is necessary for matching the term structure of credit spreads of corporate bonds. Given the empirical evidence in Adrian and Shin (2010) that bank leverage displays even stronger mean-reversion than that of non-financial corporations, modeling this phenomenon appears particularly important for accurately valuing bank bonds.

⁹ The credit spread depends only on the bank's current asset-to-deposit ratio and the parameters of the asset jump process. Only jumps that wipe out the bank's capital can impose losses on depositors.

¹⁰ Our results are qualitatively and quantitatively similar if we assume that bonds pay fixed coupons.

We now specify how a CoCo or COERC bond's conversion would be triggered. The trigger can be most easily described as a threshold total capital-to-deposit ratio, χ :

$$\chi = \frac{\bar{A}_t - D_t}{D_t} \quad (6)$$

where, given the current level of deposits, \bar{A}_t is the corresponding threshold value of assets at which conversion is triggered. Recall that for the example of Section 2, $D_0 = \$1,000$, $\bar{A}_t = \$1,065$, and $\chi = 6.5\%$. The only difference is that equation (6) allows for the realistic possibility that the quantity of deposits can change over time.

While the trigger based on asset values in equation (6) is well-defined, a bank's market value of assets is not directly observable. However, the fundamental relation that the market values of assets and liabilities must be equal implies $A_t = S_t \times n_0 + V_t + D_t$, where recall that S_t is the bank's date t stock price, n_0 is the number of shares outstanding, and V_t is the market value of the convertible bond. Note that the deposits' short maturity and continuously-adjusting fair credit spread makes their market value equal their par value, D_t . Thus, the market value of assets, and hence total capital, can be observed from the sum of the market values of shareholders equity plus the convertible bond: $A_t - D_t = S_t \times n_0 + V_t$. By observing the market values of equities plus bonds, equation (6) can be implemented so that conversion is triggered whenever¹¹

$$\frac{S_t \times n_0 + V_t}{D_t} \leq \chi \quad (7)$$

An alternative trigger might be based on the market value of equity ratio, say $S_t \times n_0 / D_t$. However, Glasserman and Nouri (2012) show that a trigger based solely on the stock price, and not the bond price, can be ill-defined in that there is no equilibrium. No equilibrium occurs when the conversion terms are advantageous to shareholders and disadvantageous to bondholders. The intuition is that if the event of conversion transfers bank capital value from bondholders to shareholders, so that conversion makes the stock more valuable, investor recognition of this value transfer maintains the stock price above the trigger, leading to no equilibrium.

¹¹ We are grateful to Stewart Myers for first suggesting this trigger.

The trigger in (7) is immune to this problem because while the bond price falls in proportion to the rise in the stock price, so that their sum continues to reflect that bank's total capital and underlying asset value.¹² Although the current paper will assume CoCos and COERCs convert in such a way that there is not a value transfer, we maintain the total capital ratio trigger because it is more robust to different contractual features for convertible bonds. Also, since the total capital ratio can be written as $(A_t - D_t)/D_t = x_t - 1$, it allows us to view x_t as the "state" variable that triggers conversion whenever $x_t \leq 1 + \chi$.

Having specified the trigger, we need to consider the conversion terms. For standard CoCos, it is assumed that CoCo investors receive a fixed number of shares such that they would receive the par value of their bond if the bank's asset value equals the asset trigger threshold. This is the conversion method advocated by Flannery (2010), and it gives CoCo investors and initial shareholders fixed proportions of the bank's total capital. If n_1 is the number of new shares issued to CoCo investors, then it will satisfy $n_1 \times \bar{S}_t = B$ where \bar{S}_t is the post-conversion stock price when the bank's capital equals the trigger threshold. Since total equity in this case equals $(n_0 + n_1) \times \bar{S}_t = n_0 \bar{S}_t + B = \bar{A}_t - D_t = \chi D_t$, we have

$$n_1 = \frac{n_0 B}{\bar{A}_t - B - D_t} = \frac{n_0 B}{\chi D_t - B} \quad (8)$$

Consistent with (8), if $\alpha = n_1/(n_0 + n_1)$ denotes the share of total bank capital that is owned by the CoCo investors at the time of conversion, then $\alpha = B/(\bar{A}_t - D_t)$ and the payoff at conversion to CoCo investors satisfies the same equation (1) that applies to COERC investors, where t_r now denotes the date that CoCos convert.

The critical difference between the COERC and this standard CoCo is that the number of shares that COERC investors are entitled to receive is assumed to be much greater than that given by equation (8).

¹² Glasserman and Nouri (2012) Section 4.6 give another example of a trigger based on the sum of two security prices that avoids the no equilibrium problem of a single security price trigger. More generally, they show that if trading occurs discretely, rather than continuously as in the current paper, a trigger based only on the stock price can lead to multiple equilibria. Such multiple equilibria due to discrete trading are also avoided by a total capital trigger in (7) because, once again, any value transfers between shareholders and bondholders do not affect the sum of the two securities.

Equivalently, the share of total bank capital that COERC investors are entitled to receive is assumed to exceed $B/(\bar{A}_t - D_t)$, the amount for standard CoCo investors. For example, returning to our simple example in Section 2, the proportion of total capital for standard CoCos would be $\alpha = B/(\bar{A}_t - D_t) = 30/65 = 6/13 \approx 0.46$ while the value for COERCs was assumed to be $\alpha = 30/37 \approx 0.81$. As a result, with a higher value of α and greater potential dilution to the initial shareholders, equation (1) shows that there are more states of the world where COERC investors receive their bond's par value compared to the states where CoCo investors receive theirs. The greater potential dilution coupled with the initial shareholders' right to repurchase the COERC investors' shares at par, makes COERCs less default-risky than the standard CoCo.

Another more minor difference between CoCos and COERCs is the date at which investors receive the payoff given in equation (1). CoCos' payoff can be determined immediately when conversion is triggered, say at date t_c . However, for COERCs a rights offering must take place following this trigger date in order to give the initial shareholders the time to decide whether to repurchase the newly issued COERC shares. In practice, a rights offering would be completed at some date $t_r > t_c$ where, for example, $t_r = t_c + 20$ trading days if it takes approximately one month for a rights offering to be completed. Hence, our model assumes that the payoff obtained by CoCo investors occurs at the trigger date while the payoff to COERC investors occurs 20 trading days later.¹³

One additional bond that we analyze is non-convertible subordinated debt. As with CoCos and COERCs, subordinated debt investors receive a floating-rate coupon and the par value of their bond, B , at maturity as long as the bank's asset value exceeds $D_t + B$, the total par value of debt. If, prior to maturity, the bank's asset value no longer exceeds total debt, the subordinated debt holders receive a final payoff of $\max[A_t - D_t, 0]$.

The last bank liability is shareholders' equity. It is assumed to be paid a continuous dividend equal to a constant proportion of the bank's net worth, $\delta(A_t - B - D_t)dt$, where $A_t - (B + D_t)$ is the difference between the bank's asset value and the par value of its debt, and δ is approximately the dividend yield of bank equity. At the date of bond conversion or bond maturity, the value of the initial shareholders' equity equals the bank's residual capital after payoffs are made to bondholders as was specified above.

¹³ Since the asset value relevant for COERC investors' payoff, A_{t_r} , is for a date following the asset value triggering conversion, A_{t_c} , our model and calculations account for the possibility that COERC investors are exposed to further asset value declines during the rights offering period.

While a closed-form solution exists for the equilibrium credit spread that the bank pays on its short-term deposits (equation (5)), it is necessary to numerically calculate the equilibrium credit spread on the bank's bonds, s . Similar to Boyle (1977), we use a straightforward Monte Carlo valuation technique that simulates the risk-neutral processes for the bank's asset-to-deposit ratio, x_t , and the instantaneous-maturity interest rate, r_t . The Appendix shows how the process for x_t is derived from the bank's asset process, A_t , where the change in the bank's assets equals the return earned on the bank's assets (equation (2)), less interest payments to depositors, coupon payments to bondholders, and dividend payments to shareholders, plus deposit changes that target capital (equation (4)). The value of bonds reflects their coupon payments prior to conversion or maturity plus their payoffs at conversion or maturity, where conversion is determined by whether the value of assets breaches the capital ratio threshold given in equation (6). This Monte Carlo valuation leads to a date 0 bond value, V_0 , for a given spread, s . Then, the bond's fair initial credit spread, s^* , is determined by varying s until $V_0 = B$; that is, until the bond initially sells for its par value.

3.2 Model Parameter Estimates

By recapitalizing banks prior to severe financial distress, thereby reducing the need for a government bailout, CoCos (and COERCs in particular) will be most valuable when issued by banks considered "too-big-to-fail." Therefore we calibrate the model's parameters using data on three large U.S. banks: Bank of America, Citigroup, and JPMorgan Chase. For each bank, we estimated a daily asset return process over the period January 2, 2003 to December 30, 2011 by calculating market returns on the bank's total liabilities, based on the assumption that the market return on the bank's total assets equals the market return of its total liabilities.

From information in quarterly Federal Reserve Y9-C Reports (Consolidated Financial Statements for Bank Holding Companies), we obtained daily estimates of each bank's amounts of short-term senior debt (mainly deposits), senior bonds, subordinated bonds, and preferred stock.¹⁴ Along with the bank's daily market value of shareholders' equity obtained from the Center for Research in Security Prices (CRSP), we calculated daily proportions of the bank's liabilities in these five different liability classes.

For example, the average liability proportions across these three banks over the sample period was 71.6%, 15.5%, 2.5%, 0.5%, and 9.8% for short-term debt, senior bonds, subordinated bonds, preferred stock, and common shareholders' equity, respectively.

¹⁴ To estimate daily amounts from quarterly data, a cubic spline was fit for each trading day between the quarterly observations.

By calculating the product of a bank's daily liability proportions and the market rates of return earned by each liability class, we obtained the daily return on the bank's total liabilities. Consistent with our model, we proxied the daily return on the bank's short-term debt by the overnight LIBOR. The daily return on senior bonds was estimated from daily changes in each bank's 5-year credit default swap (CDS) spread. Subordinated bond returns were computed using daily TRACE transaction prices of a representative subordinated debt issue of each bank.¹⁵ Daily preferred stock returns were obtained from Bloomberg while daily common stock returns were obtained from CRSP.

Calculations over the nine year period led to 2,270 daily total liability returns (equal to total asset returns) for each of the three banks. We assumed that a "jump" event occurred on a given day if the return was different from the mean daily return by more than three standard deviations, an event that averaged approximately 5 times per year for each bank, providing a jump frequency estimate of $\lambda = 5$.¹⁶ The sample standard deviation of the size of these jump returns provided an estimate of $\sigma_y = 0.0125$; that is a 1.25% daily total asset change. After eliminating these jump events from the daily return series, we found that the standard deviation of the remaining "diffusion-generated" returns was approximately $\sigma = 0.03$, or an annual asset return standard deviation of 3%.

By calibrating the risk-neutral jump frequency and jump volatility parameters, λ and σ_y , from the time series of returns, we assume that they equal their physical process counterparts. Pan (2002) makes this same assumption when estimating a similar jump-diffusion process for the S&P500 index return. However, she assumes that the risk-neutral expected jump size differs from the physical (actual) expected jump size by a risk premium. In our sample, the average jump size for the three banks over the nine-year period, call it k^P , is close to zero, equal to 0.00025 (or 2.5 basis points). We follow Pan (2002) and assume that the risk premium from jumps is reflected solely in the mean jump size and set $\mu_y = -0.0025$ so that the risk-neutral expected jump size is $k = E^Q \left[Y_{q_r} - 1 \right] = \exp \left[\mu_y + \frac{1}{2} \sigma_y^2 \right] - 1 = -0.0024$ and the implied jump risk premium is $\lambda (k^P - k) = 1.3\%$.

¹⁵ The subordinated debt issues that were used are those given in Table 1.

¹⁶ In the absence of jumps where returns are generated by only a (normal) diffusion process, the expected number of returns exceeding three standard deviations would be less than one per year.

This excess rate of return on bank assets is slightly greater than the 1% excess rate of return that others have estimated for a large sample of banks, but it is consistent with the evidence finding greater systematic risk for the largest of banks.¹⁷

We assume a dividend yield of $\delta = 2\%$, which is slightly lower the average dividend yields for Bank of American, Citigroup, and JPMorgan over our sample period, but significantly higher than their current dividend yields of less than 1%. The target total capital-to-deposit ratio for banks is assumed to be 14% ($\hat{x} = 1.14$), which is approximately the sample average ratio of total capital to short-term and senior debt for these three banks. Consistent with evidence in Adrian and Shin (2010) and Memmel and Raupach (2010), we also assume a capital targeting mean reversion speed of $g = \frac{1}{2}$, so that approximately one-half of a bank's deviation of capital from its target is expected to be reduced over the next year.

The remaining parameters relate to the Cox, Ingersoll, and Ross (1985) default-free term structure. We chose parameter estimates similar to Duan and Simonato (1999) with $\kappa = 0.114$, $\bar{r} = 6.45\%$, $\sigma_r = 0.07$, and $\rho = -.2$. Assuming an initial short-rate of $r_0 = 2\%$, these parameters lead to a five-year, fixed-coupon default-free bond having a par yield of 3%.

4. Basic Model Results

Our benchmark bonds (CoCos, COERCs, and non-convertible subordinated debt) are assumed to have a five-year maturity and an initial par value equal to 3% of deposits; that is, $B/D_0 = 3\%$. This is the assumption of our previous numerical example and is comparable to the amounts of non-common equity capital that our three sample banks have traditionally issued.¹⁸ For CoCos and COERCs, we assume that conversion is triggered when the total capital to deposit ratio, χ , breaches the 6.5% threshold. Given an initial bond par value to deposit ratio of 3%, this total capital threshold implies a common equity trigger level of approximately 3.5%. As in the previous example, we assume that the share of total bank capital that COERC investors are entitled to receive when conversion is triggered equals $\alpha = 30/37$.

Figure 2 plots the new issue credit spreads for COERCs, CoCos, and non-convertible subordinated debt based on the previous section's valuation method and parameter values.

¹⁷ Pennacchi (2000) estimates a 1% excess asset return from all commercial banks listed on CRSP during 1926 to 1996. Demsetz and Strahan (1997) and De Jonghe (2010) find that the largest commercial banks have greater systematic risk, particularly if they undertake investment banking activities.

¹⁸ From 2003 to 2011, the average ratio of subordinated debt plus preferred stock to short-term and senior debt was 4.1%, 2.7%, and 3.4% for Bank of America, Citigroup, and JPMorgan Chase, respectively.

The horizontal axis gives the percent of total bank capital per deposits, $(A_0 - D_0)/D_0$, at the time of the bonds are issued. The vertical axis is the new issue credit spreads, s , in basis points. As would be expected, as a bank's initial total capital declines, all three bonds' new issue credit spreads rise. For the case of non-convertible subordinated debt, lower initial bank capital increases the likelihood that the bonds' investors would suffer losses if the bank failed.

That would occur if, over the bond's five-year life, there was a sudden decline in capital strictly below the bond's par value, equal initially to 3% of deposits. For the case of CoCos, lower initial bank capital increases the likelihood of a conversion where CoCo investors could suffer losses. Losses would occur if, over the bond's five year life, there was a sudden decline in capital strictly below the $\chi = 6.5\%$ capital to deposit threshold. Only if there is a gradual (continuous) decline in capital that led to conversion exactly at the 6.5% capital ratio trigger would CoCo investors receive shares that are worth their bond's par value and, thereby, avoid a loss.

Similar to CoCos, COERCs could also sustain losses at conversion, and the likelihood of such losses is greater when the bank's initial capital is less. However, COERC losses require a much greater decline in bank capital around the time of conversion. As discussed earlier, when $\alpha = 30/37$ the capital/deposit ratio would need to fall from the 6.5% trigger to below 3.7% before the bank's shareholders would lack the incentive to repurchase the shares issued to COERC investors at the bond's \$30 par value.¹⁹ Because the likelihood of this event is relatively small, COERC investors are better protected from losses compared to investors in CoCos and subordinated debt. Thus, for any level of initial bank capital, COERC credit spreads are significantly lower than those for the other two bonds.²⁰

¹⁹ Recall from the COERC payoff in equation (1), capital below 3.7% implies a payoff indicated by the right-hand side's second or third lines, rather than the first which returns the bond's par value.

²⁰ Given the same conversion threshold, χ , COERC credit spreads are lower than comparable CoCo credit spreads as long as the share of capital that COERC investors are entitled to receive, α , exceeds that for CoCo investors. However, COERC (and CoCo) credit spreads will not, in general, be less than subordinated debt credit spreads. As will be illustrated next, reducing the dilution ratio, α , and the conversion threshold, χ , can raise COERC credit spreads above those of subordinated debt.

It should be emphasized that if bank assets followed a pure Brownian motion diffusion process, so that $\lambda = 0$ and/or $\sigma_y = \mu_y = 0$, the bank's asset value would have a continuous sample path and the credit spreads for the three bonds in Figure 2 would equal zero for every initial level of capital.²¹

For the case of subordinated debt, regulators could always close the bank at the point that assets exactly equal the par value of total debt, $D_t + B$, allowing full recovery by debt holders. Also, CoCos and COERCs would always convert when the bank's capital value exactly equals the trigger level, also ensuring that investors receive the par value of their bonds. Thus, the realistic possibility of sudden asset value losses is what generates differences in the three bonds' credit spreads.

To illustrate how the threat of dilution protects COERC investors, Figure 3 reports new issue credit spreads for COERCs that differ by the number of shares that investors are entitled to receive at conversion. Specifically we consider $n_1 = 40, 30, 20,$ or 10 shares, so that the dilution ratio is $\alpha = 40/47, 30/37, 20/27,$ or $10/17$. Clearly, for a given level of initial bank capital, new issue credit spreads are lower when COERC investors are entitled to greater proportion of the bank's capital. The intuition is the same as discussed earlier. COERC investors would be subject to losses only when there is a sudden decline from the 6.5% capital ratio trigger to a capital ratio below $(B/\alpha)/1000$, which are capital/deposit ratios of 3.53%, 3.70%, 4.05%, and 5.10%, respectively.

Another contract feature that affects the risk of COERCs (as well as CoCos) is the trigger level of capital. As was just mentioned, when $\alpha = 30/37$ capital would need to fall suddenly from the trigger level to below 3.70% in order for COERC investors to suffer a loss. The likelihood of this happening is less the higher is the trigger capital ratio. Previous graphs assumed a trigger capital/deposit threshold of $\chi = 6.5\%$.

Figure 4 graphs new issue credit spreads for COERCs where the trigger capital ratio threshold equals either $\chi = 5\%, 5.5\%, 6.0\%,$ or 6.5% . Clearly for any level of initial bank capital, new issue COERC credit spreads are lower when the trigger threshold, χ , is higher. While conversion is less likely the lower is the trigger threshold, if conversion does occur at the lower threshold COERC investors are more likely to sustain losses.

²¹ Moreover, as can be seen from equation (5), credit spreads on deposits, h_t , would also equal zero. An example where asset returns follow a pure diffusion process is Albul, Jaffee and Tchisty (2010), and CoCos in their model have zero credit spreads (are default-free).

For example, starting from a capital value just above the thresholds, when $\chi = 5.0\%$ an asset value decline of just over 1.3% ($5.0\% - 3.7\%$) would lead to COERC investor losses, whereas when $\chi = 6.5\%$ an asset value decline of just over 2.8% ($6.5\% - 3.7\%$) would be required for COERC investor losses.

The design features that reduce the default risk of COERCs have implications for a bank's risk-shifting incentives. Merton (1974) noted that the shareholders' equity of a levered, limited-liability firm is comparable to a call option written on the firm's assets with a strike price equal to the promised payment on the firm's debt. By raising the risk of the firm's assets, shareholders can increase the volatility and, in turn, the value of their call option at the expense of the firm's debt value. This moral hazard incentive to transfer value from debt holders to equity holders tends to rise as the firm becomes more levered.

The risk-shifting incentives of banks that issue COERCs, CoCos, and non-convertible subordinated debt can be compared in the context of our model. We calculate the change in the value of a bank's shareholders' equity following a rise in the volatility of jump risk, $\partial E/\partial\sigma_y$. Note that this comparative static exercise does not change the bank's asset value, though from equation (5) it does raise the credit spread on short-term deposits, with the effect that the deposits' market value continues to equal their par value. Consequently, the rise in jump risk transfers value to the bank's shareholders at the expense of its bondholders; that is, $\partial E/\partial\sigma_y = -\partial V/\partial\sigma_y$. Figure 5 reports numerical estimates of the derivative $\partial E/\partial\sigma_y$ for a bank that issues subordinated debt, CoCos, or COERCs.²² The calculation is made for current bank capital levels ranging from 7% to 20% of deposits. The benchmark parameters and contract features are assumed for CoCos and COERCs ($\chi = 6.5\%$, $\alpha=30/37$).

²² The bank is assumed to have issued each bond at its fair credit spread when the bank's total capital equaled 10% of deposits. For each bond, the derivative is calculated numerically by the discrete approximation $\Delta E/\Delta\sigma_y$, where $\Delta\sigma_y = (0.0150 - 0.0125) = 0.0025$. In other words, for each current level of bank capital, we valued bank equity by 200,000 Monte Carlo simulations when $\sigma_y = 0.0125$ (the benchmark case) and then repeated the equity valuation but with $\sigma_y = 0.0150$.

Figure 5 shows that for any level of capital, $\partial E/\partial \sigma_y$ is lowest when the bank issues COERCs, second lowest for CoCos, and highest for subordinated debt. The degree of moral hazard tends to be greater as the bank's capital declines, except for convertible bonds at capital levels near the conversion threshold.²³ However, the most important finding is that a bank that issues COERCs has a smaller incentive to engage in activities or make investments that would increase the volatility of jumps.

The relatively high number of shares that COERC investors are entitled to receive at conversion better protects the par value of their investment compared to investors in CoCos. Furthermore, because COERCs have a high probability of being converted at par, they benefit from the ability to exit the bank earlier than non-convertible bond investors.

While not reported here, the same qualitative findings occur if one considers the derivative $\partial E/\partial \lambda$, which captures a bank's moral hazard incentive to choose investments that would increase the frequency of jumps. When a bank issues COERCs, it has the least incentive to raise jump frequency, followed by when it issues CoCos, then when it issues subordinated debt. The same ordering occurs if one considers a bank's moral hazard incentive to reduce the mean jump size, μ_y . A COERC's greater protection against jump risk reduces moral hazard.²⁴

Subordinated debt, CoCos, and COERCs also affect another bank incentive, namely, "debt overhang." In general, when a bank's debt is subject to possible default losses, issuing new equity will make these losses less likely and increase the debt's value. Given that investors pay a fair price for the new equity issue, the increase in the debt's value must come at the expense of the bank's initial shareholders' equity.

²³ For convertible bonds near the conversion threshold, it can be relatively more likely that the threshold will be hit exactly (due to diffusion movements in asset values) which would result in repayment at par. Furthermore, at low levels of capital, the market value of equity is also low, so that its absolute increase from greater risk will tend not to be as great, though it may be greater as a proportion of equity.

²⁴ Unreported calculations also show that a bank's incentive to raise assets' diffusion volatility, $\partial E/\partial \sigma$, is also smaller for COERCs, except when bank capital becomes very low. With low capital, a rise in (continuous) Brownian motion risk makes it more likely that, in the case of CoCos, assets will exactly equal the trigger threshold at conversion or, in the case of subordinated debt, assets will exactly equal total debt at the time the bank is closed. In such scenarios, CoCo and subordinated debt investors suffer no losses. This is in contrast to higher jump risk that makes it more likely that conversions and bank closures occur following downward jumps where these investors would suffer losses.

Such a loss in shareholder value creates a disincentive for the bank to replenish its equity following a decline in the bank's capital, which is the Myers (1977) debt overhang problem. We quantify debt overhang by calculating the change in the value of the bank's shareholders' equity, ∂E , following a new equity issue that increases the bank's assets by ∂A . Since new equity is assumed to be fairly priced, the change in the value of the pre-existing shareholders' equity is $\partial E/\partial A - 1$. A negative value for this quantity indicates debt overhang. Similar to previous figures that analyzed risk-shifting incentives, Figure 6 shows calculations of $\partial E/\partial A - 1$ for a bank that issued either subordinated debt, CoCos, or a COERC. As was done in the comparison of risk-shifting, the benchmark parameters and contract features are assumed for CoCos and COERCs.²⁵

Relative to non-convertible subordinated debt, Figure 6 shows that COERCs reduce the debt overhang problem for any level of bank capital from 7% to 14% of deposits. In addition, for most capital levels the debt overhang problem also is smaller for a bank that issues COERCs relative to one that issues CoCos. The only exception occurs at low capital levels where the two bonds are close to their conversion thresholds. There we see that $\partial E/\partial A - 1$ actually turns positive.

The intuition for this result is that conversion due to a diffusion movement in asset value becomes more likely when capital is close to the threshold, an event that would pay the bondholders' their par values and which the shareholders would wish to avoid. However, taken as a whole, our analysis indicates that COERCs mitigate debt overhang and could improve financial stability by removing much of the bank's disincentive to replenish capital following an expected loss.

5. Extending the Model to Incorporate Deviations from Fundamentals

CoCos with market value triggers have been criticized because market prices of bank stocks and CoCos, on which triggers would be based, may not always reflect the underlying fundamental asset value of the bank. Deviations of market prices from fundamentals could harm the bank's shareholders if premature conversions provide CoCo investors with undervalued shares that heavily dilute the initial shareholders.

Indeed, when a bank issues CoCos, speculators have the incentive to buy them and then short-sell the bank's stock in order to force an economically "unjustified" conversion that

²⁵ The bank is assumed to have issued each bond at its fair credit spread when the bank's total capital equaled 10% of deposits. For each bond, the derivative $\partial E/\partial A$ is calculated numerically by the discrete approximation $\Delta E/\Delta A$ where $\Delta A = 0.125\%$ of deposits. The different values of equity for each asset (capital) level were calculated by 1 million Monte Carlo simulations.

benefits CoCo investors at the expense of the diluted initial shareholders. Even without short-sellers, bank shareholders may be concerned that an irrational market panic or a “death spiral” could lead to unjustified conversions and dilutions of their ownership stake.²⁶ A related concern for shareholders may be a loss of control if CoCo investors end up with a significant share of the bank’s equity after conversion.

To illustrate how CoCos have the potential to harm the bank’s initial shareholders, recall the earlier simple example where a bank has issued \$1,000 in deposits, CoCos with a par value of \$30, and 7 shares of stock, currently valued at \$10 per share, so that the bank’s total capital is \$100. If capital falls to \$65, CoCo investors are issued 6 new shares. Now suppose that a speculator purchases the CoCos for \$30 and, via short-selling or an unjustified rumour that generates a panic, is able to manipulate the bank’s stock price down to \$5. Conversion is then triggered because the market value of capital equals \$65, the sum of the \$30 CoCos plus the $7 \times \$5 = \35 value of equity. Thus CoCo investors receive 6 new shares. After the short-selling ends or the panic subsides, suppose that the bank’s total capital is now recognized to still equal its fundamental value of \$100. Then the price per share would equal $\$100/13 = \7.69 , giving the CoCo investors a claim worth $6 \times \$7.69 = \46.15 and the initial shareholders a claim worth $7 \times \$7.69 = \53.85 . As a result, manipulation or panic that temporarily reduces market prices below fundamentals transfers $\$70 - \$53.85 = \$16.15$ from shareholders to CoCo investors.

This section extends the basic model of Section 3 to formally consider how deviations from market price fundamentals, as might result from manipulation or panics, affects the values of CoCos and COERCs relative to the bank’s initial shareholders’ equity. We continue to assume that the “true” or “fundamental” value of the bank’s assets equals A_t and follows the same risk-neutral rate of return process assumed earlier, equation (2). However, the market value of capital no longer is assumed to satisfy the fundamental value relation $S_t \times n_0 + V_t = A_t - D_t$. Instead, we now assume the market value of the bank’s total liabilities differs from the fundamental value of its assets:

$$S_t \times n_0 + V_t + D_t = A_t e^{\eta_t} \tag{9}$$

where η_t is a “noise” term which represents a deviation of the market value of liabilities from the fundamental value of assets, A_t . When η_t is positive (*negative*), the bank’s liabilities are over- (*under-*) valued relative to the bank’s fundamental asset value.

²⁶ Calomiris and Herring (2011) propose to outlaw short-selling of bank stocks to prevent death spirals.

It is most natural to think that η_t is non-zero because it is mainly the bank's stock price, S_t , that does not fully reflect the bank's fundamental underlying assets, A_t . The fundamental value of bank assets is unlikely to be directly observable by outside investors since at least some of the bank's assets (e.g., most loans) are not traded or investors may not know exactly which types of assets the bank currently holds. Moreover, manipulation by better-informed speculators could force stock prices from fundamental values due to limited arbitrage by lesser-informed investors. Overly optimistic or pessimistic beliefs regarding the banks' prospects, as might characterize "bubbles" or "panics," could lead to non-fundamental stock (and perhaps bond) prices.

As do Jurek and Yang (2007), we assume that the deviation from fundamentals, which we simply call "noise," follows the mean-reverting Ornstein-Uhlenbeck process

$$d\eta_t = -\kappa_\eta \eta_t dt + \sigma_\eta dz_\eta \quad (10)$$

where $\kappa_\eta > 0$ measures the speed at which noise is expected to revert to its unconditional mean of zero, and σ_η is the volatility of changes in the level of noise.

As before, conversion is assumed to occur then equation (7) holds, but the market value of capital, $S_t \times n_0 + V_t$, now is assumed to equal $A_t e^{\eta_t} - D_t$, rather than the fundamental value of capital, $A_t - D_t$. However, for standard CoCos, we assume that after conversion the noise, η_t , returns to zero, so that the payoff to CoCo investors after conversion is given by $\max[\alpha(A_t - D_t), 0]$, where, for example, $\alpha = 6/13$ for standard CoCos. For COERCs, we assume that during the rights offering period, shareholders make their decision whether to repurchase shares based on capital observed with noise, $A_t e^{\eta_t} - D_t$, but following that decision COERCs are again valued based on the fundamental payoff (1). Thus, the payoff to COERCs is now

$$V_{t_r} = \begin{cases} B & \text{if } B \leq \alpha(A_{t_r} e^{\eta_{t_r}} - D_{t_r}) \\ \alpha(A_{t_r} - D_{t_r}) & \text{if } 0 < \alpha(A_{t_r} e^{\eta_{t_r}} - D_{t_r}) < B \\ 0 & \text{if } A_{t_r} - D_{t_r} \leq 0 \end{cases} \quad (11)$$

where, for example, $\alpha = 30/37$.

Our analysis incorporating noise maintains all of the parameter and contract assumptions made earlier except that we also need estimates for κ_η and σ_η of the mean-reverting noise process in (10).

One gauge of size and persistence of stock price deviations from fundamentals comes from “Siamese Twins,” which are firms that have two classes of shares with each share class owning a fixed proportion of dividends and assets of the firm. As pointed out by Rosenthal and Young (1990), the prices of these two share classes should always trade at a fixed ratio, equal to the ratio of their cash flow rights. However, empirical evidence from two firms with such dual share classes, Royal Dutch/Shell and Unilever NV/Unilever PLC, finds that the ratio of dual share prices persistently deviates from the fixed ratio of their fundamental cash flow rights.

Jurek and Yang (2007) use daily stock price data of Royal Dutch/Shell and Unilever NV/PLC from 1970 to 2006 to estimate the non-fundamental noise process for η_t in (10). For these two firms’ dual class stocks, they estimate an average annualized value of $\sigma_\eta = 6.4\%$ and $\kappa_\eta = 3.56\%$, the latter estimate implying a mean reversion half-life of 49 trading days. We use their estimates assuming that bank total capital has the same deviations from fundamentals as these firms’ stocks. However, since we model deviations at the asset level, we adjust for an average bank capital/asset ratio of roughly 14%, so that our estimate of σ_η is $0.14 \times 6.4\% = 0.896\%$; that is, the observed bank assets deviate from their fundamental value with an annual standard deviation of slightly less than 1%. This noise standard deviation equals about one-quarter of our model’s fundamental bank asset return standard deviation, which is slightly less than 4%.²⁷

As detailed in the Appendix, with the addition of this noise affecting the bank’s observed asset value and capital, $S_t \times n_0 + V_t = A_t e^{\eta_t} - D_t$, the previously described risk-neutral valuation method is used to solve for the fair new issue credit spreads for CoCos and COERCs. Figure 7 graphs these fair credit spreads for CoCos and COERCs when banks have starting capital from 9% to 20% and when the fundamental value of assets is observed both without and with noise.²⁸ As seen in the figure, noise has a much greater impact on the value of CoCos. For example, if a bank issued CoCos when its total capital/deposits was 9%, the fair credit spread without noise would be 243 basis points but only 202 basis points if total capital was observed with noise, a difference of 41bp.

²⁷ As discussed earlier, a 3.96% fundamental asset return standard deviation was the average calibrated from Bank of America, Citigroup, and JPMorgan Chase, and includes both diffusion and jump risks.

²⁸ Our fair value calculations with noise assume that at the initial date 0, $\eta_0 = 0$. The calculations without noise are the same as those in Figure 1.

In contrast, if the same bank had issued COERCs, the fair credit spreads without and with noise would be 38 and 36 basis points, respectively, a difference of only 2 basis points.²⁹

The intuition for these results should be clear from the contractual payoffs of CoCos and COERCs. When $\eta_t > 0$ so that the market values bank capital above its fundamentals (as might be the case in a “bubble” period), conversion may be delayed relative to fundamentals if $(S_t \times n_0 + V_t)/D_t = (A_t e^{\eta_t} - D_t)/D_t > \chi > (A_t - D_t)/D_t$. This situation does not transfer much value between bond investors and initial shareholders since the unconverted bonds continue to receive their coupon payments.³⁰ However, an equally likely case is $\eta_t < 0$ where the market values bank capital below its fundamentals, a situation that might be due to manipulative short-selling or an unjustified panic.

Here if $(S_t \times n_0 + V_t)/D_t = (A_t e^{\eta_t} - D_t)/D_t < \chi < (A_t - D_t)/D_t$, conversion gives CoCo investors a share of fundamental bank capital that exceeds their bond’s par value.³¹ As illustrated in the simple numerical example at the beginning of this section, CoCo investors benefit at the expense of the initial shareholders. Consequently, for a given coupon spread, CoCos would be worth more, and initial shareholders’ equity would be worth less, in the presence of noise. That explains why if this ex-post transfer of value is recognized initially, the fair credit spread of CoCos is significantly lower in the presence of noise.

In contrast, in the same situation of manipulation or panic where $\eta_t < 0$ and $(S_t \times n_0 + V_t)/D_t = (A_t e^{\eta_t} - D_t)/D_t < \chi < (A_t - D_t)/D_t$, the triggering of conversion is unlikely to transfer value from initial shareholders to COERC investors.

²⁹ For better visual clarity, Figure 7 graphs credit spreads starting with a bank capital/deposit ratio of 9%. However, the same qualitative differences occur when the bank’s initial capital is as low as 7%: the CoCo credit spreads without and with noise are 788bp versus 705bp, a difference of 83bp. The COERC credit spreads without and with noise are 120bp and 121bp, a difference of less than 1 bp.

³⁰ Delayed conversion may have some harm to bondholders, but the effect is relatively small. If conversion is delayed but eventually does occur despite $\eta_t > 0$, convertible bonds are more likely to suffer a loss of par value. This case is similar to that with no noise but a lower conversion threshold, χ , as was illustrated in Figure 3. With a smaller fundamental value of capital, a jump below the threshold makes it less likely that bondholders would receive their par values following conversion.

³¹ Since from (8) CoCo investors’ share of capital equals $\alpha = B/(\chi D_t)$, then $B = \alpha \chi D_t < \alpha(A_t - D_t)$.

If initial shareholders repurchase the new shares that COERC investors are entitled to receive whenever the shares' observed market value exceeds the bonds' par value, $B < \alpha(A_t e^{\eta_t} - D_t)$, that event would most likely continue to occur. Only if $\alpha(A_t e^{\eta_t} - D_t) < B < \alpha \chi D_t < \alpha(A_t - D_t)$ would there be a transfer from shareholders to COERC investors, which is unlikely because, as discussed in Section 2, α is set to be significantly greater than $B/(\chi D_t)$ which is the proportion of shares given to CoCo investors. The non-fundamental information at the end of the rights offering period, η_t , would need to be very negative to persuade shareholders to not exercise their repurchase option.

Because an ex-post transfer from shareholders to COERC investors is much less likely, the values of COERCs and shareholders' equity is much less sensitive to noise due to manipulation or panic. Recognizing this fact, speculators will have little incentive to short sell the bank's stock in order to prematurely trigger conversion. While we have modelled noise as an exogenous process, a more general model with incentive-based manipulation suggests that manipulation will be less, and bank stock prices will be more transparent, when they issue COERCs rather than CoCos.³²

6. Further Considerations

The COERC's trigger in (7) is specified as a threshold level for the market value of total capital; that is, the sum of the market values of COERCs and equity. As detailed in Glasserman and Nouri (2012), the main reason for choosing this trigger, rather than one based solely on the bank's stock price, is to avoid an ill-defined trigger that would produce no equilibrium.

Of course, the viability of such a trigger will depend on the availability of information on senior debt and the market prices of COERCs. Large U.S. banks must already report their senior debt to the Federal Reserve on a weekly basis.³³

³² The design of the contract also discourages manipulation by the bank's other bondholders. Bolton and Samama (2010) argue that other bondholders may want to short the bank's stock to trigger conversion and improve their seniority. However, because COERC investors are repaid in these circumstances, such activity would not improve other bondholders' seniority.

³³ Banks report the amounts of their deposits and other non-capital liabilities in form FR 2644 Weekly Report of Selected Assets and Liabilities of Domestically Chartered Commercial Banks and U.S. Branches and Agencies of Foreign Banks.

Whether COERCS will be sufficiently liquid to observe their market prices on a frequent basis cannot be known with certainty before they exist. However, while many corporate bonds are not very liquid, subordinated debt issued by large banks is.

To investigate the liquidity of large banks' subordinated debt (for which COERCs will be a special case), we collected TRACE transactions from January 2007 to December 2011 for three different subordinated notes issued by Bank of America, Citigroup, and JPMorgan Chase. Summary statistics in Table 1 show that the average daily trades in these three bonds exceeded 32. Moreover, trading increased during 2008 and 2009 at the height of the crisis, so it was not the case that liquidity dried up during the crisis. For these three bonds, there were 20 instances when one of the bonds did not trade on a given day. However, five of these cases were on a November 11, which is the Veterans Day holiday when bond markets were open but overall trading is expected to be light. If we excluded these instances, there would be only 15 bond-days with zero trades, or an average of only one day per year with no trading.

Moreover, a bond's liquidity tends to be greater the lower is its credit risk (Bühler and Trapp (2009)), and, as we have shown above (Figure 2), COERCs should have lower risk than standard subordinated debt. The relatively low risk of COERCs has another advantage relative to standard CoCos. Standard CoCos are often criticized for being hard to value, which makes them unattractive to traditional fixed-income investors and makes credit rating agencies reluctant to rate them. Investors may shy away from them because they do not wish to become bank shareholders, especially when the bank is in financial distress. This criticism applies most to CoCos with triggers based on regulatory capital ratios and/or regulator discretion: banks can manipulate regulatory accounting and regulators' decisions are subject to political pressure.³⁴ Even if the timing of conversion is hard to predict, the fact that COERC investors almost always receive their bonds' par value in cash should qualify them for a very high quality credit rating.

³⁴ For example, Credit Suisse's CoCo, issued in February 2011, converts to equity if the bank's core Tier1 capital ratio falls below 7%. However, the Swiss regulator, FINMA, can also force conversion if it sees that Credit Suisse needs public funds to avoid insolvency. The conversion price is the minimum of \$20 and the volume weighted average stock price five days before the conversion notice. Arguably, there are three reasons why this CoCo is risky. First the trigger is based on regulatory accounting capital ratios so that the stock price at the time of conversion is unpredictable. Second, if the stock price at the time of conversion is less than \$20, CoCo investors can incur a significant loss. Third, the ability of FINMA to force conversion before the trigger is reached creates additional risk that is difficult to price.

The COERC's design also should qualify it for favourable U.S. tax treatment. Under current U.S. tax law, the deductibility of interest on standard CoCos is in question.³⁵ The reason is that the U.S. Internal Revenue Service may not treat a CoCo bond as debt for tax purposes when there is a "high" likelihood that it will be converted to equity (IRS Code Section 163).

However, since COERC investors are almost always repaid in cash, and are only repaid in equity at a loss, a strong argument can be made that their tax treatment should be the same as standard bonds.

As we have shown above, the COERC reduces the costs resulting from conflicts between bondholders and shareholders (Jensen and Meckling (1976) and Myers (1977)), and as such, should not only be of interest to banks but also to corporations in general. These costs of financial distress occur because shareholders have limited liability: they only focus on upside gains while debt holders are only concerned with downside losses. The COERC eliminates this limited liability to a large extent by forcing shareholders to repay debt in order to avoid heavy dilution. Although, ex-post, shareholders may dislike being pressured to repay debt, the ex-ante benefit is that they can borrow at close the rate paid by the government, an institution that can also coerce equityholders (i.e., taxpayers) to bail out debt holders.³⁶

In general, shareholders may be reluctant to authorise a large issue of new shares, as would be required under a COERC. Such reluctance may be driven by the fear of losing control to new shareholders. However, since the COERC structure allows existing shareholders to preserve their pre-emptive rights (again a unique feature relative to other CoCos), control by the initial shareholders' can be maintained. Moreover, existing shareholders should not fear being liquidity constrained when COERCs convert since they can sell their repurchase rights to non-constrained investors. In many countries brokers automatically sell unexercised rights if investors fail to inform them of a decision whether to exercise. Such a procedure guarantees the success of the rights issue provided, of course, the rights are in the money. While in some cases an equity issue can be interpreted as a negative signal (Myers and Majluf (1984)), a rights issue to repay COERCs should not since the corporation is not issuing shares because it believes the stock is overvalued. The rights issue is an automatic consequence of the market of capital breaching its trigger, not a timing decision by the management.

³⁵ In Europe, interest on CoCos is tax deductible, which may explain why only European banks have issued CoCos thus far.

³⁶ Government coercion is possible as long as the tax base is large enough to repay the debt. The 2011 sovereign debt crisis revealed limitations to governments' ability to raise taxes.

One potential concern about CoCos in general is the effect on fully diluted earnings per share (EPS).³⁷ Although diluted EPS may not be economically meaningful, in practice many investors focus on this financial ratio. According to US GAAP “Potentially issuable shares are included in diluted EPS using the ‘if-converted’ method if one or more contingencies relate to the entity’s share price.” As the COERC trigger is based on a market capital ratio, not a stock price, it is unclear whether a firm issuing a COERC would have to report a heavily reduced EPS, particularly since shareholders have purchase rights. Under IFRS “potentially issuable shares are considered ‘contingently issuable’ and are included in diluted EPS using the if-converted method only if the contingencies are satisfied at the end of the reporting period.” This rule would appear to lead to dilution only if conversion is triggered, which of course makes sense.

Kashyap, Rajan and Stein (2008) propose that, rather than increasing capital requirements ex ante, firms buy contingent capital insurance: insurance that inserts capital in the bank when it gets into trouble, which essentially is analogous to the firm buying put options on its own stock. Their solution requires the existence of default-free entities that sell such insurance. As Duffie (2010) points out, if the source of distress is a general financial crisis, the put seller may itself be distressed and unable to honour its commitments. Bolton and Samama (2010) propose that banks buy puts from long-term investors such as sovereign wealth funds and other large institutional investors.

It is again not obvious why these institutions would want to sell this insurance. Note that in the case of COERCs all investors in the world have an incentive to subscribe to the rights issue when the post-issue price is larger than the exercise price, not simply a number of long-term investors who has made a specific agreement with the bank in advance.

The COERC trigger we propose in this paper is issuer specific. In contrast, Kashyap, Rajan and Stein (2008) propose a trigger mechanism based on aggregate bank losses. McDonald (2010) proposes a dual price trigger: conversion would be mandatory if the stock price falls below a trigger value *and* the value of a financial institutions stock index falls below another trigger.

These proposals allow all financial institutions to recapitalize during a widespread financial crisis, but permit an individual institution to fail during normal times.

³⁷ See Bolton and Samama (2010, p.39).

A similar dual trigger mechanism is proposed by the Squam Lake Working Group (2009) proposal: banks would issue debt that would convert into equity when a regulator declares that there is a systematic crisis *and* the bank violates covenants. These approaches assume that the main purpose of CoCos is to mitigate the consequences of a major financial crisis, and because they assume that a regulator ultimately decides when conversion takes place, these CoCos may be hard to value. The goal of our paper is more general: to design a security that has the benefits of debt financing over equity financing but with lower financial distress costs than other debt securities. As a consequence, a COERC may be beneficial to any bank that wants to reduce shareholder – bondholder conflicts and avoid financial distress, regardless of a major systemic crisis.

A COERC should not be viewed as the sole instrument that prevents financial collapse, especially considering that the conversion of COERCs, as with other CoCos, does not infuse new funds into the bank. COERCs simply “clean up” the balance sheet and reduce the debt overhang and risk-shifting problems. These problems may be mitigated, but possibly not completely eliminated, if the bank has other senior debt or over-the-counter derivative liabilities. However, since COERCs are subordinated to these other senior liabilities, the larger the proportion of COERCs to these liabilities, the greater will be the reduction in risk-shifting and debt overhang. In addition, when conversion occurs at an early stage of financial distress, the resulting higher level of equity decreases the disincentive to issue additional equity or new COERCs.

7. Conclusions

In this paper we introduce and value a new security, the Call Option Enhanced Reverse Convertible (COERC). The security design modifies the CoCo proposal of Flannery (2005, 2009a) to deal with three fundamental concerns. First, the security should not be an instrument to manipulate the issuing bank’s stock price or cause a “death spiral” due to fears of massive dilution. COERCs avoid this problem by giving shareholders an option to buy back the shares from the COERC investors at the conversion price. Second, one cannot expect that there will be a very active market for CoCos if their investors are exposed to large risks. One way to reduce these investors’ risks is to design their security in such a way that it forces shareholders to pay them back in cash when financial distress becomes significant. This is achieved with COERCs by setting the conversion price very low, below the stock price that will trigger the conversion.

Not paying back the COERC investors would massively dilute shareholders and transfer wealth to COERC investors. This, in turn, lowers the credit risk of COERCs. Third, the security should be designed to rule out the problems of multiple- or no- equilibria pointed out by Bond, Goldstein and Prescott (2010) and analysed by Glasserman and Nouri (2012). Basing the conversion trigger on the market value of total capital to senior debt ratio, rather than the stock price, makes the COERC trigger robust to these potential problems.

Relative to standard CoCos, or even non-convertible bonds, COERCs' lower default risk mitigates the excessive risk-taking incentives that are typically present in a levered firm. The COERC design that reduces the possibility of wealth transfers between their investors and shareholders also helps solve the 'debt overhang' problem of high leverage described by Myers (1977). This reduction in agency costs should make the COERC design relevant for corporations in general.

Finally, unlike some other CoCos, with COERCs involvement by government regulatory authorities is not required. For example, Duffie (2010) proposes that regulators force a bank to make a deep discount rights issue whenever they consider it necessary. The COERC design also "forces" equity holders to repay debt in order to avoid dilution, but because this commitment is anticipated, it will benefit shareholders through lower yields on COERCs. Of course, in order to make a COERC interesting for issuers, interest should be tax deductible. It would be ironic if government policy handicapped debt that reduces the likelihood of a financial crisis while favouring standard debt that does not. Because COERC investors are almost always repaid in cash, the tax authorities should look more favourably at a COERC than a standard CoCo.

Appendix

Derivation of the Deposit Credit Spread

The following is a derivation of the formula for h_t in equation (5). Define H_t as the value of the instantaneous loss per deposit conditional on a jump occurring. Then

$$\begin{aligned}
 H_t &\equiv E_t^Q \left[\max \left(\frac{D_t - Y_{q_t} A_{t^-}}{D_t}, 0 \right) \right] = E_t^Q \left[\max (1 - Y_{t^-} x_{t^-}, 0) \right] \\
 &= \int_0^{1/x} (1 - Yx) \exp \left[-\frac{(\ln Y - \mu_y)^2}{2\sigma_y^2} \right] \frac{1}{Y\sigma_y \sqrt{2\pi}} dY
 \end{aligned} \tag{A.1}$$

Make the change in variable $y \equiv (\ln Y - \mu_y)/\sigma_y$. Then $y|_{Y=0} = -\infty$, $y|_{Y=1/x} = -(\ln x + \mu_y)/\sigma_y$, $Y = \exp[\mu_y + y\sigma_y]$, and $dy = dY/(Y\sigma_y)$. Defining $d_1 \equiv [\ln x + \mu_y]/\sigma_y$, then

$$H_t = \int_{-\infty}^{-d_1} \left(1 - \exp[\mu_y + y\sigma_y]x\right) \frac{e^{-y^2/2}}{\sqrt{2\pi}} dy = N(-d_1) - xe^{\mu_y} \int_{-\infty}^{-d_1} \exp\left[y\sigma_y - \frac{y^2}{2}\right] \frac{1}{\sqrt{2\pi}} dy \quad (\text{A.2})$$

Completing the square in the exponent, one obtains

$$\int_{-\infty}^{-d_1} \exp\left[y\sigma_y - \frac{y^2}{2}\right] \frac{1}{\sqrt{2\pi}} dy = e^{\sigma_y^2/2} \int_{-\infty}^{-d_1} \frac{\exp\left[-\frac{1}{2}(y - \sigma_y)^2\right]}{\sqrt{2\pi}} dy = e^{\sigma_y^2/2} \int_{-\infty}^{-d_2} \frac{e^{-y^2/2}}{\sqrt{2\pi}} dy \quad (\text{A.3})$$

where $d_2 = d_1 + \sigma_y = \lceil \ln x + \mu_y \rceil / \sigma_y + \sigma_y$. Collecting terms together, one finds

$$H_t = N(-d_1) - x \exp\left[\mu_y + \frac{1}{2}\sigma_y^2\right] N(-d_2) = N(-d_2) - \exp\left[\ln x + \mu_y + \frac{1}{2}\sigma_y^2\right] N(-d_2) \quad (\text{A.4})$$

Multiplying H_t by the risk-neutral probability of a jump, λ , gives equation (5) in the text.

Monte Carlo Simulation Method

The following describes the risk-neutral valuation method for the case where bank assets are observed with noise. Valuation for the basic model without noise is a special case with the noise term, η_t , set to zero.

The risk-neutral process for the fundamental value of the bank's assets, A_t , equals the assets' risk-neutral rate of return plus deposit growth less the payouts of interest to depositors and dividends to shareholders. In addition, as long as bonds remain unconverted, payouts include bond coupons. Thus, if $A_t e^{\eta_t}$ equals the observed (with noise) bank asset value, the actual (fundamental) asset value follows the process

$$\begin{aligned} dA_t &= (dA_t^* / A_t^*) A_t + dD - (r_t + h_t) D_t dt - c_t B - \delta (A_t e^{\eta_t} - B - D_t) dt \\ &= \left[(r_t - \lambda k - \delta e^{\eta_t}) A_t + (g(x_t e^{\eta_t} - \hat{x}) - r_t - h_t + \delta) D_t - (c_t - \delta) B \right] dt \\ &\quad + \sigma A_t dz + (Y_{q_t} - 1) A_t dq \end{aligned} \quad (\text{A.5})$$

where we have substituted in equations (2) and (4). Equation (A.5) can be rewritten as

$$\frac{dA_t}{A_t} = \left[r_t - \lambda k - \delta e^{\eta_t} + \frac{g(x_t e^{\eta_t} - \hat{x}) - r_t - h_t + \delta - (c_t - \delta) b_t}{x_t} \right] dt + \sigma dz + (Y_{q_t} - 1) dq \quad (\text{A.6})$$

where $b_t \equiv B/D_t$. Thus, the risk-neutral process for the asset/deposit ratio is

$$\begin{aligned}
dx_t / x_t &= dA_t / A_t - dD_t / D_t \\
&= \left[r_t - \lambda k - \delta e^{\eta_t} + \frac{g(x_t e^{\eta_t} - \hat{x}) - r_t - h_t + \delta - (c_t - \delta) b_t}{x_t} - g(x_t e^{\eta_t} - \hat{x}) \right] dt \quad (\text{A.7}) \\
&\quad + \sigma dz + (Y_{q_t^-} - 1) dq
\end{aligned}$$

A simple application of Itô's lemma for jump-diffusion processes implies

$$\begin{aligned}
d \ln x_t &= \left[r_t - \lambda k - \delta e^{\eta_t} + \frac{g(x_t e^{\eta_t} - \hat{x}) - r_t - h_t + \delta - (c_t - \delta) b_t}{x_t} - g(x_t e^{\eta_t} - \hat{x}) - \frac{\sigma^2}{2} \right] dt \quad (\text{A.8}) \\
&\quad + \sigma dz + \ln Y_{q_t^-} dq
\end{aligned}$$

Note that in equation (A.8), when bonds are assumed to pay floating coupons, $c_t = r_t + s$. Also, when bank assets are observed with noise, the deposit credit spread, h_t , is given by equation (5) in the text but with x_t replaced by $x_t e^{\eta_t}$. Furthermore, a trivial application of Itô's lemma shows that $b_t = B/D_t$ evolves as

$$db_t / b_t = g(\hat{x} - x_t e^{\eta_t}) dt \quad (\text{A.9})$$

To value subordinated debt or a CoCo or COERC bond, we compute the expression

$$V_0 = E_0^Q \left[\int_0^T e^{-\int_0^t r_s ds} \nu(t) dt \right] \quad (\text{A.10})$$

where $\nu(t)$ is the bond's cash flow per unit time paid at date t . $\nu(t) = c_t B = (r_t + s)B$ as long as the bond is not converted or the bank has not failed. If date T is reached without the bond converting or the bank failing, there is a final cash flow of B . Given equation (7), conversion of a CoCo or COERC is triggered the first time that the observed capital to deposit ratio falls below the trigger threshold:

$$x_t e^{\eta_t} - 1 \leq \chi \quad (\text{A.11})$$

In this case, there is a final cash flow given by equation (1). For the case of subordinated debt, bank failure occurs the first time that the par value of total debt exceeds observed assets, or $x_t e^{\eta_t} \leq 1 + b_t$. In that case, subordinated debt holders receive a final cash flow of $\min\{B, \max[A_T - D_t, 0]\}$.

The right-hand side of equation (A.10) is calculated using a technique similar to Zhou (2001), which is a discretization method for Monte Carlo valuation of a mixed jump-diffusion process.

We generalize his approach for the case of our four state variables: the default-free short rate, r_t , which follows the process (4); the asset/deposit ratio, x_t , which satisfies the jump-diffusion process (A.8); the bond par value/deposit ratio, b_t , which follows the process (A.9); and noise, n_t , which follows the process (10).

Divide the time interval $[0, T]$ into n equal sub-periods, where $\Delta t \equiv T/n$ is the length of each period. n is chosen to be relatively large so that a small Δt leads to an accurate discrete-time approximation of the model's continuous-time processes. With time measured in years, our empirical work assumes $\Delta t \equiv 1/250$, the length of one trading day.

Let t denote the end of trading day $t-\Delta t$ and the beginning of trading day t . Then the discrete-time process corresponding to (4) is

$$\begin{aligned} r_{t+\Delta t} &= r_t + \kappa_r (\bar{r} - r_t) \Delta t + \sigma_r \sqrt{r_t} \sqrt{\Delta t} \xi_{t+\Delta t} \\ &= \bar{r} \kappa_r \Delta t + r_t (1 - \kappa_r \Delta t) + \sigma_r \sqrt{r_t} \sqrt{\Delta t} \xi_{t+\Delta t} \end{aligned} \quad (\text{A.12})$$

where $\xi_{t+\Delta t} \sim N(0,1)$ are serially independent shocks representing Brownian motion uncertainty. Similarly, the discrete-time process corresponding to (A.8) is

$$\begin{aligned} \ln x_{t+\Delta t} &= \ln x_t + \left[r_t - \lambda k - \delta e^{\eta_t} + \frac{g(x_t e^{\eta_t} - \hat{x}) - r_t - h_t + \delta - (c_t - \delta) b_t}{x_t} - g(x_t e^{\eta_t} - \hat{x}) - \frac{\sigma^2}{2} \right] \Delta t \\ &\quad + \sigma \sqrt{\Delta t} \varepsilon_{t+\Delta t} + \ln Y_{t+\Delta t} \varphi_{t+\Delta t} \end{aligned} \quad (\text{A.13})$$

where $\varepsilon_{t+\Delta t} \sim N(0,1)$ are serially independent shocks, $E_t^Q[\varepsilon_{t+\Delta t} \xi_{t+\Delta t}] = \rho$, $\ln Y_{t+\Delta t} \sim N(\mu_y, \sigma_y^2)$,

and

$$\varphi_{t+\Delta t} = \begin{cases} 1 & \text{with probability } \Delta t \lambda \\ 0 & \text{with probability } 1 - \Delta t \lambda \end{cases} \quad (\text{A.14})$$

Finally, the discrete-time analogues of equations (A.9) and (10) are

$$b_{t+\Delta t} = b_t \exp[-g(x_t e^{\eta_t} - \hat{x}) \Delta t] \quad (\text{A.15})$$

$$\eta_{t+\Delta t} = (1 - \kappa_\eta \Delta t) \eta_t + \sigma_\eta \sqrt{\Delta t} \varpi_{t+\Delta t} \quad (\text{A.16})$$

where $\varpi_{t+\Delta t} \sim N(0,1)$ are serially independent shocks uncorrelated with $\xi_{t+\Delta t}$ and $\varepsilon_{t+\Delta t}$. A Each Monte Carlo simulation of (A.12), (A.13), (A.15), and (A.16) calculates a realization of the right-hand side of (A.10), and taking the average of at least 100,000 of them gives V_0 for a given spread, s . s is varied until the (fair) one is found where $V_0 = B$

References

- Adrian, T. and H. S. Shin, 2010, Liquidity and leverage, *Journal of Financial Intermediation* 20, 418-437.
- Albul, B., D. Jaffee and A. Tchisty, 2010, Contingent convertible bonds and capital structure decisions, working paper, University of California, Berkeley.
- Barucci, E. and L. Del Viva, 2011, Dynamic capital structure and the contingent capital option, *Annals of Finance* (forthcoming).
- Basel Committee on Banking Supervision, 2011, Global systematically important banks: Assessment methodology and the additional loss absorbency requirement, Bank for International Settlements, November.
- Berg, T. and C. Kaserer, 2011, Does contingent capital induce excessive risk-taking and prevent an efficient recapitalization of banks? working paper, Humboldt University and Technical University Munich.
- Bolton, P. and F. Samama, 2010, Contingent capital and long term investors: a natural match?, conference paper, Columbia University Committee on Global Thought.
- Boyle, P., 1977, Options: A Monte Carlo approach, *Journal of Financial Economics* 4, 323-328.
- Bühler, W. and M. Trapp, 2009, Time-varying credit risk and liquidity premia in bond and CDS markets, working paper.
- Calomiris, C. and R. Herring, 2011, Why and how to design a contingent convertible debt requirement, working paper, Columbia University and University of Pennsylvania.
- Collin-Dufresne, P. and R. Goldstein, 2001, Do credit spreads reflect stationary leverage ratios? *Journal of Finance* 56, 1929-1957.
- Cox, J., J. Ingersoll, and S. Ross, 1985, A theory of the term structure of interest rates, *Econometrica* 53, 385-408.
- De Groen, W. P., 2011, A closer look at Dexia: the case of misleading capital ratios, CEPS Commentary, October.
- De Jonghe, O., 2010, Bank to the basics in banking? A micro-analysis of banking system stability, *Journal of Financial Intermediation* 19, 387-417.
- Demsetz, R. and P. Strahan, 1997, Diversification, size, and risk at U.S. bank holding companies, *Journal of Money, Credit, and Banking* 29, 300-313.
- Duan, J.-C. and J.-G. Simonato, 1999, Estimating and testing exponential-affine term structure models by Kalman filter, *Review of Quantitative Finance and Accounting* 13, 111-135.
- Duffie, D., 2010, A contractual approach to restructuring financial institutions, Chapter 6 of George Schulz, Kenneth Scott, and John Taylor (eds.) *Ending Government Bailouts as We Know Them*, Hoover Press.

- Flannery, M., 2005, No pain, no gain: Effecting market discipline via reverse convertible debentures, in Hal S. Scott (ed.) *Capital Adequacy beyond Basel: Banking, Securities and Insurance*, Oxford: Oxford University Press.
- Flannery, M., 2009a, Market value triggers will work for contingent capital investments, working paper, University of Florida.
- Flannery, M., 2009b, Stabilizing large financial institutions with contingent capital certificates, working paper, University of Florida.
- Flannery, M., 2010, A fix to the death spiral Problem, mimeo.
- Flannery, M. and K. Rangan, 2008, What caused the bank capital build-up of the 1990s?, *Review of Finance* 12, 391-429.
- Glasserman, P. and B. Nouri, 2010, Contingent capital with a capital ratio trigger, *Management Science*, (forthcoming).
- Glasserman, P. and B. Nouri, 2012, Market-Triggered Changes in Capital Structure: Equilibrium Price Dynamics, working paper, Columbia University.
- Haldane, A., 2011, Capital discipline, paper presented at American Economic Association Meetings, Denver CO, January 9.
- HM (UK) Treasury, 2009, Risk, reward and responsibility: the financial sector and society, available at hm-treasury.gov.uk.
- Hillion, P. and T. Vermaelen, 2004, Death spiral convertibles, *Journal of Financial Economics* 71, 381-415
- Hilscher, J. and A. Raviv, 2011, Bank stability and market discipline: The effect of contingent capital on risk taking and default probability, working paper, Brandeis University.
- Jensen, M. and W. Meckling, 1976, Theory of the firm, managerial behaviour, agency costs and ownership structure, 3, 305-360
- Jurek, J. and H. Yang, 2007, Dynamic Portfolio Selection in Arbitrage, working paper, Harvard University.
- Kasyhap, A., R. Rajan, and J. Stein, 2008, Rethinking capital regulation, Federal Reserve Bank of Kansas City Economic Symposium on *Managing Stability in a Changing Financial System*.
- Mommel, C. and P. Raupach, 2010, How do banks adjust their capital ratios?, *Journal of Financial Intermediation* 19, 509-528.
- Merrouche, O. and M. Mariathasan, 2012, The manipulation of base risk weights : evidence from 2007-2010, EUI and Oxford University working paper.
- Merton, R., 1974, On the pricing of corporate debt: The risk structure of interest rates, *Journal of Finance* 29, 449-470.
- McDonald, R., 2010, Contingent capital with a dual price trigger, working paper, Northwestern University

- Myers, S., 1977, Determinants of corporate borrowing, *Journal of Financial Economics* 5, 147-175.
- Myers, S., and N. Majluf, 1984, Corporate financing and investment decisions when firms have information that investors don't have, *Journal of Financial Economics* 13,187-221
- Pan, J., 2002, The jump-risk premia implicit in options: Evidence from an integrated time-series study, *Journal of Financial Economics* 63, 3-50.
- Pennacchi, G., 2011, A structural model of contingent bank capital, Federal Reserve Bank of Cleveland Working Paper 10-04. Available at <http://business.illinois.edu/gpennacc/ConCap061811.pdf>.
- Pennacchi, G., 2000, The effects of setting deposit insurance premiums to target insurance fund reserves, *Journal of Financial Services Research* 17, 153-180.
- Rosenthal, L. and C. Young, 1990, The seemingly anomalous price behavior of Royal Dutch Shell and Unilever nv/plc, *Journal of Financial Economics* 26, 123-141.
- Squam Lake Working Group, 2009, An expedited resolution mechanism for distressed financial firms: regulatory hybrid securities, Council on Foreign Relations.
- Zhou, C., 2001, The term structure of credit spreads with jump risk, *Journal of Banking and Finance* 25, 2015-2040.

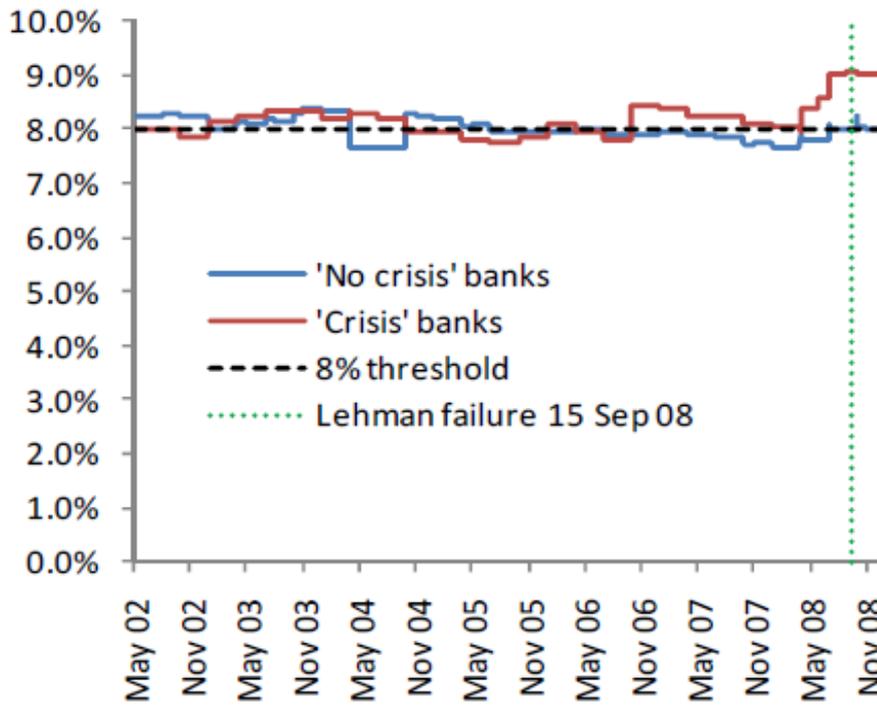
Table 1**Daily Trading Statistics for Subordinated Debt of Major US Banks
2007 to 2011**

	Bank of America		Citigroup		JP Morgan Chase	
	Trades	\$ Volume	Trades	\$ Volume	Trades	\$ Volume
Average	33.4	2674066	33.3	4965545	32.9	3979899.8
Standard Deviation	27.8	4338850	23.5	7664606	19.4	5863343.9
1 Percentile	1	13880	3	55880	5	30000
5 Percentile	5	101350	11	299850	10	242000
25 Percentile	13	533750	20	1164750	20	756000
50 Percentile	26	1258000	28	2428500	30	1746000
75 Percentile	47	2963750	40	5853750	42	5002750
95 Percentile	85	9562050	75	16686150	66	14780900
99 Percentile	122	20980080	119	32975180	86	30608380
Median 2007	9	538000	22	1742000	15	2367000
Median 2008	14	708000	27	1666000	30	1556000
Median 2009	44	1916500	47	5032500	39	1597500
Median 2010	43	2050500	30	2428500	37	2344500
Median 2011	33	1571500	27	2331000	31.5	1503500
Total Days With Zero Trading	9		6		5	

Note: The table's trading statistics are computed from January 2, 2007 to December 30, 2011 TRACE data. TRACE does not specify the dollar amount for transactions exceeding \$5 million. In those cases we assume a transaction of \$5 million. The statistics are for the following bonds. Bank of America: 12-year subordinated note issued December 2003 with 5.25% semi-annual coupon, cusip 060505BG8. Citigroup: 10-year subordinated note issued August 2002 with 5.625% semi-annual coupon, cusip 172967BP5. JP MorganChase 10-year subordinated note issued October 2005 with 5.15% semi-annual coupon, cusip 46625HDF4.

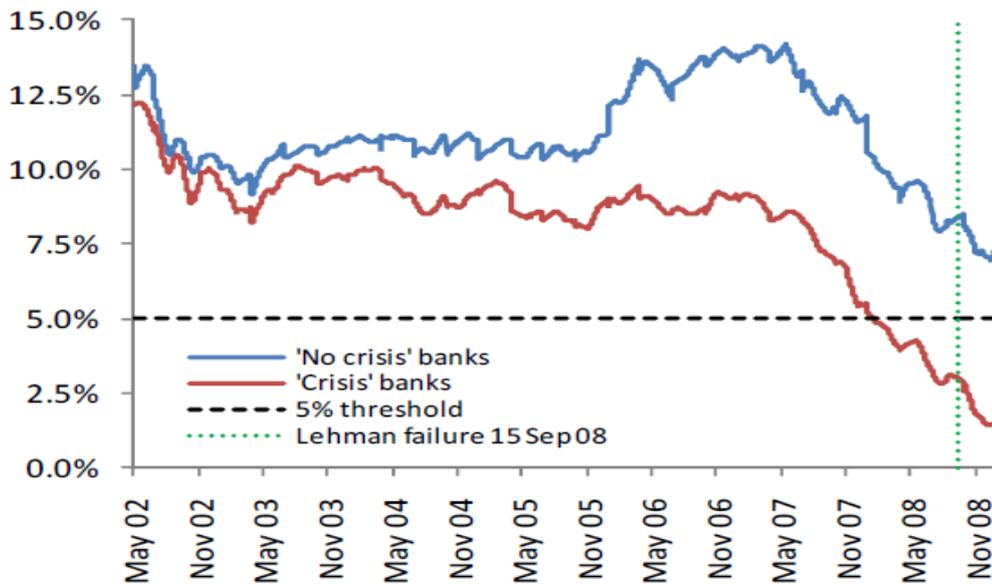
Figure 1 Tier 1 Capital Ratios versus Market Capital Ratios

A. Tier 1 capital ratios for “crisis” and “no crisis” banks (Haldane (2011), p.14)



Sources: Capital IQ and Bank calculations

B. Market capitalisation to book-value of debt (Haldane (2011), p.15)



Sources: Capital IQ and Bank calculations

Figure 2 Credit Spreads of Subordinated Debt, CoCos, and COERCs

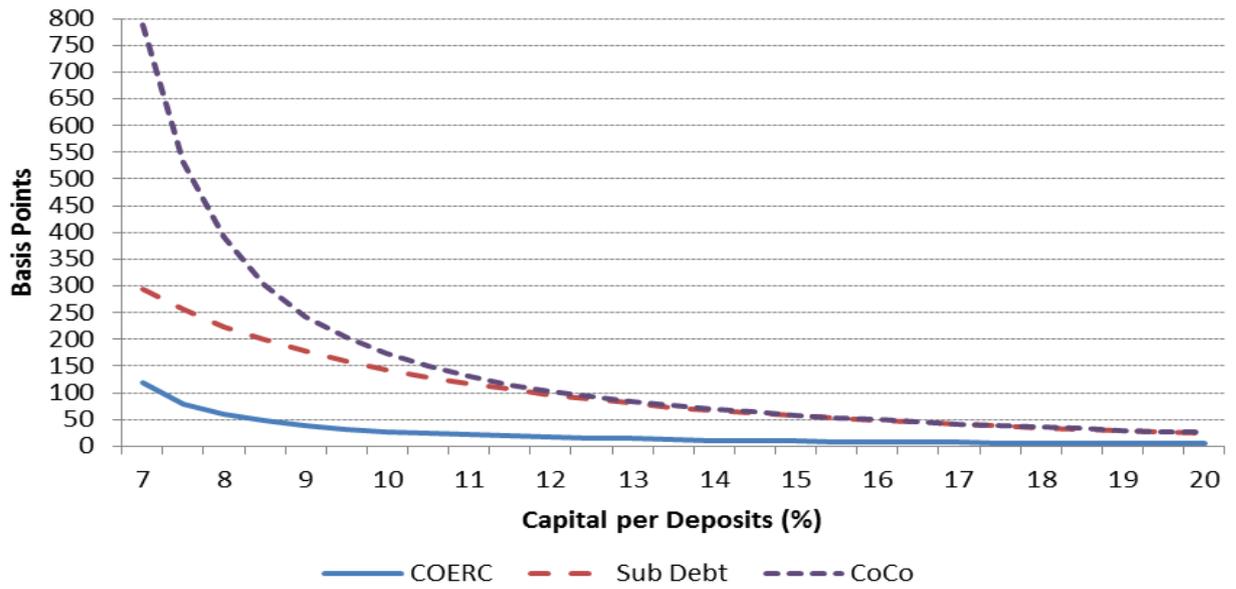


Figure 3 COERC Credit Spreads by Dilution Ratio, α

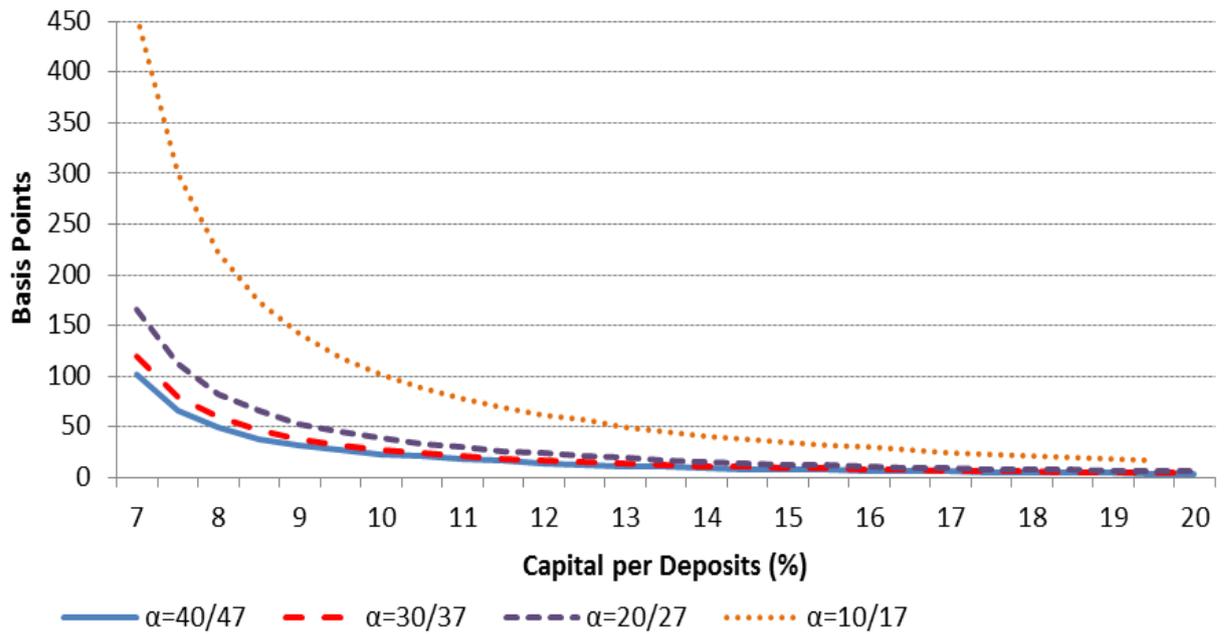


Figure 4 COERC Credit Spreads by Trigger Threshold, χ

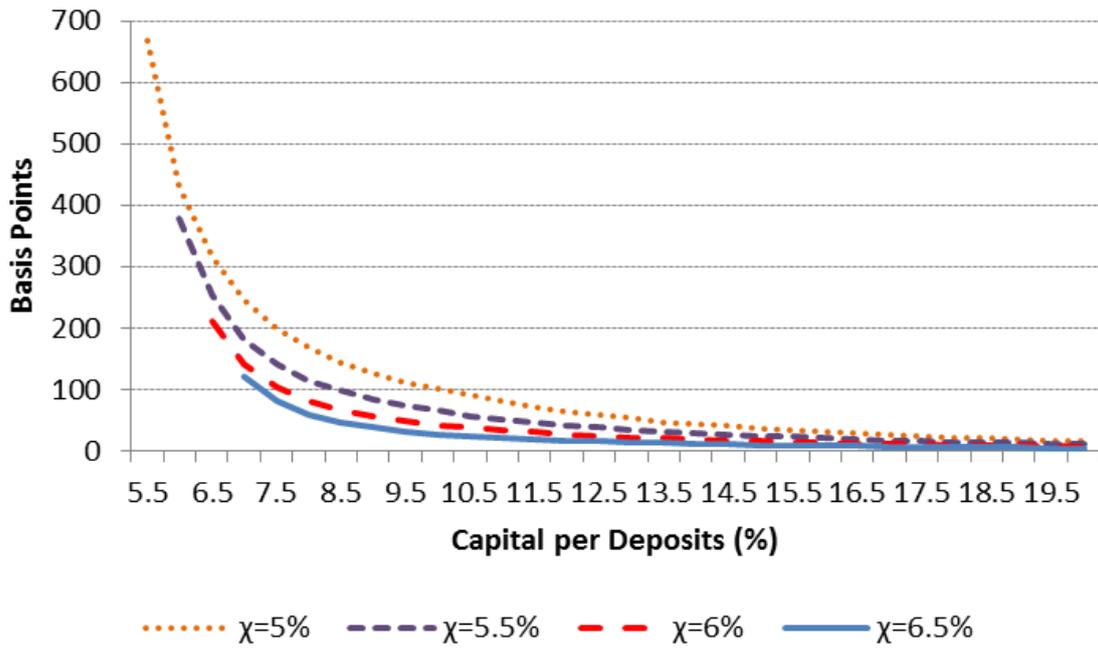


Figure 5 Risk-Shifting Incentives when Banks Issue Subordinated Debt, CoCos, and COERCs

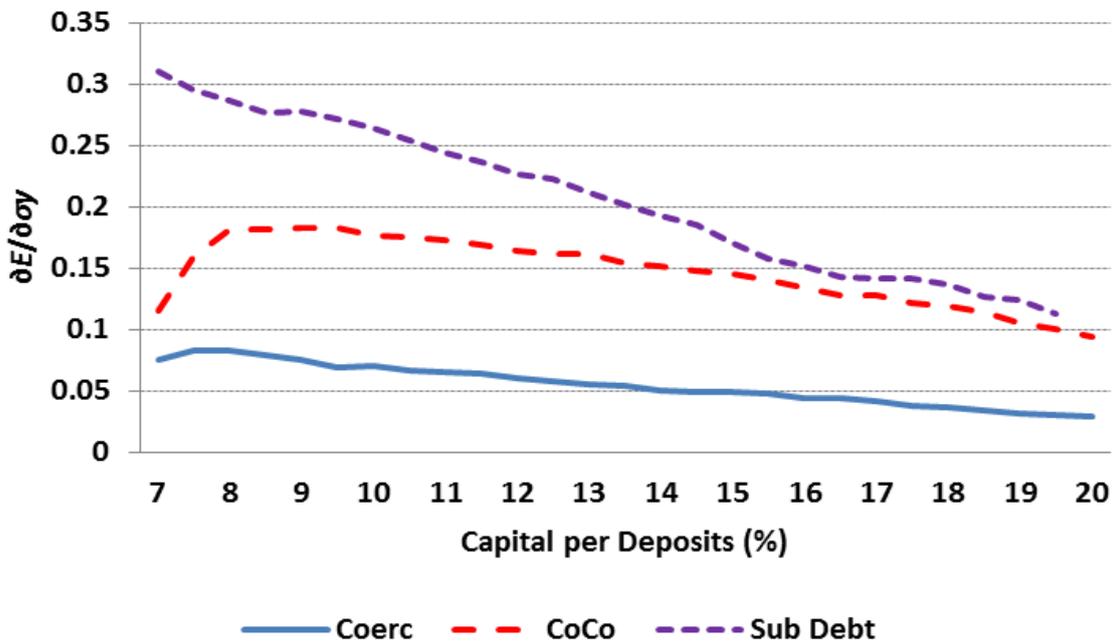


Figure 6 Debt Overhang when Banks Issue Subordinated Debt, CoCos, and COERCs

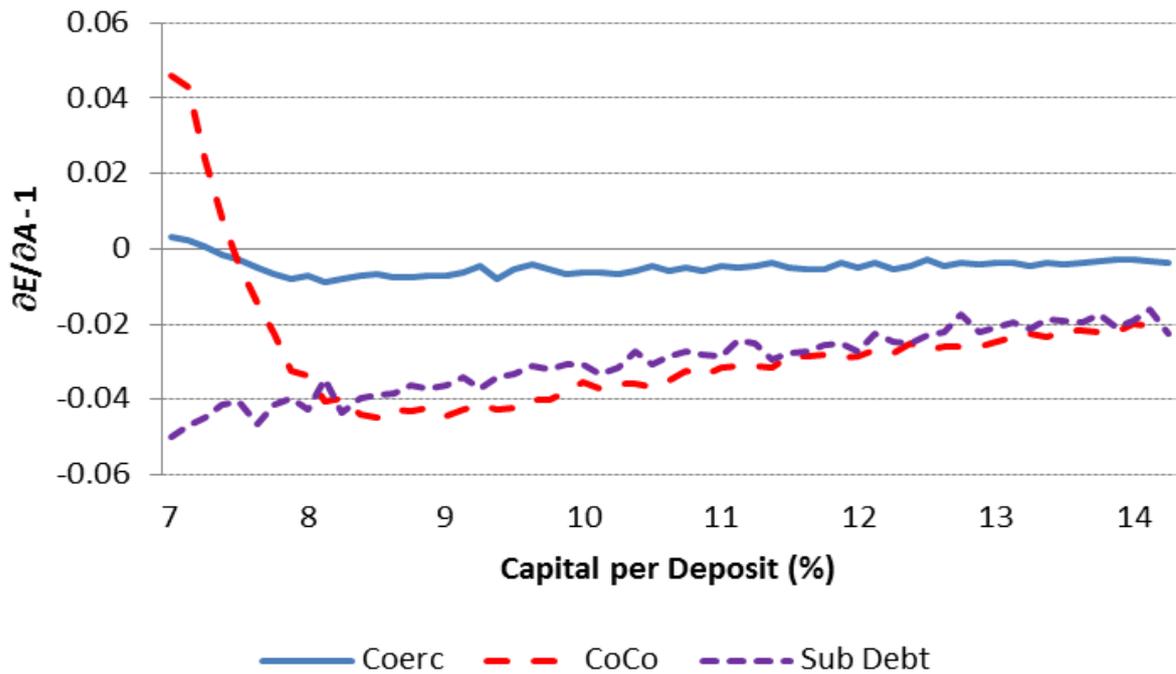
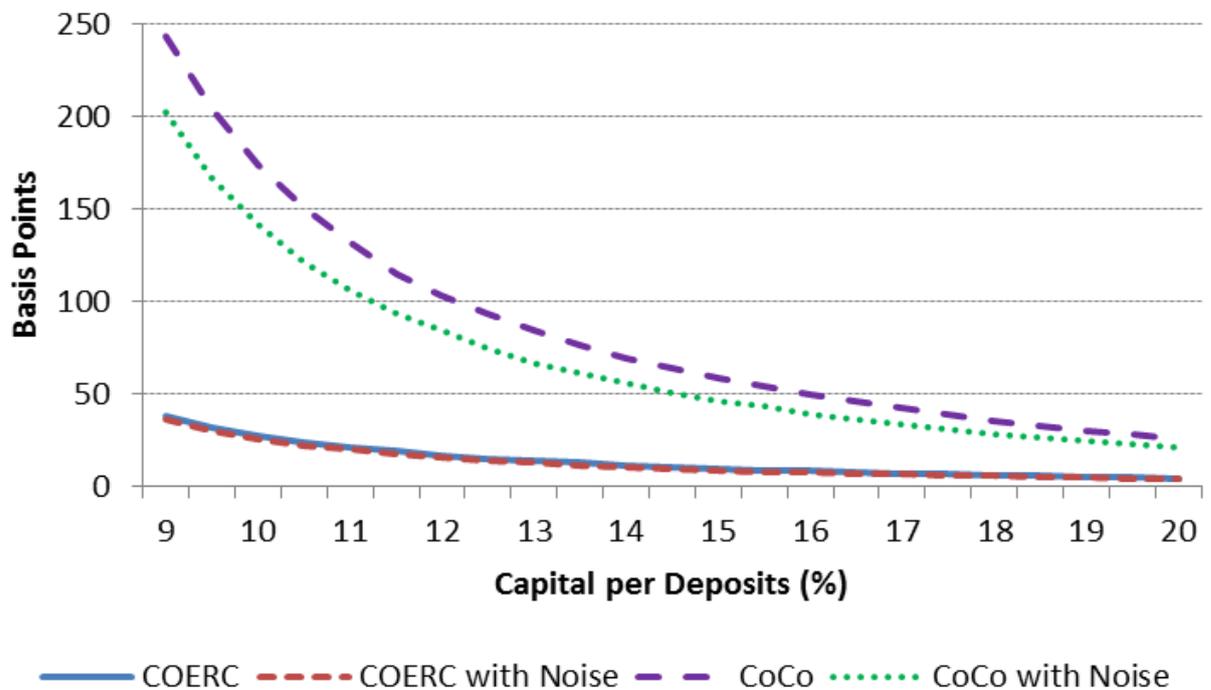


Figure 7 Credit Spreads for CoCos and COERCs: The Effect of Noise



ICSSAM-477

The Contemporaneous Relation between VIX Options Volume and VIX Index Change: A Test of the Information Hypothesis

Wei-Che Tsai*,

Assistant Professor of Finance at the Department of Finance, National Sun Yat-sen University,
R.O.C.

E-mail: weiche@mail.nsysu.edu.tw.

Dian-Xuan Kao

Finance from National Taiwan University, R.O.C.

E-mail: adakao@ntu.edu.tw.

Yaw-Huei Wang

Professor of Finance at the Department of Finance, National Taiwan University, R.O.C. E-mail:
wangyh@ntu.edu.tw.

Abstract

This study tests the information hypothesis by examining the contemporaneous relation between trading activity in VIX options and changes in the VIX in a high-frequency framework. Our results show a consistent and significant contemporaneous relation and thus support the information effect in the VIX options market, particularly when we examine the net signed trading activity in VIX calls and puts. The information effect is clear-cut when we examine the crisis period encompassing the collapse of Lehman Brothers and when the trading activity variables are compiled only from out-of-the-money VIX options. When taking into consideration the impacts of liquidity in the VIX options market and the periodical patterns of the intraday time series, the conclusions drawn from our empirical analysis remain unchanged.

Keywords: VIX Options; VIX; Trading activity

JEL Classification: G12, G14

1. Introduction

In the absence of market completeness, it is important to understand the informational linkage between the options market and its underlying asset market. Prior research on the useful role of trading activity in individual stock options with regard to the price discovery of the underlying asset is inconclusive and contradictory.

Whereas numerous studies provide support for the informational role of options (Bhattacharya, 1987; Easley, O'Hara, and Srinivas, 1998; Chakravarty, Gulen, and Mayhew, 2004; Pan and Poteshman, 2006; Cao and Wei, 2010; Cremers and Weinbaum, 2010; Xing, Zhang, and Zhao, 2010; Johnson and So, 2012), other research does not find any confirmatory evidence (Vijh, 1990; Chiang and Fung, 2001; Chan, Chung, and Fong, 2002).¹

This study extends the existing literature for the newly established and rapidly growing VIX options market² by exploring the informational role of VIX options volume. VIX options, compared to the straddle and strangle strategies in the S&P 500 index options market, offer investors a simple and direct way to trade volatility without dealing with the other associated risk factors that otherwise affects the overall performance of volatility strategies. If investors want to act on volatility information, whether public or private, they may trade directly in the VIX options market. As such, VIX options volume conveys information and should predict the change of the CBOE volatility index (VIX), which implies the existence of an information effect. In addition, unlike most asset returns, which are generally proven to be a random walk, volatility is highly predictable, particularly when using option implied information.³ This predictability suggest an advantage for investigating the information hypotheses with this options market.⁴

The VIX, which is the underlying asset of VIX options, is compiled from the market prices of S&P 500 index options as a means of approximating the expected aggregate volatility of the S&P 500 index during the subsequent 30 calendar days. As such, it represents a sort of aggregate information implied in the S&P 500 options market.

¹ Furthermore, Amin and Lee (1997), Cao, Chen, and Griffin (2005) and Roll, Schwartz, and Subrahmanyam (2010, 2012) show that options trading activity is informative immediately prior to the release of details on certain events, such as earnings, takeover, and macroeconomic announcements.

² The launch of VIX options took place on the Chicago Board Options Exchange (CBOE) on 24 February 2006. Since then, as a result of the increasing demand for practical market risk management, these options have become the most successful new product launch in the history of the CBOE.

³ See, for example, Christensen and Prabhala (1998), Fleming (1998), Andersen, Bollerslev, Diebold, and Ebens (2001), Blair, Poon and Taylor (2001), Ederington and Guan (2002), Andersen, Bollerslev, Diebold, and Labys (2003), Jiang and Tian (2005), Giot and Laurent (2007), and Taylor, Yadav, and Zhang (2010).

⁴ This study contains relatively minor microstructure issues, such as the nonsynchronized trading problem and the problem of stale prices, because both the S&P 500 index and VIX options are traded with satisfactory liquidity in the same exchange (i.e., CBOE).

Therefore, studying the contemporaneous relation between the trading activity in VIX options and the dynamic of VIX provides an ideal channel to investigate not only the informational role of the trading activity of VIX option contracts on the price dynamic of the underlying asset but also the mechanism of information dissemination in two highly related option markets.⁵

Our empirical approach refers to the seminal works of Stoll (2000), Schlag and Stoll (2005), and Chang, Hsieh, and Lai (2013) to specify the link between VIX options trading and the changes in the VIX in a high-frequency framework. We analyze three different types of information sources: trading volume, dollar volume, and the total number of transactions. For each type of information source, we investigate the information content of not only the aggregation variables but also the four signed variables, which are explained in detail in Section 2, compiled from buyer- and seller- initiated trading activities using Lee and Ready's (1991) algorithm.

Using tick data from the Market Data Express of the CBOE for the period from January 2008 to March 2010, we explore the contemporaneous relation between trading activity in VIX options and the changes in the VIX and find that VIX options markets play an informational role. Focusing on an intraday dimension with 15-minute time intervals, we find a consistently significant association between the net signed variables of trading activity in VIX options and contemporaneous changes in the VIX, particularly when we examine the net signed trading activity in VIX calls and puts.

These empirical findings become even more clear-cut when we focus on the crisis period around the collapse of Lehman Brothers and on an examination of out-of-the-money (OTM) options. In other words, the financial crisis strengthened the concurrent relation between trading activity in VIX options and changes in the VIX and the trading of the OTM contracts are more effectively informative. Furthermore, even when we take into consideration the impact of options liquidity and the periodical patterns of the intraday time series, our empirical results remain unchanged.

⁵ Because frictions exist in most, if not all, of the financial markets and because these frictions have different degrees of impact on the speed of information flow across markets, at a shorter horizon one market may process new information faster than the others. Therefore, the impact of order imbalances in the VIX options market on the levels of VIX conveyed by S&P 500 options may induce a contemporaneous or lead-lag phenomenon.

Extending the seminal work of Shu and Zhang (2012) who show that both VIX futures prices and the VIX reflect information in the same period, our empirical results provide further evidence from the VIX options market to support the information hypothesis. In addition, our empirical findings are complementary to the theoretical findings of Easley, O'Hara, and Srinivas (1998), who predict that, if the markets are in a pooling equilibrium, the contemporaneous coefficients of positive (negative) option trades on price changes in the underlying asset will be significantly positive (negative).⁶ However, we find no consistent lead-lag relation between trading activity in VIX options and changes in the VIX. This result implies that professional traders have difficulties predicting VIX index changes unless they know the contemporaneous net signed trading activity in VIX options volume in advance. Therefore, this study confirms the argument of several prior studies such as Pan and Poteshman (2006) that a lead-lag analysis is not applicable to the index options market.

The remainder of this paper is organized as follows. Section 2 provides the details of our empirical methodology and hypothesis. Section 3 describes the data adopted for our empirical analysis. Section 4 discusses the main empirical results, and Section 5 undertakes a robustness analysis. Finally, Section 6 offers the conclusions drawn from this study.

2. Method and Hypothesis Development

2.1 Classification of Signed Trading Activities

Each transaction includes a buyer and a seller who possess contrary perspectives on the changes in the underlying asset price. Therefore, in addition to examining both the entire market and the call and put aggregations, we also construct signed trading activities, which should contain even greater information. However, to carry out this analysis, we must determine whether a transaction in VIX options is buyer- or seller-initiated. Therefore, similar to many prior studies,⁷ we adopt Lee and Ready's (1991) algorithm implemented under the following two steps:

1. Transactions occurring below (above) the midpoint of the bid and ask prices are classified as seller- (buyer-) initiated.

⁶ Although informed traders cannot trade the VIX directly, volatility information contained in the market prices of S&P 500 index options is quickly reflected in the changes of the VIX level because the VIX index is updated approximately every 15 seconds during each trading day.

⁷ See, for example, Amin and Lee (1997), Easley, O'Hara, and Srinivas (1998), Lee and Yi (2001), Chan, Chung, and Fong (2002), Cao, Chen, and Griffin (2005), and Pan and Poteshman (2006).

2. Transactions occurring at the midpoint of the bid and ask prices are first classified using a tick test, comparing the trade price to the price of the previous transaction. Specifically, if the current transaction price occurs at a higher (lower) price than the previous transaction, it is classified as seller- (buyer-) initiated.

If, on the basis of the previous trade, the transactions are still unclassifiable, we use a zero-uptick or a zero-downtick test, depending on the direction of the last nonzero price change. The unclassified transactions in our sample account for less than 1 percent of the total.

2.2 Hypothesis development

To test for the information hypothesis, we focus on the contemporaneous relations between trading activity in VIX options and changes in the VIX. Based on intraday frequency, we refer to the seminal works of Stoll (2000), Schlag and Stoll (2005), and Chang, Hsieh, and Lai (2013) to specify the following empirical model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \varepsilon_t \quad (1)$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . Because highly developed computer techniques have provided an enormous boost to the speed of information transfer, only four periods of lagged information are included within the model, and all of the intraday time series are normalized by subtracting the daily mean value and dividing by the standard deviation of the series.

If traders who act quickly on public information or possess private information trade first in specific options, we expect trading activity in VIX options to effect movements in the VIX index. Specifically, if trading activity in VIX options conveys information on the movements in the VIX index, we should see significant coefficients on the trading activities of VIX options, such as β_0 , which lends support to the information hypothesis. Intuitively, the coefficient β_0 of our empirical model is similar to the coefficient λ_0 of Kyle (1985), which measures the impact on the changes in the underlying asset.

2.3 Variables and Predictive Relations

The trading activity variables in the regression analysis are compiled from both the aggregations of the entire market (*ALL*), calls (*CALL*), and puts (*PUT*) and from the signed trading activities.

The former are referred to as non-signed variables, and the latter are referred to as signed variables. The signed variables are *POSITIVE*, *NEGATIVE*, *CALLNET*, and *PUTNET*. *POSITIVE* (*NEGATIVE*) is generated by combining the trading activities of buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts), and *CALLNET* (*PUTNET*) is generated by calculating buyer-initiated calls (puts) minus seller-initiated calls (puts).

If investors tend to trade more when uncertainty is greater with regard to changes in market volatility, we should expect to find a positive relation between changes in the VIX and *ALL*. However, if the majority of sellers of VIX options are market makers who are risk neutral, we should expect to find a positive (negative) relation between changes in the VIX and *CALL* (*PUT*) because investors will tend to buy calls (puts) if they believe that the VIX is going to rise (fall).

However, if market makers trade only with the express aim of providing liquidity, and thus they are necessarily either buyers or sellers all of the time, we must distinguish between those transactions that are initiated by investors possessing either bullish or bearish information or beliefs. Those investors who possess bullish (bearish) information or beliefs include call buyers and put sellers (call sellers and put buyers). We therefore expect to find a positive contemporaneous association between changes in the VIX and *POSITIVE* (*CALLNET*) and a negative contemporaneous association between changes in the VIX and *NEGATIVE* (*PUTNET*).

3. Data

The primary data used in this study are the intraday VIX levels and tick information on VIX options. The sample period, which runs from 2 January 2008 to 31 March 2010, provides a total of 566 trading days. Figure 1 shows the daily VIX levels for our sample period. Table 1 provides the summary statistics of the VIX levels and changes in the VIX.

< Figure 1 about here >

< Table 1 about here >

The mean level of the VIX during the full sample period is about 30.8 percent. However, ignoring the recent financial crisis period encompassing the collapse of Lehman Brothers, the mean level of the VIX is about 20 percent. After the Lehman Brothers filed for bankruptcy protection on 15 September 2008, the VIX jumps to an all-time high of over 80 percent at the end of October and the early part of November 2008. However, by March 2009, the level slowly declines to 40 percent, and, by October 2009, the VIX finally returns to the pre-financial crisis level. We follow Bartram and Bodnar (2009) to define the crisis period as 15 September 2008 to 27 February 2009.

Although the mean (standard deviation) of changes in the VIX is only -0.20 percent (2.42 percent), there is significantly negative skewness and high kurtosis, both of which are caused by the significant changes that occur during the financial crisis period. Because the high-volatility period reveals critical information on the extreme behavior of volatility, the information hypothesis is clearly relevant and important to investigate for this period.

The tick data on VIX options are obtained from the Market Data Express of the CBOE. The options data set includes complete information for each trade quote and transaction in VIX options, including the formation date, formation time (in seconds), expiration date, strike price, option type (call or put), bid and ask prices for a quote or trading price for a transaction, order or transaction size, and the closest VIX level.

This data set enables us to investigate three different types of trading activities in VIX options: trading volume, dollar volume, and number of transactions. For each time interval, we calculate the trading volume by adding the number of contracts traded across all options. We approximate the dollar volume by multiplying the number of contracts traded in each option by the transaction price and then aggregating this total across all options. We compute the number of transactions by counting all transactions across all options during a time interval.

Two implementation issues must be taken into consideration. The first implementation issue that we consider is the choice of time frequency because having sufficient transactions during a time interval is extremely important. Although many prior empirical studies that examine the linkage between the stock and options markets use a five-minute interval, this interval may be inappropriate for VIX options because investors in the VIX options market do not trade as aggressively as those in the other options markets, such as the S&P 500 index options market. We therefore use a 15-minute time interval, which is essentially a trade-off between selecting a short time interval and having sufficient transactions during the interval to ensure that the analysis is meaningful. The trading hours for VIX options in the CBOE start at 8:30 AM and end at 3:15 PM; thus, each trading day contains 27 intraday intervals.

The second implementation issue that we consider is trade aggregation. As in trading in all other options markets, VIX options can be simultaneously traded at different strike prices and maturity dates. Therefore, when generating the trading activity measures, we do not need to focus on any of the particular properties of options. Instead, we follow Easley, O'Hara, and Srinivas (1998) to aggregate the transactions across all strike prices and maturities, unless otherwise stated.

In addition to abandoning those transactions and quotes that violate any no-arbitrage condition, we filter out all VIX options with a time-to-maturity of less than one week or greater than one year to avoid the issue of liquidity. Table 2 reports the daily averages of the three types of trading activity in VIX call and put options for the full and crisis sample periods.

< Table 2 about here >

For each type of trading activity, Table 2 reports the total number of transactions and buyer- and seller-initiated transactions, which are identified using the Lee–Ready algorithm and referred to as signed trading activities (the figures in parentheses are the percentages of the corresponding averages of the signed trading activities). For the full sample, call options are traded much more actively than put options, and most of the transactions are buyer-initiated. These findings hold regardless of which types of trading activities are examined.

However, we find some notable differences in the findings for the crisis period. First, transactions become far less active in call options (in terms of both the number of transactions and the trading volume), whereas the dollar volume during this period is higher than that during the full sample period. We surmise that investors may have become much more conservative during the crisis period, turning more toward trading in in-the-money calls essentially as a result of risk concerns.

Second, as Table 2 shows, the total number of transactions in put options during the crisis period is higher than that during the full sample period. Third, the difference between buyer- and seller-initiated transactions is lower during the crisis period. Indeed, sellers initiate most of the transactions, in terms of both the dollar volume for call options and the total number of transactions and trading volume for put options. The second and third findings jointly suggest that investors regarded volatility as being too high during the crisis period and that when it eventually reverted to the long-term level, they were more willing to stand on the bearish side of volatility.

4. Empirical Results

We first run the regression model for the full sample and then for the crisis period to identify the differences between unconditional and conditional markets. Because OTM options have higher levels of leverage and are thus cheaper, investors may prefer to use OTM options to realize their information or beliefs. Thus, we also run the regression model for the trading activity variables compiled from OTM options only. Finally, to investigate further whether the financial crisis has significant impacts on the degree of informativeness of trading activity with regard to changes in the VIX, we run an additional regression model that includes a dummy variable representing the crisis effect.

In this regression model, the two most important and meaningful coefficients are β_0 , which denotes the effects of concurrent trading activity, and β_1 , which denotes one-period lagged trading activity. Because liquidity in the VIX options market is highly satisfactory, it would make little sense for us to jump to any conclusions if we find significant β_2 , β_3 , or β_4 but insignificant β_0 or β_1 , essentially because it is quite difficult for us to accept that the market should take such a long time to digest the information. Thus, our regression results report the estimates of β_0 and β_1 only, with the two-, three-, and four-period lagged information serving as control variables for the high autocorrelation usually found in high-frequency time series.

4.1 Regression Results on the Full Sample

Table 3 presents the regression results on the full sample. None of the contemporaneous coefficients (β_0) for the non-signed variables (*ALL*, *CALL*, and *PUT*) reveal any level of significance. The significance of the contemporaneous coefficients of the first two signed variables (*POSITIVE* and *NEGATIVE*) depends on which type of trading activity is used. Clear contemporaneous relations exist between the *POSITIVE* variable (in terms of trading volume and total number of transactions) and changes in the VIX, whereas the *NEGATIVE* variable (in terms of total number of transactions) is the only type of trading activity that is statistically significant (at the 1 percent level) in the contemporaneous relation. Although the β_0 coefficients on *NEGATIVE* (in terms of trading volume and dollar volume) are insignificant, the signs are still consistent with our expectations. Furthermore, all of the β_0 coefficients for the VIX options volume imbalances (*CALLNET* and *PUTNET*) are significant at the 1 percent level with the expected signs, whereas the corresponding first lag coefficients (β_1) are statistically insignificant at the 1 percent level. The significant contemporaneous relations between volume imbalances in VIX options and changes in the VIX suggest support for the information effect for VIX options traders.

<Table 3 about here >

In other words, of the four signed variables, *CALLNET* and *PUTNET* are the most robust measures of trading activity in VIX options. The β_0 coefficient of *CALLNET* (*PUTNET*) is consistently positively (negatively) significant at the 1 percent level across all types of trading activity. Therefore, the net signed trades in VIX calls and puts consistently provide information on contemporaneous changes in the VIX.

Of the three types of trading activity, the total number of transactions is the most informative source on changes in the VIX. All of the β_0 coefficients on the four signed variables of the number of transactions are significant at the 1 percent level with expected signs, and, when compared to the other two types of trading activity, the R^2 s are the highest.

Interestingly, the coefficients on β_1 for two of the signed variables (*POSITIVE* and *NEGATIVE*) are significant at the 1 percent level, although the signs of the coefficients on β_0 for all four signed variables are in direct contrast to those of their corresponding β_1 coefficients. The opposite sign observed for the contemporaneous and first lagged coefficients reflects the temporary impact of trading activity in VIX options on the VIX change. The seminal works of Vijh (1990), Berkman (1996), Schlag and Stoll (2005), and Ahn, Kang, and Ryu (2008) report evidence of inventory control in the options markets, which we surmise may be due to the presence of inventory or liquidity effects in the VIX options market. Trading pressure in the VIX options market may transmit volatility information to the S&P 500 index options market and push up (or down)⁸ the VIX index. As market makers unwind their inventory positions against the trading pressure of VIX options, the shift in inventory is more likely to induce the VIX index back to normal. If so, the first lag coefficient, which the sign is opposite to that of the contemporaneous coefficient, will be the statistical significant.

In sum, we find, in general, significant relations between the signed variables of trading activity in VIX options and contemporaneous changes in the VIX; however we do not find any significant relations with regard to non-signed trading activity. We find that the net signed trade (i.e., volume imbalances) is the most robust variable and the number of transactions is the most informative type with regard to the association between trading activity in VIX options and changes in the VIX.

Next we look at whether VIX options volume can predict the changes in the VIX index. Because the regressions of Table 3 are conditional on knowing the contemporaneous VIX options volume, we rerun these regressions without imposing the contemporaneous volume variables to determine whether VIX options volume predicts future VIX index changes. Table 4 provides the results. Our findings do not provide support for the predictability of trading activity in VIX options on changes in the VIX.

< Table 4 about here >

4.2 Regression Results for the Crisis Period and OTM Options

Table 5 provides the regression results on the crisis period. The general findings are not only consistent with those for the full sample but also are more clear-cut. The average R^2 is higher in the crisis period than in the full sample period.

⁸ Whether the market is pushed up or down depends on the direction of trading pressure in the VIX options market.

All of the coefficients on β_0 and β_1 for the non-signed variables are statistically insignificant, whereas all of the coefficients on β_0 for the net signed trade variables (*CALLNET* and *PUTNET*) are significant at the 1 percent level with all of the signs consistent with our expectations. Similar to the results in Table 3, the total number of transactions is the most efficient source of information.

<Table 5 about here>

Next we investigate the relation of lagged variables of VIX options volume and VIX index changes to test whether the VIX options market in the crisis period attracts more informed trading. Table 6 clearly shows that we do not find the predictability of VIX options volume on future VIX changes during the crisis period.

<Table 6 about here>

Table 7 provides the regression results for the variables compiled from OTM options only. The findings are, in general, similar to those previously discussed. That is, the signed variables provide information on the relation between trading activity in VIX options and changes in the VIX, whereas the non-signed variables do not. However, when using OTM options only, in addition to *CALLNET* and *PUTNET*, the *t*-statistics for both *POSITIVE* and *NEGATIVE* increase with expected signs. In other words, all of the four signed variables provide information on the concurrent changes in the VIX, and these relationships are not dependent on the types of trading activity under examination. We therefore conclude that the information contained in OTM contracts is more precise than that contained in the full sample of contracts.

<Table 7 about here>

To understand better the magnitude of the predictability using OTM options only, we exclude the contemporaneous VIX options volume in Table 7 and then rerun the regressions. Table 8 provides the results. The coefficients on the second lag of *PUT* are significant at 1 percent level with expected signs, regardless of the type of trading activity. This finding is interesting because the lag in the response of VIX index to the information of OTM VIX put options is about a half hour.

<Table 8 about here>

4.3 Impact of the Financial Crisis

Because the findings for the crisis period are more clear-cut than those for the full sample, we enquire whether the crisis period strengthens the contemporaneous relation existing between the signed variables on trading activity in VIX options and changes in the VIX. To answer this question, we include an additional independent variable, $X_t D_t$, into the original regression model, where D_t is a dummy variable indicating the crisis period. The model is specified as

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \gamma X_t D_t + \varepsilon_t, \quad (2)$$

where D_t equals 1 when t falls within the period from 15 September 2008 to 27 February 2010, and zero otherwise. If the financial crisis strengthens the relation, we expect to find a significant γ , with the same sign that of β_0 .

Table 9 shows the regression results of Model (2) for the full and crisis sample periods. Although only some of the γ coefficients are statistically significant, virtually all of their signs are the same as those of their corresponding β_0 coefficients. In other words, although we find some evidence of a stronger relation between trading activity in VIX options and changes in the VIX, this finding is not robust to the variables and information sources.

<Table 9 about here>

5. Test For Robustness

To test whether the liquidity of VIX options affects our results, we run the full sample analysis using another data set, from which we exclude option contracts with less than six transactions in a single day. This exclusion removes from the sample about 8.17 percent (10.07 percent) of all call (put) options transactions and 4.54 percent (5.36 percent) of all call (put) options trading volume. In terms of dollar volume, the reduction for call (put) options is 6.72 percent (9.73 percent). Because the regression results from this new data set are qualitatively the same as those from the original data, we conclude that the liquidity of VIX options does not affect our empirical results.

Figure 2 shows an obvious intraday periodical pattern in the VIX and three types of trading activity in VIX options, and the intraday patterns of these four time series is quite similar. That is, they are roughly U-shaped with higher levels for those intervals close to the open and close periods. To check whether these intraday patterns affect our empirical results, we include an additional dummy variable in our original regression model. The new model is specified as

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \delta D_{t(l)} + \varepsilon_t, \quad (3)$$

where $D_{t(l)}$ is a dummy variable that considers the effect of the intraday periodical pattern of the trading activity of interest, which equals 1 if t is one of the intraday intervals in which the value of the trading activity variable is higher than the means plus one standard deviation, and zero otherwise.

<Figure 2 is inserted about here>

Table 10 presents the content of l and the summary of the dummy variables for alternative sample periods and types of trading activity. As previously noted, the patterns of the dummy variables are similar across all sample periods and all trading activity types.

<Table 10 is inserted about here>

Table 11 provides the regression results on Model (3) for the full sample. Virtually all of the δ coefficients are significant at the 1 percent level, and all of the R^2 s are higher than their corresponding levels (as shown in Table 3). Nevertheless, the general patterns of the coefficients on β_0 and β_1 are exactly the same as those previously reported in Table 3. Therefore, although the conclusions derived from the empirical results remain unchanged, the econometric performance of the model is improved when the intraday patterns are taken into consideration.

<Table 11 about here>

6. Conclusions

This study provides a comprehensive analysis of the contemporaneous relations that may exist between trading activity in VIX options and changes in the VIX. This investigation also provides an ideal channel to explore the information effect of the VIX options market. We analyze three different types of information sources (trading volume, dollar volume, and total number of transaction), and, for each type of information source, we investigate the information content of the three aggregated variables and the four signed variables.

Focusing on an intraday dimension featuring 15-minute time intervals, we consistently find a significant association between the net signed trade variables of trading activity in VIX options and contemporaneous changes in the VIX, particularly when examining the net signed trades in VIX calls and puts. These empirical findings become even more clear-cut when we focus on the crisis period encompassing the collapse of Lehman Brothers and the analysis of OTM options. These empirical findings remain unchanged even when we take into consideration the impact of options liquidity and the periodical patterns of the intraday time series.

In sum, our empirical results indicate that contemporaneous relations exist between trading activity in VIX options and changes in the VIX. Nevertheless, our empirical findings provide strong support for the information hypothesis of the VIX options market. In other words, we find that information tends to flow from the VIX options market to the SPX options market in a prompt manner.

As regards future research, if a comprehensive record of all transactions, including trader types, were available, it would be interesting to explore which factors contribute more to this contemporaneous relation and whether private information, proxied by open-buy, open-sell, close-buy, and close-sell trades, plays a different a different role in the relation between trading activity in VIX options and changes in the VIX.

References

- Ahn, H.-J., J. Kang and D. Ryu (2008), 'Informed Trading in the Index Option Market: The Case of KOSPI 200 Options', *Journal of Futures Markets*, **28**: 1118–1146.
- Amin, K. and C. Lee (1997), 'Option Trading, Price Discovery and Earnings News Dissemination', *Contemporary Accounting Research*, **14**: 153–192.
- Andersen, T.G., T. Bollerslev, F.X. Diebold and H. Ebens (2001), 'The Distribution of Realized Stock Volatility', *Journal of Financial Economics*, **61**: 43–76.
- Andersen, T.G., T. Bollerslev, F.X. Diebold and P. Labys (2003), 'Modeling and Forecasting Realized Volatility', *Econometrica*, **71**: 579–625.
- Bartram, S. and G. Bodnar (2009), 'No Place to Hide: The Global Crisis in Equity Markets in 2008/2009', *Journal of International Money and Finance*, **28**: 1246–1292.
- Berkman, H. (1996), 'Large Option Trades, Market Makers, and Limit Orders', *Review of Financial Studies*, **9**: 977–1002.
- Bhattacharya, M. (1987), 'Price Changes of Related Securities: The Case of Call Options and Stocks', *Journal of Financial and Quantitative Analysis*, **22**: 1–15.
- Blair, B.J., S.-H. Poon and S.J. Taylor (2001), 'Forecasting S&P 100 Volatility: The Incremental Information Content of Implied Volatilities and High-Frequency Index Returns', *Journal of Econometrics*, **105**: 5–26.
- Cao, C., Z. Chen and J.M. Griffin (2005), 'Informational Content of Option Volume Prior to Takeovers', *Journal of Business*, **78**: 1073–1109.
- Cao, M., and J. Wei (2010), 'Option Market Liquidity: Commonality and Other Characteristics', *Journal of Financial Markets*, **13**: 20–48.
- Chakravarty, S., H. Gulen and S. Mayhew (2004), 'Informed Trading in Stock and Option Markets', *Journal of Finance*, **59**: 1235–1258
- Chan, K., Y.P. Chung and W.M. Fong (2002), 'The Informational Role of Stock and Option Volume', *Review of Financial Studies*, **15**: 1049–1075.
- Chang, C., P.H. Hsieh and H.N. Lai (2013), 'The Price Impact of Options and Futures Volume in After-Hours Stock Market Trading', *Pacific Basin Finance Journal*, **21**: 984–1007.
- Chiang, R. and W. Fung (2001), 'Relative Informational Efficiency of Cash, Futures, and Option Markets: The Case of an Emerging Market', *Journal of Banking and Finance*, **25**: 355–375.
- Christensen, B.J. and N.R. Prabhala (1998), 'The Relation between Implied and Realized Volatility', *Journal of Financial Economics*, **50**: 125–150.
- Cremers, M., and D. Weinbaum (2010), 'Deviations from Put–Call Parity and Stock Return Predictability', *Journal of Financial and Quantitative Analysis*, **45**: 335–367.
- Easley, D., M. O'Hara and P.S. Srinivas (1998), 'Option Volume and Stock Prices: Evidence on Where Informed Traders Trade', *Journal of Finance*, **53**: 431–465.

- Ederington, L.H. and W. Guan (2005), 'Forecasting Volatility', *Journal of Futures Markets*, **25**: 465–490.
- Fleming, J. (1998), 'The Quality of Market Volatility Forecasts Implied by S&P 100 Index Option Prices', *Journal of Empirical Finance*, **5**: 317–345.
- Giot, P. and S. Laurent (2007), 'The Information Content of Implied Volatility in Light of the Jump/Continuous Decomposition of Realized Volatility', *Journal of Futures Markets*, **27**: 337–359.
- Jiang, G.J. and Y.S. Tian (2005), 'Model-Free Implied Volatility and its Information Content', *Review of Financial Studies*, **18**: 1305–1342.
- Johnson, T.L. and E.C. So (2012), 'The Option to Stock Volume Ratio and Future Returns', *Journal of Financial Economics*, **106**: 262–286.
- Kyle, A.S. (1985), 'Continuous Auctions and Insider Trading', *Econometrica*, **53**: 1315–1336.
- Lee, C.M.C. and M.J. Ready (1991), 'Inferring Trade Direction from Intraday Data', *Journal of Finance*, **46**: 733–746.
- Lee, J. and C.H. Yi (2001), 'Trade Size and Information-Motivated Trading in the Options and Stock Markets', *Journal of Financial and Quantitative Analysis*, **36**: 485–501.
- Pan, J. and A.M. Poteshman (2006), 'The Information in Option Volume for Future Stock Prices', *Review of Financial Studies*, **19**: 871–908.
- Roll, R., E. Schwartz and A. Subrahmanyam (2010), 'O/S: The Relative Trading Activity in Options and Stock', *Journal of Financial Economics*, **96**: 1–17.
- Roll, R., E. Schwartz and A. Subrahmanyam (2012), 'Trading Activity in the Equity Market and Its Contingent Claims: An Empirical Investigation', Working Paper.
- Schlag, C. and H. Stoll (2005), 'Price Impacts of Options Volume', *Journal of Financial Markets*, **8**: 69–87.
- Shu, J. and J. Zhang (2012), 'Causality in the VIX Futures Markets', *Journal of Futures Markets*, **32**: 24–46.
- Stoll, H. (2000), 'Friction', *Journal of Finance*, **55**: 1479–1514.
- Taylor, S.J., P.K. Yadav and Y. Zhang (2010), 'The Information Content of Implied Volatilities and Model-Free Volatility Expectations: Evidence from Options Written on Individual Stocks', *Journal of Banking and Finance*, **34**: 871–881.
- Vijh, A. (1990), 'Liquidity of the CBOE Equity Options', *Journal of Finance*, **45**: 1157–1179.
- Xing, Y., X. Zhang and R. Zhao (2010), 'What Does the Individual Option Volatility Smirk Tell Us about Future Equity Returns?' *Journal of Financial and Quantitative Analysis*, **45**: 641–662.

Table 1. Descriptive statistics of daily VIX levels

This table reports the summary statistics of daily VIX levels and the percentage changes in the VIX for the sample period running from January 2008 to March 2010, giving a total of 566 trading days. The autocorrelation function up to lag 5 and the augmented Dickey–Fuller (ADF) test statistics are also shown.

Variables	VIX Level	Change in the VIX (%)
Mean	30.80	-0.20
Std. Dev.	13.09	2.42
Skewness	1.49	-0.25
Kurtosis	4.65	13.38
Min.	16.30	-17.43
Max.	80.86	13.56
.....		
ACF		
Lag 1	0.99	0.16
Lag 2	0.97	-0.20
Lag 3	0.96	-0.05
Lag 4	0.95	-0.06
Lag 5	0.94	0.11
.....		
Unit-root ADF test	-1.82	-10.47

Table 2. Trading activity in VIX options

This table reports the daily averages on the total number of transactions, trading volume and dollar volume of VIX call and put options for the full sample period running from January 2008 to March 2010 and the crisis period encompassing the collapse of Lehman Brothers, from 15 September 2008 to 27 February 2009. Each transaction is classified as buyer- or seller-initiated or nonclassified by the Lee-Ready algorithm (1991); the difference between the sum of the buyer-initiated and seller-initiated total and the total (All) represents nonclassified trades. The figures in the parentheses represent the percentages of the corresponding averages of signed trading activities.

Variables	Call Options		Put Options	
	Full sample	Crisis period	Full sample	Crisis period
<i>No. of Transactions</i>				
Buyer-initiated	432 (50.12)	417 (51.18)	199 (49.61)	243 (47.54)
Seller-initiated	422 (49.03)	393 (48.26)	197 (49.23)	263 (51.52)
All	861	814	400	511
<i>Trading volume</i>				
Buyer-initiated	40,334 (52.85)	25,820 (51.78)	18,647 (50.38)	13,160 (49.29)
Seller-initiated	34,222 (44.84)	23,629 (47.39)	17,569 (47.46)	13,273 (49.72)
All	76,323	49,864	37,016	26,698
<i>Dollar volume</i>				
Buyer-initiated	70,052 (50.31)	99,154 (47.64)	32,729 (52.89)	30,234 (49.89)
Seller-initiated	66,748 (47.94)	107,173 (51.49)	27,860 (45.03)	29,589 (48.82)
All	139,244	208,142	61,875	60,607

Table 3. Regression results for the full sample

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model.

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes, and the sample period runs from January 2008 to March 2010. *ALL* refers to aggregate trading activity, *CALL* (*PUT*) denotes trading activity measured by call (put) options; *POSITIVE* (*NEGATIVE*) refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts); and *CALLNET* (*PUTNET*) is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the contemporaneous and first lag (lags 2–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_0		β_1		R^2 (%)
	Coeff.	t-statistic	Coeff.	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	0.0098	1.1776	-0.0122	-1.5248	0.59
<i>CALL</i>	0.0052	0.6373	-0.0171 **	-2.0938	0.60
<i>PUT</i>	0.0083	0.9596	-0.0018	-0.2250	0.57
<i>POSITIVE</i>	0.0264 ***	3.1190	-0.0138 *	-1.7091	0.65
<i>NEGATIVE</i>	-0.0118	-1.4563	-0.0051	-0.6348	0.60
<i>CALLNET</i>	0.1599 ***	20.4580	-0.0064	-0.7811	3.12
<i>PUTNET</i>	-0.1305 ***	-15.9193	-0.0028	-0.3561	2.25
Panel B: Dollar Volume					
<i>ALL</i>	0.0017	0.2029	-0.0175 **	-2.1452	0.60
<i>CALL</i>	0.0075	0.9188	-0.0223 ***	-2.6177	0.63
<i>PUT</i>	-0.0055	-0.6262	-0.0060	-0.7498	0.57
<i>POSITIVE</i>	0.0166 **	1.9735	-0.0152 *	-1.7891	0.62
<i>NEGATIVE</i>	-0.0132	-1.6146	-0.0157 *	-1.8777	0.62
<i>CALLNET</i>	0.1452 ***	18.3185	-0.0037	-0.4523	2.67
<i>PUTNET</i>	-0.1246 ***	-15.2968	0.0033	0.4269	2.10
Panel C: No. of Transactions					
<i>ALL</i>	0.0048	0.4594	-0.0044	-0.4598	0.60
<i>CALL</i>	0.0045	0.4297	-0.0142	-1.4851	0.61
<i>PUT</i>	0.0054	0.5590	0.0063	0.7156	0.60
<i>POSITIVE</i>	0.1530 ***	15.2886	-0.0494 ***	-5.0165	2.72
<i>NEGATIVE</i>	-0.1507 ***	-15.0458	0.0361 ***	3.7978	2.62
<i>CALLNET</i>	0.2590 ***	31.7668	-0.0144 *	-1.7260	7.23
<i>PUTNET</i>	-0.1798 ***	-22.5177	0.0049	0.6412	3.76

Table 4. Regression results of excluding contemporaneous volume for the full sample

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=1}^4 \beta_j X_{t-j} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes and the sample period runs from January 2008 to March 2010. *ALL* refers to aggregate trading activity; *CALL (PUT)* denotes trading activity measured by call (put) options; *POSITIVE (NEGATIVE)* refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts); and *CALLNET (PUTNET)* is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the first two lags (lags 3–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_1		β_2		R^2 (%)
	Coeff.	t-statistic	Coeff.	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	-0.0110	1.3770	0.0117	1.4035	0.53
<i>CALL</i>	-0.0165 **	-2.0235	0.0141 *	1.6571	0.55
<i>PUT</i>	-0.0011	-0.1342	-0.0078	0.0084	0.51
<i>POSITIVE</i>	-0.0115	-1.4238	0.0050	0.5902	0.53
<i>NEGATIVE</i>	-0.0064	-0.7889	0.0103	1.2515	0.53
<i>CALLNET</i>	-0.0011	-0.1271	-0.0080	-0.9951	0.53
<i>PUTNET</i>	0.0078	0.9672	0.0037	0.4575	0.51
Panel B: Dollar Volume					
<i>ALL</i>	-0.0173 **	-2.1269	0.0057	0.6843	0.55
<i>CALL</i>	-0.0216 **	-2.5267	0.0062	0.7475	0.57
<i>PUT</i>	-0.0065	-0.8065	-0.0042	0.4991	0.51
<i>POSITIVE</i>	-0.0137	-1.6210	-0.0126	-1.5251	0.54
<i>NEGATIVE</i>	-0.0169 **	-2.0284	0.0053	0.6498	0.55
<i>CALLNET</i>	0.0014	0.1679	-0.0058	-0.7176	0.52
<i>PUTNET</i>	0.0024	0.3024	0.0029	0.3783	0.50
Panel C: No. of Transactions					
<i>ALL</i>	-0.0030	-0.3338	-0.0055	-0.5398	0.54
<i>CALL</i>	-0.0130	-1.4533	0.0017	0.1717	0.56
<i>PUT</i>	0.0075	0.8733	-0.0189 **	-2.0952	0.54
<i>POSITIVE</i>	-0.0080	-0.8575	-0.0094	-0.9601	0.57
<i>NEGATIVE</i>	-0.0092	-0.9967	-0.0027	-0.2772	0.56
<i>CALLNET</i>	-0.0001	-0.0168	-0.0079	-0.9436	0.56
<i>PUTNET</i>	0.0042	0.5446	-0.0043	-0.5561	0.51

Table 5. Regression results for the crisis period

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^k \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^k \beta_j X_{t-j} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes and the sample period covers only the crisis period from 15 September 2008 to 27 February 2009, encompassing the collapse of Lehman Brothers. *ALL* refers to aggregate trading activity, *CALL (PUT)* denotes trading activity measured by call (put) options, *POSITIVE (NEGATIVE)* refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts), and *CALLNET (PUTNET)* is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the contemporaneous and first lag (lags 2–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_0		β_1		R^2 (%)
	Coeff	t-statistic	Coeff	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	0.0178	0.8440	-0.0193	-1.0315	0.91
<i>CALL</i>	0.0061	0.3115	-0.0121	-0.6452	0.87
<i>PUT</i>	0.0278	1.2934	-0.0044	-0.2407	0.91
<i>POSITIVE</i>	0.0472 **	2.3024	-0.0026	-1.1430	1.09
<i>NEGATIVE</i>	-0.0183	-0.9215	-0.0233	-1.2243	1.04
<i>CALLNET</i>	0.1974 ***	10.4805	-0.0135	-0.7146	4.88
<i>PUTNET</i>	-0.1610 ***	-8.0311	-0.0316 *	-1.6490	3.54
Panel B: Dollar Volume					
<i>ALL</i>	0.0122	0.5884	-0.0194	-1.0778	0.88
<i>CALL</i>	0.0108	0.5497	-0.0243	-1.3284	0.91
<i>PUT</i>	0.0120	0.5691	-0.0058	-0.3209	0.85
<i>POSITIVE</i>	0.0316	1.5805	-0.0156	-0.8260	0.98
<i>NEGATIVE</i>	-0.0139	-0.6891	-0.0124	-0.6493	0.94
<i>CALLNET</i>	0.1670 ***	9.0007	-0.0081	-0.4255	3.73
<i>PUTNET</i>	-0.1538 ***	-8.4088	0.0071	0.4019	3.25
Panel C: No. of Transactions					
<i>ALL</i>	0.0210	0.8030	-0.0051	-0.2097	0.78
<i>CALL</i>	0.0192	0.7793	-0.0164	-0.7119	0.78
<i>PUT</i>	0.0230	1.0160	0.0056	0.2606	0.84
<i>POSITIVE</i>	0.1884 ***	10.0036	-0.0537 ***	-2.7072	3.96
<i>NEGATIVE</i>	-0.1676 ***	-8.8096	0.0420 **	2.0930	3.30
<i>CALLNET</i>	0.2815 ***	15.0204	-0.0061	-0.3166	8.71
<i>PUTNET</i>	-0.2128 ***	-12.1458	-0.0045	-0.2750	5.19

Table 6. Regression results of excluding contemporaneous volume for the crisis period

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=1}^4 \beta_j X_{t-j} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes and the sample period covers only the crisis period from 15 September 2008 to 27 February 2009, encompassing the collapse of Lehman Brothers. *ALL* refers to aggregate trading activity; *CALL (PUT)* denotes trading activity measured by call (put) options; *POSITIVE (NEGATIVE)* refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts); and *CALLNET (PUTNET)* is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the first two lags (lags 3–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_1		β_2		R^2 (%)
	Coeff	t-statistic	Coeff	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	-0.0173	-0.9326	0.0100	0.5180	0.59
<i>CALL</i>	-0.0116	-0.6189	0.0086	0.4681	0.58
<i>PUT</i>	-0.0007	-0.0378	-0.0091	-0.4512	0.55
<i>POSITIVE</i>	0.0002	0.0104	-0.0091	-0.4432	0.58
<i>NEGATIVE</i>	-0.0255	-1.3551	0.0283	1.5821	0.72
<i>CALLNET</i>	0.0176	0.9249	-0.0059	-0.3246	0.69
<i>PUTNET</i>	0.0339*	1.7508	-0.0069	-0.3897	0.68
Panel B: Dollar Volume					
<i>ALL</i>	-0.0182	-1.0185	-0.0035	-0.1788	0.58
<i>CALL</i>	-0.0235	-1.2873	-0.0034	-0.1767	0.61
<i>PUT</i>	-0.0044	-0.2504	-0.0072	-0.3603	0.55
<i>POSITIVE</i>	-0.0130	-0.6922	-0.0180	-0.8561	0.60
<i>NEGATIVE</i>	-0.0137	-0.7269	0.0221	1.2391	0.64
<i>CALLNET</i>	0.0103	0.5426	-0.0078	-0.4226	0.65
<i>PUTNET</i>	-0.0063	-0.3515	-0.0138	-0.8032	0.61
Panel C: No. of Transactions					
<i>ALL</i>	0.0014	0.0659	-0.0046	-0.2103	0.48
<i>CALL</i>	-0.0114	-0.5390	-0.0021	-0.1034	0.48
<i>PUT</i>	0.0107	0.5304	-0.0174	-0.8494	0.53
<i>POSITIVE</i>	-0.0011	-0.0588	-0.0078	-0.3868	0.53
<i>NEGATIVE</i>	-0.0082	-0.4186	0.0032	0.1577	0.57
<i>CALLNET</i>	-0.0003	-0.1088	0.0003	0.0137	0.56
<i>PUTNET</i>	0.0108	0.6291	-0.0060	-0.3687	0.46

Table 7. Regression results for the out-of-the-money options

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^1 \beta_j X_{t-j} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes and the sample period runs from January 2008 to March 2010. Only out-of-the-money options are included in the trading activity measures. *ALL* refers to aggregate trading activity; *CALL (PUT)* denotes trading activity measured by call (put) options; *POSITIVE (NEGATIVE)* refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts); and *CALLNET (PUTNET)* is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the contemporaneous and first lag (lags 2–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_0		β_1		R^2 (%)
	Coeff	t-statistic	Coeff	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	0.0089	1.0866	-0.0085	-1.0743	0.58
<i>CALL</i>	0.0010	0.1266	-0.0082	-1.0134	0.59
<i>PUT</i>	0.0127	1.4780	-0.0027	-0.3307	0.64
<i>POSITIVE</i>	0.0325 ***	3.8787	-0.0111	-1.3789	0.68
<i>NEGATIVE</i>	-0.0244 ***	-3.0514	-0.0021	-0.2576	0.64
<i>CALLNET</i>	0.1667 ***	21.4279	-0.0048	-0.5852	3.33
<i>PUTNET</i>	-0.1283 ***	-15.1217	-0.0860	-1.1031	2.23
Panel B: Dollar Volume					
<i>ALL</i>	0.0039	0.4769	-0.0142 *	-1.7844	0.61
<i>CALL</i>	0.0021	0.2587	-0.0096	-1.1617	0.58
<i>PUT</i>	-0.0001	-0.0104	-0.0047	-0.5627	0.74
<i>POSITIVE</i>	0.0192 *	2.2991	-0.0157 *	-1.9196	0.65
<i>NEGATIVE</i>	-0.0203 **	-2.5248	-0.0150 *	-1.7849	0.65
<i>CALLNET</i>	0.1579 ***	19.9371	-0.0049	-0.6030	3.06
<i>PUTNET</i>	-0.1248 ***	-14.7122	-0.0030	-0.3777	2.14
Panel C: No. of Transactions					
<i>ALL</i>	0.0004	0.0414	-0.0017	-0.1853	0.60
<i>CALL</i>	-0.0034	-0.3539	0.0003	0.0338	0.57
<i>PUT</i>	0.0039	0.4129	-0.0066	-0.7210	0.76
<i>POSITIVE</i>	0.1348 ***	14.2693	-0.0364 ***	-3.8123	2.29
<i>NEGATIVE</i>	-0.1438 ***	-15.1973	0.0229 **	2.4759	2.51
<i>CALLNET</i>	0.2286 ***	28.9541	-0.0094	-0.1658	5.74
<i>PUTNET</i>	-0.1554 ***	-19.0480	-0.0039	-0.5191	2.99

Table 8. Regression results of excluding contemporaneous volume for the out-of-the-money options

This table reports the estimation results for various trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=1}^4 \beta_j X_{t-j} + \varepsilon_t,$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . The time interval is 15 minutes and the sample period runs from January 2008 to March 2010. Only out-of-the-money options are included in the trading activity measures. *ALL* refers to aggregate trading activity; *CALL (PUT)* denotes trading activity measured by call (put) options; *POSITIVE (NEGATIVE)* refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts), and *CALLNET (PUTNET)* is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). Here, we report the regression coefficients of the trading activity measures for the first two lags (lags 3–4 are not shown to save space). The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_1		β_2		R^2 (%)
	Coeff	t-statistic	Coeff	t-statistic	
Panel A: Trading Volume					
<i>ALL</i>	-0.0074	-0.9458	0.0109	1.2564	0.58
<i>CALL</i>	-0.0081	-1.0037	0.0154 *	1.7535	0.53
<i>PUT</i>	-0.0016	-0.1963	-0.0241 ***	-2.8836	0.57
<i>POSITIVE</i>	-0.0084	-1.0531	0.0015	0.1770	0.52
<i>NEGATIVE</i>	-0.0047	-0.5689	0.0081	0.9769	0.53
<i>CALLNET</i>	0.0006	0.0672	-0.0052	-0.6412	0.53
<i>PUTNET</i>	0.0150 *	1.9154	-0.0025	-0.3144	0.55
Panel B: Dollar Volume					
<i>ALL</i>	-0.0138 *	-1.7359	0.0038	0.4410	0.55
<i>CALL</i>	-0.0094	-1.1390	0.0094	1.0754	0.53
<i>PUT</i>	-0.0047	-0.5641	-0.0388 ***	-4.5788	0.69
<i>POSITIVE</i>	-0.0143 *	-1.7492	-0.0036	-0.4291	0.57
<i>NEGATIVE</i>	-0.0167 **	-1.9986	0.0019	0.2268	0.56
<i>CALLNET</i>	-0.0000-	-0.0008	-0.0070	-0.8707	0.53
<i>PUTNET</i>	0.0083	1.0469	-0.0044	-0.5409	0.54
Panel C: No. of Transactions					
<i>ALL</i>	-0.0016	-0.1852	-0.0087	-0.8615	0.54
<i>CALL</i>	-0.0005	-0.0559	0.0018	0.1798	0.52
<i>PUT</i>	-0.0059	-0.6568	-0.0393 ***	-4.4516	0.71
<i>POSITIVE</i>	-0.0052	-0.5672	-0.0138	-1.4292	0.56
<i>NEGATIVE</i>	-0.0138	-1.5197	0.0014	0.1525	0.56
<i>CALLNET</i>	0.0014	0.1684	-0.0112	-1.3619	0.54
<i>PUTNET</i>	0.0113	1.4821	-0.0048	-0.6121	0.55

Table 9. Regression results for the impact of the crisis period

This table reports the estimation results for various information-based trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_t^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \gamma X_t D_t + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . D_t , which is a dummy variable indicating the crisis period encompassing the collapse of Lehman Brothers, equals 1 when t is within the period 15 September 2008 to 27 February 2009, and zero otherwise. The time interval is 15 minutes and the sample period runs from January 2008 to March 2010. *POSITIVE* (*NEGATIVE*) refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts), and *CALLNET* (*PUTNET*) is generated by buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). In each regression, we report the contemporaneous coefficients for the trading activity measure and the multiply of the trading activity measure and the dummy variable (other lags are not shown to save space). The regressions are conducted with robust Newey-West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, 10% levels, respectively.

Variables	β_0		γ		R^2 (%)
	Coeff	t-statistic	Coeff	t-statistic	
Panel A: Full Sample					
Trading Volume					
<i>POSITIVE</i>	0.0223 **	2.4449	0.0206	1.0176	0.66
<i>NEGATIVE</i>	-0.0094	-1.0358	-0.0117	-0.5769	0.60
<i>CALLNET</i>	0.1517 ***	16.8543	0.0402 **	2.0144	3.15
<i>PUTNET</i>	-0.1253 ***	-13.8648	-0.0262	-1.3055	2.27
Dollar Volume					
<i>POSITIVE</i>	0.0134	1.4731	0.0155	0.7642	0.63
<i>NEGATIVE</i>	-0.0133	-1.4563	0.0003	0.0137	0.63
<i>CALLNET</i>	0.1410 ***	15.6340	0.0210	1.0512	2.68
<i>PUTNET</i>	-0.1185 ***	-13.1069	-0.0299	-1.4900	2.12
No. of Transactions					
<i>POSITIVE</i>	0.1435 ***	15.1734	0.0047 **	2.2375	2.76
<i>NEGATIVE</i>	-0.1473 ***	-15.4311	-0.0172	-0.8104	2.62
<i>CALLNET</i>	0.2532 ***	28.6495	0.0295	1.5085	7.24
<i>PUTNET</i>	-0.1720 ***	-19.1466	-0.0389 *	-1.9520	3.78
Panel B: Out-of-the-Money Options					
Trading Volume					
<i>POSITIVE</i>	0.0246 ***	2.6981	0.0395 *	1.9528	0.70
<i>NEGATIVE</i>	-0.0182 **	-1.9906	-0.0309	-0.5276	0.66
<i>CALLNET</i>	0.1546 ***	17.1849	0.0597 ***	2.9976	3.39
<i>PUTNET</i>	-0.1247 ***	-13.7831	-0.0178	-0.8876	2.24
Dollar Volume					
<i>POSITIVE</i>	0.0127	1.3971	0.0319	1.5735	0.67
<i>NEGATIVE</i>	-0.0117	-1.2870	-0.0423 **	-2.0859	0.68
<i>CALLNET</i>	0.1447 ***	16.0769	0.0661 ***	3.3101	3.15
<i>PUTNET</i>	-0.1192 ***	-13.14653	-0.0285	-1.4214	2.15
No. of Transactions					
<i>POSITIVE</i>	0.1222 ***	13.0990	0.0630 ***	3.0259	2.35
<i>NEGATIVE</i>	-0.1407 ***	-15.0183	-0.0156	-0.7441	2.51
<i>CALLNET</i>	0.2266 ***	24.4599	0.0100	0.5102	5.75
<i>PUTNET</i>	-0.1449 ***	-16.0853	-0.0520 ***	-2.6034	3.03

Table 10. Summary of intraday pattern dummy variables

This table reports the daily average cross-interval means and standard deviations for trading volume, dollar volume, and number of transactions, beginning with the calculation of the daily average of each interval, followed by the computation of the mean and standard deviations based on the average values of the 27 intervals. The dummy variable $D_{t(l)}$ is set as 1 when the value of the variable of trading activity during interval l is higher than the mean plus one standard deviation, and zero otherwise. The time interval is 15 minutes, with the full sample period running from January 2008 to March 2010, and the sample for the crisis period running from January 2008 to March 2010.

Sample Periods	Mean	S.D.	$D_{t(l)}$
Panel A: Trading Volume			
Full sample period	4,197.73	1,339.47	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 3,4,5,26,27 \\ 0 & \text{others} \end{cases}$
Crisis period	2,835.63	938.98	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 3,4,5,27 \\ 0 & \text{others} \end{cases}$
Panel B: Dollar Volume			
Full sample period	7,448.84	2,410.27	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 3,4,5,26,27 \\ 0 & \text{others} \end{cases}$
Crisis period	9,953.65	3,301.83	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 2,3,4,5,6 \\ 0 & \text{others} \end{cases}$
Panel C: No. of Transactions			
Full sample period	46.86	12.29	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 1,2,3,4,26,27 \\ 0 & \text{others} \end{cases}$
Crisis period	49.72	13.37	$D_{t(l)} = \begin{cases} 1 & \text{for } l = 1,2,3,4,26 \\ 0 & \text{others} \end{cases}$

Table 11. Regression results with controls for intraday patterns

This table reports the estimation results for various information-based trading activity measures including trading volume, dollar volume, and number of transactions, based on the following regression model:

$$r_t^{VIX} = \alpha_0 + \sum_{i=1}^4 \alpha_i r_{t-i}^{VIX} + \sum_{j=0}^4 \beta_j X_{t-j} + \delta D_{t(1)} + \varepsilon_t$$

where r_t^{VIX} is the change in the VIX, X_t is the trading activity measure of interest, and ε_t is the turbulence term at time t . $D_{t(1)}$, which is a dummy variable taking into account the effect of the intraday periodical trading activity pattern of interest, equals 1 when t is one of the intraday intervals during which the value of the trading activity variable is higher than the mean plus one standard deviation, and zero otherwise. The time interval is 15 minutes and the sample period runs from January 2008 to March 2010. *ALL* refers to aggregate trading activity; *CALL* (*PUT*) denotes trading activity measured by call (put) options; *POSITIVE* (*NEGATIVE*) refers to the trading activity obtained by combining buyer-initiated calls and seller-initiated puts (seller-initiated calls and buyer-initiated puts); and *CALLNET* (*PUTNET*) is generated by calculating buyer-initiated minus seller-initiated calls (buyer-initiated minus seller-initiated puts). In each regression, we report the coefficients of the trading activity measure for the contemporaneous and first lag (other lags are not shown to save space), and the coefficient of the dummy variable. The regressions are conducted with robust Newey–West (1987). ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Variables	β_0		β_1		δ		R^2 (%)
	Coeff.	t-statistic	Coeff.	t-statistic	Coeff.	t-statistic	
Panel A: Trading Volume							
<i>ALL</i>	0.0129	1.5502	-0.0100	-1.2405	-0.0542 **	-2.2797	0.64
<i>CALL</i>	0.0080	0.9815	-0.0151 *	-1.8423	-0.0509 **	-2.1351	0.64
<i>PUT</i>	0.0104	1.2069	-0.0001	-0.0130	-0.0533 **	-2.2498	0.61
<i>POSITIVE</i>	0.0293 ***	3.4635	-0.0116	-1.4331	-0.0583 **	-2.4608	0.70
<i>NEGATIVE</i>	-0.0093	-1.1532	-0.0034	-0.4187	-0.0475 **	-2.0002	0.63
<i>CALLNET</i>	0.1600 ***	20.4719	-0.0059	-0.7187	-0.0535 **	-2.3129	3.17
<i>PUTNET</i>	-0.1302 ***	-15.8980	-0.0025	-0.3152	-0.0453 *	-1.9432	2.29
Panel B: Dollar Volume							
<i>ALL</i>	0.0050	0.5909	-0.0143 *	-1.7469	-0.0634 ***	-2.8529	0.66
<i>CALL</i>	0.0107	1.3120	-0.0192 **	-2.2450	-0.0634 ***	-2.8397	0.69
<i>PUT</i>	-0.0030	-0.3492	-0.0036	-0.4483	-0.0646 ***	-2.9147	0.63
<i>POSITIVE</i>	0.0202 **	2.4108	-0.0124 *	-1.4523	-0.0687 ***	-3.0859	0.69
<i>NEGATIVE</i>	-0.0101	-1.2354	-0.0132	-1.5701	-0.0580 ***	-2.5928	0.67
<i>CALLNET</i>	0.1454 ***	18.3483	-0.0033	-0.3965	-0.0693 ***	-3.1930	2.74
<i>PUTNET</i>	-0.1244 ***	-15.2887	0.0036	0.4715	-0.0647 ***	-2.9407	2.17
Panel C: No. of Transactions							
<i>ALL</i>	0.0148	1.4156	0.0026	0.2626	-0.0867 ***	-3.3477	0.70
<i>CALL</i>	0.0133	1.2855	-0.0078	-0.7935	-0.0800 ***	-3.1399	0.70
<i>PUT</i>	0.0131	1.3623	0.0123	1.3692	-0.0845 ***	-3.3052	0.71
<i>POSITIVE</i>	0.1725 ***	16.7721	-0.0346 ***	-3.5179	-0.1774 ***	-6.8822	3.17
<i>NEGATIVE</i>	-0.1540 ***	-15.1494	0.0337 ***	3.4848	0.0289	1.1033	2.63
<i>CALLNET</i>	0.2588 ***	31.8029	-0.0146 *	-1.7490	-0.0727 ***	-3.1013	7.32
<i>PUTNET</i>	-0.1795 ***	-22.5233	0.0050	0.6636	-0.0716 ***	-3.0000	3.85

Figure 1. Daily VIX Index Level

This figure exhibits the time series of daily VIX index level. The sample period covers January 2008 to March 2010.



Figure 1. Daily VIX time series, January 2008 to March 2010

Figure 2. Intraday Patterns of Trading Activity in VIX Options

This figure exhibits the intraday patterns of trading volume, dollar volume, and number of transactions. The trading hours for VIX options in the CBOE start at 8:30 AM and end at 3:15 PM, and we use a 15-minute time interval. Therefore, each trading day has 27 intervals. For each interval, we take the average across days. The sample period covers from January 2008 to March 2010.

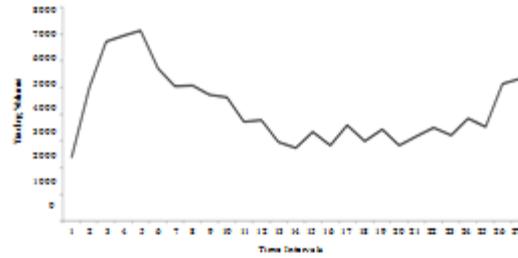


Figure 2a. Average intraday trading activity patterns for trading volume

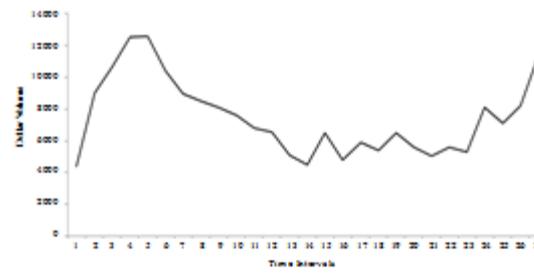


Figure 2b. Average intraday trading activity patterns for dollar volume

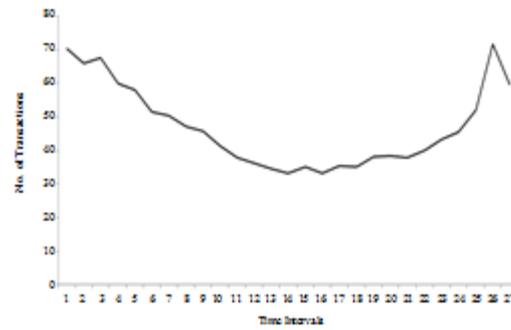


Figure 2c. Average intraday trading activity patterns for total number of transactions

ICSSAM-450
Do Fund Families Take the Discrepancy Strategies toward the Best Fund Awards?

Lin Lin

Department of Banking and Finance, National Chi Nan University

Pi-Hsia Hung

Department of Banking and Finance, National Chi Nan University
phhung@ncnu.edu.tw.

Pei-Jhen Su

Cathay Financial Holding Co., Ltd.

Abstract

This study uses unique data concerning the “Best Fund Award” in Taiwan since 1998 to investigate the specific characteristics of star funds, the contributions of these funds to their families, and the discrepancy strategies of the star families. Our results show that the star funds will not improve the fund fees of their families, but their fund performance and fund flows. After the award is announced, the star funds can, on average, outperform non-star funds for at least six months, and their fund families tend to take the discrepancy strategies to favor these funds.

JEL Classification: G11, G14, G23

Keywords: award funds, fund family strategies, spillover effect, fund characteristics, fund performance

1. Introduction

While there exists a variety of innovative financial products in the modern capital markets in the world, mutual funds remain to be popular investment vehicles perhaps due to their characters of cost-efficiency and tax-deductibility. They allow almost all kinds of investors to build diversified and liquid portfolios regardless of their attitudes to risk, amount of investments, and preference towards financial products. The assets under management in the fund industry during 1976-2009 have grown 222 times to \$11.1 trillion. In 2012, this number has exceeded \$23 trillion. The rapid development of the mutual fund industry was supported by the increasing number of fund holders, and some experts who offer professional fund information and investment strategies to them.

The information and strategies that fund investors will feel vital for their investment is so far unclear, and thus become an appealing line of research in decades (see Grinblatt, Titman and Wermers, 1995; Malkiel, 2013).

There exist a large amount of studies in literature on the fund selection and mutual fund investing strategies. For example, Fant and O'Neal (2000) suggest that the past performance is a reliable measure of fund selection. Scholars soon realized that most individual mutual fund should not be treated as independent investment vehicle, but part of a mutual fund family where investors can flexibly switch the selected funds with limited sales charge (Elton, Gruber, and Blake, 2006; Elton, Gruber, and Green, 2007) and also benefit from operational convenience and recordkeeping (Kempf and Ruenzi, 2008). Gaspar, Massa, and Matos (2006) then found that a strongly performing fund with higher expense rate tends to have higher fund value and ability to bring in greater commission and management fees to its fund family, which will induce its family to reallocate inner resources in an attempt to further enhancing the performance of this fund at the expense of that of relatively low-fee funds in the same family. The convex relationship between fund cash inflow and performance also rationalizes this strategy (Sirri and Tufano, 1998). Chevalier and Ellison (1999) notice that such difference concerning investors' asymmetry responses towards strongly- and weakly-performing funds will be more common between younger funds. That is, fund a family will be further motivated to distribute disproportional resources to its young but competitive members as compared to the others in this family. It is evidenced that the investors' investing strategies can conclude the strategic behavior of mutual fund families.

Other key determinants of fund performance which are also widely accepted include the reputation of fund family (Nanda, Wang, and Zheng, 2004) and fund manager's investment philosophies and skills in terms of picking successful stocks and timing the market (Bollen and Busse, 2002; Daniel et al., 2012).

One of the important threads of this area of study is the spillover effects of the star funds on their fund families. Nanda, Wang, and Zheng (2004) notice that star funds will attract inflow of new money and also positively affect the cash flow of other funds without stellar performance in their families. They then point out that it is this spillover effect that motivates fund families to pursue star-creating strategy for better reputation of the family. In reality, Morningstar rating and investment style box provide monthly ratings of individual open funds with at least one year trading records in the markets to facilitate an efficient way for investors to select funds.

On the basis of the analytic information, Morningstar issues a dozens of investment awards every year to funds (for example, “Best Equity ETF” and “Best Fund of Funds”), fund managers (for example, “Morningstar Foreign Equity Fund Manager of the Year”), fund companies (for example, “Advisors’ Choice Investment Fund Company of the Year”), and the firms providing professional investment services such as marketing and training, and finally, individuals (for example, “Career Achievement Award”). The funds that win any of these annual awards will be seen as the star funds of their families, and a fund family with at least one star fund in the preceding 12 months will be regarded as a star family. According to the spillover hypothesis, the increase of cash flow attracted to the winners of such awards and the rest of funds of their families can both be expected.

To advance the development of mutual fund business, some countries provide similar awards to their domestic and foreign investment firms and distributors in a hope to continuously improve best practices for local investors. For example, the “Best Fund Award” sponsored by the Taipei Foundation of Finance (TFF), Bloomberg, and Business Today since 1998 has been becoming one of the greatest finance event of the year in Taiwan. The lists of winners are also considered into the investment guideline for fund investors. Partly due to the promotion through these awards, the mutual fund industry in Taiwan was ranked the 7th of the 22 countries (and cities) in Morningstar’s “Second Global Investor Experience Study” in 2011 and the 2nd of the world for the sales of funds consisting of the undertaking for collective investment in transferable securities (UCITS) in the same year based on the Lipper’s research findings. Unfortunately, the strategic behavior of mutual fund families in Taiwan has not been extensively studied in literature. In addition, although there is abundant evidence concerning the spillover effects in fund industry (Nanda, Wang, and Zheng, 2004), whether and how the fund family will treat its star funds differently from the others in the same family are yet inconclusive (Gaspar, Massa, and Matos, 2006). To fill in these gaps in the literature, the present study will trace the related information of the funds which has ever won the “Best Fund Award” in Taiwan during 2001-2011 to examine the strategic behavior of their star families in terms of favorably skewed resource allocation and supports to these star funds as compared to the other members of their families.

The main contributions of this study are three-folds. Firstly, this is the first paper thoroughly investigates the effects of star funds’ on their families from the perspectives of individual star fund’s expense rate, cash flow, and performance. The determinants of award-winning funds and star families will then be identified respectively. Finally, the impact of the spillover effect of star funds on the strategic behavior of fund families in Taiwan will be also analyzed.

The results of this study will be compared to those in the literature to shed light on some distinctive characters of the mutual fund industry in Taiwan.

2. Data and Methodology

2.1. Data Sources

Award funds can be defined as the funds which win the “Best Fund Award” announced every March since 1998 and organized by Taipei Foundation of Finance, Bloomberg, and Business Today. Limited by insufficient fund fees data, our sample cover fund fee data from January 2001 to December 2011, a total of 11 years, including handling charges, management fees, storage charges, guarantee fees, other types of expenses, net assets value, fund returns, turnover rates, risk-free rates, and Stock Exchange Capitalization Weighted Stock Index (TAIEX) available to Taiwan Economic Journal Database. This study use monthly data to explore the role of the Best Fund Awards in fund families and examine whether fund families take the discrepancy strategies toward their underlying funds.

This study refers events as the “Best Fund Award”. Since the award funds don’t consist of bond funds and monetary funds, this study only focuses on domestic stock funds and balance funds. The number of award funds with available data is 79, and the number of non-award funds 359, a total of 438 funds.

2.2. Measurement

To thoroughly examine the role of award funds in fund families, we first define the related variables for individual funds and their corresponding families as follows. Fund fees ($FundFee_{it}$) are computed as the sum of the handling charges, management fees, storage charges, guarantee fees, and other types of expenses to the total net assets value (NAV; interest included) of mutual funds for fund i in month t . Fund flows ($FundFlow_{it}$) are fund i 's exchange rate of NAV of mutual funds in t month, excluding the fund return. It is calculated by difference between the current NAV and the lagged NAV multiplied by fund return, and then deflated by the lagged NAV multiplied by fund return. As for fund performance ($FundPer_{it}$), this study uses Jensen’s α performance (Jensen, 1968) and three-factor adjusted performance (Fama and French, 1993) to evaluate the performance of mutual funds. The models are specified as follows.

$$r_{it} - r_{ft} = \alpha_i + \beta_i(r_{mt} - r_{ft}) + \varepsilon_{it} \quad (1)$$

$$r_{it} - r_{ft} = \alpha_i + \beta_{1i}(r_{mt} - r_{ft}) + \beta_{2i}SMB_t + \beta_{3i}HML_t + \varepsilon_{it} \quad (2)$$

where r_{it} is the monthly rate of return of mutual fund i in t month. r_{ft} is the average of one-month deposit rate of the Bank of Taiwan, Taiwan Cooperative Bank, First Bank, Hua Nan Bank and Chang Hwa Bank, representing the risk-free interest rate. $(r_{it} - r_{ft})$ is fund i 's excess return in t month. r_{mt} is the rate of return of TAIEX in t month, representing the

monthly rate of return of the market portfolio. $(r_{mt} - r_{ft})$ symbols the risk premium of the market portfolio in t month. β_i represents the systematic risk factor. ε_{it} is the error term. Jensen's α performance is measured through the intercept α_i of regression equation (1), in which the estimation period includes the concurrent month and its prior 11 months.

Fama and French's three-factor adjusted performance is from the intercept α_i of regression equation (2), in which performance is computed according to the market risk premium $(r_{mt} - r_{ft})$, size risk premium (SMB_t) , and book-to-market risk premium (HML_t) . The above single-factor and three-factor adjusted fund performance are exhibited as the symbols $FundJensen_{it}$ and $FundFamaFrench_{it}$, respectively. Fund size ($FundSize_{it}$) in t month is evaluated by the natural logarithm of NAV. Fund turnover rate ($FundTO_{it}$) in t month is represented by the approach suggested by the Securities Investment Trust and Consulting Association of the R.O.C. (SITCA), namely to use the average of buying and selling turnover rates to assess the turnover rate of a mutual fund. Fund age ($FundAge_{it}$) in t month is the natural logarithm of years over the period from the fund establishment point to the measurement point.

2.3. Analytical Models

Gaspar, Massa, and Matos (2006) find that mutual fund families strategically transfer performance across member funds to favor those high value-added funds to increase overall family profits. They show that funds with high fees or better past performance will financially contribute more to their corresponding families so that they tend to be over-invested at the expense of low value-added funds in return. As fund investors in general emphasize on past performance of the funds, better past performers can not only attract capital inflows themselves, but also establish good family images and increase family's profits, which is favorable to the family's promotion for other member funds. Accordingly, this study proposes the following hypothesis:

H1₀: Fund families take no discrepancy strategies toward award funds and non-award funds in terms of fund fees.

H1₁: Fund families take discrepancy strategies toward award funds and non-award funds in terms of fund fees.

To examine this hypothesis, we perform the following model:

$$FundFee_{i(+1,+k)}^{award} - FundFee_{i(+1,+k)}^{nonaward} = \beta_0 + \beta_1 SameFamily_{i0} + \beta_2 SameStyle_{i0} + \beta_3 \Delta MedFee_{i(-1,-12)} + \beta_4 \Delta MedFlow_{i(-1,-12)} + \beta_5 \Delta MedPer_{i(-1,-12)} + \beta_6 \Delta MedSize_{i(-1,-12)} + \beta_7 \Delta MedTO_{i(-1,-12)} + \beta_8 \Delta Age_{i(-1)} + \varepsilon_{i(+1,+k)} \quad (3)$$

where $FundFee_{i(+1,+k)}^{award}$ and $FundFee_{i(+1,+k)}^{nonaward}$ indicate the cumulative fund fees of award funds and non-award funds, respectively, over k months after the fund award announcement, where $k = 3, 6$ and 12 . The dependent variable measure the difference of

cumulative fund fees between award funds and non-award funds. $SameFamily_{i0}$ is a dummy variable that takes one if award fund i and the paired non-award funds come from the same family in the award announcement months, and zero otherwise. $SameStyle_{i0}$ is a dummy variable that takes one if award fund i and the paired non-award funds are the same investment types in the award announcement months, and zero otherwise. Other control variables include the differences of fund fees, flows, performance, size and turnover rate between award funds and non-award funds, measured by their medians over the prior 12 months of the fund award announcements. Besides, the differences of fund ages in the award announcement months are included in the models. If fund families essentially take discrepancy strategies toward award funds, in the condition of controlling other factors, the coefficient β_1 of $SameFamily_{i0}$ should be significantly positive. That is, award funds are treated differently from those non-award funds for the fund fees that award funds can bring in to maximize the profit of overall fund families.

We further examine whether fund families take discrepancy strategies between award funds and non-award funds in terms of fund flows and performance. We set the following hypotheses and respectively replace the dependent variables in model (3) with the differences of flows and performance between award funds and non-award funds.

H2₀: Fund families take no discrepancy strategies toward award funds and non-award funds in terms of fund flows.

H2₁: Fund families take discrepancy strategies toward award funds and non-award funds in terms of fund flows.

H3₀: Fund families take no discrepancy strategies toward award funds and non-award funds in terms of fund performance.

H3₁: Fund families take discrepancy strategies toward award funds and non-award funds in terms of fund performance.

3. Empirical Results

In this study, the Best Fund Award is referred to as study events. Our sample includes domestic equity funds, bond funds and balance funds. Table 1 present descriptive statistics. Total observations include 79 award funds and 359 non-award funds, a total of 438 funds. Among award funds, there exist 62 equity funds and 17 balance funds. Over our sample period, regardless of the types of funds, award funds' net assets value, flows, return and age are larger than non-award funds', while their fees and turnover rate are less than non-award funds'. When award funds are decomposed into equity funds and balance fund, equity award funds' net assets value, fund fees, return, turnover rate and age are significantly larger than balance award funds'.

Fund families are motivated to take the discrepancy strategies across member funds to favor those more likely to win the award for the maximization of the overall family profits. Tools of discrepancy strategies include fund fees, flows, and performance. Panel A, B, and C of Table 2 presents the three-month, six-month, and one-year post-event differences between the award funds and non-award funds in terms of their fund fees, flows, and performance. $SameFamily_{i0}$ is a dummy variable that takes one if the selected award fund and non-award fund are in the same family; and zero otherwise. The positive coefficient of this variable signals the utilization of discrepancy strategies by the fund families. In Model 1 and 2 of Panel A, controlling for prior fund fee differences, the coefficients of $SameFamily_{i0}$ are not significant, suggesting no big fee differences between the award funds and non-award funds in the three-month post-event period. Model 3 to 4 show the coefficients of $SameFamily_{i0}$ are still not significant. However, controlling for prior fund performance, the coefficients of this variable are significantly positive in Model 5 and 6. These results seem to suggest that fund families take no discrepancy strategies on fund fees nor fund flows, but fund performance. The Jensen's α performance and the Fama and French's three-factor adjusted performance are apparently different between the award funds and non-award funds over the three months after the Best Fund Award announcements. They are consistent with Gaspar, Massa and Matos (2006), supporting the argument that the fund families will take the discrepancy strategies to favor the latest award funds within them. Panel B and C provide similar results with those of Panel A.

4. Conclusions

This study investigates the determinant factors of the fund's winning the Best Fund Award, its specific characteristics, its contributions to the fund family to which it belongs, and the existence of discrepancy strategies that the fund family may use in Taiwan. The popular stock funds and balance funds are targeted samples due to the concern of data quality. The results are rich. Our empirical analysis firstly shows that award funds usually have larger net asset scales, fund flows, higher fund return rates, lower fund fees, and turnover rates. Evidence shows that, on average, award funds overwhelmingly outperform non-award funds, and stock award funds outperform balance award funds.

Our empirical results show that, after winning the Best Fund Award, the fund families of award funds do not adopt discrepancy strategies in terms of fund fees and flows, but in performance. Motivated by maximizing the overall family interests, fund families are likely to adjust the resource distribution strategies among its member funds to favor award funds, assuming they are more likely to increase the overall family profits.

Reference

- Bollen, N. P. B. and J. A. Busse, 2004, Short-term Persistence in Mutual Fund Performance, *Review of Journal Financial Studies* 18 (2), 569-597.
- Chevalier, J. and G. Ellison, 1999, Career Concerns of Mutual Fund Managers, *Quarterly Journal of Economics* 114 (2), 389-432.
- Elton, E. J., M. J. Gruber, and C. R. Blake, 2006, The Adequacy of Investment Choices Offered by 401K Plans, *Journal of Public Economics* 90 (6-7), 1299-1314.
- Elton, E. J., M. J. Gruber, and T. C. Green, 2007, The Impact of Mutual Fund Family Membership on Investor Risk, *Journal of Financial and Quantitative Analysis* 42 (2), 257-277.
- Fama, E. F. and K. R. French, 1993, Common Risk Factors in the Returns on Stocks and Bonds, *Journal of Financial Economics* 33 (1), 3-56.
- Fant, L. F. and E. S. O'Neal, 2000, Temporal Changes in the Determinants of Mutual Fund Flows, *Journal of Financial Research* 23 (3), 353-371.
- Gaspar, J. M., M. Massa, and P. Matos, 2006, Favoritism in Mutual Fund Families? Evidence on Strategic Cross-Fund Subsidization, *Journal of Finance* 61 (1), 73-104.
- Grinblatt, M., S. Titman, and R. Wermers, 1995, Momentum Investment Strategies, Portfolio Performance and Herding: A Study of Mutual Fund Behavior, *American Economic Review* 85 (5), 1088-1105.
- Kaushik, A. and S. W. Barnhart, 2009, Do Mutual Funds with Few Holdings Outperform the Market? *Journal of Asset Management* 9 (6), 398-408.
- Kempf, A. and S. Ruenzi, 2008, Family Matters: Ranking within Fund Families and Fund Inflow, *Journal of Business Finance & Accounting* 35 (1-2), 177-199.
- Malkiel, B. G., 2013, Asset Management Fees and the Growth of Finance, *Journal of Economic Perspectives* 27 (2), 97-108.
- Nanda, V., Z. J. Wang, and L. Zheng, 2004, Family Values and the Star Phenomenon: Strategies of Mutual Fund Families, *Review of Financial Studies* 17 (3), 667-698.
- Sirri, E. R. and P. Tufano, 1998, Costly Search and Mutual Fund Flows, *Journal of Finance* 53 (5), 1589-1622.

Table 1 Descriptive Statistics

Investment Styles	# of Funds		Net Assets Value (NTD billion)			Fund Fees (Basis point)			Fund Flow (%)		
	Award	Non-award	Award	Non-award	Difference	Award	Non-award	Difference	Award	Non-award	Difference
Equity	62	314	3,318 ***	1,888 ***	1,430 ***	2.03 ***	4.03 ***	-2.00 ***	0.75 ***	-0.36 ***	1.11 ***
Balance	17	45	2,014 ***	1,559 ***	455 ***	1.42 ***	1.69 ***	-0.27 ***	0.31	-1.43 ***	1.74 ***
Difference	45	269	1,304 ***	329 ***	-	0.61 ***	2.34 ***	-	0.44	1.07 ***	-
Investment Styles	# of Funds		Fund Return (%)			Turnover Rate (%)			Fund Age (Years)		
	Award	Non-award	Award	Non-award	Difference	Award	Non-award	Difference	Award	Non-award	Difference
Equity	62	314	0.92 ***	0.49 ***	0.43 ***	20.57 ***	23.85 ***	-3.28 ***	8.78 ***	7.23 ***	1.55 ***
Balance	17	45	0.69 ***	0.31 ***	0.38 ***	12.13 ***	17.39 ***	-5.26 ***	6.76 ***	5.55 ***	1.21 ***
Difference	45	269	0.23 *	0.18 *	-	8.44 ***	6.46 ***	-	2.02 ***	1.68 ***	-

Table 2 The Discrepancy Strategies of Fund Families

Panel A: Three-month Post-award Difference between Award Funds and Non-award Funds						
Independent Variables	$FundFee_{i(+1,+2)}^{award} - FundFee_{i(+1,+2)}^{nonaward}$		$FundFlow_{i(+1,+2)}^{award} - FundFlow_{i(+1,+2)}^{nonaward}$		$FundPer_{i(+1,+2)}^{award} - FundPer_{i(+1,+2)}^{nonaward}$	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	-37.65 ***	-39.61 ***	32.10 ***	25.91 ***	0.99 ***	-29.90 ***
SameFamily _{it}	0.7913	1.3950	-1.1791	-0.0406	4.3264 ***	2.4562 ***
SameStyle _{it}	4.0919	3.6545 ***	-1.9105 *	-2.2442 **	1.9032 ***	1.6213 ***
$\Delta MedFee_{i(-1,-12)}$	1.7782 ***	1.7778 ***	0.0294 ***	0.0305 ***	-0.0003	0.0007 **
$\Delta MedFlow_{i(-1,-12)}$	-0.1415	-0.1328 ***	1.1933 ***	1.2039 ***	0.0469 ***	-0.0179 ***
$\Delta MedJensen_{i(-1,-12)}$	0.2674		0.3851 ***		1.4005 ***	
$\Delta MedFamaFrench_{i(-1,-12)}$		0.0471		0.2171 ***		1.5436 ***
$\Delta MedSize_{i(-1,-12)}$	0.3538	0.3574 ***	-0.4342 ***	-0.4116 ***	0.0110	-0.0524 ***
$\Delta MedTO_{i(-1,-12)}$	0.1084	-0.2405	0.8182 ***	0.1468	-0.1085 ***	-0.0663 **
$\Delta Age_{i(-1)}$	0.3774	0.2556 **	0.3587 ***	-0.0490	0.0839 ***	-0.2081 ***
R-Square	0.9936	0.9936	0.5330	0.5334	0.7572	0.9564
Observations	5,796	5,796	5,796	5,796	5,796	5,796

Panel B: Six-month Post-award Difference between Award Funds and Non-award Funds

Independent Variables	$FundFee_{i(+1,+6)}^{award} - FundFee_{i(+1,+6)}^{nonaward}$		$FundFlow_{i(+1,+6)}^{award} - FundFlow_{i(+1,+6)}^{nonaward}$		$FundPer_{i(+1,+6)}^{award} - FundPer_{i(+1,+6)}^{nonaward}$	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Intercept</i>	-1.7703 **	-2.3292 **	3.9809 ***	-1.1856	-4.7335 ***	-4.2607 ***
<i>SameFamily_{it}</i>	0.2225	0.6186	0.5420	1.5713	2.7559 ***	1.1993 ***
<i>SameStyle_{it}</i>	1.4352 *	1.0068	3.0776 ***	2.6916 ***	1.0393 ***	1.0384 ***
$\Delta MedFee_{i(-1,-12)}$	0.3286 ***	0.3278 ***	0.0350 ***	0.0357 ***	-0.0006 **	0.0003
$\Delta MedFlow_{i(-1,-12)}$	-0.0752 ***	-0.0678 ***	0.1879 ***	0.1985 ***	0.0295 ***	-0.0129 **
$\Delta MedJensen_{i(-1,-12)}$	0.2098 ***		0.3686 ***		0.2621 ***	
$\Delta MedFamaFrench_{i(-1,-12)}$		-0.0061		0.1743 ***		0.3417 ***
$\Delta MedSize_{i(-1,-12)}$	0.2049 ***	0.2027 ***	-0.3336 ***	-0.3159 ***	0.0050	-0.0324 ***
$\Delta MedTO_{i(-1,-12)}$	0.3796 ***	0.1546	0.8804 ***	0.2757 *	0.0389	0.0334 *
$\Delta Age_{i(-1)}$	0.0974 *	0.0687	0.0894	-0.2487 ***	0.0709 ***	-0.1327 ***
R-Square	0.9261	0.9257	0.1789	0.1772	0.2560	0.7260
Observations	5,796	5,796	5,796	5,796	5,796	5,796

Panel C: One-year Post-award Difference between Award Funds and Non-award Funds

Independent Variables	$FundFee_{i(+1,+12)}^{award} - FundFee_{i(+1,+12)}^{nonaward}$		$FundFlow_{i(+1,+12)}^{award} - FundFlow_{i(+1,+12)}^{nonaward}$		$FundPer_{i(+1,+12)}^{award} - FundPer_{i(+1,+12)}^{nonaward}$	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Intercept</i>	-3.4904 ***	-5.0163 ***	10.1427 ***	4.6059 ***	-7.7113 ***	-6.1743 ***
<i>SameFamily_{it}</i>	0.0624	0.6101	-0.0167	0.9735	4.0131 ***	2.3406 ***
<i>SameStyle_{it}</i>	3.0229 **	2.5780 **	-1.0662	-1.3266	1.5911 ***	1.2932 ***
$\Delta MedFee_{i(-1,-12)}$	0.5490 ***	0.5485 ***	0.0314 ***	0.0325 ***	-0.0003	0.0006 *
$\Delta MedFlow_{i(-1,-12)}$	-0.1446 ***	-0.1361 ***	0.1888 ***	0.1976 ***	0.0434 ***	-0.0162 ***
$\Delta MedJensen_{i(-1,-12)}$	0.2543 ***		0.3277 ***		0.3362 ***	
$\Delta MedFamaFrench_{i(-1,-12)}$		0.0302		0.1966 ***		0.4864 ***
$\Delta MedSize_{i(-1,-12)}$	0.3387 ***	0.3405 ***	-0.3964 ***	-0.3758 ***	0.0066	-0.0506 ***
$\Delta MedTO_{i(-1,-12)}$	0.4509 **	0.1356	0.6554 ***	0.0705	-0.1297 ***	-0.0812 ***
$\Delta Age_{i(-1)}$	0.2483 ***	0.1552	0.2954 ***	-0.0700	0.0808 ***	-0.1786 ***
R-Square	0.9334	0.9333	0.1628	0.1634	0.2335	0.7023
Observations	5,796	5,796	5,796	5,796	5,796	5,796

ICSSAM-535
Proximity and IPO Underpricing

Ulf Nielsson

Copenhagen Business School
un.fi@cbs.dk.

Dariusz Wojcik

University of Oxford

Abstract

The paper analyses the relationship between issuers' location and IPO underpricing in the U.S. in the period 1985-2011. Issuers headquartered in rural areas are associated with approximately seven percentage points lower underpricing compared to urban firms. This finding is consistent with strong local bias in rural areas, accompanied by superior local information and monitoring intensity, which results in more accurate pricing and less 'money left on the table'. The paper further finds that proximity to finance professionals and density of financial expertise affects IPO underpricing more than proximity to large cities.

JEL classification: G10, G12, G30

Keywords: IPO underpricing, proximity, local bias, information

1. Introduction

IPO underpricing is one of the best-documented empirical findings in finance. Underpricing, defined as the difference between the closing price on the first day of trading and the IPO offer price, averaged 18.8% in the U.S. in the period 1980-2001 (Ritter and Welch, 2002). There are many theories of underpricing, ranging from those focused on information asymmetry to those emphasizing ownership and control. The relative contribution of these theories to explaining the empirical data on IPO underpricing remains far from conclusive (Ljungqvist, 2007). This paper offers a contribution to research on IPO underpricing by considering a recent stream of literature that has explored the role of location and proximity in stock markets, documenting e.g. local bias of investors (Coval and Moskowitz, 2001; Massa and Simonov, 2006) and superior local information in rural areas (Bodnaruk, 2009). Thus far, there has been no engagement between the literatures on IPO underpricing and location.

Our conjecture is that companies from rural areas should experience less IPO underpricing, because superior local information in such areas lowers the uncertainty about IPO value. More specifically, as rural investors exhibit a stronger local bias than urban investors (i.e. allocate a larger part of their stock portfolios to local companies), this gives them stronger incentives to monitor and take advantage of local information about rural issuers. As a consequence, a more intensive use of local information in the case of rural companies should result in lower uncertainty about IPO value, and thus – as demonstrated in this paper – lower IPO underpricing.

This hypothesis is firmly founded on existing literature. The stronger local bias in rural areas has been documented by Bernile, Kumar and Sulaeman (2012), who use data on institutional investment in nearly 4,000 U.S. publicly traded companies in the period 1996-2008, showing that local stock ownership levels are higher in states with lower population density. In addition, they establish that local bias applies particularly to younger firms, which implies that local ownership is particularly relevant to firms at the time of their IPO, as they involve relatively young firms. Supporting evidence from Finland shows that investors who live outside Helsinki have a particularly strong bias towards holding local stocks (Grinblat and Keloharju, 2001). This tendency of rural investors to invest heavily in local companies creates an incentive to acquire information and monitor those companies, which the literature has found local investors particularly well equipped to do. For example, the superior access of local investors to tacit, non-standardized information about issuers has been demonstrated by Coval and Moskowitz (2001) and Ivkovic and Weisbenner (2005), who show that superior returns realized by local investors are particularly high in rural areas of the U.S. Bodnarik (2009) similarly shows that investors who move away from the Swedish countryside, thereby leaving behind close community ties, experience a greater loss in local information compared to those who move away from metropolitan areas. Lastly, Gaspar and Massa (2007) and Chhaochharia, Kumar and Niessen-Ruenzi (2012) show that local investors conduct a larger amount of monitoring of corporate activities, leading to improved corporate governance of firms with higher local ownership. Thus, the stronger local bias in rural areas, accompanied by superior information and monitoring abilities, leads us to conjure that IPOs from rural areas require less underpricing to compensate investors for the uncertainty involved in an IPO.

While most existing studies on location in stock markets define rural and urban firms primarily on the basis of distance to large population centers (Loughran and Schultz, 2005; Loughran, 2007; John, Knyazeva and Knyazeva, 2011), we refine the measures of location and proximity by considering distance to areas that are either large or dense in financial expertise. The size of financial expertise most relevant to stock markets is captured with data

on county level employment in the securities industry, while its density is captured by dividing employment in the securities industry by the total county population. Building on prior research showing that local bias is relatively strong among households and less investment savvy institutions (Grinblat and Keloharju, 2001) and in states with lower education levels (Bernile, Kumar and Sulaeman, 2012), we expect local bias of investors to be particularly strong – and hence underpricing to be particularly low – in areas where stock market expertise is small and most sparse.

Empirical results confirm our hypothesis. The analysis covering U.S. IPOs for the period 1985-2011 shows that IPOs of companies headquartered in areas with small and least dense stock market expertise are associated with significantly lower underpricing. The relationship is economically important, as results show 7 percentage points more underpricing in (or close to) the top ten counties according to expert density than in those outside of the top 50. In comparison, the relationship between underpricing and proximity of issuers to large population centers is relatively weak. Therefore, the number and density of experts is a more significant factor of underpricing than the mere number of people living in an area.

The paper proceeds with a description of methodology and data (section 2), followed by the presentation of results and robustness checks (section 3). The last section discusses the overall findings and concludes (section 4).

2. Methodology and data

Data on IPO underpricing comes from the SDC New Issues database and covers all public U.S. companies issuing equity in the period between 1985 and August 2011 (when the data was collected). Table 1 presents summary data on IPO underpricing, e.g. showing that the average level of underpricing is 19% in 1985-2011, which translates into \$13.6 million ‘left on the table’ in an average IPO.

Crucial to our analysis is the conceptualization of proximity measures. First of all, we follow a number of authors, including Coval and Moskowitz (2001), Malloy (2005), Loughran and Schultz (2005), Seasholes and Zhu (2010), and John, Knyazeva and Knyazeva (2011), and use the zip code of corporate headquarters (obtained for all companies from Compustat) as a proxy of corporate location. Then, to capture the remoteness of companies, we follow Loughran and Schultz (2005) who use the physical distance between companies and one of the top ten largest population centers in the U.S. (detailed in the appendix).

More precisely, our starting point for measuring proximity is the distance between a company's zip code and the closest top ten most populated counties in the U.S.¹

However, as Grinblat and Keloharju (2001) and Bernile, Kumar and Sulaeman (2012) show, local bias may be related to low investor sophistication rather than merely small population size. Thus, to capture the proximity of companies to sophisticated investors, we measure the distance between company location and the ten top places of financial employment. To create such a measure we use the County Business Patterns database of the U.S. Census Bureau, which provides annual employment data for all U.S. counties broken down by sector.

Specifically, employment in the financial sector is based on the number of employees in NAICS sector 523, which covers securities, commodity contracts and investments.² We use the NAICS sector 523 as it represents the concentration of financial expertise most relevant to stock market investments (Wójcik, 2011). Finally, in addition to considering the absolute number of financial sector employees, we also measure the distance between companies and the top ten places of financial employment expressed as a share of total population. These two novel measures allow us to capture both the size and the density of the available financial expertise. Our aim is thus to test the relationship between IPO underpricing and proximity of companies to centers of financial expertise as well as population. As local bias is likely to be stronger in areas of low financial expertise, we expect underpricing to be particularly low in those areas, compared to areas of merely low population. The average distance in miles of each company to the closest top center of population or expert employment is summarized in Table 2.

¹ This distance is calculated with the Haversine formula for all firms, which gives the shortest path between two points on the surface of a sphere (i.e. "as the crow flies" between any two points). More precisely, let r be the radius of the earth and $(\gamma_a, \lambda_a; \gamma_b, \lambda_b)$ be the geographical latitude and longitudes of points a and b (the central point of a firm's zip code) where their difference is noted by $\Delta\gamma, \Delta\lambda$. Then the distance between the two points is calculated as

$$\text{Distance} = 2r \arcsin \sqrt{\sin^2 \frac{\Delta\gamma}{2} + \cos \gamma_a \cos \gamma_b \sin^2 \frac{\Delta\lambda}{2}}$$

² More specifically, NAICS code 523 covers ten specific professions within finance. In detail, these are 1) investment banking and securities dealing, 2) securities brokerage, 3) commodity contracts dealing, 4) commodity contracts brokerage, 5) securities and commodity exchanges, 6) miscellaneous intermediation, 7) portfolio management, 8) investment advice, 9) trust, fiduciary, and custody activities, and 10) other miscellaneous financial investment activities. Prior to the introduction of the NAICS classification system in 1998, we use corresponding employment numbers based on SIC industry classification codes, where the linkage between NAICS and SIC codes is obtained from U.S. Census conversation tables.

The ranking of counties according to population, expert employment, and expert density is presented in the appendix. The rankings differ significantly.

For example, while the central counties of New York, Boston and San Francisco feature among the top ten places according to expert employment and its density, they are not among the most populous counties. On the other hand, the central counties of Houston, Phoenix and Dallas feature among the most populous areas but not among the top centers of financial expertise. This confirms that the different measures are likely to represent different notions of proximity. The complementarity of the three proximity measures is further confirmed by calculating their correlation coefficients. The correlation between the average number of “miles-to-population” to either the employment or density measures is low (0.54 and 0.46, respectively). This underlines the important distinction to be made between proximity to experts versus mere population. In contrast, and perhaps unsurprisingly, the correlation between the average distance to expert employment and expert density is high (0.88). The difference between the two variables in conceptual terms, however, justifies the use of both measures in the analysis.

Finally, to control for other factors which may correlate with underpricing we obtain various data on firm and IPO characteristics. This includes information on the extent of analyst coverage obtained from the I/B/E/S dataset, as well as data on underwriter reputation and firm age collected by Loughran and Ritter (2004). Company characteristics in the year of issue (size, sector, listing venue, etc.) are obtained from financial statement data, which is available through the CRSP/Compustat Merged Database (CCM). Summary statistics on firm and IPO characteristics are presented in Table 2, where the number of observations varies with the availability of data.³ Lastly, to control for market cycles the econometric analysis contains several market level variables. This includes controlling for ‘hot market’ effects following Banerjee, Dai and Shrestha (2011), which is defined as the number of IPOs taking place in a given year relative to the total number of IPOs during the entire sample period. Additionally, to fully capture any market cycle effects, the analysis also controls for the year-by-year average return of the S&P500 index.

³ The upper bound on the working sample size in the subsequent analysis is approximately 1,750 observations, which corresponds to the number of IPOs with full data availability on all variables.

3. Empirical results

To compare IPO underpricing across geographical regions, we define standard proximity dummies using a procedure modeled after Loughran and Schultz (2005).⁴ Specifically, the variable $Rural_{Population}$ ($Rural_{Expert\ employment}$; $Rural_{Expert\ density}$) takes the value of 0 if the company is headquartered less than 100 miles away from one of the top ten counties in terms of population (expert employment, expert density); and the value of 1 if the company is headquartered 100 miles or further away from one of the top 50 counties in terms of population (expert employment, expert density). Thus, for each of the three dummy variables, companies with a value of 0 can be referred to shortly as urban, and those with a value of 1 as rural, while keeping in mind that the definitions are varied and extend beyond those used in existing literature. As an illustration, figure 1 shows the scope of rural areas in the U.S. defined on the basis of employment in NAICS 523, as well as the ten counties with the largest absolute employment in NAICS 523.

Portfolio sorts

Before applying a more technical regression methodology, it is useful to briefly present the raw data on IPO underpricing across the geographical definitions. Table 3 presents the average level of IPO underpricing for both urban and rural firms, based on the three different definitions of proximity. Rural firms exhibit a significantly lower level of underpricing than urban firms for each definition of proximity. As we move from the definition based on population, through expert employment, to expert density, the difference in underpricing between urban and rural firms grows. This conforms to the idea that the number and density of experts better captures differences in local bias, and thereby produces a sharper difference in underpricing than the mere number of people living in an area.

The results are consistent between equally-weighted and age-adjusted portfolios. Existing research shows firm age as a principal variable related to IPO underpricing (e.g. Loughran and Ritter, 2004), since investors intuitively face less uncertainty about the IPO value of more familiar (older) firms.⁵ Consistently, the average level of underpricing in Table 3 decreases across all subsamples when weighting older firms more heavily.

⁴ All results obtained using continuous proximity measures are qualitatively the same as those obtained using dummies (not reported).

⁵ In contrast, capturing firm familiarity with measures of firm size has proven less fruitful and generated mixed results (Booth and Chua 1996; Banerjee, Dai and Shrestha, 2011), making value-weighted averages less relevant in this context.

But most notably, urban firms remain significantly more underpriced than rural firms, where the gap widens in magnitude and significance as we move from population to expert based proximity measures. However, to further account for other possible determinants of IPO underpricing, we next turn to a regression based analysis.

Multivariate analysis

The results of regressing IPO underpricing on proximity measures and relevant control variables are presented in Table 4. All three coefficients of proximity are negative and significant, implying that rural areas are associated with lower underpricing. Consistent with results in Table 3, as we move from rurality defined on the basis of population to that defined on the basis of expert density, both the value and the significance of the proximity coefficient grows, which is consistent with local bias being stronger in areas where financial expertise is small and most sparse. The result for proximity to centers of dense financial expertise is significant at the 1% level, showing that on average rural companies experience 7 percentage points less underpricing relative to urban companies. This is moreover an economically significant result taking into account that the average level of underpricing in the sample is 19% (cf. Table 1).

Coefficients on control variables largely conform to existing empirical literature. Firms going public at an older age exhibit less underpricing, which – as noted above – can be explained by investors being more familiar and knowledgeable about them, and thus facing lower information uncertainty (Chambers and Dimson, 2009; Habib and Ljungqvist, 2001).

Companies with more assets are associated with more underpricing, while a number of studies point to a negative relationship between size and underpricing (e.g. Banerjee, Dai and Shrestha, 2011). Here, however, this positive sign can be explained by a common component between age and asset size. Specifically, if firm age is excluded from the regression, the coefficient on size becomes negative (not reported). The relationship between underpricing and underwriter reputation is positive, in line with Loughran and Ritter (2004) who compile this variable and conjure that underwriters with the best analysts have leverage to underprice more, thus lowering the risk of underwriting. Higher underwriting fees and more bookrunners are associated with less underpricing, which conforms with our expectations that more effort put into an IPO, other things being equal, should result in a closer alignment between the offer price and the value of the company. Firms going public on NASDAQ experience more underpricing (as documented by Leone, Rock and Willenborg, 2007) and high-tech firms also exhibit more underpricing, driven presumably by higher information uncertainty intrinsic to the sector (Chambers and Dimson, 2009; Kennedy, Sivakumar, Vetzal, 2006).

Finally, the results for analyst coverage and measures capturing the market cycle (HotCold and S&P500 return) are largely insignificant, in line with mixed existing empirical evidence (Banjerjee, Dai and Shrestha, 2011; Booth and Chua, 1996). Also worth noting, the explanatory power is consistent in magnitude with existing empirical studies evaluating factors of underpricing (see e.g. Chambers and Dimson, 2009; Banjerjee, Dai and Shrestha, 2011).

Robustness and further results

In Table 5 we present further regression results that test the robustness of our findings on lower underpricing among rural firms. Since the definition of rural companies based on expert density is both the most intuitive and novel methodological contribution of our study, we apply this notion of proximity in the first part of our robustness tests (regressions 1-6).⁶

First, to control for the impact of New York as the largest concentration of IPOs, expert employment and expert density, we run the analysis on a sample excluding companies headquartered in New York (regression 1). The resulting coefficient for rural companies is significant at the 1% level and even larger than for the sample of companies including New York. In other words, the difference between underpricing in New York and the rest of the country does not drive the results.

Second, in regression (2) we add a dummy variable for firms that specialize in any financial activities (NAICS 52 and 53). The underpricing of rural firms remains significantly lower as in Table 4. Interestingly, the coefficient for financial firms is negative, high and significant, which may indicate that firms that possess considerable financial expertise by the virtue of their core activity get their IPO offer price closer to the value of the company as established by the stock market. In regression (3), we further control for industry effects by adding a comprehensive set of 18 industry dummies based on NAICS classification, thereby filtering out all industry variation of underpricing (i.e. beyond just the high-tech and financial sectors). Rural companies remain significantly less underpriced than urban companies.

Regression (4) controls for the variance of underpricing in the county where the company is headquartered. This takes into account that greater variation in first day returns may call for more underpricing as compensation for risk. The results show that underpricing is indeed positively related to its local variance, indicating that firms from areas with more variability in first day returns underprice more.

⁶ The results are largely the same if rural companies are defined on the basis of expert employment (not reported).

This relationship, however, does not vary systematically between urban and rural areas to the extent that it explains the observed pattern across firm locations, since underpricing in rural firms stays significantly lower than in urban firms.

Regression (5) is motivated by the observation that top ten centers of population, expert employment and expert density are also large concentrations of IPOs (cf. the appendix). In such places where IPOs are relatively frequent, competition for the attention of potential investors may be more intense, and consequently issuers and their advisers may be inclined to underprice more than in areas with low IPO activity. To address this issue, regression (5) controls for the fraction of IPOs in the local county relative to the total number of IPOs in the sample. It should be emphasized that this is a very restrictive specification, since areas with dense financial expertise are bound to be large concentrations of corporate headquarters in general, and consequently have high IPO activity. In other words, expert density is bound to be highly correlated with IPO density. For example, it is well-established in the literature on economic geography (Krugman, 1992; Wójcik, 2011b) that financial and non-financial firms are attracted to each other through the power of agglomeration economies, which helps them take advantage of a common labor pool and urban infrastructure, while also helping them to undertake complex financial transactions. Nonetheless, despite the inevitable high correlation between financial density and IPO density, regression (5) shows that the proximity measure remains statistically significant at the 10% level. Thus, although the results indeed show that there is more underpricing in counties in which many IPOs are already taking place, this relationship alone is not driving the observed relationship between proximity and underpricing. Put differently, rural firms remain less underpriced even when we control for the density of IPOs.

Regression (6) explores the possibility that underpricing may be related to the time zone of the IPO issuers. An absolute majority of IPOs takes place on the NYSE or the NASDAQ, which both follow trading hours adapted to the Eastern Standard Time. As local investors are particularly active not only in holding shares, but also in buying and selling (Loughran and Schultz, 2004; Grinblatt and Keloharju, 2001), it is possible that the trading on the IPO day for companies headquartered on the Eastern coast is particularly high, as local traders do not need to adjust their working day to the trading hours of the stock exchange. As we move to companies headquartered further West the misalignment between the working hours of local traders in these time zones and stock exchange trading hours grows, which may depress trading activity on the IPO day. The resulting pattern of trading activity may in turn influence the degree of underpricing. To address this issue regression (6) adds eight binary dummies, one for each of the U.S. time zones.

Coefficients for individual time zones are all statistically insignificant (not reported to conserve space), lending no support to the speculation on the relationship between underpricing and time zones. Also, as proximity remains statistically and economically significant, the relatively low underpricing of rural firms is not the product of regional differences or the concentration of underpriced firms in a particular time zone, whether on the East Coast, West Coast or anywhere between.

In the second part of Table 5 (regressions 7-11), the definition of proximity is modified in order to test the robustness of our central proximity specification (physical distance to centers of expert density). First, a potential shortcoming of defining proximity on the basis of physical distance is that it may overestimate the impact of physical proximity on investor behavior, and consequently on pricing. Consider the example of Omaha, a significant securities industry center, hosting among others the headquarters of Warren Buffet's Berkshire Hathaway. While a location 50 miles from Omaha would appear close to a center of financial expertise according to physical distance, in reality this would be a rural location, where the characteristics of investors and their behavior may have little to do with those in Omaha. To address this issue, in regression (7) we base the measure of proximity on the density of expert employment in the local county of each company. Specifically, in regression (7) the variable *Rural* takes the value of 0 if the company is headquartered in one of the top ten counties in terms of employment in NAICS 523 relative to total county population (expert density), and the value of 1 if the company is headquartered outside one of the top 50 counties in terms of expert density. This definition helps to assess the significance of being in an area with particular characteristics, rather than merely being close to such a place. The resulting coefficient for rural companies takes an even higher value than in our baseline model in Table 4 and is significant at the 5% level.

Regressions (8) and (9) further test the sensitivity of the results to the definition of proximity. First, we use a narrower definition, with a firm considered urban if it is headquartered less than 100 miles away from one of the top 5 (instead of 10) counties in terms of expert density, and rural if it is headquartered 100 miles or more away from one of the top 75 (instead of 50) counties. With urban firms now being 'more urban' than in our baseline model, and rural firms 'more rural', we would expect the coefficient of proximity to be larger and more significant. This is confirmed in regression (8), with rural firms on average experiencing 8.43% less underpricing than urban firms (compared to 7.02% in Table 4). In regression (9) we conversely use a broader definition, where a firm is considered urban if it is headquartered less than 100 miles away from one of the top 20 counties in terms of expert density, and rural if it is 100 miles or more away from top 25.

This definition makes the difference between urban and rural firms less sharp, and should lead to a lower difference in underpricing. This is again confirmed in regression (9), where the coefficient on proximity is smaller in magnitude, but still highly significant. This also implies that the results are not driven by an arbitrary definition of rural and urban firms.

Finally, in regressions (10) and (11) we define rural companies on the basis of distance to centers with large total population (10) and expert population (11) per square mile. As U.S. counties differ considerably in terms of their total area, these measures may better capture the urban or rural character of counties compared to the absolute number of residents or experts. Indeed, using the number of people per square mile to define rurality leads to a coefficient of proximity (-5.23) larger and more significant than that for total population presented in Table 4 (-3.77). Similarly, the result for the number of experts per square mile (-7.32) is higher in magnitude and more significant compared to the results based on total employment in Table 4 (-6.07). It even produces marginally stronger results than our original specification of expert density in Table 4 (-7.02), where the number of experts is divided by total population. Also notably, the pattern across proximity definitions remains unchanged, as the coefficient for proximity based on population per square mile (-5.23) is still weaker than any measure based on expert employment in either absolute or relative terms. This is again consistent with higher local bias in areas where the local population has less expertise in securities business, compared to areas that simply have a small population or a low population density.

Looking beyond the first trading day

For completeness, we lastly examine whether the geographical pattern in underpricing extends beyond the first trading day. If it does, it would suggest that urban firms consistently outperform rural firms and thus the relatively higher first day returns are simply a reflection of that. If, however, there is no systematic pattern in returns when looking beyond the first trading day, it indicates that rural and urban firms are not systematically different in ability, but rather that there is a geographical difference that pertains specifically to the first trading day. This would be consistent with the hypothesis that the difference originates from uncertainty about IPO value, which varies across geographical areas (due to strong local bias and superior information in rural areas) and is fully revealed in different first day returns. In other words, any such pre-IPO uncertainty and informational diversity should appear as soon as the company becomes publicly traded and all available information becomes reflected in market prices.

Table 6 repeats the previous analysis for realized stock returns after the first day of trading. We separately examine the cumulative return in i) the first week of trading following the initial trading day (days 2-5), ii) the remainder of the first month (days 6-30), iii) months 2-3 (days 31-90) and finally iv) months 4-6 (days 91-180) following the offering. As before, we focus our analysis on proximity defined based on expert density (NAICS sector 523 employment / population). Panel A reports the cumulative average return for each of the post-IPO periods, showing no systematic difference between returns of rural and urban firms.

The difference in returns varies from being either positive or negative, and it is only significantly different from zero in one out of eight cases (days 31-90 for age-adjusted portfolios). A more extensive regression analysis in Panel B consistently reveals that there is no systematic pattern or statistical significance in any of the corresponding post-IPO periods.

Thus, conforming to the underlying hypothesis, the geographical difference in returns concentrates on the first day of trading.

4. Concluding remarks

To the best of our knowledge this is the first paper to relate IPO underpricing to corporate location, thus merging two hitherto separate bodies of literature. We demonstrate that underpricing varies systematically with corporate location, with firms from rural areas exhibiting significantly less underpricing, thus leaving less ‘money on the table’ than their urban counterparts. Lower IPO underpricing applies particularly to firms from areas distant to centers of financial employment and expertise, rather than just those distant from large centers of population. In our view, the lower underpricing of rural firms can be explained with relative preponderance of local investors, which invest a large part of their stock portfolio in local firms, and hence have strong incentives to monitor and acquire information on these firms. To borrow an analogy, in their seminal paper on local bias Ivkovic and Weisbenner (2005, p. 267) refer to a famous quote from Mark Twain: “Behold, the fool saith, “Put not all thine eggs in the one basket ... but the wise man saith, “Put all your eggs in the one basket and—*watch that basket.*”” The quote lends itself to the interpretation of the argument presented in our paper. Prior research on the geography of local bias reveals that investors in rural areas with lower levels of education and financial expertise have a stronger tendency to ‘put their eggs into the local basket’. Our claim and evidence suggest that this gives investors in such areas strong incentives to ‘watch the local basket’, and in consequence companies from such areas are better ‘watched over’ and obtain IPO prices closer to their post-IPO values. Given how conflicting different theories of IPO underpricing still are, and how elusive the empirical quest for identifying the factors affecting underpricing has proven so far, this is a result of major significance.

Additionally, the statistically and economically significant differential in the IPO underpricing of urban and rural firms might influence trading strategies, as it reveals that stocks of rural IPOs yield considerably lower first day returns compared to stocks of urban IPOs.

Lastly, our analysis implies opportunities for further research. The empirical literature on financial geography could be extended by considering other measures of proximity, such as corporate presence in places that do not host corporate headquarters. Specifically, while proximity between investors and corporate headquarters plays a primary role, investors in places where a company has other major operations – or which constitute a major market for the company – are likely to be more familiar with the company than others. Similarly, an extended definition of proximity useful within the underpricing literature might consider investors in places visited as a part of an IPO roadshow or locations of underwriters involved in an IPO. Whatever analytical strategies are pursued, looking beyond simple distinctions between rural and urban may be of value by e.g. considering the role of social, economic and cultural characteristics engrained in particular places, which are likely to shape both local stock market behavior and pricing.

References

- Banerjee, S., Dai, L., Shrestha, K., 2011. Cross-country IPOs: What explains differences in underpricing? *Journal of Corporate Finance* 17, 1289-1305.
- Bernile, G., Kumar, A., Sulaeman, J., 2012. Home away from home: relevance and local investors. AFA 2012 Chicago Meetings Paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1711653.
- Bodnaruk, A. 2009. Proximity Always Matters: Local Bias When the Set of Local Companies Changes. *Review of Finance* 13: 629-656.
- Booth, J., Chua, L., 1996. Ownership dispersion, costly information, and IPO underpricing. *Journal of Financial Economics* 41, 291-310.
- Chambers, D., Dimson, E., 2009. IPO underpricing over the very long run. *Journal of Finance* 64, 1407-1443.
- Chhaochharia, V., Kumar, A., Niessen-Ruenzi, A., 2012. Local investors and corporate governance. *Journal of Accounting and Economics* 54, 42-67.
- Coval, J., Moskowitz, T., 2001. The geography of investment: informed trading and asset prices. *Journal of Political Economy* 109, 811-841.
- Gaspar, J-M., Massa, M., 2007. Local ownership as private information: evidence on the monitoring-liquidity trade-off. *Journal of Financial Economics* 83, 751-792.
- Grinblatt, M., Keloharju, M., 2001. How distance, language, and culture influence stockholdings and trades. *Journal of Finance* 56, 1053-1073.

- Habib, M., Ljungqvist, A., 2001. Underpricing and entrepreneurial wealth losses in IPOs: theory and evidence. *Review of Financial Studies* 14, 433-458.
- Ivkovic, Z., Weisbenner, S., 2005. Local does as local is: information content of the geography of individual investors' common stock investments. *Journal of Finance* 60, 267-306.
- John, K., Knyazeva, A., Knyazeva, D., 2011. Does geography matter? Firm location and corporate payout policy. *Journal of Financial Economics* 101, 533-551.
- Kennedy, D., Sivakumar R., Vetzal, K., 2006. The implications of IPO underpricing for the firm and insiders: tests of asymmetric information theories. *Journal of Empirical Finance* 13, 49-78.
- Krugman, P., 1992. *Geography and Trade*. MIT Press, Cambridge, MA.
- Leone, A., Rock, S., Willenborg, M., 2007. Disclosure of intended use of proceeds and underpricing in initial public offerings. *Journal of Accounting Research* 45, 111-153.
- Ljungqvist, A., 2007. IPO underpricing. In: Eckbo, B.E. (Ed) *Handbook of Corporate Finance: Empirical Corporate Finance* (Chapter 7), Elsevier Science, North Holland, pp. 375-422.
- Loughran, T., 2007. Geographic dissemination of information. *Journal of Corporate Finance* 13, 675-694.
- Loughran, T., Ritter, J., 2004. Why has IPO underpricing changed over time? *Financial Management* 33, 5-37.
- Loughran, T., Schultz, P., 2004. Weather, stock returns, and the impact of localized trading behavior. *Journal of Financial and Quantitative Analysis* 39, 343-364.
- Loughran, T., Schultz, P., 2005. Liquidity: urban versus rural firms. *Journal of Financial Economics* 78, 341-374.
- Malloy, C., 2005. The geography of equity analysis. *Journal of Finance* 60, 719-755.
- Massa, M., Simonov, A., 2006. Hedging, Familiarity and Portfolio Choice. *The Review of Financial Studies* 19, 633-685.
- Ritter, R., Welch, I., 2002. A review of IPO activity, pricing, and allocations. *Journal of Finance* 57, 1795-1828.
- Seasholes, M., Zhu, N., 2010. Individual investors and local bias. *Journal of Finance* 65, 1987-2010.
- Wójcik, D., 2011. *The Global Stock Market: Issuers, Investors, and Intermediaries in an Uneven World*. Oxford University Press, Oxford.
- Wójcik, D., 2011b. Securitization and its footprint: the rise of the US securities industry centres 1998-2007. *Journal of Economic Geography* 11, 925-947.

Table 1. Overview of IPO underpricing

This table shows the number of IPOs (available in the SDC database) and average first day returns (i.e. underpricing) over the 1985-2011 period. Gross proceeds are defined as the amount raised from investors in USD millions. The amount of money ‘left on the table’ is in USD millions and is calculated as the product of shares issued and the first day return (change from offer price to closing price at first trading day). All dollar amounts are reported at year 2000 prices. All figures are compiled from the Securities Data Company (SDC) New Issues database.

Year	Number of IPOs	First-day return	Average		Aggregate	
			Gross proceeds	Money left on the table	Gross proceeds	Money left on the table
1985	16	4.6%	25.0	1.2	400	19
1986	560	16.4%	56.2	3.1	31,444	1,758
1987	437	17.3%	69.9	3.4	30,547	1,479
1988	236	21.3%	121.1	3.0	28,569	706
1989	189	28.2%	85.0	4.1	16,059	766
1990	179	20.7%	66.5	6.6	11,901	1,179
1991	340	12.2%	74.1	5.4	25,191	1,852
1992	503	10.3%	78.6	4.3	39,530	2,140
1993	677	11.5%	81.7	5.6	55,340	3,800
1994	523	12.0%	63.7	3.9	33,309	2,028
1995	493	26.0%	57.9	10.8	28,545	5,325
1996	712	18.1%	56.0	9.4	39,892	6,657
1997	490	15.2%	75.3	10.6	36,900	5,187
1998	317	19.6%	106.0	14.7	33,606	4,650
1999	459	58.3%	102.6	62.5	47,079	28,696
2000	320	53.0%	98.6	68.2	31,541	21,831
2001	106	10.5%	199.8	10.8	21,181	1,144
2002	133	4.7%	168.5	7.1	22,415	946
2003	104	7.5%	276.6	10.3	28,764	1,075
2004	240	8.9%	189.3	13.7	45,443	3,288
2005	215	7.6%	190.8	11.5	41,017	2,480
2006	173	10.8%	160.4	16.9	27,752	2,927
2007	206	10.0%	181.1	16.7	37,313	3,442
2008	24	3.8%	205.4	17.5	4,929	421
2009	45	8.5%	234.3	22.7	10,542	1,020
2010	93	6.5%	142.6	8.3	13,260	772
2011 (Aug.)	49	9.8%	167.1	13.7	8,188	671
1985-1989	1438	18.9%	74.4	3.3	107,019	4,728
1990-1994	2222	12.2%	74.4	4.9	165,272	10,999
1995-1999	2471	26.8%	75.3	20.4	186,024	50,516
2000-2004	903	23.9%	165.4	31.3	149,343	28,283
2005-2011	805	8.9%	177.6	14.6	143,001	11,732
1985-2011	7839	19.0%	95.8	13.6	750,659	106,259

Table 2. Summary statistics

This table reports descriptive statistics of the key variables to be used in the subsequent analysis. Miles to top population is the distance from a firm's headquarters to the closest top 10 populated county in the U.S. Similarly, miles to top expert employment is the distance to the closest top 10 county in terms of NAICS sector 523 employment (representing securities, commodity contracts and investments) and miles to top expert density is the distance to the closest top 10 county in terms of expert employment relative to population. Age at IPO is the number of years since the founding date of the firm, total assets is given in millions of U.S. dollars at year 2000 prices and analyst coverage refers to the annual number of analyst recommendations (either buy/hold/sell) for a security. Underwriter reputation measures the prestige of the underwriter and takes values 0-9, where a higher value represents higher rank. The underwriting fee paid to the lead and co-managers (who are part of the purchasing group) is expressed as a percentage of the principal amount credited to the book managers on the issue. The number of bookrunners is the number of managers assuming the responsibility of the bookrunner's role. The last two columns report mean values for rural and urban firms separately, where rural (urban) firms are defined as in terms of expert density. Specifically, rural (urban) firms are those 100 miles or more (less) away from the top 50 (top 10) counties in terms of the ratio of NAICS sector 523 employment to population. To dilute the influence of outliers, financial data is winsorized at the 1st and 99th percentiles. The data is obtained from Loughran and Ritter (2004), the CRSP/Compustat Merged Database (CCM), the Institutional Broker's Estimate System (IBES), the Securities Data Company (SDC) New Issues database, the 2005 U.S. Census (USC) and the County Business Patterns (CBP) database of the U.S. Census Bureau.

	All firms						Rural	Urban	Data source:
	Mean	Std. dev.	Median	Min	Max	No. of obs.	Mean	Mean	
Geographical characteristics of firms									
Miles to top population	279	303	216	0	2,944	3,901	371	152	CCM, USC
Miles to top expert employment	280	379	47	0	2,756	3,901	613	48	CCM, CBP
Miles to top expert density	288	309	190	0	2,756	3,901	575	20	CCM, USC, CBP
Firm characteristics									
Age at IPO	16.9	22.7	8	1	165	4,141	19.3	15.2	L&R (2004)
Total assets (mill. USD)	664	3904	90	3.6	67,852	3,435	581	689	CCM
Analyst coverage	4.5	4.0	3	1	35	4,589	5.1	5.2	IBES
IPO characteristics									
Underwriter reputation	6.7	2.5	8	1	9	8,132	7.1	7.5	L&R (2004)
Underwriting fee (%)	1.5	0.5	1.4	0.1	6.1	6,451	1.5	1.4	SDC
No. of bookrunners	1.1	0.5	1	1	14	8,376	1.2	1.2	SDC

Figure 1. Rural areas

This figure illustrates the definition of proximity in terms of employment in the financial sector (NAICS sector 523, which covers securities, commodity contracts and investments). Shaded are rural areas, defined as those being 100 miles or further away from one of the top 50 counties ranked in terms of employment in NAICS sector 523 (see exact ranking in the appendix). Also shown are the top ten cities hosting counties with the largest number of employees in NAICS sector 523. Alaska and Hawaii are classified as rural areas.



Table 3. Average underpricing across proximity definitions

This table reports the average level of IPO underpricing (first day returns) across different definitions of proximity. The proximity measures are defined as follows: i) Population: Urban if less than 100 miles away from the top 10 counties in terms of population, rural if 100 miles or more away from the top 50; ii) Expert employment: Urban if less than 100 miles away from the top 10 counties in terms of NAICS sector 523 employment, rural if 100 miles or more away from the top 50; iii) Expert density: Urban if less than 100 miles away from the top 10 counties in terms of expert density (NAICS sector 523 employment / population), rural if 100 miles or more away from the top 50. The average underpricing is obtained from equally weighted firm portfolios and from age-adjusted firm portfolios, where in the latter case the average is weighted with the number of years between the founding date of the firm and the IPO date (cf. Loughran and Ritter, 2004). The number of observations corresponds to the number of IPOs in each sample, which naturally varies with proximity definitions. T-statistics is reported for two-sided tests on whether estimates are different from zero. Statistical significance is indicated at the 10% (*), 5% (**) and 1% (***) level.

	Equally-weighted			Age-adjusted		
	Underpricing	t-stat.	Obs.	Underpricing	t-stat.	Obs.
<i>Population</i>						
Rural	12.48%	12.53***	627	10.29%	9.96***	425
Urban	16.00%	16.46***	1432	13.62%	12.23***	801
Difference	-3.52%	-2.53**		-3.33%	-2.19**	
<i>Expert employment</i>						
Rural	14.04%	11.14***	543	11.04%	9.70***	373
Urban	21.67%	22.57***	2141	16.75%	17.48***	1307
Difference	-7.63%	-4.52***		-5.71%	-3.84***	
<i>Expert density</i>						
Rural	15.24%	14.65***	900	11.24%	13.32***	621
Urban	23.17%	20.64***	1725	16.96%	16.26***	1091
Difference	-7.94%	-5.18***		-5.72%	-4.26***	

Table 4. Proximity and underpricing

This table reports the relationship between IPO underpricing (first day returns) and different dummy measures of proximity, all of which classify firms as either rural (1) or urban (0). The dummy measures are defined for each firm as follows: i) Population: 0 if less than 100 miles away from the top 10 counties in terms of population, 1 if 100 miles or more away from the top 50; ii) Expert employment: 0 if less than 100 miles away from the top 10 counties in terms of NAICS sector 523 employment, 1 if 100 miles or more away from the top 50; iii) Expert density: 0 if less than 100 miles away from the top 10 counties in terms of expert density (NAICS sector 523 employment / population), 1 if 100 miles or more away from the top 50. The NASDAQ variable is a binary dummy taking value 1 if the IPO occurs at the NASDAQ exchange, 0 otherwise (Leone, Rock and Willenborg [2007] document relatively higher average underpricing on NASDAQ IPOs). Similarly, the HighTech variable is a binary dummy taking value 1 if the firm is in the high-tech industry (based on the NAICS classification provided by TechAmerica.org), 0 otherwise. The variable HotCold controls for 'hot market' effects, following Banerjee, Dai and Shrestha (2011), and is calculated as the total number of IPOs taking place in a given year relative to the total number of IPOs during the entire sample period. To further control for market cycles, the year-by-year average return of the S&P500 stock index is also included. All other variables are defined as in Table 2 (summary statistics). The number of observations corresponds to the number of IPOs in each regression, which naturally varies with proximity definitions (the number of non-rural and non-urban IPOs is bound to differ). T-statistics are reported in parenthesis (calculated based on Huber/White robust standard errors) and significance is indicated at the 10% (*), 5% (**) and 1% (***) level.

	(1)	(2)	(3)
RuralPopulation	-3.77* (-1.67)		
RuralExpert employment		-6.07** (-2.57)	
RuralExpert density			-7.02*** (-3.08)
Ln(Age at IPO)	-4.34*** (-3.83)	-9.99*** (-7.08)	-10.26*** (-7.59)
Ln(Assets)	0.00 (0.00)	4.60*** (3.56)	4.99*** (3.85)
Underwriter reputation	1.63*** (2.59)	2.43*** (3.62)	2.06*** (3.06)
Underwriting fee	-6.42* (-1.74)	-9.99** (-2.32)	-13.46*** (-3.04)
No. of bookrunners	-4.29** (-2.30)	-10.60*** (-3.60)	-15.00*** (-4.62)
NASDAQ	4.98** (1.97)	9.26*** (3.03)	10.35*** (3.49)
HighTech	15.03*** (3.74)	18.55*** (5.97)	18.57*** (6.06)
Analyst coverage	0.56* (1.66)	0.65* (1.79)	0.44 (1.31)
HotCold	-21.54 (-0.52)	-12.32 (-0.28)	-2.35 (-0.05)
S&P500 return	13.12 (1.42)	-1.52 (-0.15)	-6.43 (-0.65)
Constant	18.56* (1.90)	14.74 (1.25)	26.29** (2.22)
Observations	830	1,185	1,197
R-squared	0.09	0.15	0.16

Table 5. Robustness and further results

This table shows further tests and extensions of previously established results in Table 4. First, regression (1) leaves out firms headquartered in New York. Second, regression (2) controls specifically for first day returns among financial firms (NAICS sector 52 and 53) and regression (3) includes 18 industry dummies based on NAICS classification (industry fixed effects). Coefficients on these industry dummies are omitted to conserve space (high-tech/financial dummies drop out as they are collinear with the corresponding fixed effect). Regression (4) controls for the variance in underpricing in the local county of each firm. Regression (5) controls for the fraction of IPOs in the local county relative to the total number of IPOs in the sample. Regression (6) includes eight dummy variables (not reported to conserve space) for each of the U.S. time zones (based on county-level time zone data from the National Oceanic and Atmospheric Administration's National Weather Service, www.nsw.noaa.gov). In the remaining analysis (regressions 7-11) the proximity dummy is redefined in various ways (to emphasize this, the subscript '*ExpertDummy*' is dropped from the *Rural* dummy).

Regression (7) defines a company as urban if its local county ranks in the top 10 in terms of expert density (NAICS sector 523 employment to population), but rural if it originates in a county ranked below the top 50. Regressions (8)-(9) rerun the main specification of Table 4, except using a narrower/broader definition of proximity. Specifically, in regression 8 (9) a firm is considered urban if it is less than 100 miles away from the top 5 (20) counties in terms of expert density, and rural if 100 miles or more away from top 75 (25). Regression 10 (11) adjusts the population (employment) proximity measure reported in Table 4 by adjusting for county square miles, i.e. a firm is considered urban if it is less than 100 miles away from the top 10 counties ranked in terms of population (employment) per square mile, and rural if 100 miles or more away from top 50 (based on county-level data on square miles of land area from the U.S. Census Bureau). All other variables are defined as in Tables 2 and 4. The number of observations corresponds to the number of IPOs in each regression, which naturally varies with across data restrictions. T-statistics are reported in parenthesis (calculated based on Huber/White robust standard errors) and significance is indicated at the 10% (*), 5% (**), and 1% (***) level.

	(1) Excl. NY	(2) Fin. firms	(3) Industry FE	(4) Variance	(5) IPO density	(6) Time zone
RuralExpert density	-8.06*** (-3.13)	-7.37*** (-3.23)	-7.23*** (-3.13)	-5.30** (-1.99)	-4.41* (-1.83)	-6.07** (-2.34)
Ln(Age at IPO)	-10.40*** (-7.07)	-10.44*** (-7.69)	-9.37*** (-7.17)	-10.31*** (-7.11)	-9.46*** (-6.89)	-9.51*** (-6.96)
Ln(Assets)	6.08*** (3.96)	6.35*** (4.24)	5.77*** (3.90)	5.40*** (3.99)	5.06*** (3.88)	5.52*** (4.22)
Underwriter reputation	2.01*** (2.65)	1.61** (2.28)	1.64** (2.31)	2.34*** (3.46)	1.74*** (2.59)	1.76*** (2.61)
Underwriting fee	-12.76*** (-2.61)	-12.54*** (-2.84)	-9.37** (-2.12)	-14.89*** (-3.07)	-12.35*** (-2.76)	-13.88*** (-3.12)
No. of bookrunners	-19.34*** (-3.81)	-15.14*** (-4.58)	-16.15*** (-4.51)	-14.41*** (-4.31)	-15.23*** (-4.69)	-14.32*** (-4.43)
NASDAQ	10.99*** (3.38)	10.84*** (3.63)	11.01*** (3.68)	11.06*** (3.51)	10.72*** (3.54)	10.02*** (3.38)
HighTech	18.28*** (5.73)	17.67*** (5.84)		17.15*** (5.49)	17.51*** (5.68)	16.70*** (5.51)
Analyst coverage	0.38 (1.06)	0.36 (1.06)	0.57* (1.65)	0.42 (1.25)	0.51 (1.45)	0.33 (0.98)
HotCold	7.83 (0.16)	-6.80 (-0.15)	-12.63 (-0.31)	13.09 (0.28)	6.63 (0.15)	8.90 (0.20)
S&P500 return	-10.39 (-0.96)	-5.37 (-0.54)	-10.11 (-0.99)	-6.69 (-0.64)	-6.53 (-0.66)	-5.77 (-0.58)
Financial		-11.34*** (-2.72)				
Local variance of underpr.				0.003*** (3.41)		
Ln(Local IPOs/Total IPOs)					1.81** (2.55)	
Constant	25.12* (1.84)	23.85** (2.00)	24.33 (1.42)	17.88 (1.43)	35.85*** (2.86)	24.04* (1.86)
Observations	1,044	1,197	1,197	1,126	1,177	1,197
R-squared	0.16	0.16	0.19	0.17	0.16	0.17

Table 5, continued (changing proximity definitions).

	(7)	(8)	(9)	(10)	(11)
	In-or-out defn.	Narrow defn.	Broad defn.	Popul./sq.mi.	Experts/sq.mi.
Rural	-9.38** (-2.07)	-8.43*** (-3.23)	-5.37*** (-2.68)	-5.23** (-2.06)	-7.32*** (-3.30)
Ln(Age at IPO)	-9.16*** (-7.61)	-10.50*** (-6.82)	-8.36*** (-7.72)	-11.19*** (-7.71)	-9.70*** (-7.64)
Ln(Assets)	3.57*** (3.11)	5.43*** (3.58)	3.07*** (3.03)	5.60*** (3.91)	4.65*** (3.73)
Underwriter reputation	2.20*** (3.53)	2.26*** (2.93)	2.17*** (3.84)	2.34*** (3.21)	2.39*** (3.68)
Underwriting fee	-6.98* (-1.82)	-14.54*** (-2.76)	-9.28*** (-2.65)	-8.23* (-1.90)	-7.53* (-1.88)
No. of bookrunners	-13.34*** (-4.27)	-15.85*** (-4.44)	-8.90*** (-4.09)	-15.38*** (-4.70)	-11.59*** (-3.96)
NASDAQ	8.05*** (2.93)	10.22*** (2.97)	8.38*** (3.62)	9.27*** (2.82)	8.04*** (2.75)
HighTech	19.35*** (6.56)	18.49*** (5.47)	17.95*** (6.75)	16.64*** (5.56)	17.74*** (6.09)
Analyst coverage	0.80** (2.37)	0.52 (1.33)	0.58** (2.00)	0.49 (1.41)	0.46 (1.40)
HotCold	5.07 (0.12)	24.31 (0.50)	-4.95 (-0.13)	-15.46 (-0.33)	-5.30 (-0.12)
S&P500 return	-3.18 (-0.34)	-6.84 (-0.61)	-0.39 (-0.05)	-7.05 (-0.69)	-8.38 (-0.88)
Constant	20.22* (1.81)	23.14 (1.64)	18.72* (1.92)	20.48* (1.65)	13.75 (1.16)
Observations	1,328	1,006	1,630	1,191	1,319
R-squared	0.14	0.16	0.13	0.15	0.14

Table 6. Returns beyond the first trading day

This table reports the relationship between firm location and stock returns that are realized after the first day of trading. Specifically, the table separately reports cumulative returns over i) the 2-5 days succeeding the first day of trading (i.e. first week returns, excluding the first day of trading), ii) the 6-30 days after the first trading day (weeks 2-4), iii) the 31-90 days after the first trading day (months 2-3) and iv) the 91-180 days after the first day of trading (months 4-6). The underlying proximity definition is based on expert density, where urban firms are those less than 100 miles away from the top 10 counties in terms of expert density (NAICS sector 523 employment / population), and rural firms are 100 miles or more away from the top 50. Panel A reports the cumulative average return for equally weighted firm portfolios and for age-adjusted firm portfolios, where in the latter case the average is weighted with the number of years between the founding date of the firm and the IPO date (cf. Loughran and Ritter, 2004). Panel B reports a multivariate regression analysis where the dependent variables are the cumulative returns across different time periods. All explanatory variables are as defined in Table 4. The number of observations corresponds to the number of IPOs in sample. T-statistics are reported in parenthesis (calculated based on Huber/White robust standard errors) and significance is indicated at the 10% (*), 5% (**) and 1% (***) level.

Panel A: Average cumulative returns

	Equally-weighted			Age-adjusted		
	Cumul. return	t-stat.	Obs.	Cumul. return	t-stat.	Obs.
<i>Days 2-5</i>						
Rural	-0.45%	-2.16**	884	0.15%	0.43	608
Urban	-0.40%	-2.27**	1673	-0.00%	-0.00	1050
Difference	-0.05%	-0.19		0.15%	0.34	
<i>Days 6-30</i>						
Rural	1.80%	4.06***	869	1.70%	2.53**	604
Urban	2.59%	7.06***	1641	2.65%	4.86***	1034
Difference	-0.79%	-1.37		-0.95%	-1.10	
<i>Days 31-90</i>						
Rural	1.46%	1.87*	868	-0.71%	-0.62	601
Urban	1.19%	1.95*	1635	3.90%	3.77***	1026
Difference	0.27%	0.27		-4.61%	-2.99***	
<i>Days 91-180</i>						
Rural	0.23%	0.25	868	0.43%	0.28	599
Urban	-1.58%	-2.26**	1642	-0.60%	-0.50	1035
Difference	1.81%	1.57		1.03%	0.53	

Panel B: Multivariate regression analysis

	(1)	(2)	(3)	(4)
	Days 2-5	Days 6-30	Days 31-90	Days 91-180
RuralExpert density	-0.75 (-1.63)	-1.42 (-1.45)	-0.33 (-0.19)	2.25 (1.20)
Ln(Age at IPO)	0.37 (1.43)	-0.42 (-0.86)	0.99 (1.18)	0.39 (0.42)
Ln(Assets)	0.49** (2.30)	0.88** (1.97)	-0.19 (-0.24)	0.67 (0.76)
Underwriter reputation	-0.04 (-0.26)	0.41 (1.22)	-0.13 (-0.23)	0.69 (1.01)
Underwriting fee	0.81 (0.84)	3.20 (1.61)	7.53* (1.96)	8.38* (1.86)
No. of bookrunners	0.87 (1.14)	-1.71 (-1.59)	6.61*** (2.97)	3.97* (1.85)
NASDAQ	0.48 (0.84)	2.61** (2.16)	4.45** (2.06)	3.09 (1.47)
HighTech	0.08 (0.14)	3.65*** (3.16)	-0.10 (-0.05)	0.27 (0.13)
Analyst coverage	-0.02 (-0.32)	0.12 (1.14)	0.56*** (2.65)	1.06*** (4.75)
HotCold	9.51 (0.89)	17.24 (0.83)	122.38*** (3.14)	64.36 (1.54)
S&P500 return	2.96 (1.51)	2.73 (0.73)	22.78*** (3.44)	42.17*** (5.77)
Constant	-7.18*** (-2.71)	-11.36** (-2.07)	-32.70*** (-3.17)	-42.43*** (-3.74)
Observations	1,152	1,139	1,138	1,144
R-squared	0.01	0.03	0.04	0.06

Appendix. Ranking and summary of counties

The three panels within this table rank U.S. counties according to a) their estimated population in the 2005 U.S. Census, b) their total employment in NAICS sector 523 (securities, commodity contracts and investments) and their c) ratio of sector 523 employment to population (expert density). Also reported are the corresponding city/area and state names and the number of IPOs (observations) originating in the corresponding county and for which data is available (437 counties are documented in the data to have headquartered an IPO, out of approximately 3,000 existing U.S. counties). Source: The Securities Data Company (SDC) New Issues database, the 2005 U.S. Census and the County Business Patterns (CBP) database of the U.S. Census Bureau.

Panel A: Population

	County	City/Area	State	Estimated population	Estim. expert employment	Expert density	Obs.
1	Los Angeles	Los Angeles	California	9,900,000	26,433	0.27%	132
2	Cook County	Chicago	Illinois	5,300,000	45,614	0.86%	165
3	Harris County	Houston	Texas	3,700,000	11,885	0.32%	116
4	Maricopa County	Phoenix	Arizona	3,600,000	12,233	0.34%	44
5	Orange County	Santa Ana	California	3,000,000	17,500	0.59%	78
6	San Diego	San Diego	California	2,900,000	7,578	0.26%	91
7	Kings County	Brooklyn	New York	2,500,000	3,202	0.13%	2
8	Dallas County	Dallas	Texas	2,300,000	10,942	0.47%	84
9	Queens County	Queens	New York	2,200,000	788	0.04%	5
10	San Bernardino	San Bernardino	California	2,000,000	750	0.04%	2
11	Wayne County	Detroit	Michigan	2,000,000	1,508	0.08%	12
12	Riverside County	Riverside	California	1,900,000	1,750	0.09%	1
13	Broward County	Fort Lauderdale	Florida	1,800,000	3,750	0.21%	32
14	King County	Seattle	Washington	1,800,000	6,796	0.38%	57
15	Santa Clara	San Jose	California	1,700,000	4,049	0.24%	240
⋮							
46	Shelby County	Memphis	Tennessee	909,035	3,198	0.35%	14
47	Honolulu County	Honolulu	Hawaii	905,266	1,750	0.19%	4
48	Fairfield County	Bridgeport	Connecticut	902,775	15,764	1.75%	49
49	Bergen County	Hackensack	New Jersey	902,561	3,750	0.42%	26
50	Travis County	Austin	Texas	888,185	2,941	0.33%	29
51	Fresno County	Fresno	California	877,584	750	0.09%	1
52	Hartford County	Hartford	Connecticut	877,393	3,750	0.43%	15
53	Marion County	Indianapolis	Indiana	863,133	3,750	0.43%	11
54	New Haven	New Haven	Connecticut	846,766	994	0.12%	13
55	Prince George's	Seabrook	Maryland	846,123	375	0.04%	5
⋮							
433	Essex County	Tappahannock	Virginia	10,492	10	0.10%	1
434	Franklin County	Mt Vernon	Texas	10,200	10	0.10%	1
435	Nantucket	Nantucket	Massachusetts	10,168	10	0.10%	1
436	Cheyenne County	Sidney	Nebraska	9,993	10	0.10%	1
437	Howard County	Cresco	Iowa	9,700	10	0.10%	1
		Mean:	All	431,901	1861	0.26%	9
			No. 1-10 (Urban)	3,740,000	13,693	0.33%	72
			No. 11-50	1,234,357	8,262	0.63%	37
			No. 51-437 (Rural)	263,479	893	0.23%	4

Panel B: Expert employment

	County	City/Area	State	Estimated population	Estim. expert employment	Expert density	Obs.
1	New York	New York	New York	1,600,000	158,280	9.93%	248
2	Suffolk County	Boston	Massachusetts	654,428	46,547	7.11%	79
3	Cook County	Chicago	Illinois	5,300,000	45,614	0.86%	165
4	Los Angeles	Los Angeles	California	9,900,000	26,433	0.27%	132
5	San Francisco	San Francisco	California	739,426	19,662	2.66%	43
6	Orange County	Santa Ana	California	3,000,000	17,500	0.59%	78
7	Hudson County	Jersey City	New Jersey	603,521	17,480	2.90%	13
8	Fairfield County	Bridgeport	Connecticut	902,775	15,764	1.75%	49
9	Hennepin County	Minneapolis	Minnesota	1,100,000	15,035	1.34%	77
10	Chester County	West Chester	Pennsylvania	474,027	13,921	2.94%	28
11	Maricopa County	Phoenix	Arizona	3,600,000	12,233	0.34%	44
12	Harris County	Houston	Texas	3,700,000	11,885	0.32%	116
13	Dallas County	Dallas	Texas	2,300,000	10,942	0.47%	84
14	Philadelphia	Philadelphia	Pennsylvania	1,500,000	10,438	0.71%	17
15	San Diego	San Diego	California	2,900,000	7,578	0.26%	91
...							
46	Baltimore County	Baltimore	Maryland	786,113	3,750	0.48%	9
47	Multnomah	Portland	Oregon	672,906	3,750	0.56%	8
48	Providence	Providence	Rhode Island	639,653	3,750	0.59%	5
49	Arapahoe County	Aurora	Colorado	529,090	3,750	0.71%	18
50	New Castle	Wilmington	Delaware	523,008	3,750	0.72%	61
51	Polk County	Des Moines	Iowa	401,006	3,750	0.94%	7
52	Sacramento	Sacramento	California	1,400,000	3,542	0.26%	8
53	Bexar County	San Antonio	Texas	1,500,000	3,514	0.23%	13
54	Mercer County	Trenton	New Jersey	366,256	3,401	0.93%	23
55	DuPage County	Wheaton	Illinois	929,113	3,350	0.36%	26
...							
433	Nantucket	Nantucket	Massachusetts	10,168	10	0.10%	1
434	Cheyenne County	Sidney	Nebraska	9,993	10	0.10%	1
435	Howard County	Cresco	Iowa	9,700	10	0.10%	1
436	Franklin County	Mt Vernon	Vermont	47,914	9	0.02%	1
437	Tishomingo	Iuka	Mississippi	19,202	6	0.03%	1
		Mean:	All	431,901	1,861	0.26%	9
			No. 1-10 (Urban)	2,427,418	37,624	3.03%	91
			No. 11-50	1,160,822	5,596	0.59%	38
			No. 51-437 (Rural)	304,997	551	0.16%	4

Panel C: Expert density

	County	City/Area	State	Estimated population	Estim. expert employment	Expert density	Obs.
1	New York	New York	New York	1,600,000	158,280	9.93%	248
2	Suffolk County	Boston	Massachusetts	654,428	46,547	7.11%	79
3	Chester County	West Chester	Pennsylvania	474,027	13,921	2.94%	28
4	Hudson County	Jersey City	New Jersey	603,521	17,480	2.90%	13
5	San Francisco	San Francisco	California	739,426	19,662	2.66%	43
6	Fairfield County	Bridgeport	Connecticut	902,775	15,764	1.75%	49
7	St. Louis city	St. Louis	Missouri	344,362	5,724	1.66%	3
8	Richmond city	Richmond	Virginia	193,777	3,101	1.60%	4
9	Hennepin County	Minneapolis	Minnesota	1,100,000	15,035	1.34%	77
10	Morris County	Morristown	New Jersey	490,593	6,412	1.31%	12
11	Sarpy County	Bellevue	Nebraska	139,371	1,750	1.26%	1
12	Jefferson County	Fairfield	Iowa	15,972	186	1.16%	1
13	Norfolk County	Norfolk	Massachusetts	653,595	6,759	1.03%	16
14	Denver County	Denver	Colorado	557,917	5,437	0.97%	46
15	Montgomery	Pottstown	Pennsylvania	775,883	7,500	0.97%	28
⋮							
46	Middlesex	Edison	New Jersey	789,516	3,750	0.47%	28
47	Dallas County	Dallas	Texas	2,300,000	10,942	0.47%	84
48	Waukesha	Waukesha	Wisconsin	378,971	1,750	0.46%	5
49	Marin County	Novato	California	246,960	1,123	0.45%	12
50	Davidson County	Nashville	Tennessee	575,261	2,606	0.45%	13
51	Washoe County	Reno	Nevada	389,872	1,750	0.45%	8
52	Marion County	Indianapolis	Indiana	863,133	3,750	0.43%	11
53	Hartford County	Hartford	Connecticut	877,393	3,750	0.43%	15
54	Bergen County	Hackensack	New Jersey	902,561	3,750	0.42%	26
55	Radford city	Radford	Virginia	14,575	60	0.41%	2
⋮							
433	Berkeley County	Goose Creek	South Carolina	151,673	19	0.01%	1
434	Yamhill County	McMinnville	Oregon	92,196	10	0.01%	1
435	Boone County	Florence	Kentucky	106,272	10	0.01%	1
436	Spotsylvania	Spotsylvania	Virginia	116,549	10	0.01%	1
437	Randolph County	Asheboro	North Carolina	138,367	10	0.01%	1
		Mean:	All	431,901	1,861	0.26%	9
			No. 1-10 (Urban)	710,291	30,193	3.32%	56
			No. 11-50	800,142	5,436	0.69%	24
			No. 51-437 (Rural)	386,647	759	0.14%	6

ICSSAM-965
Does Clean Energy Cause Economic Growth?

Jikhans, Jeong

Korean Electric Power Corporation (KEPCO) Economy & Management Research Institute
Jikhans@kaist.ac.kr

Abstracts

Nowadays, regarding the perspective on the climate change, clean energy attracts rising attention, which enables us to achieve sustainable economic growth. The aim of this study is to investigate the causal relationships between clean energy and the growth of GDP in China, Korea, and Japan. The annual GDP data from 1994 to 2007 of the World Bank is analyzed based on the Granger Causality tests. Results were as follows:

(i) In case of China, there is no casual relationship between clean energy and the GDP. China is the largest energy consumption country in the world and is a rapid growing developing country. The country has less access to high technology in comparison to developed countries hence it is hard to choose clean energy over other easy-to-use and cheaper energy sources;

(ii)

(iii) In case of Korea, there is a bidirectional relationship between clean energy and the GDP. Since 1997, nuclear energy has made up more than 30 percent for the local energy use. The Korea government strongly has encouraged the use of nuclear energy use because of its cheap price and the belief on its supporting the domestic economic growth;

(iv)

(v) In case of Japan, there is a unidirectional relationship from clean energy to growth of GDP. Japan is a developed country and has a high level of technology thus it can afford to use clean energy. Clean energy has an impact on the growth of GDP. Consequently, Japan should increase its clean energy usage to further facilitate its GDP growth.

Above all, developed countries that have a high level of technology should increase their use of clean energy for its GDP growth.

Key word: Clean Energy, Economic Growth, Sustainable growth

1. Introduction

Nowadays, regarding the global perception of climate change, clean energy initiatives have attracted rising attention, which will enable us to achieve sustainable economic growth. The aim of this study is to investigate the causal relationships between clean energy and economic

growth in China, Korea, and Japan. In this sense, this paper draws on the literature regarding several topics, including clean energy and economic growth. So far, there have been many tries to correctly map the causal relationship between specific energy sources and economic growth, particularly for oil, renewable, and nuclear energy, but it is still ambiguous exactly what the relationship is between each of these energy sources and economic growth. The paper focuses on causality tests between clean energy and economic growth in China, Korea, and Japan. They are in the same region of Earth; hence, regional disparity effects will be reduced. However, they each have a unique level of industry and financial capacity, so it will be meaningful to compare them.

Table 1. Causality Literature review

Author	Period	Countries	Empirical Methods	Causal Relationships
Yoo and Jong (2005), [6]	1977-2002	Korea	Vector Error Correction model	In the short & long run NE > RY
Yoo and Jong (2009), [7]	1965-2005	Argentina, Brazil, Bulgaria, Canada, Finland, Germany, Hungary, India, Japan, Korea, The Netherlands, Pakistan, Slovakia, South Africa, Spain, Sweden, Switzerland, the U.K and the U.S	Vector error Correction model And Granger Causality Test	In the long run NE > RY: Korea NE < RY: France And Pakistan NE < > RY Switzerland NE x RY Argentina and Germany
Apergis and Payne (2010), [1]	1980-2005	Argentina, Belgium, Bulgaria, Canada, Finland, France, India, Japan, the Netherlands, Pakistan, South Korea, Spain, Sweden,	Panel Vector error correction and panel causality test	In the short run: NE < > RY In the long run: NE > RY

		Switzerland, the U.K and the US		
Wolde-Rufael(2010 , [8]	1969-20 06	India	Granger Causality Test	NE<>RY
Wolde-Rufael and Menyah (2010),[5]	1971– 2005	Canada, France, Japan, the Netherlands, Spain, Sweden, Switzerland, the U.K. and the U.S.	Granger causality test	In the long run: NE>RY: Japan, the Netherlands and Switzerland NE<RY: Canada and Sweden NE<>RY: France, and, theU.K.and the U.S.
Lee, Chien-Chiang, and Yi-Bin Chiu(2011),[2]	1965~20 08	Canada, France, Germany, Japan, the United Kingdom, and the United States	Granger Causality	RY>NE : Japan NE<>RY : Canada, Germany, and the U.K OP>NE : All except for theU.S OC > NE : Canada, Japan, U.K

* Sources : Lee and Chiu(2011), modified

* RY (Real Income or Economic Growth) NE (Nuclear Energy Consumption) OC (Oil Consumption) OP (Oil Price) RE(Renewable Energy Consumption) NRE(Non Renewable Energy Consumption)

2. Data

The annual GDP data from 1994 to 2007 for China, Korea, and Japan is analyzed with Granger Causality tests. The data was obtained from World Bank Indicators, which are derived from the International Energy Association. According to the description of World Bank Indicators, clean energy sources make non-carbohydrate energy that does not produce carbon dioxide when generated such as hydropower, nuclear, geothermal, solar power, and others. The variables in this paper include clean energy use (%), non clean energy use (%), and GDP per capita.

Hypothesis

We hypothesize that increasing the use of clean energy will encourage economic growth in Korea, Japan, and China.

Hypothesis 1: Clean energy use causes GDP Growth

Hypothesis 2: Non-clean energy use causes GDP Growth

3. Model Formulation

In accordance with statistical theory and data availability, we propose following Vector Autoregressive (VAR) Granger causality for Korea and Japan, and Vector Error Correction Model (VECM) Granger causality for China. The basic structure and main model is based on the following structure:

$$\begin{aligned} \text{GDP}_t &= \alpha_1 + \sigma_1 t + \alpha_{11} \text{GDP}_{t-1} + \dots + \alpha_{1p} \text{GDP}_{t-p} + \beta_{11} \text{Clean}_t + \dots + \beta_{1p} \text{Clean}_{t-p} + \varepsilon_{1t} \\ \text{Clean}_t &= \alpha_2 + \sigma_2 t + \alpha_{21} \text{GDP}_{t-1} + \dots + \alpha_{2p} \text{GDP}_{t-p} + \beta_{21} \text{Clean}_t + \dots + \beta_{2p} \text{Clean}_{t-p} + \varepsilon_{2t} \\ \text{GDP}_t &= \alpha_1 + \sigma_1 t + \alpha_{11} \text{GDP}_{t-1} + \dots + \alpha_{1p} \text{GDP}_{t-p} + \beta_{11} \text{noclean}_t + \dots + \beta_{1p} \text{noclean}_{t-p} + \varepsilon_{1t} \\ \text{noclean}_t &= \alpha_2 + \sigma_2 t + \alpha_{21} \text{GDP}_{t-1} + \dots + \alpha_{2p} \text{GDP}_{t-p} + \beta_{21} \text{noclean}_t + \dots + \beta_{2p} \text{noclean}_{t-p} \\ &\quad + \varepsilon_{2t} \end{aligned}$$

4. Empirical Results

In this section, we provide the empirical results based on the VAR and VECM Granger test.

1. Korea Case

1.1 Lag Selection

Information criterion procedures help lag selection. Three commonly used information criterion procedures are Schwarz's Bayesian information criterion (SBIC), the Akaike's information criterion (AIC), and the Hannan and Quinn information criterion (HQIC). Based on SBIC and AIC, orders of 1, 2, 3 and 4 were selected for Korea case

1.2 Unit Root Test

The Dickey-Fuller test is commonly used unit root tests. The null hypothesis is that the series has a unit root (Oscar, [3]). All our variables in Korea case have no unit root.

1.3 VAR Granger Test

In Korea cases, we can reject the null hypothesis, as each variable does Granger-cause the other. As a result, we can state that clean energy implementation and GDP have a bidirectional relationship in Korea.

Table 2. Granger Causality Case in Korea

Equation	Excluded	Chi2	df	Prob > Chi2
Clean	GDP	16.567	4	0.002
Clean	ALL	16.567	4	0.002
GDP	Clean	121.31	4	0.000
GDP	ALL	121.31	4	0.000

So far, we have followed up the steps for the causality test in Korea. This paper follows similar steps for China and Japan, and finds that China has a unit root. Therefore, we perform a differentiation so that it does not. Finally, Japan has a unit root even after differentiation, so we do a cointegration test. Therefore, this paper uses the above methods for, and to discover cointegration. This paper uses VECM Granger Model and Code is from Stata Website (<http://www.stata.com/statalist/archive/2010-01/msg00822.html>, [3])

	Korea	China	Japan
RY<>Clean	RY <> Clean	No	Clean > RY
RY<>Non Clean	RY<>No-Clean	No	RY > No-Clean
Unit Root	No	Yes	Yes
Differentiation	NO	Yes	Yes
Model	VAR Granger	VAR Granger	VECM Granger

5. Conclusion

In this paper, we study Granger causality to figure out the Granger causality between clean energy and GDP. For China, there is no casual relationship between clean energy and the GDP. China is the largest energy-consuming country in the world, and is a rapidly growing developing country. The country has less access to high technology compared to developed countries; hence, it is difficult to choose clean energy over the other easy-to-use and cheaper energy sources.

For Korea, there is a bidirectional relationship between clean energy and the GDP. Since 1997, nuclear energy has made up more than 30 percent of the local energy use. The Korean

government has strongly encouraged the use of nuclear energy use because it is cheap and believed to support domestic economic growth.

For Japan, there is a unidirectional relationship from clean energy to the growth of GDP. Japan is a developed country and has a high level of technology, thus it can afford to use clean energy, and clean energy has an impact on GDP growth. Consequently, Japan should increase its clean energy usage to further facilitate GDP growth. In addition, GDP growth has caused an increase in non-clean energy usage. After increasing GDP, it brings more investment and operating activity so that their energy consumption would grow up.

Based on country-specific energy policies and economic level, technology has the potential to effect causality tests, however, based on the results, highly developed countries should encourage clean energy to stimulate GDP growth.

6. Limit and Future Study

As one of the key factors for sustainable growth is financing, future study should consider investment diffusion and its effects on clean energy use. In addition, we only studied three countries; future studies should investigate a broader range of countries over different periods.

References

- [1] Apergis, Nicholas, and James E. Payne. "A Panel Study Of Nuclear Energy Consumption And Economic Growth." *Energy Economics.*, 2010
- [2] Lee, Chien-Chiang, and Yi-Bin Chiu. "Nuclear Energy Consumption, Oil Prices, And Economic Growth: Evidence from Highly Industrialized Countries." *Energy Economics.*, 2011
- [3] Oscar Torres-Reyna, "Time Series 101", Princeton University., <<http://dss.princeton.edu/training/>>
- [4] VECM Granger Code : <http://www.stata.com/statalist/archive/2010-01/msg00822.html>
- [5] Wolde-Rufael, Yemane, and Kojo Menyah. "Nuclear Energy Consumption And Economic Growth In Nine Developed Countries." *Energy Economics.*, 2010
- [6] Yoo, S.-H., Jung, K.-O., Nuclear energy consumption and economic growth in Korea. *Progress in Nuclear Energy.*, 2005
- [7] Yoo, S.-H., Ku, S.-J., Causal relationship between nuclear energy consumption and economic growth: a multi-country analysis. *Energy Policy* 37 (5), 1905–1913, 2009.
- [8] Wolde-Rufael. "Bounds Test Approach To Cointegration And Causality Between Nuclear Energy Consumption And Economic Growth In India." *Energy Policy.*, 2010

Education II

AV Room

13:10-14:40

Thursday, May 8

Session Chair: *Prof. Pudtan Phanthunane*

ICSSAM-746

A Study on Audiences Experience Affect Experiential Value from the Curating Points of View: Taking the Exhibition of Teaching Achievements as an Example

Lin Chia-Hua *Tatung University*

Hsiao-Ching Huang *Tatung University*

Liang-Yuan Che *Tatung University*

ICSSAM-754

Providing Special Education Programs to Disabled and Underprivileged Children in Highland Areas of Thailand

Pudtan Phanthunane *Naresuan University*

Suphanaree Pho-Ong *International Health Policy Program*

Supasit Pannarunotha *Naresuan University*

Jongjit Chaiyawong *Special Education Center of Mae Hong Son*

ICSSAM-872

The Use of Authentic Materials for ESL Learners in Language Classes

Wing Sze Biddy Yiu *Hong Kong Polytechnic University*

ICSSAM-880

How Working Experience Affects English Learning Motivation and Career Planning with Medical Junior College Students in Taiwan?

Zih-Ling Lin *Shu Zen Junior College of Medicine and Management*

Yen-ju Hou *Shu Zen Junior College of Medicine and Management*

ICSSAM-815

The Problems Manageresses Face With IN School Management

Seda YILMAZ *Anadolu University*

ICSSAM-887

Development of Social Capital in National Character Education

Siti Irene Astuti Dwiningrum *Yogyakarta State University*

ISEPSS-1923

**To Establish Networked FFFS-eCT for the Families of Infants and Young Children in
Taiwan**

Ling-Li Chu

National Kaohsiung Normal University

Chwen-Chyong Tsau

Fooying University

ICSSAM-746

A Study on Audiences Experience Affect Experiential Value from the Curating Points of View: Taking the Exhibition of Teaching Achievements as an Example

Chia-Hua Lin*

The Graduate Institution of Design Science, Tatung University, Taipei 106, Taiwan
chiahualin@ttu.edu.tw

Hsiao-Ching Huang

The Graduate Institution of Design Science, Tatung University, Taipei 106, Taiwan

Liang-Yuan Che

Department of Industrial Design, Tatung University, Taipei 106, Taiwan

Abstract

With the booming development of the integrating theory and practice through instruction in higher education in Taiwan, the teaching achievements has been utilized into life. Recently, there has been a fad of curating, creating new waves. Curators become an important role in negotiating among various communities, trying to balance between the mutual benefits and the ideas of creation. This research considers a student as the role of a curator who has the view to finding a way out from the rigid system of the teaching achievements exhibition. Curators attempt to depict the themes from different aspects of works; on the other hand, they want to attract the public's attention by arranging a meaningful exhibition. This research intends to analysis the curating effectiveness of the original exhibition - "Isomer-Teaching Achievements" that by the combination of Industry and University, the interdisciplinary theme concept creates educational learning experience. The main purpose is to reflect how the curating strategy used in the exhibition, caused audiences to have different experiences, increased experiential values, satisfaction and recommendation. This study first collected and summarized the experience dimensions of sense, feel, think, act and relate, then investigated the variables relationship and how the factors influenced the experiential quality.

According to the event planning, curators' interview and empirical analysis, the research generalizes the core concept and important experience value as follows:

- Audiences for the evaluation of the various experiences are towards positive and affirmative. In curatorial experience dimensions, the feel、sense and think have a significant positive influence to the experiential satisfaction.

- As for curating strategy, the substantial curating stress on situational interaction and interdisciplinary theme display, the results showed that, exhibition ambience, exhibits interaction and audiences inspiration are towards positive and affirmative.
- The enjoyment and amazement of sense experience has a significant impact to the inspiration and immersion of think experience, the visual identity has a significant impact to the exhibition attraction and preference, the enjoyment of sense experience and innovation of think experience have the great impact to the education spirits of university and overall satisfaction, the ambience of act experience have the great impact to the curious of think experience.

The exhibition is an informal educational learning experience, and the crucial value is to arouse the audience's interest in science. This research generalizes the core concept and important value, through the investigation of touring exhibition, hoping the result of the study can be used as reference for the related Exhibition in the future.

Keywords: experiential value 、 curating 、 satisfaction 、 teaching practice

ICSSAM-754
**Providing Special Education Programs to Disabled and Underprivileged
Children in Highland Areas of Thailand**

Pudtan Phanthunane^a

^a Faculty of Business, Economics and Communications, Naresuan University, Phitsanulok,
Thailand
pud_tan@hotmail.com

Suphanaree Pho-Ong^b

^b International Health Policy Program, Nonthaburi, Thailand.
millamint@gmail.com

Supasit Pannarunotha^c

^c Faculty of Medicine, Naresuan University, Phitsanulok, Thailand
supasitp@nu.ac.th

Jongjit Chaiyawong^d

^d Bureau of Special Education Administration, Ministry of Education, Mae Hong Son,
Thailand
toy082504@hotmail.com

Abstract

The special education programs in Thailand are almost supported by Thai government. Mae Hong Son is a remote highland area and the poorest province with forested area of 90% and poverty rate of 60%. Mae Hong Son has two parts far away from each other, Maesariang and Mae Hong Son, but only one special education center is located. This study aims to analyze cost of providing special education to children in Mae Hong Son and explore the difficulty in accessibility. The information will help the Office of the Basic Education Commission (OBEC) considering setting another center to support disabled and underprivileged children not only in Mae Hong Son but also in other parts of Thailand having similar characteristics.

The methods used in the current study included (1) Activity-Based Costing (ABC) applied to clarify unit cost of providing education, and (2) qualitative techniques (i.e. interview using questionnaire, focus groups and observation) adopted to explore barriers to access the center. The identified activities included screening process, education plan development, special education programs and treatment, and visiting children' homes. Secondary data gathered

from the special education center of Mae Hong Son was used for conducting the cost analysis; however, when documentary evidence unavailable qualitative technique was performed.

The unit cost of providing special education to a disabled child not blind was almost 24,000 baht per semester (4 months). For, blind child it was more expensive due to the orientation and mobility's cost of 7,000 baht. The majority of the unit cost was labor cost, accounted for 65%.

The cost of development of the education plans (Individualized Education Plan (IEP); Individual Implementation plan (IIP) and Individualized Family Service Plan (IFSP)) were only 200 baht per person. The costs of occupational therapy, competency development and physical therapy were 4,000 3,000 and 1,000 baht, respectively. There were three main barriers to access the center: transportation, health status of children and opportunity loss of growing rice. Some families could not reach the center since roads were unusable; children coming to the center with parents using motorcycles were likely to get sick, especially during rainy season and it took them at least a week to recover from the illness. During the season for growing rice, parents had to work for getting rice to consume throughout the year.

Mae Hong Son has 1,000 disabled children and only one special education center does not meet requirements. Although our results show relatively high cost of education, having more special education centers is still essential. The OBEC might consider providing only some programs at the beginning; occupational therapy might be excluded, for example. Due to the barriers to access, the center would set the individual training programs to help parents increasing their children's capacity at homes. Providing such training program will be beneficial in terms of cost reduction as well. Cost is only one criterion to help making decision. The information on effectiveness of the education programs and the number of teachers and healthcare providers available in the area are the other important factors.

1. Introduction

In Thailand, there are 1.5 million disabled people across the country. According to the disability survey conducted by the National Statistic Office in 2012 (1), it was found that 22.4 % of them had no education; almost 60% educated less than primary care. Before 1975, disabled children in Thailand tended not to be provided education. However, after that the government proposed the policy to support educational program for children with disabilities by organizing a department taking responsibility for this target (2). The government has granted all disabled children a free and suitable public education. Currently there are 76 special education centers throughout the country. These centers are all public education managed under the Bureau of Special Education, the Ministry of Education, and Thailand. It can be seen that although Thailand has public schools for children with special needs, a lot of

children cannot access those schools to be provided appropriate education able to assist them improving behavioral skills and other brain, cognitive and physical development.

Mae Hong Son is the most remote highland area with 90% of mountains surrounding and the poorest province. Regarding the information from the Office of the National Economic and Social Development Board (NESDB), the poverty line of Mae Hong Son was 2,084 below the average value by approximately 300 baht; the poverty head count ratio of Mae Hong Son was 60% which is much lower than the national average ratio of 15% in 2011 (3). The mountains in Mae Hong Son are also an obstacle for student and people to travel and to access both public and private facilities. Mae Hong Son has 7 districts: Mae Hong Son, Khun Yuam, Pai, Mae Sariang, Mae La Noi, Sop Moei and Pangmapha. Geographically Mae Hong Son can be divided into 2 parts far away from each other: Mae Sariang and Mae Hong Son. Mae Sariang part includes 3 districts, i.e. Mae Sariang, Sop Moei and Mae La Noi, while Mae Hong Son part covers the others.

There are 5,417 disabled people in Mae Hong Son and approximately 1,000 are children aged below 18 years (4, 5). However, only one Special Education Center is located in Mae Hong Son district. The director of Mae Hong Son Special Education Center have to administrate by hiring local people completing secondary schools to be trained to be local teachers able to support children with disabilities in other districts. Those local teachers come to the center every month to report children progression. There is no evidence to clarify the effectiveness of local teacher program, but there is no doubt that only one special education center does not meet the requirement of all disabled children there. Another problem was found in Mae Hong Son is barriers to access the center due to either socioeconomic problems of disabled children's families or specific geographical area of Mae Hong Son. As a result, the special education center has to provide free transportation to most of the students and that service is relatively expensive. There is no study in Thailand indicating cost of providing special education in disadvantaged areas. This study aims to analyze cost of providing special education to children in Mae Hong Son and explore the difficulty in accessibility. The information will help the Office of the Basic Education Commission (OBEC) considering setting another center to support disabled and underprivileged children not only in Mae Hong Son but also in other parts of Thailand having similar problems.

2. Methods

The methods used in the current study included (1) Activity-Based Costing (ABC) and (2) qualitative techniques (i.e. interview using questionnaire, focus groups and observation).

2.1 Activity Based Costing

The ABC was conducted basing on 4 steps (6, 7):

- 1) Identifying the major activities and their output
- 2) Assigning inputs for each activities
- 3) Determining the cost driver for each activity
- 4) Assigning the costs of activities to outputs

For the first step, we reviewed all documents relevant to educational provision for children with disabilities including the standard guidelines, the curriculum planning for children with special needs, IEP programs and children diary allowing us to know the children 's activities in the Mae Hong Son special education center. The information from the interview with the director of the center and special educators also used to clarify the available activities have been done by the center and direct involved with the students. There are 15 main activities applied to this study: registration, screening, individualized educational planning, physical therapy, occupational therapy, psychological services, speech therapy, social support, activities helping with capacity development, evaluation, consultation, other educational supports, referral, home visiting and other activities. The outputs of each activity are normally the number of students (Table 1).

In terms of resources of each activity, we classified them into 6 categories: materials, labor, durable articles, building and location, public utility and resources used for transportation. The cost drivers include time spending on each activity and the size of the areas only for allocating cost of building and space used. The unit cost of each activity was then calculated by dividing total cost of each activity by its output.

This ABC study is a retrospective study using data from the Mae Hong Son special education center in 2012. However, when documentary evidence unavailable qualitative technique was performed. We interviewed staff of the special education center to get the labor-hour spent for each activity. We measured rooms in square meters and use the concept of depreciation to compute their costs.

2.2 Qualitative analysis

The qualitative techniques adopted for this study are interview, focus groups and observation. We developed the short questionnaire to be a guideline for interviewing parents of disabled children. The questions are about types of disability, impact of disability, obstacles to come to the special education center and needs of additional special supports from the government.

The 30 parents involved the project. In terms of focus group, a small group of educators including the director and vice director of the center and were asked about the situation of educational provision for disabled children in Mae Hong Son in particular the difficulty in accessibility of the special education. The observation technique was applied for finding out more information about children's homes to the center transport. The field trips were designed to visit some of the children's homes to see the obstacles along the ways to get there. The field trips have been done in three areas: Mae Hong Son and Mae Sariang and Sob Moei districts.

3. Results

The 15 activities, hours spent on each activity, the number of times done in a semester and activities' outputs (products) are interpreted in Table 1. Almost activities have the number of children as activities' output. Some activities were conducted only one time per semester such as searching and registration, screening, educational planning, evaluation and report, referral and home visiting.

Table 1 Activities and details

No	Activity	Time used (hours/person/time)	Frequency (times/person/semester)	Unit	Quantity of output
1	Searching & registration	80.00	1	Children	230
2	Screening	0.33	1	Children	234
	Basic functional capacity evaluation	0.33	1	Children	80
3	Education planning	3.00	3	Plans	237
	Individualized Education Plan (IEP)	1.00	1	Plans	237
	Individual Implementation Program (IIP)	1.00	1	Plans	237
	Individual Family Service Plan (IFSP)	1.00	1	Plans	237
4	Physical Therapy	1.00	32	Children	40
5	Occupational Therapy	1.00	80	Children	40
6	Psychological service	0.75	1	Children	40
7	Speech therapy	0.50	80	Children	40
8	Social supports	0.50	16	Families	230
9	Capacity development	5.50	560	Children	237
	9.1 Fine Motor Development	0.50	80	Children	138
	9.2 Gross Motor Development	0.50	80	Children	138
	9.3 Social/Emotional/Behavioral Development	0.50	80	Children	237
	9.4 Academic skill development	0.50	80	Children	184
	9.5 Language and communication skill development	0.50	80	Children	79
	9.6 Self-help skills	0.50	80	Children	237
	9.7 Special skill development	2.50	80	Children	237
	- Orientation and Mobility (O&M)	0.50	80	Children	7
	- Sign language	0.50	80	Children	20
	- Music therapy	0.50	80	Children	237
	- Art therapy	0.50	80	Children	237
	- Others	0.50	80	Children	237
10	Evaluation and reporting	2.00	1	Children	237
11	Consultation	0.50	1	Children	230
12	Inclusive education	3.00	2	Times	39
13	Referral	2.00	1	Times	5
14	Home visiting	8.00	1	Children	237
15	Other projects	0.83	80	Pieces	237

Source: All of the information gathered by the research team

The unit cost of providing special education to a disabled child not blind was approximately 24,000 baht per semester (Table 2). For, blind child it was more expensive due to the orientation and mobility's cost of 7,000 baht. The cost of providing education for child who are blind and need all activities provided by the center was therefore almost 30,000 baht per semester. Note that there are only 7 blind children in the center (Table 1). The majority of that cost was labor cost accounted for 65% of total cost, followed by durable goods cost (21%). The material, public utility and travel costs were responsible for about 3-4% each of total cost. The cheapest cost was building cost accounted for only 1%. When clarifying the unit cost by activities, it was found that the most expensive activity is O&M activity for blind children (7,000), followed by Occupation therapy (3,800), general capacity development (2,800), sign language (2,500), and speech therapy (1,200), respectively. The cost of education planning was only 200 baht per semester in general. To be more specific, the cost of IEP, IIP and IFSP were 60, 22 and 109 baht per semester, respectively. Interestingly, the cost of inclusive education is much cheaper than the full cost of providing special education, although its labor cost and material costs were quite high. The cost of inclusive education was about 1,500 baht per semester.

Table 2 Cost of providing special education for child by activities per semester (4 months)

No	Activity	Material	Labor	Durable goods	Building	Public utility	Travel	Total cost/child
1	Searching for registration	8,752	354,369	30,724	20	4,853	-	1,734
2	Screening	4,210	1,404	19,415	81	20	-	107
	Basic functional capacity evaluation	2,425	1,404	19,415	81	20	-	292
3	Education planning	20,494	22,148	2,096	-	182	-	190
	Individualized Education Plan (IEP)	194	13,289	441	41	61	-	59
	Individual Implementation Program (IIP)	194	4,430	441	41	61	-	22
	Individual Family Service Plan (IFSP)	20,107	4,430	1,214	41	61	-	109
4	Physical Therapy	-	37,940	13	81	1,941	-	999
5	Occupational Therapy	500	94,849	52,119	81	4,853	-	3,810
6	Psychological service	-	-	-	81	45	-	3
7	Speech therapy	-	47,425	-	81	2,426	-	1,248
8	Social supports	15,884	9,485	-	81	485	-	113
9	Capacity development	23,074	521,672	97,113	-	26,690	-	2,821
	9.1 Fine Motor Development	-	47,425	18	81	2,426	-	362
	9.2 Gross Motor Development	-	47,425	23,450	81	2,426	-	532
	9.3 Social/Emotional/Behavioral Development	-	47,425	15,241	81	2,426	-	275
	9.4 Academic skill development	21,716	47,425	11,228	81	2,426	-	450
	9.5 Language and communication skill development	-	47,425	47,148	81	2,426	-	1,229
	9.6 Self-help skills	-	47,425	7	81	2,426	-	211
	9.7 Special skill development	1,359	237,124	21	-	12,132	-	1,038
	- Orientation and Mobility (O&M)	-	47,425	2	81	2,426	-	7,133
	- Sign language	-	47,425	4	81	2,426	-	2,497
	- Music therapy	-	47,425	9	81	2,426	-	211
	- Art therapy	1,359	47,425	-	81	2,426	-	216
	- Others	-	47,425	6	81	2,426	-	211
10	Evaluation and reporting	11,101	2,371	116,385	20	121	-	549
11	Consultation				20			

No	Activity	Material	Labor	Durable goods	Building	Public utility	Travel	Total cost/child
		97	1,186	-		50	-	6
12	Inclusive education	3,662	14,235	37,900	20	364	3,120	1,521
13	Referral	587	2,522	288	81	121	-	720
14	Home visiting	-	35,437	1,126	81	485	20,000	241
15	Other projects	12,906	295,308	141,644	29,448	4,044	92,358	2,429
	Total	110,883	1,953,943	615,349	31,077	72,886	115,478	31,356

Source: The costs were computed by the research team

According to the results from qualitative research, we found three main barriers to access the center: transportation, health status of children and opportunity loss of growing rice. Due to the geographical area of Mae Hong Son in which 90% of area are covered by mountain (8). Mae Hong Son is identified to be the highland of Thailand with many mountain ranges dominating the province. A lot of roads in Mae Hong Son are poor-quality and some of them are unusable in particular during rainy season. In addition, since motorcycles are the main vehicles taking parents and disabled children to the special education center, during the rainy season, children are likely to get sick and for disabled children it take them a week to recover from the illness. Although the center gives a ride to children and families two days a week, it is not sufficient to properly improve children' capacities and behaviors. The center also has the problem with the budget used to provide this free transport due to not only expensive petrol but also high cost of car maintenance. Some payment comes from donations. Lastly, due to the facts that almost families of disabled children in Mae Hong Son are poor and have no permanent work; they are agriculturists mainly working for their daily lives, during the season for growing rice, parents therefore had to work for getting rice to consume throughout the year. They therefore have no time to take children to the center and be with them although free transport available. They are many reasons why the disabled children are unable to access the special education center and all of them will be major concerns when considering an establishment of a new one.

4. Discussion and conclusion

Mae Hong Son has 1,000 disabled children and only one special education center does not meet requirements. Although our results show relatively high unit cost of special educational provision, having more special education centers is still essential. Difficulties in accessing the center are inevitable and need to carefully contemplate.

To organize the other centers, the OBEC might consider providing only some programs. The data on types of disabilities will help indentifying what activities essential to children in the areas that the new center will take responsibility. For example if there are no blind children, O & M doesn't need to be provided. The unit cost of new centers would be higher than our cost estimate for a number of reasons: disabled children in the area are less than 237 people; the educators have no experience so they tend to spend more time on each activity. In contrast, the unit cost of the new center would be lower than our cost estimate if less inputs and different type of inputs are used. Rather than constructing the proper school, renting or sharing a few rooms from other public or non-government organizations would be possible, for example. ABC approach is useful to prevent cost distortion; reduce cost of non-value adding activities; and improve efficiency of organizations (9, 10).

The results from this study allow the OBEC to comprehend how expensive some activities are; and what resources should be lessened or augment productivity. Different centers needs different resources and have different outputs, leading to different amount of unit cost. Rather than informing the OBEC that the unit cost of providing special education is high with the cost of 30,000 baht per semester, we would suggest the OBEC to cut some unnecessary activities; increase productivity of educators (the most expensive cost component); and take travel cost into account when allocating the budget. We have provided an excel-based cost template; this will be useful to estimate future unit cost when inputs changed. Note that the ABC applications have the number of disadvantages: this method consume a large amount of financial and non-financial data and it needs re-interview and survey causing rising management cost and employee irritation (6). ABC also does not take unproductive time into account. Adding personal workforce activities such as drinking coffee and applying the concept of Full-Time Equivalent would affect more accurate cost analysis.

Due to the barriers to access, the center would set the individual training programs to help parents increasing their children's capacity at homes. Providing such training program will be beneficial in terms of cost reduction as well. Thailand has implemented the project "Change homes to school; change parents to be educators" for many years. The future studies will need to investigate not only unit cost of the project but also project's effectiveness.

According to our results, the cost of inclusive education (3,000 baht per year) is much cheaper than the cost of providing education at the special education centers. Providing special education in the existing schools distributed throughout the province would partly resolve the problem about inaccessibility. Again the future research is required to explore the answer of this hypothesis as well as its cost and effectiveness especially in terms of quality of education.

UNESCO has mentioned that "Although the concept of inclusive education has been promoted internationally for more than a decade, multiple barriers remain to the full participation of children with disabilities in education. Lack of information, combined with discriminatory attitudes towards persons with disabilities at all levels of society, contributes to the continued neglect of their right to education" (11).

Cost is only one criterion to help making decision. The information on effectiveness of the education programs, the number of teachers and healthcare providers available in the area and the topics in relation to demand side such as discriminatory attitude mentioned above are all crucial. More research needs to be done for these underprivileged children who have no voice for themselves.

Acknowledge

We would like to acknowledge the Thai Health Promotion Foundation and Quality Learning Foundation. We also would like to thank Kraiyos Patrawart, Anake Chiwong and Channarong Bootweingpan. This study was supported by the Thai Health Promotion Foundation, Thailand. This research was approved by the Naresuan Research Ethics Committee.

References

1. National Statistic Office. Disability survey. Bangkok: National Statistic Office; 2013 [cited 2014 Feb, 12]; Available from: <http://service.nso.go.th/nso/nsopublish/themes/files/disabledSum55.pdf>.
2. Bureau of Special Education. Background of Bureau of Special Education. Bkk: Bureau of Special Education; [cited 2014 Feb, 12]; Available from: <http://special.obec.go.th/About/History>.
3. Office of the National Economic and Social Development Board. Poverty and distribution. Bangkok: Office of the National Economic and Social Development Board; 2011 [cited 2014 Feb, 25]; Available from: <http://www.nesdb.go.th/Default.aspx?tabid=430>.
4. National Office for Empowerment of Persons with Disabilities. Statistics. Bangkok: National Office for Empowerment of Persons with Disabilities; 2014 [cited 2014 Mar, 13]; Available from: <http://nep.go.th/th/disability-statistic>.
5. Maehongson Special Education Center. Special Education Center. Maehongson: Maehongson Special Education Center; [cited 2013 Apr, 1]; Available from: <http://www.mhs.go.th/>.
6. Popesko B. Specifics of the Activity-Based Applications in Hospital Management. International Journal of Collaborative Research on Internal Medicine & Public Health. 2013;5(3).
7. Kuchta D, Zabek S. Activity-based costing for health care institutions. 8th International Conference on Enterprise Systems, Accounting and Logistics; Thassos Island, Greece 2011.
8. Mae Hong Son province. Basic information of Mae Hong Son province in Thailand. Mae Hong Son: Mae Hong Son province; 2014 [cited 2014 Feb, 12]; Available from: <http://www.maehongson.go.th/index.php/2012-08-17-15-06-54/mibrife2556>.
9. Kim Y-W, Ballard G, editors. Activity-Based Costing and its application to lean construction. The 9th annual conference of the Int'l Group for Lean 2001; National University of Singapore: Yong-Woo Kim.

10. Waters H, Abdallah H, Santillán D. Application of activity-based costing (ABC) for a Peruvian NGO healthcare provider. *The International Journal of Health Planning and Management*. 2001;16(1):3-18.
11. UNESCO Bangkok. *Towards Inclusive Education for Children with Disabilities: A Guideline*. Bangkok: UNESCO Bangkok 2009.

ICSSAM-872

The Use of Authentic Materials for ESL Learners in Language Classes

Yiu Wing Sze Bidy

The Hong Kong Polytechnic University – Hong Kong Community College

8 Hung Lok Road, Hung Hom, Kowloon

Hong Kong

ccbiddy@hkcc-polyu.edu.hk

Abstract

This paper investigates into the possibility of using authentic materials among ESL (English as a second language) learners. Many argue that authentic materials are not suitable for ESL learners as they might be too challenging for ESL learners to comprehend. In this study, a group of students with English as their second language has been selected and authentic materials are used in their class as part of their listening and grammar training. The materials used are carefully selected to suit the English proficiency of the class. Also, different activities are designed to enable the students to comprehend the materials used. Most of the students respond positively towards the activities though some encounter problems during the class. The problems could be attributed to the learners' rare exposure to the language and also the relatively large class size which results in the lack of attention given to individual students. The use of authentic materials could encourage learning provided that attention could be given to individual students who encounter problem during their learning.

Keyword: Education, ESL, authentic

1. Introduction

Whether to use authentic materials or not in classes has been a constant debate among teachers. Some argue that the materials provide scenarios similar to what the students will encounter in their everyday lives and the materials are good references for ESL (English as a second language) learners. Teachers who are not in favor argue that the materials are too difficult for ESL learners which might discourage them from participating in class.

This paper investigates into the possibility of using authentic materials for ESL learners in language classes. A group of tertiary students, with a class size of around 35, has been selected for this class observation. Listening and grammar skills are covered in the class.

2. The class

Before the class I give them a list of irregular verbs to familiarize them with the form even though I am sure they have all learnt the verbs before. They are asked to read the list of verbs before the class. To start the class, I show them a video which consists of a series of past tenses verbs/phrases. They are asked to listen and answer questions regarding the content as well as the attitude of the speakers. The video watching exercise will then lead to the grammar focus, which is an exercise on past tense. They are asked to complete a grammar exercise about past tense verbs. I will draw the name of a student and also a verb and the student chosen has to come out and perform an action in front of the class so that the class can form a sentence on the exercise using past tense verb selected.

3. Theory Practice Integration

The listening exercise which I have picked is conducted by native speakers. I would classify it as a “near authentic” listening material. The conversations involve native speakers, the pace and context could be compared to an authentic situation. However, it is considered as ‘near authentic’ because it bears several features of non-authentic speech such as the lack of background noise [1] (Underwood 1989). Also, the situations presented are designed for teaching, instead of being extracted from a real conversation.

There are two objectives for the listening task. Students have to listen for the context as well as the tone of the speakers. To begin the listening, which is actually a video watching task, students are asked to watch it for the first time with the sound off. By doing this, the students can determine the type of speech event being processed and determine the meaning of the conversation through the visual. They are asked to explain, in their own words, the scenario presented in the video. This short session proves to be helpful as students could come up with a series of major keywords which are important for understanding the video.

As the students involved come from the tertiary sector, they are expected to demonstrate English proficiency beyond secondary school level. Therefore, instead of merely asking them to understand the context of the conversation, they are asked to tell the attitude of the speakers as well. Watching the video again with the sound on, students are asked to determine the subtle meaning and attitude presented between the speakers in the video. They will need to determine the inferred meaning of the speakers.

The next step of the exercise is to understand the conversation word by word. They need to complete a fill-in-the-blanks exercise. It prepares the students for the grammar exercise which comes after this section as the grammar exercise helps them to review the different forms of past tense verbs.

The last task will be a grammar review on past tense. Students are given general rules of forming statements as well as questions in past tense and then they are asked to complete an exercise. The context of the exercise is based on the video they have just watched. It is important to provide a context for the exercise as that “the notion that grammar can be taught from a sentence-level, context free approach has been attacked from various quarters in recent years” (Nunan, 1996) [2]. With a specific context provided to the learners, they will find the exercise more meaningful.

The class is conducted using the task-based learning approach. Through the participation in class, students would be able to achieve the learning outcome laid out in the teaching plan. The activities in class aim at generating students’ own language and create an opportunity for language acquisition. Most students showed enthusiasm about the activity and are willing to participate in the tasks.

4. Strengths, Obstacles and Improvements

Welker’s paper [3] has highlighted many useful points for organizing ELT classes and it has provided me with insights in planning my class. Welker has stressed the importance of using “English when opening and closing a class” (Welker 1996). English is the only medium used in this class and students are asked to use English only even when they are interacting with each other.

Even though the class goes smoothly, there is still room for improvement. Although I have picked a video topic which I assume most students have been exposed to, there is a small group of students who could not follow the video tape content and have not given any response throughout the exercise. It may be attributed to the unsatisfactory standards in English among students because of their lack of exposure or lack of quality input in English (A. Mei Yi Lin 1997) [4]. They are used to the form of English used on the Internet or social networking platforms, which is characterized by the broken structure as well as direct translation of Chinese phrases into English. It might explain the reason why they find it hard to form even simple, grammatical English sentences and some of them are reluctant to speak up in class because they are not confident about their English proficiency.

Moreover, it is not an easy task to encourage participation of students in a large class with about 35 students. The learning outcome would be more effectively achieved if students can be divided into smaller groups for discussion. Even though during the discussion students might switch from using English into Chinese, with smaller groups, it will encourage more

participation among them. Also, it is more possible for teachers to give feedback to individual groups.

Teaching English in large classes is a difficult yet challenging job. The teacher has to be well prepared for the class and he/she also has the responsibility to manage the classroom discipline as well as monitoring the response of the students in order to adjust the pace. Yet, it is all these difficulties that encourage teachers to strive to improve their classes.

References

- [1] Underwood, Mary. *Teaching Listening*, Longman, London, 1989.
- [2] Nunan, David. An organic approach to the Teaching of Grammar. *Hong Kong Journal of Applied Linguistics*, Volume 1 (1), pp. 65-86, 1996.
- [3] Welker, James R. (1996). Easy English Communication at the Secondary Level: Easy ways Teachers who are non-native speakers can use more English in class. *The Internet TESL Journal*. Retrieved on March 14, 2014, from <http://iteslj.org/Articles/Welker-Communication.html>.
- [4] LIN, M Y Angel . Analyzing the ‘language problem’ discourses in Hong Kong: How official, academic, and media discourses construct and perpetuate dominant models of language, learning and education. *Journal of Pragmatics*, Volume 28 (4), pp. 427-440, 1997.

ICSSAM-880

How Working Experience Affects English Learning Motivation and Career Planning with Medical Junior College Students in Taiwan?

Zih-Ling Lin

Shu Zen Junior College of Medicine and Management

yunju@ms.szmc.edu.tw

Yen-ju Hou

Shu Zen Junior College of Medicine and Management

yunju@ms.szmc.edu.tw

Abstract

By personal desire and motives, students' pursuing part-time job becomes common in Taiwan. However, working experience could have direct or indirect impacts on students' English learning. The study was conducted to investigate whether working experience can be a predictor to college students' motivation on English learning as well as career planning. This study mainly has three purposes: (a) to identify students' job interest and career orientation; (b) to identify the types of the types of motivation on English learning; (c) to determine the impacts of working experience on the career planning (d) correlation among working experience, job interest, job orientation, English learning motivation.

Keywords: part-time job, job interest, career orientaion, English learning motivation

Background

As in a global village, English has become the “Lingua Franca” and been widely used as a tool for communication in many fields. To promote the English skills of its workforce and economic outlook, many countries have invested enormous resources in English learning. Taiwan is not an exception. However, based on the 2013 report of The World's Top 60 Countries in English, Taiwan ranked 33rd, lower than that of some other Asia countries, such as South Korea (24th), Japan (26th), and Vietnam (28th) (www.ef.com/epi/). The results has provoked much concern in Taiwan. Without doubt, language learning is a complex process and related to many factors. Among them, motivation is a key to any learning, both instrumentally and integrately. But what is Taiwanese students' motivation to learn the crucial tool, and what are the factors really related to their English learning? Nowadays, due to the influence of the social and economic development, more and more students are becoming interested in part-time working, in particular, more than 73% of Taiwanese college students had part-time job experience (Huang & Lin, 2010). Part-time working is believed to

be both instrumentally and integratively oriented. Hence, the study aimed to investigate how working experience affects students' English learning motivation and career planning.

Literature Review

Some related literature about English learning motivation, and part-time job employment were reviewed as followed:

Motivation about foreign language learning

Gardner & Lambert (1959) were the first to introduce the integrative-instrumental approach to measuring motivation. Attention was shifted from the study of learner's behavior to the learning process of language learners. It was this shift that gave definition to the field of second/foreign language learning. Integratively motivated learners are those who wish to identify with another ethnolinguistic group, whereas instrumentally motivated learners are those who learn a second/foreign language for utilitarian purposes. It has been supported that motivation is the most important factor in second language achievement and proved to be related to attitude and motivational intensity (Hou, 2010).

Teenagers' part-time job employment

Due to the influence of the social and economic development, nowadays, more and more students are becoming interested in part-time working, in particular, more than 73% of Taiwanese college students had part-time job experience (Huang & Lin, 2010). According to the survey of Taiwan Council of Labor Affairs (2006), the top three reasons of Taiwanese college students' part-time working were "to make some pocket money" (53.7%), "to have some work to do" (23.0%), and "to gain social experience" (17.4%). This approach has some pros and cons. On one side, people who encourage and support students to do part-time job believe that in the process, students can learn some important life skills, such as time management, independence, responsibility, being ready and well-prepared for the work culture and job market (Huang & Liou, 1995; Lin & Wang, 1992; Neill, Mulholland, Ross, & Leckey, 2004). However, on the other side, people who oppose students from doing part time job have opinion that students should concentrate on their studies, which will be helpful for them to be qualified for building their career after graduation. In fact, in the survey of Taiwan Council of Labor Affairs (2006), 68.1% of the students self-reported that their part time work did not relate to what they had learned. Fang (2005) found that family relationship was not negatively impacted by part-time work among the working students, but part-time work brought burdens on students' school work, participation of class and school activities. In addition to neglecting their study, some other drawbacks for part-time working students may include the challenges of working pressure, self-requirement, interpersonal relationship, adjusting the differences between professional knowledge and applications, particularly, the

possible negative influences of their health, life habit, and work-value (Carr, 2005; Fang, 2005; Hewitt, 2002; Loughlin & Barling, 2001).

Methodology

Research design

The research design is a descriptive study. The methodology of descriptive study was chosen as the research design because of its particular strength and advantages in being able to set an objective “to determine the factors, and relationships among the factors that have resulted in the current behavior or status of the study” (Gay, 1992, p.236).

Participants

A total of 253 students in a private junior college in south Taiwan participating in the study, including 35 male students (13.8%) and 218 female students (86.2%). Among them, 70.8% were English majors, 28.5% were Japanese majors, and 0.4% were non-foreign language majors. They were all arranged to take an English test and fill out questionnaires dealing with their part-time job engagement and English learning.

Research instruments

The research instrument included a set of questionnaires dealing with part-time job interest and experience (Song, 2009), career orientation (Chen, 2012), part-time job influence, as well as English learning motivation (Gardner, 2004).

Research questions

The study intended to answer the following research questions, including:

1. What is Taiwanese junior college students' job interest and job orientation?
2. What is Taiwanese junior college students' motivation on English learning?
3. What are the effects of part-time job experience on students' motivation to learn English and Job orientation?
4. Whether the experience of part-time job have impacts on students' decision for future career?

Findings

Findings included descriptions of (1) students' background, (2) students' part-time job experience and interest; (3) students' career orientation (4) students' English learning motivation, and the influences of part-time job experience on English learning, (5)

correlation among part-time job experience, job interest, job orientation, and English learning motivation.

Students' background

The majority (94.9%) of the students didn't have any experience to go abroad, though 70.8% of them were English majors and 28.3% were Japanese majors. About 17-21% of their parents had college/above educational background. In general, fathers had higher degrees than mothers had.

Students' part-time job experience

Based on students' self-report, 69.6% of the students had part-time job experience. Among them, 5.6% worked more than 3 years, while 49.2% worked less than 6 months.

Students' part-time job interest

The top five reasons for students' interest in part-time working were: "to have working experience" (item 8), "to broaden eyesights" (item 7), "to have practical learning opportunity" (item 4), "to build up public relationship with others" (item 9), and "to apply for professional knowledge into practice" (item 5).

On the other hand, the bottom five reasons were: "to meet school's requirement" (item 13); "to be influenced by friends" (item 12); "to be introduced by relatives" (item 11); "to support family's expenses" (item 15); and "to have family's encouragement" (item 10).

Students' career orientation

In terms of students' career orientation, they seemed to like the career goal they choose (item 38); be satisfied with their present career goal (item 39) and major (item 42); be confident with their career goal (item 40); and to have majors related to future career (item 47). Additionally, less students thought that none of the careers they knew was suitable or them (item 72); or they were forced to choose the major (item 51); or it was not necessary to have a clear direction for future career goal (item 69); or they didn't have strong interest in any career (item 71), and they never thought of what career they were going to have (item 68).

ANOVA was employed to find the relationship between students' working experience and their career orientation, the results failed to show any significance ($F_{(1,250)} = .406$, $P > .05$). However, on average, students with working experience ($M = 3.32$, $SD = .686$) revealed lower scores on their career orientation than those without working experience ($M = 3.38$, $SD = .759$).

On individual item, the finding revealed that students' job experience has significant impact on item 42 and item 47 (see Table 1). Comparing to their counterparts, students without working experience expressed that they felt more satisfied with their present major ($p < .05$) and revealed that their major related to their future career ($p < .05$).

Table 1 Summary of ANOVA analysis on individual item of career orientation with two groups

	Working experience	M	SD	Sig
42.I am very satisfied with my present major.	yes	4.36	1.41	.029
	No	4.77	1.11	
	all	4.47	1.33	
47.My major is related to my future career.	yes	4.12	1.45	.022
	No	4.56	1.22	
	all	4.24	1.38	

*"yes" indicated those students with part-time working experience, while "no" revealed those students without part-time working experience

Students' English learning motivation

ANOVA was employed to find the relationship between students with/without working experience and their English learning motivation. The results did not show any significance ($F_{(1,250)} = .087, P > .05$).

Regarding to students' English learning motivation, the top five reasons were because: "It's good to learn English" (item 73), "It's important to learn English to know kinds of people" (item 84), "It's important to learn English to get along with English speaking people" (item 83), "It's important to learn English to understand and appreciate the life of English speaking people" (item 85), and "English is an important part of school curriculum" (item 77).

On individual item related to English learning motivation, the finding revealed that students' job experience has significant impact on their certain motivation toward English learning (see Table 2). Among them, students without working experience showed higher motivation than those with working experience on English learning (items 75, 80, 87, 89).

Table 2 Summary of ANOVA analysis on English learning items with two groups

	Working experience	M	SD	Sig
75.I really like to learn English.	yes	3.79	1.48	.048
	No	4.20	1.44	
80.I love to learn English.	yes	3.89	1.51	.007
	No	4.44	1.30	
87. I have strong desire to learn English.	yes	3.97	1.37	.014
	No	4.41	1.04	
89.If I can choose, I will use all my time to learn English.	yes	3.54	1.43	.004
	No	4.12	1.37	

*"yes" indicated those students with part-time working experience, while "no" revealed those students without part-time working experience

Influences on students after part-time working

After part-time job working, over 70 percent of students realized the importance of English (item 121); were willing to spend time in learning English (item 122); knew what and how they should work for the future (item 123) and what kind of jobs were suitable for them (item 124); as well as knew what their future career would be (item 125).

Correlation among part-time experience, career orientation, and English learning motivation

By using Pearson correlation analysis, the finding showed that job experience was not correlated with either carrer orientation or English motivation. However, it was found that students' part-time job performance was correlated with English learning motivation ($p < .01$). In addition, job interest was found to be correlated with career orientation ($p < .01$) and English motivation ($p < .01$). The finding was shown in Table 3.

Table 3. Correlation among part-time experience, job interest, job orientation, and English learning motivation

		Job- experience	Job interest	Career- orientation	English-mo tivation
Job- experience	Pearson	1	.104	-.040	-.019
	Sig		.100	.525	.768
	N	253	252	252	252
Job interest	Pearson	.104	1	.178(**)	.343(**)
	Sig	.100		.004	.000
	N	252	252	252	252
Career-orie ntation	Pearson	-.040	.178(**)	1	.573(**)
	Sig	.525	.004		.000
	N	252	252	252	252
English motivation	Pearson	.019	.343(**)	.573(**)	1
	Sig	.768	.000	.000	
	N	252	252	252	252

** p<.01 * p<.05

Conclusions

A total of 69.6% of the students had part-time working experience. The high percentage of college students' engaging in part-time working supported other studies (Taiwan Council of Labor Affairs, 2006, Fang, 2005, Huang & Lin, 2010). The result reveals that pursuing part-time job becomes a common situation among students, even with different purposes. Based on studies conducted in Taiwan to investigate the college students' working experience and career orientation (Wang, 2012; Wu, 2012; Liu, 2012), the findings showed that the values and competence during working experience might affect one's career planning and learning performance directly or indirectly.

In the study, although job experience did not show significant impact on students' career orientation and motivation toward English learning, yet job interest greatly affects students' career orientation and English learning motivation. So, parents and teachers should hold positive attitudes toward students' part-time working interest and engagement. As Dewey's theory "learning by doing," students could learn knowledge and skill through completing tasks, and then enhance motivation and learning outcome. Thus, teacher should provide tasks or opportunities that focus on promoting students' engagement and interest, and then through the process can students "learn" by "doing."

References

- Carr, J. W. (2005). *An exploration of how learning and development emerge for student employees during the on-campus work experience*. Unpublished doctoral dissertation, The Georgetown University, Washington, D.C.
- Chen, H. R. (2012). *The impact of career decisiveness on the learning motivation of continuing vocational high school students*. Unpublished Master Thesis. National Changhua University of Education, Changhua, Taiwan.
- Chung, W. Y.(2012). Anxiety and motivation in foreign language learning- a case study. *The 14th International Conference on Multimedia Language Instruction* (pp.202-216). December 17-18, 2010. Kaohsiung, Taiwan.
- Directorate- General of Budget, Accounting and Statistics Executive Yuan, R.O.C. *Report of Taiwanese young adults' working and life investigation, 2001. (Taiwan)*. <http://www.dgbasey.gov.tw/>
- Fang, Y. M. (2006). A study on the experience of part-time work for college students. Master thesis, Hsuan Chuang University, Taiwan.
- Gardner, R.C. (2004). *Attitude/Motivation Test Battery: International AMTB Research Project*. London, Canada: University of Western Ontario.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266-72.
- Gay, L. R. (1992). *Educational research: Competencies for analysis and application* (4th Ed.). Macmillan Publishing Company, N.Y.
- Gay, L. R. & Airasian, P. (2003). *Educational research: Competencies for analysis and application* (7th Ed.). Macmillan Publishing Company, N.Y.
- Hewitt, B. L. (2002). *Effects of academic achievement, extracurricular involvement and work experience on entry-level employment of college graduates*. Unpublished doctoral dissertation, University of Pennsylvania, Philadelphia.
- Hou, Y. A. (2010). College students' motivation, attitude and English performance. *Tamsui Oxford Journal of Liberal Arts Education*, Vol. 6, pp. 39-62.

- Huang, Y.C. & Lin, S.H. (2010). Relationship between part-time work or practical training and work value of college students in central Taiwan. *Taiwan Counseling Quarterly*, 2(2), 36-57.
- Liou, Y.S. (2012). *The Study of the Relationship Among Career Anxiety, Locus of Control and Career Decisions in of University Students - An Example of University Students in North Area of Taiwan*. Unpublished Master Thesis. National Chiao Tung University, Hsinzju, Taiwan.
- Neill, N., Mulholland, G., Ross, V., & Leeckey, U. (2004). The influence of part-time work on student placement. *Journal of Further and Higher Education*, 28(2), 123-137.
- Song, G. Y. (2009). *Research on the Work Motivations and Job Performance to Facilitate the Employability of College Students : A Case Study of Summer Community-Industry Internships*. Unpublished master thesis, National Taiwan Normal University, Taipei, Taiwan.
- Wang, J. I. (2012). *A Study of Relationship among College Students' Career Guidance Needs, Career Self-Efficacy and Employability*. Unpublished Master Thesis. Chang Jung Christian University, Tainan, Taiwan.
- Wang, L. Z.(2000). Young adults' part-time working- protection and prohibition. *Humanity Education Jouranl*, 8, 24-25.
- Wang, S. Y. (2009). *A study of correlation between university students' part-time jobs and their potential competence of employability*. Master thesis, National Taiwan Normal Universtiy, Taiwan.
- Wu, P. S. (2012). *Exploration of the Influence of Student Employability, School Club Participation Identity, and Work Values on Personal Career Development Inclination — A Case Study of Fu Jen Catholic University*. Unpublished Master Thesis. Fu Jen Catholic University, Taipei, Taiwan.

Appendix:
Taiwanese college students part-time working and English learning

I. Personal backgrounds

N = 253

background	school	1%	2%	3%	4%	5%	sig
1. majors: (1) nursing (2) English (3) Japanese (4) others	SZMC	0.4	70.8	28.3	0.4		
2. grade : (1).first year (2).second year (3).third year (4).fourth year (5) fifth year	SZMC	0	33.9	26.7	27.6	11.8	
3. gender : (1).male (2).female	SZMC	13.8	86.2				
4. time to live in English-speaking country: (1).none (2).less than 1 year (3).1-3 years (4).more than 3 years	SZMC	94.7	4.0	0.4	1.9		
5. years to learn English : (1).3-5 years (2).5-7 years (3).7-10 years (4).more than 10 years	SZMC	11.5	19.1	30.6	38.7		
6. weely extra English learning time (1).less than 2 hours (2).2-4 hours (3).4-6 hours (4).6-8 hours (5).more than 8 hours	SZMC	55.6	31.0	6.5	4.8	2.0	
7. part-time working experience? (1).no (2).yes	SZMC	30.2	69.8				
8. time for part-time working: (1).less than 6 months (2).0.5-1 year (3).1-2 year (4).2-3 year (5).more than 3 years	SZMC	47.4	18.7	18.7	9.4	5.8	
9. father's educational background: (1).graduate school and above (2).college/university (3).high school (4). below high school	SZMC	1.7	19.5	63.9	14.9		
10. mother's educational background: (1).graduate school and above (2).college/university (3).high school (4). Below high school	SZMC	2.9	14.8	69.7	12.7		

II. Part-time job interest, English learning motivation

1=completely disagree , 2=disagree , 3=somewhat disagree , 4=somewhat agree , 5=agree , 6=completely agree

*“yes/no” indicated students **with/without** part-time working experience N=253

Part-time job interest	experie nce	1 %	2 %	3 %	4 %	5 %	6 %	M	SD	sig
1.to satisfy my desire of learning	yes							4.36	1.15	.013
	No							3.94	.15	
	all	3.2	4.0	13.1	34.5	31.3	13.1	4.23	1.22	
2.to meet my interest	yes							4.05		.413
	No							4.20		
	all	5.2	4.0	20.2	27.0	31.0	11.9	4.07	1.31	
3.to have self-accomplishment	yes							4.64	1.08	.040
	No							4.31	1.30	
	all	3.2	1.2	7.9	28.2	41.3	17.5	4.53	1.17	
4.to have practical learning opportunity	yes							4.84	1.09	.135
	No							4.59	1.38	
	all	2.8	2.4	4.8	22.2	39.7	27.4	4.73	1.21	
5.to apply for professional knowledge	yes							4.66	1.22	.291
	No							4.47	1.37	
	all	3.6	2.0	9.9	22.6	36.1	25.0	4.58	1.28	
6.to express my enthusiasm of service	yes							4.63	1.21	.040
	No							4.25	1.49	
	all	3.6	2.8	11.5	25.4	31.0	25.0	4.50	1.31	
7.to broaden my eyesights	yes							4.91	1.10	.012

	No							4.48	1.40	
	all	2.8	1.2	6.0	22.2	37.3	29.8	4.76	1.20	
8.to have working experience	yes							5.29	.85	.000
	No							4.63	1.41	
	all	1.6	1.6	2.8	11.5	42.5	39.3	5.07	1.10	
9.to build up public relationship with others	yes							4.82	1.07	.003
	No							4.32	1.45	
	all	2.4	2.8	7.5	25.0	34.1	27.4	4.65	1.24	
10.to have family's encouragement	yes							3.80	1.50	.883
	No							3.83	1.48	
	all	9.1	10.3	15.1	29.8	21.8	13.1	3.81	1.49	
11.to be introduced by relatives	yes							3.36	1.68	.798
	No							3.31	1.42	
	all	18.7	11.1	20.6	19.0	21.8	7.9	3.35	1.60	
12.to be influenced by friends	yes							3.14	1.48	.444
	No							3.29	1.43	
	all	14.7	16.7	24.6	25.0	11.5	6.3	3.17	1.45	
13.to meet school's requirement	yes							2.30	1.50	.002
	No							2.97	1.59	
	all	38.5	16.3	14.3	16.3	10.7	2.8	2.49	1.54	
14.to earn money for personal expenses	yes							4.71	1.38	.001
	No							4.04	1.60	
	all	6.3	3.2	9.9	21.0	27.0	31.7	4.51	1.48	

15.to support family's expenses	yes							3.80	1.66	.784
	No							3.74	1.68	
	all	12.7	11.1	12.3	22.2	23.0	17.5	3.80	1.67	
16.to buy some personal stuff	yes							4.00	1.45	.401
	No							3.82	1.60	
	all	9.1	8.7	13.9	26.6	27.0	13.9	3.92	1.50	
Career orientation										
38.I like the career goal I choose.	yes							4.56	1.19	.245
	No							4.75	1.09	
	all	0.8	4.0	8.7	31.3	27.8	27.0	4.61	1.17	
39.I am satisfied with my present career goal.	yes							4.19	1.30	.982
	No							4.18	1.29	
	all	4.4	4.4	14.3	37.3	22.2	17.1	4.18	1.28	
40.I am very confident with my career goal.	yes							4.21	1.29	.937
	No							4.22	1.04	
	all	3.2	3.6	15.5	39.7	20.6	17.1	4.21	1.22	
41.I am not sure if my present career choice is appropriate or not.	yes							3.88	1.34	.896
	No							3.86	1.24	
	all	6.7	6.3	17.9	37.3	22.2	9.1	3.88	1.29	
42.I am very satisfied with my present major.	yes							4.36	1.41	.029
	No							4.77	1.11	
	all	3.6	4.0	11.9	27.8	25.0	27.4	4.47	1.33	
43.I have decided my future career.	yes							3.94	1.42	.258

	No							3.71	1.43	
	all	7.9	7.5	18.7	33.3	17.5	14.7	3.87	1.42	
44.I know what career is suitable for me.	yes							3.92	1.36	.223
	No							3.70	1.27	
	all	6.0	6.3	25.4	31.7	17.5	12.7	3.38	1.33	
45.I have clear caree goal.	yes							3.85	1.40	.896
	No							3.87	1.21	
	all	5.6	7.9	25.0	26.6	23.4	11.1	3.86	1.34	
46.I know what career I should work hard for.	yes							4.07	1.43	.868
	No							4.10	1.27	
	all	3.6	8.3	19.4	26.6	24.2	17.1	4.08	1.37	
47.My major is related to my future career.	yes							4.12	1.45	.022
	No							4.56	1.22	
	all	5.6	5.2	11.9	34.1	20.6	22.2	4.24	1.38	
48.I don't like thefuture career whih is related to my present major.	yes							2.81	1.48	.503
	No							2.65	1.42	
	all	25.0	19.8	24.2	18.3	7.1	5.2	2.76	1.45	
49.My major is not really what I want to learn.	yes							2.71	1.46	.635
	No							2.62	1.49	
	all	27.8	19.0	25.8	14.7	7.1	5.2	2.68	1.46	
50.If I can, I will choose another major.	yes							2.06	1.27	.233
	No							2.27	1.58	
	all	30.2	17.5	18.3	15.9	11.1	6.7	2.79	1.61	

51.I was forced to choose the major.	yes							2.06	1.27	.284
	No							2.27	1.58	
	all	47.2	19.8	13.5	12.7	4.0	2.4	2.12	1.36	
52.There is no relation between my career goal and the present major.	yes							2.46	1.48	.387
	No							2.64	1.52	
	all	32.1	23.8	18.7	13.5	6.3	5.2	2.52	1.48	
53.I feel frustrated for the choice of career goal.	yes							2.91	1.42	.951
	No							2.90	1.58	
	all	22.2	17.5	24.6	21.8	7.9	5.6	2.91	1.46	
54.I am afraid that I might choose the wrong career.	yes							3.71	1.58	.989
	No							3.71	1.57	
	all	11.5	10.3	19.8	25.0	17.5	15.5	3.71	1.56	
55.I am anxious to make important decision.	yes							3.85	1.59	.798
	No							3.79	1.57	
	all	11.1	9.1	17.9	25.0	19.0	17.5	3.82	1.57	
56.I feel bothers to make sure of my career goal.	yes							3.77	1.57	.972
	No							3.77	1.50	
	all	10.3	11.9	14.7	29.4	18.3	15.1	3.77	1.53	
57.I am worried that I can make a good career choice.	yes							3.96	1.56	.980
	No							3.95	1.52	
	all	9.1	8.3	15.9	27.8	19.4	19.0	3.96	1.53	
58.I am not used to planning my future goal.	yes							3.21	1.55	.544
	No							3.33	1.38	

	all	16.7	13.9	24.6	23.4	13.5	7.5	3.24	1.49	
59.I always have difficulty to make decisions.	yes							3.59	1.51	.901
	No							3.62	1.28	
	all	9.5	12.7	21.4	29.4	15.5	11.1	3.60	1.44	
60.I hesitate at many things.	yes							2.87	1.44	.963
	No							2.97	1.50	
	all	8.7	10.3	20.6	25.0	21.0	13.9	3.79	1.48	
61.I feel at ease if someone can choose the career goal for me.	yes							2.87	1.44	.639
	No							2.97	1.50	
	all	22.2	16.7	27.0	21.4	6.0	6.3	2.90	1.45	
62.I am not good at making plans.	yes							3.28	1.48	.936
	No							3.27	1.39	
	all	12.3	19.0	24.2	23.4	12.3	8.3	3.28	1.45	
63.I don't know what career I like.	yes							2.80	1.44	.186
	No							3.06	1.42	
	all	20.6	21.0	25.8	17.5	9.1	5.2	2.86	1.44	
64.I don't know the content of the career I like.	yes							2.78	1.42	.063
	No							3.14	1.36	
	all	19.0	24.2	20.6	23.0	7.5	4.8	2.87	1.42	
65.I am not sure if I have the knowledge and ability needed for my favorite career.	yes							3.33	1.47	.134
	No							3.63	1.36	
	all	11.9	14.7	21.4	30.2	12.7	8.3	3.39	1.45	
66.I don't know what career I can do after I	yes							2.59	1.44	.158

graduate from my major.	No							2.87	1.50	
	all	26.6	23.4	20.6	17.1	6.7	4.8	2.65	1.45	
67.I am not sure if my interest fits my career goal.	yes							3.00	1.51	.396
	No							3.17	1.41	
	all	18.7	17.1	25.8	21.4	9.1	6.7	3.01	1.48	
68.I never think of what career goal I am going to have.	yes							2.66	1.48	.365
	No							2.85	1.40	
	all	25.8	20.6	25.0	16.3	6.0	6.0	2.72	1.46	
69.It is not necessary to have a clear direction for future career goal.	yes							2.35	1.33	.663
	No							2.43	1.37	
	all	32.1	24.6	25.0	10.7	3.2	4.0	2.38	1.33	
70.It is not time to decide my future career goal yet.	yes							2.64	1.53	.406
	No							2.82	1.46	
	all	27.0	22.6	19.8	17.9	4.8	7.5	2.72	1.52	
71.I don't have strong interest in any career.	yes							2.49	1.40	.573
	No							2.60	1.43	
	all	29.4	23.8	21.0	16.7	4.8	4.0	2.54	1.40	
72.It seems none of the careers I know is suitable for me.	yes							2.35	1.31	.424
	No							2.50	1.39	
	all	34.1	19.4	27.0	11.5	5.2	2.4	2.40	1.33	
73.It's good to learn English.	yes	0						4.91	1.25	.933
	No							4.93	1.10	
	all	2.4	2.0	6.0	18.7	31.3	39.3	4.91	1.21	

74.I hate to learn English*	yes							2.71	1.49	.248
	No							2.47	1.48	
	all	30.2	20.2	20.2	17.1	6.3	5.6	2.64	1.50	
75.I really like to learn English.	yes							3.79	1.48	.048
	No							4.20	1.44	
	all	7.9	9.1	17.1	29.4	19.0	17.1	3.92	1.47	
76.I'd rather spend time on subjects other than English.*	yes							3.22	1.49	.259
	No							2.98	1.50	
	all	15.1	20.2	25.4	18.7	11.5	8.7	3.16	1.50	
77.English is an important part of school curriculum.	yes							4.87	1.19	.364
	No							5.2	1.15	
	all	2.0	1.2	7.9	21.0	27.4	40.1	4.89	1.20	
78.It wastes time to learn English.*	yes							2.14	1.26	.223
	No							1.93	1.23	
	all	42.1	26.2	19.4	6.0	3.2	2.8	2.09	1.26	
79. I plan to learn English more.	yes							4.54	1.26	.246
	No							4.74	1.14	
	all	1.6	4.0	10.3	27.4	29.0	27.4	4.59	1.22	
80.I love to learn English.	yes							3.89	1.51	.007
	No							4.44	1.30	
	all	6.7	7.9	18.7	24.2	22.6	19.4	4.05	1.47	
81.I think it's boring to learn English.*	yes							2.89	1.46	.324

	No							2.68	1.56	
	all	22.2	22.2	25.0	16.3	6.3	7.5	2.83	1.49	
82. I will completely give up English after graduation because I am not interested in it at all.*	yes							2.35	1.37	.438
	No							2.20	1.36	
	all	36.9	23.4	19.4	12.3	2.8	4.8	2.33	1.40	
83.It's important to learn English to get along with English speaking people.	yes							5.04	1.15	.268
	No							5.21	.95	
	all	0.4	1.2	6.7	17.9	25.0	48.4	5.09	1.09	
84.It's important to learn English to know kinds of people.	yes							5.09	1.12	.392
	No							5.22	1.01	
	all	0.8	2.0	3.6	16.7	27.8	48.8	5.13	1.08	
85.It's important to learn English to understand and appreciate the life of English speaking people.	yes							5.16	1.12	.694
	No							5.22	1.04	
	all	1.2	1.2	3.6	15.9	25.8	52.0	5.18	1.09	
86.Its' important to learn English to communicate with English-speaking people.	yes							5.12	1.12	.255
	No							5.29	.90	
	all	0.8	1.2	3.6	16.3	27.0	50.8	5.18	1.05	
87. I have strong desire to learn English.	yes							3.97	1.37	.014
	No							4.41	1.04	
	all	4.4	4.4	20.2	32.9	21.8	15.9	4.09	1.29	
88.Learning English is not the major goal in my life.*	yes							3.30	1.44	.024
	No							2.85	1.47	

	all	14.7	18.3	26.6	21.8	9.9	8.3	3.17	1.46	
89.If I can choose, I will use all my time to learn English.	yes							3.54	1.43	.004
	No							4.12	1.37	
	all	8.3	9.9	23.8	28.6	15.5	13.5	3.72	1.44	
90.Sometimes I think about giving up learning English.*	yes							3.35	1.51	.353
	No							3.16	1.32	
	all	13.1	16.7	24.6	27.0	8.7	9.5	3.28	1.45	
91.I want to learn well because some day it will become part of my life.	yes							4.50	1.31	.211
	No							4.72	1.13	
	all	2.8	4.0	8.3	31.0	25.4	28.2	4.55	1.27	
92.I lost my interest in learning English.*	yes							3.35	1.54	.022
	No							2.87	1.36	
	all	15.1	17.5	24.2	21.8	12.3	5.7	3.23	1.50	
93.I try to learn English more	yes							4.30	1.43	.114
	No							4.60	1.22	
	all	4.8	4.0	14.3	25.8	25.8	25.0	4.37	1.38	
94.Honestly, I don't want to learn English at all.*	yes							2.60	1.61	.049
	No							2.18	1.29	
	all	34.1	22.2	21.4	9.1	4.8	7.9	2.50	1.54	
95.I hope to speak English fluently.	yes							5.09	1.22	.161
	No							5.32	1.07	
	all	1.2	2.4	6.3	13.9	20.6	55.2	5.14	1.19	

96.Except for basic English, I have no intention to learn other advanced English.*	yes							2.91	1.50	.114
	No							2.58	1.48	
	all	23.4	21.8	23.4	17.9	5.2	7.9	2.82	1.50	
97.I feel anxious to talk to tourists in English.	yes							4.01	1.48	.257
	No							4.24	1.29	
	all	6.0	8.3	15.1	31.0	21.0	18.3	4.06	1.42	
98.Wherever I go, I worry about speaking English.	yes							3.61	1.51	.098
	No							3.28	1.31	
	all	9.9	13.5	27.4	23.8	13.9	11.1	3.50	1.45	
99.Speaking English doesn't bother me at all.*	yes							2.88	1.52	.649
	No							2.79	1.24	
	all	20.6	21.0	25.4	19.8	6.7	6.0	2.87	1.43	
100.I feel bothered if I need to talk on the phone in English.	yes							3.69	1.60	.794
	No							3.63	1.24	
	all	9.5	9.9	22.6	30.2	11.1	15.5	3.66	1.51	
101.I am not nervous if I need to tell the direction in English.*	yes							3.22	1.50	.349
	No							3.04	1.25	
	all	15.5	14.7	27.0	27.0	7.5	7.5	3.16	1.43	
102.I don't feel comfortable if I need to speak English out of class.	yes							3.52	1.61	.896
	No							3.55	1.29	
	all	11.1	12.3	23.4	26.2	13.1	12.7	3.52	1.52	
103.I will feel comfortable to speak English if	yes							3.50	1.58	.937

there are Taiwanese and foreigners around.*	No							3.48	1.28	
	all	12.7	9.9	26.6	26.6	11.9	11.9	3.49	1.48	
104.I will feel anxious if other people ask me something in English.	yes							3.73	1.49	.685
	No							3.81	1.20	
	all	7.5	9.5	23.0	29.4	18.7	11.5	3.75	1.39	
105.I feel confident when I need to order meals in English.*	yes							3.42	1.52	.991
	No							3.41	1.52	
	all	8.7	15.9	29.8	22.6	13.1	9.5	3.42	1.40	
106.English is important because it's crucial in the job market.	yes							5.02	1.22	.425
	No							5.16	1.11	
	all	2.0	2.0	5.2	15.5	27.4	47.8	5.05	1.19	
107.English is important because it makes me well-educated.	yes							4.64	1.30	.389
	No							4.79	1.22	
	all	2.0	2.0	13.1	25.0	22.2	35.3	4.68	1.27	
108.English is important because it helps me to get a job.	yes							5.02	1.24	.479
	No							5.14	1.13	
	all	2.8	0.8	6.3	14.7	27.0	48.0	5.05	1.22	
109.English is important because other people will respect me because of my good English.	yes							4.40	1.43	.684
	No							4.32	1.31	
	all	4.0	4.8	15.5	27.0	21.8	26.6	4.36	1.38	
110.English is needed in work and in daily life. I often use English in daily life.	yes							3.98	1.59	.691
	No							4.06	1.39	

	all	8.3	8.3	16.7	25.8	19.8	20.6	4.01	1.53	
111. Most of the customers I met in part-time working were foreigners.	yes							2.78	1.55	.786
	No							2.72	1.64	
	all	27.0	22.2	19.0	15.5	8.3	7.5	2.77	1.56	
112. I established good friendship with foreigners when part-time working.	yes							3.05	1.67	.218
	No							2.77	1.68	
	all	25.0	17.5	22.2	14.3	7.9	12.7	2.99	1.68	
113. For me, to have foreign friends is good for improving my English ability.	yes							4.57	1.47	.495
	No							4.43	1.48	
	all	4.8	6.7	7.9	21.8	25.0	33.3	4.54	1.46	
114. If possible, I try not to talk to foreigners because of my shyness.	yes							3.52	1.46	.405
	No							3.68	1.47	
	all	9.9	11.9	25.8	25.4	15.5	11.1	3.56	1.45	
115. Due to financial consideration and others, I can't afford going abroad. If possible, I hope to have chances to know foreigners in the country.	yes							4.71	1.26	.198
	No							4.47	1.49	
	all	2.8	3.6	11.5	23.4	24.2	34.1	4.63	1.33	
Benefits of part-time working experience										
116. It will be a good choice to do English related work after graduation.	yes							4.36	1.44	.316
	No							4.56	1.50	
	all	4.4	4.8	14.7	23.4	21.8	30.2	4.41	1.45	
117. Part-time working experience is helpful for future employment related to English	yes							3.95	1.60	.283
	No							4.18	1.49	

teaching.	all	7.1	7.99	20.2	21.0	20.2	22.2	4.02	1.56	
118.I plan to do some job related to my part-time employment.	yes							3.33	1.54	.065
	No							3.72	1.52	
	all	12.3	12.7	25.4	23.4	13.1	11.9	3.44	1.53	
119. My priority future job place will be the one where I worked part-time before.	yes							3.15	1.57	.183
	No							3.44	1.59	
	all	16.7	13.1	25.8	22.2	9.9	11.1	3.25	1.57	
120.The main work of my colleague and me is to help to solve the problem of the job.	yes							4.25	1.40	.296
	No							4.04	1.54	
	all	4.0	6.7	17.1	27.0	21.8	22.2	4.19	1.43	
121.After having part-time working experience, I realize the importance of English.	yes							4.23	1.59	.382
	No							4.43	1.55	
	all	7.1	5.6	12.7	25.0	17.5	31.0	4.29	1.58	
122.After having part-time working experience, I am willing to spend time in learning English.	yes							4.05	1.56	.530
	No							4.18	1.54	
	all	7.9	6.3	15.5	27.8	17.9	23.4	4.07	1.55	
123.After having part-time working experience, I know what and how I should work for the future.	yes							4.01	1.53	.417
	No							4.18	1.53	
	all	6.3	6.7	17.5	28.2	18.3	21.8	4.07	1.50	
124.After having part-time working experience, I know what kind of job is suitable for me.	yes							4.01	1.49	.599
	No							4.12	1.49	
	all	6.3	5.2	21.4	25.8	19.4	20.6	4.05	1.48	

125.After having part-time working experience, I know what my future career will be.	yes							3.88	1.51	.316
	No							4.09	1.50	
	all	7.9	5.6	22.2	26.6	17.1	19.4	3.94	1.51	

ICSSAM-815

The Problems Manageresses Face With IN School Management

Seda YILMAZ

Anadolu University

sedayilmaz20@anadolu.edu.tr

The aim of this study is to specify the problems manageresses face with in school management. Educational establishments are democratic and humanitarian institutions and they also give importance to academic freedom. These institutions aims of which are to educate children and youngsters – in a word, to mother them - are supposed to approach events in a smooth and sensitive way. Also, women are thought to be humanist and equalitarian. They are not strict too much (Heller, 1997). When looked upon the field of training management in terms of gender, there is not any other situation different from a situation we face with in many fields. The fact that the majority of people managing the schools are male puts forward the situation that women do not choose management as a job because of the difficulties they have and present prejudices against leadership skills. Because the percentage of women's being represented in management is so low. This situation already shows itself in women's background pictures in many fields. During the periods when physical power is forefront, male is ahead in terms of status. This situation resulted in men's being described as strong, brave and women's being described as vulnerable and needy to be backed up. Though women are seen to enter the work life with the industrial period, they have fallen behind of men by their low status and incomes. To specify and analyze the problems women face with is important in terms of bringing solution offers. In accordance with this aim, some interviews that intend presenting the problems women face with in management will be done with 10 school principals in Central district, Eskisehir. Content analysis will be applied to datum obtained after the interviews; problems faced with in the management designated on themes and frequency analysis will be done. As a result of findings obtained, conclusions will be written and discussed through literature and studies done before and proposals will be developed based on that.

Key Words: Manager, management, problem, school.

References

Heller, T. (1997). *Yönetimde Kadın Erkek*. Çev; Işın Tuzcular. İstanbul: Altın Kitaplar.

ICSSAM-887
Development of Social Capital in National Character Education

Siti Irene Astuti D
Fakultas Ilmu Pendidikan
Universitas Negeri Yogyakarta
ireneast@yahoo.com

Abstract

National character crisis has led to the weakening of cultural identity of the nation that is crucially needed to keep the existence of the country itself. Social capital is essential to develop the power of a country to cope with global challenges. Furthermore, social capital as collective energy should be taken into account by the society as socio-cultural power that is able to strengthen the character of the country. The components of social capital has an essential role, especially in the process of character education within families, schools and members of a society in order to reestablish a nation with character through bridging social capital. Thus, the aims and functions of character education are optimally achieved.

This profound research aims at giving solutions dealing with two main issues: a) How is the social capital development within the national character education?; b) What is the appropriate character education guide book design? This research was conducted in Yogyakarta City. The samples were those coming from different social and economic backgrounds. This is a Research and Development research. This type of research is the basis of developing a guideline of social capital development in the module of character education. The products were validated to ensure the quality of the product. The data were analyzed by using mixed method. The quantitative data were analyzed through descriptive statistic, while the qualitative data were analyzed by using qualitative analysis.

The result of the first year's research showed that social capital development can be utilized in the process of character education in a society. It was proven by the social capital mapping process as the capital to develop the national character. It is supported by the value of social capital that the society has. The product (the guideline book) consists of six essential topics: The profile of People with character, Learning from the society figure with character, The house with character, Knowing self-existence as a people with character with "the river of Life", Problems in Strengthening the development of character education of the nation, Establishing life with character of a society by using the value of honesty as a guide to develop the national character.

Keywords: Social capital, characters

I. INTRODUCTION

Globalization makes changes in social and cultural aspects. Everyone will have changes in his life. Kingsley Davis defines social changes as geographic changes, materialistic culture, citizen composition, ideology or as the result of diffusion and invention in a certain society. In brief, Samuel Koenig said that social changes refers to modifications/changes happening in human's life. Meanwhile, Selo Soemardjan defined social changes as changes in social institutions of a society which affect the social system including values, manners and behavioral patterns within the members of the society (cited from Soekanto, 1982: 307).

Social and cultural changes may lead to the character crisis if it is not deeply considered. Nowadays, there is a high tendency that the society tends to encounter crisis which lead them to mess due to their inability to face global challenges. As stated by Thoma slickona that life which leads to mess is indicated by some aspects: (1) an increase in violence among adolescents, (2) the use of language and words are deteriorating, (3) the influence of a strong peer-group in violence, (4) an increase in self-destructive behavior (drug use, alcohol, and free sex), (5) the blurring of moral guidelines (6) the decline in the work ethic, (7) the lower the respect for parents and teachers, (8) lack of a sense of individual responsibility and community residents, (9) dishonesty, and (10) the existence of mutual suspicion and hatred among the members of the society (cited by Masnur Muslich, 2011: 35). Such a mess has been a phenomenon in Indonesia and some other countries as well. As the effect of the mess the multidimensional character crisis is emerged.

Character crisis is a social phenomenon happening in most of the world community. There are several factors leading such a crisis as the result of societal changes. There are several cases regarding the character crisis happening in Indonesia as stated by Gede Raka (2007: 4-6 as cited by Dwiningrum: 2010 :51). Some of them are: a) being complacent with the first problem in which they think that sufficient natural resources indicates the prosperity. It, on the contrary, needs human ability to proceed those sources to be ready-to use. It, further, means that the resources will not be valuable without human intervention or even worse, may become a problem source; b) Economic development which depends on physical capital too much. The indicators of the successfulness of our national development are, merely, the physical ones. Most of us neglect other non-physical indicators such as national level of intelligence, national character development, on which the successfulness relies; c) Lack of idealism and pragmatism. There is also tendency to keep the economic successfulness as the main indicator which makes the society in a pragmatic situation. At the moment, idealism seems trivial and even being a mockery. Even worse, the society sees people with idealism as a group that cannot accomplish anything as long as they stick to the idealism; d) Being unable to learn something from experience.

The character crisis in every nation is a responsibility of the citizen to deal with particularly in the globalization era. Thus, character education is expected to solve character crisis in global society. Character education is also aimed at maximizing the potentials of the society optimally. Furthermore, character education is also expected to help the society to develop responsible framework and manner to act optimally in their social life including their families, social environment and among other members of the nation. Thus, the character education principles that have been tried out in both formal and informal education, it is expected that the principles can be applicable to implement in the country. Even, character education as a government's policy is implemented widely with the nation.

A national policy regarding character education proves that the problems dealing with character education should be overcome as well as possible by all elements of the society in Indonesia. Besides, character education should be managed by using holistic and contextual approaches in order to achieve maximum result. As stated by Siti Irene Astuti Dwiningrum (2011:52) the problems of character crisis is structural. Therefore, character education should be carried out by using holistic and contextual approaches. Structurally developing the character of a nation starts from family, school, society and finally the nation/country itself. However, contextually character education is related to values that is needed to establish the character of a nation which is internalized in all elements of the society. By using holistic and contextual approaches it is hoped that the society with character will be successfully realized. As explained by Thomas Lickona, he defines that people with character are those who have internalized the values of character in their daily life. They implement good manners such as being honest, responsible, and respectful and other noble character values. As stated by Aristoteles, characteristic is closely related to habit. Thus, the key concept emerged from the principle is: habit of mind, habit of heart and habit of hands (Megawangi, 2005: 1 in Dwiningrum, 2011).

In Indonesia, coping with character crisis is not only depending on the government's policy about character education but it is also merely considering the socio-cultural approaches in order to create a society that is able to cope with the crisis happening in any level of the society based on social capital approach. Social capital is an undoubtedly-essential element expected to help the society to cope with problems dealing with character, especially with from the perspective of social and culture. Social capital is already existing in the society, yet its power among the social groups is not merely the same. Social capital can be redefined as socially-collective energy to encourage the society's participation in developing the countries in this global era. The social capital can be strengthened by strengthening the key components and building its social synergy. There will be two essential things to discuss in this paper: how is the role of social capital in the national character education?

Problem Formulation

1. How is the social capital development in the national character education?
2. How is the design of the guideline for character education?

Objectives of the Research

1. Describing social capital development in the national character education
2. Describing the guideline for the national character education

Significances of the Research

- a. Practicality. It can be utilized by the society to strengthen the existence of social capital in the process of character education
- b. Theoretic. The guideline can be used as a reference in the study of social capital development and as a source for character education.

II. LITERATURE REVIEW

The role of Social Capital

There is a tendency in the society that the role of social capital is weakening, while social capital is an essential aspect to develop the life sustainability of the citizen of a country. Moreover, social capital has a fundamental role in developing the nation's character since the character is determined by the effort of a country in keeping its cultural identity. The belief that cultural identity has a significant role is depending on the ability of the society in keeping the social capital that they have. This is in line with the analysis developed by James Coleman which is, further, discussed by Pierre Bourdieu and is blown up by Robert Putnam. According to James Coleman (1990) based on the result of his research about youth and schooling, he defines that the concept of social capital is a variety of entity consisting of some social structures facilitating the actions either personally or cooperatively in a social structure. Furthermore, according to him social capital is considered inherent in the relational structures existing among individuals. This relational structure and network create several types of social responsibilities, creating a climate of mutual trust, bringing information network out and establish norms and social sanctions for its members.

Social relations in social structure has also several important roles in establishing the cultural identity of a nation. In this context, building nation's cultural identity is merely to sustain the dignity of a country that is unique and distinctive. As explained by Pierre Bourdieu, he emphasized on different aspects that the capital on social network is needed to provide support, while the capitals of dignity and respect can be used as a medium to attract clients to socially-important positions, such as politics. Social capital is a set of actual resources possessed by individuals or groups due to interrelationships introductions and recognition that have been institutionalized in many ways (in John Field, 2010: 23).

Social capital is needed to reshape the character of a nation. However, the reality shows that the cultural identity of the nation has been moved aside due to global culture with its universal values. Since the globalization is indicated by the process of mutual dependency in economic, cultural, environmental and social aspects, there is a tendency to the process of homogenization, hybridization and differentiation of the global cultures (values, habits, behaviors) (Zamroni, 2011). As the impact of globalization reflects the cultural identity of self-reflection or self-image derived from each of our families, gender, culture, ethnicity, and individual socialization process (Ting-Toomey) the cultural identity of the nation is not getting stronger. Yet, there is even a tendency to melt in the global culture. This will tend to result in lower national character. That is, the crisis of national character tend to be caused by weakening and loss of cultural identity of the nation .

The cultural identity of the nation is weakened, in fact, as a social phenomenon which is caused by a shift in the role of social and educational institutions in carrying out its social function. Cultural identity is usually formed through three levels namely personal illustrating that within the individual there is something unique ; relational level that describes our relationship with others ; socio - cultural level that describes a large-scale communities such as nation , ethnicity , gender , religion or political affiliation (Hall , 2011) . The process of the formation of cultural identity is required to cope with many obstacles because conflicts continue to occur in the value of the global community. An analysis of the cultural identity of the nation is focused on the third level of the community level because it is associated with the formation of the character of the nation. However, in the process the relationship between the personal and relational identity formation cannot be separated even strengthened by the presence of social capital.

Education and Character Development

Character is defined as *distinctive trait, distinctive quality, and moral strength, the pattern of behavior found in an individual or group*. In other words, character is defined as overall natural dispositions and dispositions that have been stably controlled by an individual who defines the overall system as a typically psychological behavior in ways of thinking and acting. Further as explained by Diana there are two important aspects within the individual, namely unity (coherent way of acting) and stability (continuous unity in the period), Therefore, there is the psychological process of structuring within the individual, who, by nature, reactive nature of the environment . Several criteria such as: stability of behavior patterns; continuity in time; coherence in the act of thinking has attracted the serious attention of educators and pedagogical framework for thinking about the character education process. Thus, character education is a continuously dynamic development ability of individuals to hold the internalization of values to produce an active disposition which is stable within them.

This dynamic makes the growth of the individual becomes increasingly intact. These elements into a dimension that animates every individual formation process. Thus, the character is a dynamic condition of anthropological structure of the individual that is not just a stopover, but rather an attempt of life to become increasingly integral nature in her determination to overcome even the process of perfecting himself (Koesoema , 2004:104 quoted Dwiningrum 2011,2012) .

Character education is essentially involving the development of substance, process and atmosphere or environment that inspires, encourages, and facilitates a person to develop good habits in his/her daily life. This custom arose and developed based on the awareness, confidence, sensitivity, and the attitude of the person concerned. Thus, the character is inside - out, in the sense that the behavior evolved into a good habit of this happened because of the encouragement from within, not because of coercion from the outside (Raka , in Dwiningrum 2007:6 , 2011:51)

The character development process is influenced by typical factors the person concerned which is often also called congenital factors (nature) and environment (nurture) where the person concerned to grow and thrive. However, keeping in mind that congenital factors may be said to be outside the reach of the public to influence it. It is under the influence of us, as individuals and as part of society which belong to environmental factors. So, in an effort to the development or character development at the level of the individual and society, the focus of our attention is on the factors and environmental aspects that we can influence. They are namely the establishment of the environment. In this environment the establishment of the role of environmental education are very important , even very central , because it is basically the quality of one's personal which is formed through a process of learning , both formal and informal learning (Raka , 2007:7 cited Dwiningrum , 2011:52) .

Character education should be developed in a holistic manner so that the result will be optimal. Because in building human character not only of cognitive dimensions, but in the process must be able to develop human potential. Therefore, character education must be designed systematically and holistically so that the result is optimal. Character education process not only for an idealism point of view, but it rather means in building a welfare society. Therefore, the development of the character at the level of the individual and the wider community level needs to be contextual, that is, for Indonesia , is necessary to formulate the values of character that needs to be strengthened to be able to improve the welfare of local communities as well as possible . Value is an important element in human life, even the value of a firm foundation in shaping the behavior of the character.

Configuration values developed in character education results are determined by the socialization process that is very dynamic in the scope of individuals, families and communities. In the context of a society that occurred more complex due to the many variants that will be influential in the process of social interaction in character education there are many strategies and programs selected for character education process at all levels of education , as well as the learning experiences , structured learning experiences , persistence life situation and so on . However, variations in the educational process remain to be determined by the role of social capital.

Social Capital in Character Education

Social capital needed in the process of character education for social interaction requires social energy so that the goal of character education can be successfully optimized the macro and micro scale. Nan Lin explains that the actor access to social capital, through interaction, to promote purposive actions. Thus, the nature of accessible resources embedded in the interaction becomes important in the analysis of purposive action and social interaction. This can present a hypothesis in the typology of action and interaction. Two types of interaction that is relatively *homophilous* , where partners share the same resources , and *heterophilous* interaction, where partners share different resources . (Lin , 2004:48 cited Dwiningrum , 2011 :11, 2013: 141) .

Social capital in the process of character education in the interaction that occurs can be *homophilous* and *heterophilous*. These differences will bring effectiveness to achieve the goal of character education. In addition, the nature of social interactions will affect the strength of the elements of social capital that is owned by the community. In addition to the main elements formed there are also other elements of social capital formation that have less important role. These elements can be said as a condition of adequacy (sufficiency condition) of the formation or establishment of the power of social capital in a community. The elements are (Hasbullah , 2006: 9-16 quoted Dwiningrum,2012,2013) : (a) participation in social networks (participation and social network) , (b) exchange of kindness (*reciprocity*) , (c) trust (trust) , (d) social norms (social norm) , (e) social values , and (d) proactive actions in order to map social capital that is associated with social capital elements . The analysis of the role of social capital is built based on objective and critical analysis. Based on the analysis of the characters and elements of social capital, the role of social capital in the character education can be described as follows (Dwiningrum , 2012) :

Table 1. The roles of Social Capital in Character Education

Social Capital Elements	Character Education (At Schools, Family and Society)
Social Values	Character education is in desperate need of character values that are considered right and important by all members of the community. The values chosen in character education has an important role in shaping and influencing the rules (the rules of conducts), and the rules behave (the rules of behavior), which is intended to form the cultural patterns (cultural pattern) as a form of cultural identity of the nation.
Social Norms	Character education requires social norms to do an important role in controlling the process of the character internalization that grew up in the family, school and community. Social norms are needed to stimulate the ongoing social cohesion which is strongly needed in character education.
Participation and social net work	Character education requires a social capacity that is able to establish associations and social networks to form a pattern of synergistic relationships between families, schools and communities to develop the principle of voluntarism (voluntary), equality (equality), freedom (freedom), and behavior (civility) to achieve character education goals.
Resiprocity	Character education requires reciprocal patterns constructed by a high level of social awareness, mutual assistance and attention to the social relations that occur in families, schools and communities to function character education can build the nation's character.
Trust	Character education is in desperate need of confidence (trust) in the process of social interaction in an individual level, the level of social relations and social systems level. Social relationships that are built are based on a pattern of mutually supporting actions for the purpose of building the nation's character.
Proactive actions	Character education is largely determined by the strong desire of the members of the group to participate and be involved in all of the educational process. Proactive behavior determine the success of the process of character education as embodied in the spirit of liveliness proactive behavior and a strong concern for always digging up the information needed to develop the ideas, knowledge, and various

Social Capital Elements	Character Education (At Schools, Family and Society)
	initiatives of the individual level, group level for the purpose of forming a strong national character and solid and address the problems in the process of character education.

Based on Table 1 it can be concluded that in the process of character education it requires social capital. Similarly, the elements of social capital are interrelated. By understanding the basic elements of social capital needed in character education, the process will not only focus on the determination of the values of the characters itself, but it is more important to strengthen social capital at all levels of society, so that the social interactions that occur in the process of character education can run optimally in realizing educational goals of character education, (Sahid Hamid Hasan et al, 2010:7 quoted Dwimingrum 2013)

- a. Developing the potential of the heart / conscience / affective learner;
- b. Developing habits and attitudes of the students are commendable and in line with universal values and cultural traditions;
- c. Inculcate leadership and responsibility of students as the future generation;
- d. Developing human -ability learners to become independent , creative , and insightful nationality
- e. Developing the school environment as a learning environment that is safe, honest, full of creativity and friendship, and with a high sense of nationality and full strength.

Based on the description above it can be defined that the purpose of character education still has not been achieved optimally. Therefore, the function of character education is not in accordance with what has been decided by the government that is the emergence of a variety of issues impacting the nation's crisis. Therefore, the process of character education must continue to take place dynamically, ongoing and continuous within the individual, engaged in social life. Socialization and internalization of the values of the characters being conducted by the family, school and society in accordance with the power of social capital is essential. In this case the dimensions of bonding social capital and bridging social capital cannot be separated in the process of character education. Bonding social capital tend to have the strength and goodness of the cooperation between members of a particular group, reciprocal social interaction between individuals (teachers , students , parents) and in order to mobilize the members in the context of social solidarity to build a critical awareness about the crisis of character .

On the other hand, bridging social capital can mobilize broader identities and reciprocity are more likely to develop in accordance with the principles of character education that can be universally accepted (Hasbullah, 2006:31 quoted Dwiningrum 2013) . In the context of

character education it will work well if bridging social capital in a movement puts more emphasis on dimension since it will lead to the search for answers together to resolve the problems faced by the group or problems associated with efforts to overcome the crisis more characters pursued by all levels of society. Thus, the positive effect of strengthening the social capital actually can be undergone by all members of society equally by struggling to build the nation's character. While bonding social capital movements sometimes life is not clear, because it is colored by the courage to cope with threats such as the possibility of the collapse of the symbols and traditional beliefs by group. In this group, the dominant behavior is a sense of solidarity (solidarity making). For this reason, the character education necessary to build bridging social capital, as it is considered capable of bridging social capital to contribute to the development and advancement of public power (Hasbullah , 2006: 32 in Dwiningrum 2013) . This is very important , because the character education process can be formed by bridging openness , having a network that is flexible, being tolerant , allowing to have an alternative answer and problem solving crises character , accommodating , tending to have the attitude that altruistic , implementing humanistic and universal character education in developing strategies .

Conceptual Framework

Crisis of the nation's character is still happening in the life of the global community especially dealing with structural and cultural character. Structurally, the crisis has occurred at all levels of public life, and culturally, it is indicated by the weakening of the values that are needed to build the nation's character. character crisis deals with the need character education that is undertaken by all levels of public life, especially the values needed in character education that is contextually determined in accordance with the conditions of the students and community residents .

Character education is successfully internalized if supported by social capital. Social capital as a social energy would be weakened if the elements of social capital are not developed optimally. In this case, the strengthening of social capital can be done by strengthening the social capital elements by adjusting it with the purposes and character of the nation's educational function.

Mapping social capital owned by the family\, school and community into the preliminary data is needed to design the nation's community-based character education, as a source of the nation's character crisis caused by the weakening of the power of social capital. The success is determined by the strength of character education elements of social capital that are owned by families, schools and communities to develop social capital bridging.

III. RESEARCH METHODS

The study was carried by using the Research and Development approaches, as described by Borg and Gall (1989). The study population is people living in the municipality of

Yogyakarta, especially in districts Mantrijeron. Subjects were community residents whose socio - economic backgrounds are different. The study subjects were selected to have specific criteria that citizens who are active in social organizations in the community of three groups: a group of mothers, fathers groups and youth groups .

Data collection techniques. The data were collected through questionnaire, active participation, observation, focused group discussions, documentation and data exploration.

Validation Instruments. Instrument validation performed on the instrument questionnaires, while construct validity is referred to validate the questionnaire by consulting with an expert or expert judgment. Validation is done by using instruments for materials experts and instructional technologists. **Product Validation.** Product validation is done gradually until the product is successfully patented. Initial validation performed by a team of researchers to conduct a limited trial to assess the feasibility of materials and processes. Then, validation through experts was carried out to assess the feasibility of the materials developed in the guidebooks as well as to provide an assessment of learning technologies in the feasibility of the teachings and learning process. Developmental psychologists assess specific material with the characteristics of the community. In this study, three process has been carried out and assessed by manual assessment formats.

Data analysis techniques. The data were analyzed by using data reduction in which the data were categorized according to the themes explored in this study. The data were also analyzed by using *Mixed method*. Quantitative analysis were implemented in descriptive statistics, whereas qualitative analysis is used for qualitative data. Finally, statistical analysis is used to describe the results of the mapping data of social capital, while qualitative analysis was used to map the results of the qualitative data to find patterns and meaning of the data in accordance with the purpose of research.

IV. RESULTS AND DISCUSSIONS

This chapter will be presenting various aspects of social capital and issue quarried character of the three groups descriptively, namely youth groups, groups of fathers and mothers groups , especially in the District of Mantrijeron Yogyakarta , Indonesia Yogyakarta There are two basic data that will be presented in the social capital and the character of the community.

Social Capital Mapping

Mapping social capital in this research is explored by using the *World Bank* instrument that has been modified in accordance with the purposes of the study as the initial overview of the social capital that is owned by the community, especially in the District of Yogyakarta Mantrijeron . Those groups do not see any problems due to different social backgrounds, even into the media to learn about the differences. There is a tendency that the person will be

interacting with people with different social backgrounds well. This phenomenon proves that people have already formed a social network as part of social capital in their daily life.

a. The mapping of Social Capital in the Society

Based on the preliminary data it can be concluded that within the society life there are some aspects regarding social capital. They are:

Table 1. The elements of Social Capital of a Society

Social Capital Aspects	Description
Social interaction and public services	An ability of a group of society to give public service to other members of the society. Public service represents a particular group of society towards its environment.
Decision Making	The decision derived together represents social capital possessed by a particular group of society. The joint decision is indicated by the cooperation and communication among the members of the groups.
Interaction effectiveness among groups	There is a social relationship among the members of the society with other social groups dealing with particular business in the process of fundraising. It means that the society is accustomed with building social relationship with other members of the groups in, even, wider and unlimited scope.
Activities and Funds	Funds as the sources of social capital is determined by the dues of the members of the society as well as the desire of the group members to accept any suggestions.
Information sources and Mass Media	Mass media as a source of important information has been part of social interaction and is valued as part of social capital which is needed by social groups to respond to any changes and challenges.
Sense of togetherness and familiarity among the citizens	The sense of togetherness and familiarity is established as the result of closeness between citizens as a medium for community groups to be optimized to achieve community goals.
Diversity which does not lead to Problems	Diversity will not lead to violation as long as social it is tied by capital, i.e. the sense of togetherness and familiarity.

taken from primary data, 2013

Based on the aforementioned explanation it can be concluded that social capital is already internalized in the society's life. Those are related to : Social interaction and Public services, Decision making, The effectiveness of social interaction among the members of the groups, Activities and Funds, Information source and Mass Media, sense of togetherness and familiarity among the citizens, and Diversity which does not lead to Problems. However, the problem is that not all of the members of the society is aware of the importance of social capital, especially in the process of character education of the nation.

The social capital that has already been internalized in the members of a society vary in nature. Generally, the values of social capital that has been internalized are explained as follows:

Tabel 2. Social Capital that has already been internalized

Youth groups	Mothers' Groups	Fathers' Group
<ul style="list-style-type: none"> • Love the national culture • Taking part positively in social organizations • Providing service for the members of the society when needed • Being tolerance • Providing necessary information to the society when needed. • Being responsible in taking care of the family • Leadership • Awareness toward environment 	<ul style="list-style-type: none"> • Taking part actively in social organization (<i>ketua Lansia, sekretaris Aisyiyah, ketua pemuda Mangkuyudan, ketua RT, etc.</i>) • Taking parts in organization sincerely without asking for money • Willing to sacrifice • Mutual cooperation • Being respected • Being trusted • Friendship 	<ul style="list-style-type: none"> • Taking parts in social and religious organization • Mutual cooperation • Being recognized by local community members • Being a motivator if the family • Able to establish cooperation with neighbors • Being religious • Caring each other • Tolerance

Source: taken from primary data, 2013

Based on the data above it can be inferred that there are several values of social capital that is, according to the youth respondent, already internalized in the society. Those values are: admiration toward national culture, tolerance, participation, and leadership. Meanwhile, according to mothers' groups, most of mothers have already accomplished the values of taking parts in most of social organization. Mutual cooperation, friendship, sincerity and trustworthiness are some values related to social capital that they have accomplished. Finally, the fathers' groups' respondents consider mutual cooperation, sense of sharing and security as the values of social capital that they have accomplished.

Most of the community members consider the values of social capital as values that have already been internalized in their daily life without realizing it. This can be further explained:

Table 3. Social Capital Owned by Society Members

Youth Groups	Mothers groups	Fathers groups
<ul style="list-style-type: none"> • The existence of social organization within the society • The existence of <i>Muhammadiyah</i> organization (Islamic organization) • Sense of togetherness in doing social activities, such as cleaning the environment • Implementing mutual cooperation when needed • Providing security through <i>siskamling</i> (a patrol done by youths at night) • The willingness to maintain the social organization of the local environment • Harmonious interaction among society members • Keeping the values of religiosity • Mutual Cooperation • Tolerance • Awareness of the environment 	<ul style="list-style-type: none"> • Implementing mutual cooperation principle in any aspect of daily life • Caring each other in coping with social problems • Friendship among society members • Modesty • Maintaining high work ethic • Tolerance toward diversity • Sense of familiarity • Respect 	<ul style="list-style-type: none"> • Implementing mutual cooperation principle in any aspect of daily life • Social respect • Maintaining the sense of togetherness • Keeping Solidarity up • Accepting kindness and implementing the values • Visiting neighbors. • Greeting each other well • Tolerances

Taken from primary data, 2013

Based on the data above it can be inferred that there are several values of social capital that is, according to the youth respondent, already internalized in the society. Those values are: admiration toward national culture, tolerance, participation, and leadership. Meanwhile, according to mothers' groups, most of mothers have already accomplished the values of taking parts in most of social organization. Mutual cooperation, friendship, sincerity and trustworthiness are some values related to social capital that they have accomplished. Finally, the fathers' groups' respondents consider taking part in social organization as the value of social capital that they have accomplished. Mutual cooperation, teamwork, being dependent on God's willing, caring and tolerance are the examples of social capital that they have internalized in their daily life.

The characters of the Society

To reveal the broad picture about society's understanding dealing with character problems, structured interview and FGD were conducted to reveal the information regarding the description of people with character, the causes of character crisis, character values that have been implemented within the members of a society and society's thoughts dealing with nation's character problem. Based on the result of the research, some of the respondents think that they have already accomplished some values of social capital. In brief, the values of social capital that have been internalized in the society's daily life are explained as follows:

Table 4. Character Values Owned by Society Members

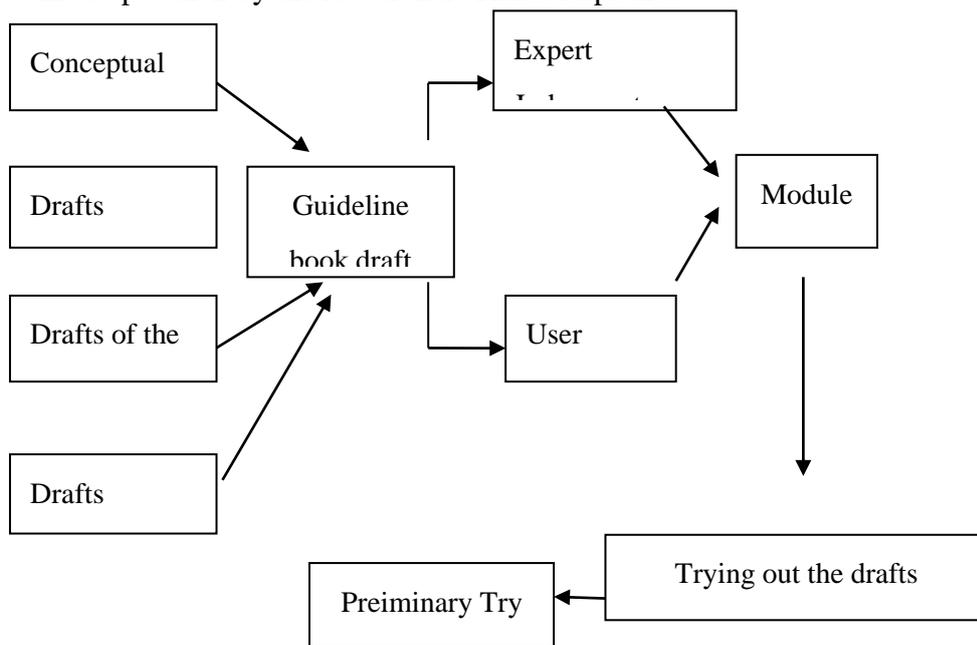
Youth Groups	Mothers Groups	Fathers Groups
<ul style="list-style-type: none"> • Being polite • Respect • Being religious • Studying hard • Honesty • Having life principles • Planning anything well • Socially adaptable • Respecting the elders • Confidence • Being responsible • Assertive 	<ul style="list-style-type: none"> • Nurturing • Yielding • Respecting others • Being religious • Doing God's orders • Tolerance • Honest • Fair • Care • Being a model • Disciplinary • Responsible • Maintaining good relationship with others • Avoiding insulting behaviors 	<ul style="list-style-type: none"> • Helping each others • Being religious • Doing God's order • Tolerance • being a good model • Disciplinary • Responsible

Source : Taken from primary data, 2013

Table 4 shows that there are already several positive values of social capital that have been accomplished by the respondents. The dominating values are honesty and being idealistic. According to the respondents (mothers), there are, actually, sufficient proofs to reveal regarding the values of social capital, yet, the most dominating attitude/values in this group is yielding. Different to the values possessed by the youth groups, the mothers groups consider social and religious values are the right values to prove that someone is already with character. However, the fathers groups consider similar values as the mothers do. The fathers groups consider social and religious values to be essential in establishing ourselves as people with character.

Developing a Guideline of Social Capital Development for Character Education

Based on the steps taken in developing a guideline, the guideline then was given to some experts on character education. The experts leave some notes as the suggestions for the refinement of the guideline. The guideline, then, was reproduced as samples that were given to some teachers and students for try-out purposes. In implementing the product, there were some steps taken by the researcher. Those steps are:



Picture1 : The flows of Guideline Development

The steps to develop the materials are explained as follows:

- a. Thematic concepts are needed to develop the main topic of the guideline to relate them with primary concepts that are to be discussed in the guideline, especially those related to social capital development in character education.

- b. There are also game plans/concepts in the guideline in order to create supportive guideline for the readers (the society) in order to maximize the internalization of social values in their daily life as well as to ensure them the importance of social capital for the national character education.
- c. The teaching-learning process are well designed in order to create a learning process which lead to character values in character education. Thus, the key components of character education, such as moral knowing, moral feeling and moral action are optimally gained.
- d. Experts' validation is aimed at checking the appropriateness of the guideline in accordance with the objective of the research both procedurally and academically.
- e. Users' validation is also carried out to check the applicability of the guideline in the society.
- f. The draft of the guideline is the preliminary and tentative concept of the guideline.
- g. Product testing was also carried out in order to ensure that the research is following the real steps of researching before the guideline is used widely in the society.
- h. The real implementation of the guideline was carried out to assess the reliability of the guideline as a medium to develop social capital values in character education.

The implementation of the product the guideline) was carried out at October 21st 2013 un Grand Palace hotel Yogyakarta. There were three big groups attended the event. They were mothers groups, youth groups and fathers groups. The invitee were selected by the Mantrijeron sub-district of Yogyakarta. Based on the result of the implementation, the themes provided in the guideline are explained as follows:

TOPICS	OBJECTIVES	SOCIAL CAPITAL COMPONENTS	CHARACTER EDUCATION VALUES
Profiles of People With Character	The participants are asked to share their thoughts delaing with the definition of people with character by using certain mind map.	Mutual trustworthy, Communication, Empathy, Social values	<i>Moral Knowing</i>
Learning from people with character	The participants are asked to write down some figures in their family or wider (even outside Indonesia) which is considered as people with character	<i>Trustworthy, cooperation, kindness, honesty</i>	<i>Moral Knowing and Moral Feeling</i>
A house with	The participants are asked to describe the definition of a house and its function that	<i>Trustworthy, respecting each</i>	<i>Moral Knowing and</i>

TOPICS	OBJECTIVES	SOCIAL CAPITAL COMPONENTS	CHARACTER EDUCATIONAL VALUES
character	may bring happiness to the family.	<i>other, social cooperation,</i>	<i>Moral Feeling</i>
Knowing self-existence as people with character by using the philosophy of “The River of Life”	The participants are asked to share their experiences about the process to be a person with character through “The River of Life Maintaining resiliency through the river of Life by relying on the fact as a God’s creature that is always thankful. Through the experiential learning, it is expected that the participants will feel being heard, being “known” and being respected by others as well as to be given advices to analyze the role of social capital in the process of creating people	<i>Trustworthy, respecting each other, social cooperation, confidence, social awareness</i>	<i>Moral Knowing and Moral Feeling</i>
Problems in strengthening social capital in developing the national character	The participants are asked to form some groups to identify the most important character values to be acquired by youths in the process of national character development. The participants are asked to choose the most effective ways to develop citizens’ life with character.	<i>caring each others, creativity, confidence, mutual cooperation</i>	<i>Moral Knowing Moral Feeling, and Moral Action</i>
Developing a group of society with character based on honesty principle	The participants are asked to form some groups and identify the importance of a nation with character by exemplifying the roles of national heroes as an effective way to internalize character values within the society members.	<i>Social awareness, cooperation, trustworthiness, social participation, and creativity</i>	<i>Moral Knowing and Moral Feeling, Moral Action</i>

Source: taken from primary data, 2013

The guideline has been tried out for limited group members and the result shows that the book is quite applicable. However, the guideline will be better if it also contains

self-assessment rubric to assess the effectiveness of social capital strengthening process to build the character of the society. Particular assessment to develop the social capital development instruments in character education should be, further, implemented for the refinement of the book.

V. CONCLUSION

The results of the study conclude that the development of social capital for the nation's character education can be done in public life. Social interaction and community services, decision-making, the effectiveness of the group interaction, activities and funding, resources and mass media, a sense of togetherness and familiarity citizens, the difference does not pose a problem aspects that can be developed in strengthening social capital. Similarly with no sufficient understanding of youth groups, groups of fathers and mothers groups on understanding social capital and social capital ownership in personal life and society, social capital can be used for character education capital of the nation.

Efforts to develop social capital in character education can be done by using a guide book. Handbook for social capital development in education has been designed in the research that is feasible for use by members of the community in building national character. The guide book is designed for character education. It consists of six themes namely: Profile of People with Character; Learning from Figures with character; The house with character ; Knowing self-existence as an individual with character under the philosophy of "River of Life" ; Problems in Strengthening Social Capital in National Character Development ; Developing a group of society with character based on honesty principle

Based on limited try out of the guideline it can be concluded that in every theme the process of character education in the nation have already been internalized with some elements of social capital, and, further, regarding the character education analysis it can be inferred that each theme is developed in the education of the nation's character has a charge dealing with moral knowing, moral feeling and moral action.

VI. SUGESTIONS

Training for strengthening social capital in association with the character of the nation's education need to be socialized in all levels of society, such as family, school and community. The character crisis will be overcome progressively if supported by the awareness of all citizens as responsibility.

Building awareness about the critical importance of national character is in desperate need of social capital as a force of social energy. Strengthening social capital can be done at the notion that social capital is the social element existing in life that is to be maintained as part of the national power to maintain the existence and identity of the nation in facing the challenges of social changes.

Daftar Pustaka

- Baron, Setephen dkk (2000), *Social Capital ; Critical Perspective* , New York: Oxford University.
- Cultural & Cultural Identity. www.faceweb.north.seattle.edu
- Culturaak identity; www.napavaley.edu .
- Culture Identity, Languange & Self Esteem; www.aracy.org.edu
- Dwiningrum, Siti Irene Astuti (2010), “Pendekatan Holistik dan Kontekstual dalam Mengatasi Krisis Karakter di Indonesia”, dalam *Cakrawala Pendidikan*, Yogyakarta, UNY, Mei 2010, Th. XXIX, Edisi Khusus Dies Natalis.
- Dwiningrum, Siti Irene Astuti (2011), “ Implementasi Pendidikan Karakter pada Matakuliah Ilmu Sosial dan Budaya Dasar (ISBD) Dengan Pendekatan Masalah”, dimuat dalam Proseding Seminar Nasional Budaya an Inovasi Pembelajaran Dalam Pemantapan Pendidikan Karakter, ISBN:978-979-562-02305.
- Dwiningrum, Siti Irene Astuti (2011), “Penguatan Modal Sosail di Sekolah”, dimuat dalam Laporan Kegiatan Seminar nasional , Tema: “ Ilmu Pendidikan: Suatu Kesempatan dan Tantangan”, Progam Studi Ilmu Pendidikan Pascasarjan UNY 2011.
- Dwingrum, Siti Irene Astuti (2011), “Kearifan Lokal Sebagai Modal Sosial Dalam Pendidikan Karakter di Sekolah “ , dimuat dalam Prosiding Seminar Nasional Ilmu Pendidikan dan pengembangan dan Pengelolaan Pendidikan Berbasis Kearifan Lokal, ISBN: 978-602-9075-63-2 . UKM Makasar.
- Dwingrum, Siti Irene Astuti (2013), “*Holistic and Contextual Learning in Character Education in Schols*”, ICSEI Congress *Proceedings*. Redefing Education, Learning and Teaching in the 21 st Century: the Pas, Present and Future of Sustainable Scholl Effectiveness.
- Dwingrum, Siti Irene Astuti (2013). “*Natoin’s Character Education Based on the Social Capital Theory*”. *Asian Social Science, Special Issue*, September 2013. Penerbit: Canadian Center on Science and Education
- Hasbullah. Jousairi (2006). *Social Capital*. Jakarta: M-R United Press
- Hauberer, Julia (2011). *Social Capital Theory*. VS Reseach.
- Koesoma, Dony (2004). *Pendidikan Karakter*. Jakarta:Grasindo
- Lin, Nan (2004). *Social Capital*. Australia: Cambrigde University.
- Lickona, Thomas (1991). *Educating for Character: How Our School Can Do Teach Respect and Responsibility*. New York: Brantam Book
- _____ (1999). Eleven Principles of Effective Character, Scholastic Early Childhood To day, November/December 1998, 13.1, *PreQuest Education Journals*.
- _____ (1991). *Educating for Character: How Our School Can Do Teach Respect and Responsibility*. New York: Brantam Book.

- _____ (1999). Eleven Principles of Effective Character , Scholastic Early Childhood To day, November/December 1998, 13.1, *PreQuest Education Journals*.
- Muslich, Masnur (2011). *Pendidikan Karakter: Menjawab Tantangan Krisis Multidimensional*. Jakarta: Bumi Aksara.
- Megawati, Ratna (2005). *Pendidikan Karakter :Sebuah Agenda Perbaikan Moral Bangsa*. EDUKASI : Jakarta, September.
- Raka, Gede (2006). Guru Tranformasional dalam Pembangunan Karakter dan Pembangunan Bangsa. *Makalah*, Orasi Dosen Berpretasi Tingkat Poltekes dan Tingkat Nasional, Jakarta: 10 Nopember.
- _____ (2006). Pendidikan Untuk Kehidupan Bermakna. *Makalah*, Orasi Ilmiah pada Hari Wisuda Universitas Kristen Maranatha Bandung, 25 Maret.
- _____ (2007). Pendidikan Membangun Karakter. *Makalah*, Orasi Perguruan Taman Siswa, Bandung 10 Februari 2007.
- Schuller, Tom dkk (2004). *The Benefits of Learning: The Impact of Education on Health*,
- Slavin, R.E. (1994). *Educational Psychology (3rd ed.)*. Englewood Cliffs, New Jersey: Prentice-Hall Inc.
- Soekanto, Soeryono (1982). *Sosiologi: Suatu Pengantar*, Jakarta: Rajawali Press.
- Zubaedi (2011). *Desain Pendidikan Karakter*, Jakarta: Kharisma Putra Utama.
- Zuchdi, Darmiyati (2008). *Humanisasi Pendidikan* , Yogyakarta ; Bumi Aksara

Siti Irene Astuti D	2013	<i>Holistic and Contextual Learning in Character Education in Schols</i>	ICSEI Congress Proceedings. Redefining Education, Learning and Teaching in the 21 st Century: the Pas, Present and Future of Sustainable Scholl Effectiveness	15	ISBN: 978-979-26-198 0-5
Siti Irene Astuti D	2013	Eksistensi Sekolah dalam Tantangan Global	Seminar Nasional, Politik Pendidikan Nasional dalam Tantangan UNY, 5 Oktober 2013 Penerbit Pascasarjana	15	ISBN :978-602-9 6172-7-6
Siti Irene Astuti D	2013	<i>Designing Therapeutic Landscape as an Effort to Reduce Stress Especially in Scholl Environment Responding to Global Warming Effect</i>	Inter-University Seminar on sian Megacities: sian Urbanism and Beyond , 15-17 agustus 2013	16	Surat penugasan No 5378/Un34.17/ KP/2013
Siti Irene Astuti D	2013	<i>Natoin's Character Education Based on the Social Capital Theory</i>	Asian Social Science, Special Issue, September 2013 Penerbit: Canadian Center on Science and Education	Vol. 9, No. 12	ISSN 1011-2017, E-ISSN 1911-2025

ISEPSS-1923
To Establish Networked FFFS-eCT for the Families of Infants and Young Children in Taiwan

Ling-Li Chu

National Kaohsiung Normal University

lingli1001@gmail.com

Chwen-Chyong Tsau

Fooying University

chwenchyongtsau@hotmail.com

Abstract

Recently the striking declining birth rate and trend toward one-child highlights the change of family structures and the obvious increase of nuclear families and double-income families. In response to these new-developed families needs, Government in Taiwan has establishing more babysitting centers and enfant-care community systems, and also actively promoting 5-year-old support plan. Therefore, many and younger infants and children are placed in these community nursing and education system. The relationships and interaction of these infants and young children with parents and other families will be reduced then? And the family functioning will be weakened? These are our worries.

To understand and maintain or/and enhance family functioning in order to promote good parent-child interaction and relationship, it is necessary to develop a family functioning survey that is suitable for infants and young children in Taiwan. We found Dr. Suzanne's Feetham's Feetham Family Functioning Survey (1982) based on Bronfenbrenner's family ecologic framework published and used in many countries and cultures for healthy and unhealthy children researches, and could also be suitable for the families in Taiwan .

We then organize 6 senior experts and scholars as research team to discuss documents (documentary analysis), revise FFFS Chinese version, questionnaire survey (pre-trial and formal test), data analysis (adopting descriptive statistics, factor analysis, Cronbach's α coefficient, Pearson correlation coefficient test...through SPSS for Windows 22.0) in order to accomplish the purpose of our study: to establish networked FFFS-eCT for the families of infants and young children in Taiwan .

The result will be finished and reported in the conference.

Keywords: family functioning survey, infant and young children, FFFS

Psychology I

Room B

14:50-16:20

Thursday, May 8

Session Chair: *Prof. Nik Rosila Nik Yaacob*

ISEPSS-1819

Visual Comfort for Reading on a Tablet Computer: A Cross-Age Study

Li-Chen Ou

National Taiwan University of Science and Technology

ISEPSS-1815

Using Medicine Wheel Teaching as a Model in Crisis Counseling

Pei-Fen Siraya Chuang

National Taitung University

ISEPSS-1755

The Concept of Helping In Counseling : An Islamic Perspective

Nik Rosila Nik Yaacob

Universiti Sains Malaysia

ISEPSS-2063

The Meaning of Family for adolescents who stays in Childs Penitentiary

Indri Oktavia Rospita

Center for Health and Indigenous Psychology

Putu Nugrahaeni Wideasavitri

Center for Health and Indigenous Psychology

ISEPSS-2082

Positive Impact on Adolescent Victims of Divorce: A Case Study

Putu Nugrahaeni Wideasavitri

Udayana University

Indri Oktavia Rospita

Udayana University

ISEPSS-2069

Counselling Students Self-perceived Professional Competence: Responsibilities and Rapport between Supervisor and Self

Tom Yuen

City University of Hong Kong

Karman Leung

City University of Hong Kong

Ming Lai Cheuk

City University of Hong Kong

Regine Chung

City University of Hong Kong

ISEPSS-1819

Visual Comfort for Reading on a Tablet Computer: A Cross-Age Study

Li-Chen Ou

National Taiwan University of Science and Technology

43, Section 4, Keelung Road, Taipei, Taiwan

E-mail address: lichenou@mail.ntust.edu.tw

Abstract

A psychophysical experiment was conducted to investigate the effects of text-background lightness difference on visual comfort. Twenty young and 20 older observers participated in the experiment, using an iPad 2 as the presentation media. The results show that the larger text-background lightness difference, the higher visual comfort value for older observers. For young observers, however, the highest visual comfort value can be obtained when there is a moderate, rather than extremely high, lightness difference. The findings can help provide useful guidelines for graphic user interface design in modern e-reading devices.

Keywords: aging research, visual comfort, lightness difference, tablet computer

1. Introduction

Many studies have been conducted to establish how text-background contrast can influence visual comfort when reading on desktop computer displays (e.g. Ling & Schaik, 2002; Buchner & Baumgartner, 2007; Lin & Huang, 2009). Little was known, however, as to whether the findings also apply to mobile computing devices, such as iPads or iPhones. The issue is more essential in the area of aging research thanks to increasing popularity of e-reading and web applications for older people. Our previous study (Ou et al., 2012) into visual comfort for older users of desktop computer displays has shown that an extremely high luminance contrast for text and background could result in a decline in visual comfort, which was more significant for a dark background than a light background. The present study aims to establish whether or not the findings still hold true for older people reading on a tablet computer.

2. Methods

We carried out a psychophysical experiment to investigate the effect of text-background luminance contrast, defined as the CIELAB lightness difference in this study, on visual comfort of older observers.

In this study, 20 young observers (10 males and 10 females, aged 20-30 years) and 20 older observers (6 males and 14 females, aged over 60 years) participated, all of whom were citizens of Taipei, Taiwan. The observers have all passed Ishihara's test for colour deficiency.

In the experiment, each observer was presented with 210 comparisons of two document layouts on an iPad 2, and was asked to pick one of the two layouts, of which the observer felt more comfortable to read the text. Each document layout presented the same text, the only difference being the luminance values of the text and of the background for the two document layouts. Fig. 1 shows an example of the comparisons.



Fig. 1: An example of screen layouts shown on the iPad 2

The text and background colours were based on 5 achromatic colour samples. Table 1 shows colorimetric measurement data for the 5 colours including luminance and the CIE values. Based on the 5 achromatic colours, 20 text-background combinations were generated, considering both positive and negative polarity conditions. This resulted in 190 paired comparisons. Out of the 190 combinations, 20 was presented twice, meaning 210 comparisons in total were made by each observer. During the experiment, the sequence of the 210 comparisons was randomised; the right/left positions of the two document layouts for each comparison were also randomised.

Table 1: Colorimetric data of the 5 colour samples used in this study

Color	(R, G, B)	Luminance	Lightness (L*)	(x, y)
1	(0, 0, 0)	0.52 cd/m ²	1.19	(0.2638,0.2552)
2	(51, 51, 51)	12.59 cd/m ²	20.71	(0.3010,0.3126)
3	(124, 124, 124)	84.25 cd/m ²	53.17	(0.3004,0.3114)
4	(185, 185, 185)	202.73 cd/m ²	76.69	(0.3010,0.3125)
5	(255, 255, 255)	397.34 cd/m ²	100	(0.3005,0.3115)

The experiment was performed using an iPad 2 (Black). The display was situated in a darkened room, with the only light source coming from the iPad 2. The display peak white had a luminance value of 397.34 cd/m², with CIE chromaticity (x, y) = (0.3005, 0.3115). The viewing distance was around 300mm between the observer and the iPad 2, which was placed with a tilt angle of 15 degrees against a desk.

Conventionally, luminance contrast was defined as a proportion of the text-background luminance difference to the adaptation luminance. The adaptation luminance was determined either by the background luminance, i.e. the Weber contrast (Peli, 1990), or by the sum of text luminance and background luminance, i.e. the Michelson contrast (Michelson, 1927). Nevertheless, these conventional measures do not correlate well with a perceptually uniform colour system and thus were considered not suitable for use in the present study. For this reason, we chose to use the CIELAB lightness difference (CIE Publication, 2004) as a measure of the text-background luminance contrast in this study.

3. Results and Discussion

The repeatability test result shows that 78.3% (for older observers) and 83.8% (for young observers) of the replicated tests had the same response by the observers. This indicates that the experiment was highly repeatable and reliable.

The scale values for the older observer response were determined using the paired comparison method (Thurstone, 1927), including the z-score conversion. To see whether and how lightness difference between text and background might affect the observer response, the scale values were plotted against the lightness difference value, as illustrated in Fig. 2 (a).

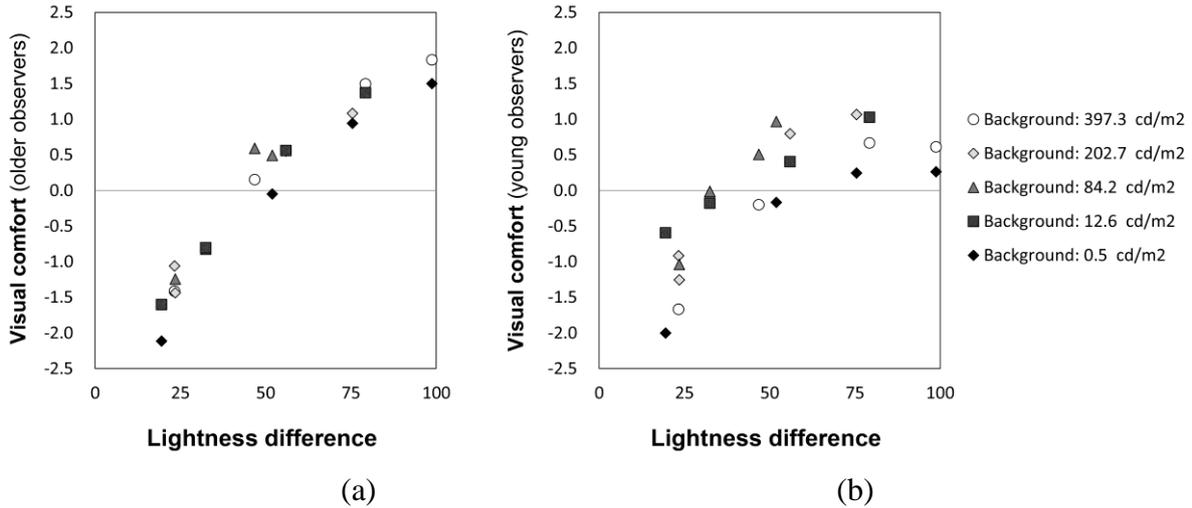


Fig. 2: (a) Older and (b) young observer response plotted against lightness difference between text and background presented on the iPad 2

It is clear from the graph that the higher lightness difference between text and background is, the higher visual comfort for older observers. Note this tendency does not seem to be affected by the background luminance, i.e. the tendency is consistent across the 5 luminance levels of the background. This suggests that on an iPad 2 in a darkened room, the older observers tended to prefer large text-background lightness difference, thus high luminance contrast, rather than small lightness difference, or low luminance contrast, between text and background.

The scale values for the young observer response were also determined using the paired comparison method (Thurstone, 1927), including the z-score conversion. The scale values were plotted against the lightness difference value, as illustrated in Fig. 2(b). As the graph shows, the larger lightness difference between background and text, the higher mean visual comfort values given by young observers until lightness difference reaches 80. For lightness difference over 80, the mean visual comfort value remains unchanged or even starts to decline. This tendency is different from that for older observers as illustrated in Fig. 2(a). The data spread of visual comfort value seems to be bigger for young observers than for older observers. Among the five background colours, the darkest background (with a luminance of 0.524 cd/m^2) tends to show the lowest visual comfort value. This was different from the result for older observers. The tendency for older observers does not seem to be affected by the background luminance.

The experimental results shown in Figs. 2(a) and (b) were compared with our previous research (Ou et al., 2012), in which the visual comfort was studied using 20 older observers and 20 young observers reading on a desktop computer monitor (Samsung 46-inch LCD).

The results of this previous research are shown in Fig. 3(a) for older observers and Fig. 3(b) for young observers. According to Fig. 3(a), there seems to be an interaction effect between the lightness difference and the background luminance, i.e. the darker the background colour is, the higher the slope of the data lines tends to become. This means that increasing lightness difference tends to enhance visual comfort, the enhancement being more significant on a dark background than on a light background. The graph also shows that the darker the background colour, the curvier the shape that the data lines seem to form. This suggests that continuing to increase lightness difference may result in a decline in visual comfort, which seems to be more likely on a dark background than on a light background. Similarly, Fig. 3(b) shows that continuing to increase lightness difference between text and background may result in a decline in visual comfort on a dark background than on a light background. In the present study, however, not only dark but also light backgrounds show a decline of visual comfort for young observers when the text-background lightness difference is greater than 80, as shown in Fig. 2(b).

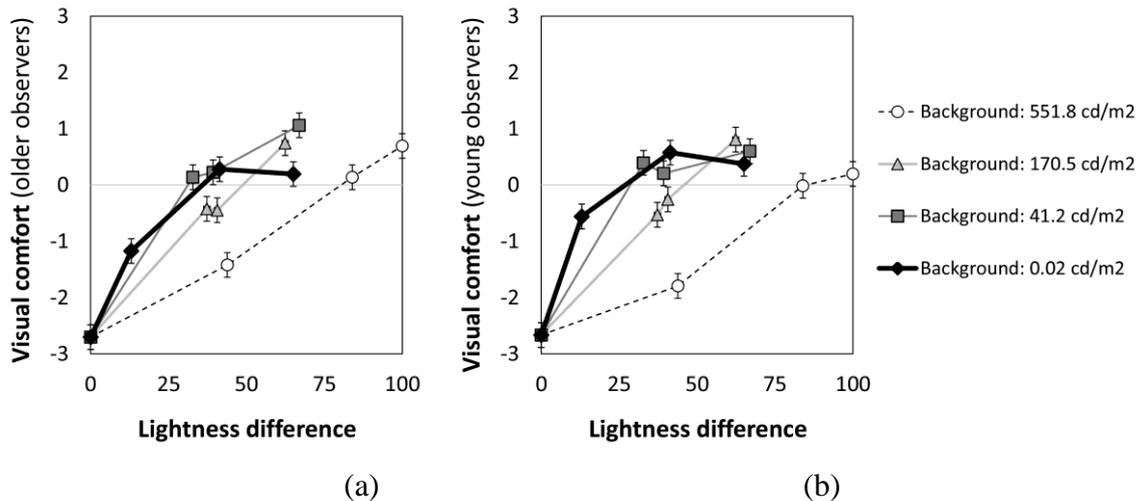


Fig. 3: (a) Older and (b) young people response plotted against lightness difference between text and background presented on a desktop LCD monitor (Ou et al., 2012)

The main difference between the present study and the previous research (Ou et al., 2012) is that the results based on the iPad 2 show a consistent pattern across various luminance levels of the background, whereas results based on the Samsung LCD shows different patterns for different luminance levels of the background.

Such a difference may be due to the fact that the display peak white for the iPad 2 had a far lower luminance (397.34 cd/m^2) than the Samsung LCD (551.8 cd/m^2), thus the former had a lower luminance contrast than the latter. In addition, the viewing distance in the present experiment was 300mm, which was much shorter than the viewing distance used in the previous research, 1500mm.

As Fig. 4 shows, the higher the lightness difference between background and text (especially for lightness difference higher than 80), the greater the difference in visual comfort value between young and older observers. For the lightness difference over 80, the visual comfort value given by young observers tends to remain unchanged or have a decline, while the visual comfort value for older observers keeps increasing. It is clear that young observers tended to feel the most comfortable visually for the text-background combinations having a lightness difference of 80, while the older observers felt the most comfortable when the lightness difference was 100. The main reason for such a difference is perhaps that the lens for older people can absorb more light than for young people, and thus older people may need greater lightness difference, or greater luminance contrast, to achieve higher visual comfort.

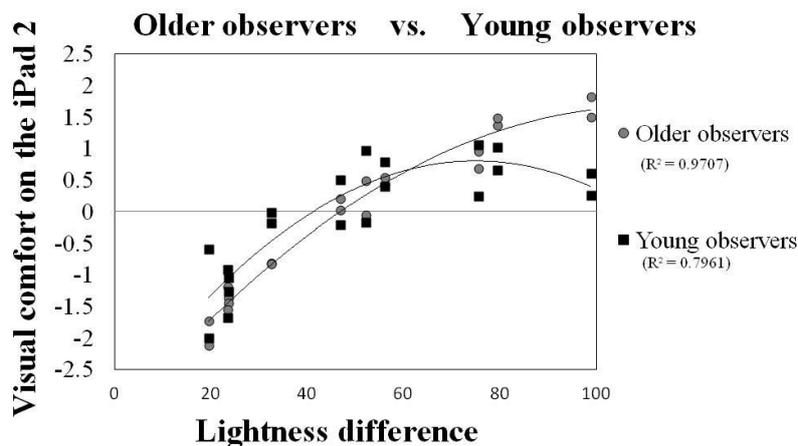


Fig. 4: Young and older observer responses plotted against lightness difference between text and background presented on the iPad 2

4. Conclusion

The visual comfort experiment using the iPad 2 shows different patterns between young and older observers. This is perhaps due to age related changes in the lens of older people. The experimental data for older observers shows that older people liked large lightness difference between text and background more than young observers did. Older observers even liked the text-background combinations with the extremely large contrast. Conversely, young observers did not like the biggest contrast.

5. Acknowledgement

This work was supported in part by the National Science Council, Taiwan (NSC 100-2218-E-011-029 and NSC 101-2410-H-011-015-MY2).

6. References

- Buchner, A., & Baumgartner, N. (2002). Text-background polarity affects performance irrespective of ambient illumination and colour contrast. *Ergonomics*, 50, 1036-1063.
- CIE Publication 15:2004 (2004). *Colorimetry*. Vienna: CIE Central Bureau.
- Lin, C., & Huang, K. (2009). Effects of color combination and ambient illumination on visual perception time with TFT-LCD. *Perceptual and Motor Skills*, 109, 607-625.
- Ling, J., & Van Schaik, P. (2009). The effect of text and background colour on visual search of web pages. *Displays*, 23, 223-230.
- Michelson, A. (1927). *Studies in Optics*. University of Chicago Press.
- Ou, L., Sun, P., & Luo, M. R. (2012). Age effects on visual comfort as a function of lightness difference between text and background. *Proceedings of the Association Internationale de la Couleur (AIC) Interim Meeting 2012*, Taipei, Taiwan.
- Peli, E. (1990). Contrast in complex images. *Journal of the Optical Society of America A*, 7, 2032-2040.
- Thurstone, L. L. (1927). A law of comparative judgment. *Psychological Review*, 34, 273-286.

ISEPSS-1815

Using Medicine Wheel Teaching as a Model in Crisis Counseling

Pei-Fen Siraya Chuang

Department of Education, National Taitung University, Taitung, Taiwan

healingsiraya@gmail.com

Abstract

The purpose of this article is to demonstrate how a therapist may apply medicine wheel teaching as a crisis counseling method within universities. This method was used and a case study of a campus that experienced three students death within two months will be presented.

Among these three deaths, there were two female students who committed suicides and one male student who got into car accident and was killed immediately. This high death rate in two months had never happened on this campus; therefore, the therapist took a different approach to take care of this campus crisis. The therapist was originally trained as a marriage and family therapist and later trained as a shaman healer. In this paper, campus crisis counseling had expanded to the level of environmental psychology, indigenous tribal history sharing and ceremony, initiating healing rituals on campus as well as raising up the land consciousness which is sharing the respectfulness to the land and the people who had come before.

Further suggestions about medicine wheel teaching on school counseling will be discussed

Key words: medicine wheel, indigenous healing ceremony, environmental psychology, shaman, campus crisis counseling

ISEPSS-1755

The Concept of Helping In Counseling : An Islamic Perspective

Nik Rosila Nik Yaacob

School of Educational Studies, Universiti Sains Malaysia, Penang

nikrusila@usm.my

ABSTRACT

Helping is the cornerstone in counseling practice. Helping in Islamic perspective is grounded upon the concept of *hisbah*. Since this concept is purposely design as a mechanism in business trade and transaction, this article extricates how *hisbah* aligned in counseling practice. The first section of this article will discuss on the concept of *hisbah* in terms of its definition, models, and roles. The second section will outline the nature of human beings and the techniques, which are amongst the important aspects in Islamic counseling point of view. The discussion in this respect will considered characteristics of helping behavior and the notions of Islamic values.

Keywords: concept of hisbah, counseling techniques, human nature

Introduction

Help mean to make things easier or possible for someone to do something by offering them one's services or resources. Helping behavior on the other hand means "*an act which benefits others with no external rewards promised a priori in return*" (Bar-Tal, 1982). According to Reber & Reber (2001), helping behavior is the providing of direct assistance to someone in need. The term is applied in situations in which the behavior involves no sacrifices, real or potential, on the part of the helper. What is perhaps the most basic form of helping has been termed natural helping. Before reaching professional helpers, clients often have been counseled or assisted in some way by family, friends, neighbors, or volunteers. Natural helping is based on a mutual relationship among equals, and the helper draws heavily on intuition and life experience to guide the helping process. The complexity of many social issues and the extensive knowledge and skill required to effectively provide some human services today exceed what natural helpers can typically accomplish. This has resulted in the emergence of several occupations, known as human services professions, that deliver more complicated services to people in need. Professional helping is different from natural helping in that it is a disciplined approach focused on the needs of the client, and it requires specific knowledge, values, and skills to guide the helping activity. Both natural and professional helping are valid means of assisting people in resolving issues related to their social functioning. In fact, many helping professionals first became interested in these careers because they were successful

natural helpers and found the experience rewarding. In Islam, every Muslim is obliged to help another Muslim for the sake of God. This is mentioned in **Surah al-Hujurat 49:10**; **“Without doubt the believers are brothers of one another so then make peace and harmony between your brothers and have consciousness of Allah so that maybe He will show you mercy”** (Abdullah Yusuf, 1989).

Helping in Islam

Helping in Islam is grounded upon the concept of *hisbah*. Historically, the Islamic state during its heyday established *hisbah*, a religious institution established under the authority of the state, which responsible to ensure that Muslim business persons conduct their business transactions in a proper, fair and ethical manner. The state has an important role to play in safeguarding fairness in business, as well as to eradicate possible fraud and dishonesty in the marketplace (Ibn Taimiya, 1982; Muhammad Abdul Mun'im, 1992). *Hisbah* is derived from the root word *hasaba*, which literally means to account, to compute, to consider (Wehr, 1980). The verbal form *ihtasaba* means “to take into consideration and to anticipate a reward in the hereafter by adding a pious deed to one’s account with God” (Ibn Taimiya, 1982). It is quite possible that from the usage of the noun *ihisab* came it’s associated with the activities of inviting others to good deed and forbidding the evil in the hope of getting reward in the hereafter. Verification or *hisbah* in its Arabic term is an Islamic doctrine of keeping everything it orders within the laws of Allah. It is based on the concept of *shariah* (law), enjoin good values and forbid bad values. The concept of *hisbah* is to review and evaluate actions and achievement in carrying out the duties and responsibilities of administration, hence, overcoming and improving weaknesses. The emergence of *hisba* is significant with modern states today. Its *raison d’être* lies in the Qur’anic command of *amr bil ma’ruf nahi ‘an al-mungkar*, that is, to ordain good and forbid evil (Ibn Taimiya, 1982; Muhammad Abdul Mun'im, 1992; Abdul Malek, 1992) and also in line with Surah al-Imran 3:104; *“Let there arise out of you a band of people inviting to all that is good, enjoining what is right, and forbidding what is wrong: there are the ones to attain felicity”* (Abdullah Yusuf, 1989).

The main purpose of the above verse is indeed to produce a harmonious community, whereby each member in the society is eager to help each other, shows a high level of empathy to the needy, and be aware of the environment. The concept of *hisbah* is comprised of elements, which can be translated into three responsibilities, i.e; i) responsibility related to the right of God, ii) responsibility related to the right of mankind, iii) responsibility related to the right of God and mankind (Abdul Malek, 1982; Muhammad Abdul Mun'im, 1992; Ibn Taimiya, 1982). Thus, the purpose of *hisbah* can be drawn as:

1. Protecting Allah's religion by ensuring that it is applied in the lives of the people, and by safeguarding it from becoming corrupted or spoiled. The *hisbah* official or *muhtasib* is charged with encouraging the people to fulfill their religious duties as prescribed by Islamic law. The *muhtasib* also responsible to prevent them from introducing deviation and corruption into these prescribed acts of worship. He must prevent innovations from being introduced into the religion as a whole and authorized to mete out punishment to those who try to introduce them. In other words, the *muhtasib* is concerned with everything that deals with safeguarding, reviving and facilitating the faith.

2. Preparing a righteous society by supporting and cultivating high moral standards and by combating and eliminating immoral behavior. The *muhtasib* is able to prevent public acts of immorality and is authorized to punish those who engage in them, if the act is one that has a punishment falling under the jurisdiction. If the act is of a nature that it must be dealt with by judicial system, then he is authorized to bring the perpetrators before the judge.

3. Preparing the righteous believer to be concerned with the affairs of his society and to work for its welfare. Islam makes enjoining what is right and forbidding what is wrong obligatory on every Muslim. He must not watch quietly as wrongdoing is committed. Similarly, he should watch idly as acts of righteousness are neglected and abandoned. If the person fulfills this duty towards others, he is less likely to leave off doing right or commit an act of wrongdoing. On the other hand, *hisbah* also provides the members of society with a constant monitoring of their activities, supporting and strengthening positive activities while combating and preventing corrupt ones.

4. Building a social conscience or social deterrent. This conscience keeps people from violating the principles and general customs of Muslim society. The social environment plays an important role in regulating individual behavior. Hence, if the principles and mores of society are observed, maintained and enforced by social pressure, it becomes difficult for immoral people to disregard them. They themselves, feel embarrassed and ashamed to go against the norms of society. On the other hand, if the majority of people in society are devoid of these principles and there is no authority to enforce them, because they are deemed to be in the private domain of the individual, it becomes easy for people to delve into immoral activity.

5. Maintaining, fostering and preserving upright social standards and ensuring that individual in society are properly understood social rules and regulation properly.

Islam believed that, when man deviant from the Truth and ignore their responsibilities to his Lord and counterparts, problems such as stress, depression, anger, anxieties, phobias and other

psychological problems arise (Al-Ghazali, 1998; Syed Azhar, 1989). Therefore, the purpose of helping from *hisbah* point of view is profoundly to guide and direct human being to a correct direction. Counseling is regarded as a discipline that involves help and healing, and by which counselors interact with clients to assist them to learn about themselves, and understand the roles and responsibilities inherent in these relations. Literally, counseling means a process of interviewing, testing, guiding, advising, and designed to help an individual to solve problems and plan for his future (Reber, & Reber, 2001). The role of emotion in causing psychological and emotional disturbances is central to understand client. Individuals are thus, aided to recognize their potential, learn how to utilize potential, and work towards removing obstacles that block full realization of their capabilities in order to strengthen his relationship with others. Islamic counseling is the incorporation of spirituality and religion in the therapeutic process. Mainstream counseling looks at the mental and physical well being but does not include the spiritual aspect which all Muslims regardless of how religious they are want an Islamic perspective to counseling (Sidek, 2009; Malik Badri, 1996; Nik Rosila, 2011). In specific, Islamic counseling is a therapeutic interaction between client and expert in Islam (Kamal Abd. Manaf, 1995; Aziz Salleh, 1993). There is no one model of Islamic counseling and there is no governing body for Islamic counseling. Therefore the best approach to Islamic counseling is the inclusion of good aspects of mainstream counseling and incorporating the Quran and the tradition or *hadith* of the Prophet (pbuh).

Human Nature and Helping Techniques in Islamic counseling

Islamic counseling is based on Islamic teaching and the tradition of the Prophet (pbuh). The Qur'an says in Surah Fussilat 41:44; "It (Qur'an) is a guide and healing to those who believe" (Abdullah Yusuf, 1989). The ultimate aim of counseling in Islam is to submit wholeheartedly to God and admit His Supremacy as Islam believed that the ultimate happiness is in the hereafter world. Since counseling in Islam is a therapeutic interaction between client and expert in Islam (Kamal, 1995; Aziz, 1993), the counselor should possess qualities and characteristics that enable him to conduct counseling session such as good character, sound reasoning, patience, and has a very high degree of integrity. Since the relationship established is humanistic based, counselors should be non-judgmental, psychologically stable and able to view issues in justice way; knowledgeable in social custom and religious matter, pious, optimistic; and capable to control mind, verbal and in-verbal expression particularly when in a stress condition (al-Ghazali, 1998; Ibn Taimiyyah, 1982; Siti Zalikah, 2002).

Prior to the attributes and characteristics, counselor should understand the concept of human nature from Islamic point of view. In Islam, man is a beauty and unique creation in nature which comprises of the body, the soul and the spirit. Thus, the whole understanding of

human nature should integrate these three components altogether; otherwise, a comprehensive conception of human personality might not be achieved (Al-Attas, 1995; Malik Badri, 1996). Up to this point, the western-secular psychologists disregard the soul or the spirit as one of the entities in human nature because the soul or the spirit is immaterial and the discussion on it falls in the realm of spirituality and metaphysics, which is against the western-secular understanding on the concept of man (Corsi, 1983; Sevensky, 1983; Nik Rosila, 2011).

Al-Ghazali (1998) in his discussion on the nature of man, believed that every human being is normal, psychologically and mentally healthy and free from any impurities. He stressed every individual is born with a positive capacity which by right directs him to be close to God and aspirant to know Him (Al-Ghazali, 1986). However, human beings also endowed with potentiality of the good (divine) and the evil in their soul that shaped their personality (Al-Ghazali, 1998; Al-Attas, 1995). These potentialities are always conflicting to each other to subjugate the human soul. The first personality is *al-nafs al mutmainnah* (the tranquil soul). This personality exists when the divine (the good) is successfully subjugated the evil (which produces anger, selfish, passion, negative thought and ect.). In this situation, the reason (which is naturally divine) is in the strong condition and plays an important role in directing the evil to the goodness. Man with this personality is always yearning for goodness and seeks the true knowledge. Al-Ghazali (1998) emphasized that the yearning for it is not superimposed task on the self, but it originates in man from the divine element (*rabbaniyyah*) which enables human soul to partake in things Divine. He said that the perfect knowledge is possessed only by God. Man with this kind of personality posse a tranquil soul, psychologically and mentally normal and free from any doubts and suspicious of others (Al-Ghazali, 1998; Syed Azhar, 1989; Yasien, 1998).

If the evil is conquering man's soul, the self is called *al-nafs al ammarah* (the instigating soul). This state is the negative psychic source in man, the seat of egoistic and selfish desires. It may be contrasted with the heart, the spirit and the reason, which represent the spiritual drives in man. Al-Ghazali (1998) then elaborates that if these forces are instigated by the evil, rebel against the reason and gain complete ascendancy over them, while the divine element becomes weaker till it is almost completely smothered. All the faculties in the soul will then subservient to the evil and even reason become slave of passion, lust and anger (Syed Azhar, 1989; Al-Attas, 1995; Yasien 1998).

When the divine element is continually struggling with the human evil tendency to subdue it, then it is called *al-nafs al-lawwamah* (the admonishing soul). According to al-Ghazali (1998) it is the equilibrium between the true parts of the soul such as *al-nafs al lawwamah* that produces

results conducive to the realization of the ideal. But the domination self over *al-nafs al-lawwamah* produces qualities which impede the progress of the self towards its goal. Man therefore occupies the position midway between the level of the angel and animal, but his distinguishing quality is knowledge. He can attain to the level of the angel with the help of knowledge or fall down to the level of animals by letting his anger and lust dominate him (Al-Attas, 1995; Syed Azhar, 1989; Yasien, 1998).

By knowing the nature of man, counselor is guided to counsel the client by applying techniques that have been mentioned in the Quran and verified by the Prophet Muhammad. The first technique is advising. Advice or *nasihat* is from Arabic word; *nasaha* which means to give sincere advice, advise, counsel, admonish, and exhort. Thus, *nasihat* means sincere advice, friendly admonition, and friendly reminder (Wehr, H, 1980). Islamic counseling is different from western approach that neglects advice in their counseling practice. Western interpretation of advice or information is categorized as a skill on how to act rather than a fundamental principle in counseling approaches (Ivey, et.al, 2002). Therefore, advising is not recommended in Western counseling approach. As Islamic counseling is grounded upon religious orientation, if the client is astray from religion, he should be advised and simultaneously directed to the correct path.

Directing the client to the correct path is a technique in Islamic counseling, which means to guide to the right way or follow the right course or not go astray especially in religious matter (Al-Ghazali, 1998; Wehr, 1980). In this case, the concept of reward and punishment in Islam should be well-explained as it is related to human behavior in this world and its implication in the hereafter world. Allah Al-mighty said in Surah al-Tin, 95:4-6; “Verily, We created man of the best stature (mould), then We reduced him to the lowest of the low, save those who believe (in Islamic Monotheism) and do righteous deeds, then they shall have a reward without end (Paradise)” (Abdullah Yusuf, 1989). In the process of directing to Islam, counselor is advised to explain religious activities such as prayer, mingled with good friend and be closed to Islamic rituals.

Tazkirah or to remind is another technique in Islamic counseling. The purpose of *tazkirah* is because human beings are born with forgetfulness and weak. Allah says, “Allah wishes to lighten (the burden) for you; and man was created weak” (Surah al-Nisa’, 4: 28 in Abdullah Yusuf, 1989). In another Surah Taha 115, He says, “And certainly, We gave a commandment to Adam before but he forgot” (Abdullah Yusuf, 1989). The worst form of forgetfulness is man forgetting himself and not recalling why he was created. It is called blindness. God Almighty helps him out of the state of blindness through some troubles and directs him to the purpose of creation. However, quite a lot of people still forget. Therefore, *tazkirah* is to

remind the client of his duty and responsibility firstly toward God and secondly to his counterpart. In family counseling for instance, client is reminded of the rights and responsibilities among family members pertaining to lineal identity and maintenance, succession and affection, socialization of the young, security for the aged and maximization of effort to ensure family continuity and welfare are certainly prescribed by religion (Hammudah, 1977; Nik Rosila, 2011). *Tazkirah* can be done by reciting and interpreting verses from Qur'an or section from the *hadith* of the Prophet (pbuh) or stories of the companions. By doing this, counselor is indeed offering spiritual solutions to the client and helps him to become closer to the reality. Notwithstanding the counselor gives advice, guidance and motivation, the final decision is still in the hands of the client (Aziz, 1993).

Islah is another approach in Islamic counseling. *Islah* is defined as to change client's perception, behavior and mind to a better state. *Islah* is from the Arabic word *salaha*, which means to be good, right, proper, righteous, pious, and godly (Wehr, 1980). In this situation, the role of counselor is to dispute client's negative thought or irrational belief or perception; and rationalized it in according to the Islam teaching. As humans are social creatures by nature; they are always in need of friends and companions. Most of our lives depend on interaction with others. Strong individuals are the core of a strong community, something that Muslims should always strive for. Thus, the main aim of *Islah* is to ensure client is able to establish a proper and harmonious relationship with his counterpart (al-Ghazali, 1998; Siti Zalikha, 2002). Interactions with others surround us is also part of healing, particularly with pious, noble and knowledgeable people as mentioned in the tradition of the Prophet (pbuh), (Az-Zabidi, 1994); "The example of a good companion and a bad companion is like that of the seller of musk, and the one who blows the blacksmith's bellows. So as for the seller of musk then either he will grant you some, or you buy some from him, or at least you enjoy a pleasant smell from him. As for the one who blows the blacksmith's bellows then either he will burn your clothes or you will get an offensive smell from him".

Al-Ghazali (1998) emphasized the relationship between individual with his brother or companion is like the relationship between a husband and his wife. Islam upholds the brotherhood of mankind as a whole, not only because of originating from a single parental pair at the Primordial Time, but also because of having a single Creator (Wan Mohd Nor, 2000; Al-Attas, 1995). Allah says in Surah al-Hujurat 49:10 (Abdullah Yusuf, 1989):

"The believers are but a single brotherhood: so make peace and reconciliation between your two (contending) brothers; and fear God, that ye may receive Mercy".

When client has recognized his weaknesses and consciously aware of his wrongdoing, the technique of *tausiyah* or recommendation is possible (al-Ghazali, 1998; Siti Zalikha, 2002).

Before giving recommendations, counselor should ensure the client has a correct understanding on his role and his responsibilities in this world. These two aspects are pivotal especially for Muslims who has attained puberty age because at this stage they held their religious responsibility. The recommendations might be in terms of skills, spiritual-struggle, self-discipline, self-mortification, exercise or information. For example, a client who wishes to acquire the quality of generosity must oblige to engage himself with generous actions, continuously struggling with his soul in giving away some particular possession until his nature conforms to it. Thus, the action becomes one of his traits and part of his nature, at which time it will become easy and habitual (Al-Ghazali, 1998; Al-Attas, 1995). The purpose of recommendations is to purify client's soul and uplift his spiritual strength, as describe by al-Ghazali (1995), "The more a man purifies himself from fleshly lust and concentrates his mind on God, the more conscious will he be of such intuitions. Those who are not conscious of them have no right to deny their reality. Nor are such intuitions confined to those of prophetic rank. Just as iron by sufficient polishing, can be made into a mirror, so any mind by due discipline can be rendered receptive to of such impression".

Qudwah or exemplar is the last technique. Counselor can be a role model or an example for the clients especially in terms of his personal attributes and character trait. Such personal attributes are patience, tolerance, gentle, empathy, good conduct, morally sound, faithful and so forth. This makes the relationship in which clients feel not only very safe, but also trusting of their counselor as a reference point whose insights, tentatively and sensitively offered, they value. When working with a client, the counselor genuinely aspires and work with the concept and practice that is a privilege to work with the client. This is because human beings are the highest aspect of human creation- a paradox of both self and soul, seen and unseen, limited and yet drawn to perfection. The fundamental qualities that counselors must acquire are: love for humanity, kindness in our hearts for others, a charitable disposition, humility, honesty, a thirst for knowledge, a desire to share knowledge with others and a constant desire to strive in the cause of Allah by doing good (Siti Zalikha, 2002; Kamal, 1995; Aziz, 1993). With these qualities and characteristic, it is hoped that the counselors can identify themselves as a therapeutic person and not as a technician (Corey, 2005). In this case, the Prophet Muhammad (pbuh) is the best model for the counselors as Allah said in Surah al-‘Imran, 33:22, "Verily you have in the prophet of Allah an excellent model" (Abdullah Yusuf, 1989). The Holy Prophet (pbuh) emphasized love, sympathy, and kindness towards all. He also emphasized that we must show each other great appreciation. He said, "One who is not grateful to mankind is not grateful to Allah" (Az-Zabidi, 1994).

Conclusion

The practice of counseling should be in line with the goals of helping that is to help client towards overcoming obstacle to personal growth and bringing him back to the reality of his existence. The foregoing discussion has been, but a humble attempt to underscore the significance of Islamic counseling to the Muslim counselors, psychologist, psychotherapy, helpers, and Muslim's clients. What follows in this paper is an introduction of Islamic counseling concept which indeed needs to be improvised such as the ethics of counselors, and in-depth discussion on techniques and constructs in Islamic counseling. Islamic counseling approach is recommended to counselors as an alternative intervention in counseling practice. The field of counseling has been slow in recognizing the need to address spiritual and religious concerns. Spirituality and religion are critical sources of strength for many clients and can be instrumental in promoting healing and well being as shown in many studies such Ivey, et.al (2002), Wulf (1997,) Malik Badri (2000) and Benson (1996).

REFERENCES

- Abdullah Yusuf Ali. 1989. The Holy Qur'ān: Text, Translation And Commentary. New Revised Edition. Maryland: Amana Corporation.
- Al-Attas, Syed Muhammad Naquib. 1995. Prolegomena To The Metaphysics Of Islam: An Exposition Of The Fundamental Elements Of The Worldview Of Islam. Kuala Lumpur: ISTAC.
- Al-Ghazālī, Abū Hamid bin Muhammad. 1998. Ihyā' 'Ulūmuddin. Vol. 2. Beirut: Dār al-Kutub al-'Ilmiyah.
- Al-Ghazālī, Abū Hamid bin Muhammad. 1995. *Disciplining The Soul, Refining The Character, & Curing Sickness Of The Heart: Breaking Two Desires: Book Xxii & Xxiii Of The Revival Of The Religious Sciences (Ihyā' 'Ulumuddin)*. Winter, T.J (tran.). Cambridge: The Islamic texts Society.
- Aziz Salleh. 1993. Kaunseling Islam Asas. Kuala Lumpur: Utusan Publications & Distributors Sdn. Bhd.
- Az-Zabidi, Zainudin Ahmad. 1994. The Translation of The Meaning of Summarized Sahih Al-Bukhari Arabic-English, Muhammad Muhsin Khan (tran.). Saudi Arabia: Maktaba Dar-Us Salam.
- Bar-Tal, D. 1982. Sequential Development Of Helping Behaviour: A cognitive-learning approach. *Developmental Review*, 2(2): 101-124.

- Benson, H. 1996. *Timeless Healing: The Power and Biology of Belief*. London: Simon & Schuster.
- Corey, G. 2005. *Theory and Practise of Counselling & Psychotherapy*. 7th edition. USA: Thomson Brooks/Cole.
- Ibn Taimiya.1982. *Public Duties In Islam: The Institution of hisba*. Translated from Arabic by Muhtar Holland. United Kingdom: The Islamic Foundation.
- Kamal Abd. Manaf. 1995. *Kaunseling Islam: Perbandingan antara Amalan dan Teori Kaunseling Barat*. Kuala Lumpur: Utusan Publications and distributors
- Malik B. Badri. 1996. *Counseling And Psychotherapy From An Islamic Perspective, Al-Shajarah*, Vol. 1,(1 & 2)
- Malik Badri. 2000. *The Aids Crisis: A Natural Product of Modernity's Sexual Revolution*. 3rd edition. Kuala Lumpur: Madeena Books.
- Muhammad Abdul Mun'im.1992. *Ensiklopedia Ekonomi Islam, Jilid 1, Salahudin Abdullah (Trans.)*. Kuala Lumpur: Dewan Bahasa & Pustaka.
- Nik Rosila Nik Yaacob.2011. *An Islamic Conceptual Framework of a Well-balanced Personality. American Journal of Islamic Social Sciences*. Volume 28, No. 4, pp. 65-88.
- Nik Rosila Nik Yaacob.2011. *Child Education in the Malay Muslim World*. Germany: Lambert Academic Publishing.
- Pietro Corsi. 1983. *History Of Science, History Of Philosophy And History Of Theology*. In *History Of Science And Medicine*. Corsi, P & Weindling, P (eds.). London: Butterworth Scientific.
- Reber,A.S & Reber, E. 2001. *The Penquin Dictionary of Psychology*. 3rd edition.London: Penquin Books
- Sevensky, R.L. 1983. *The Religious Foundations Of Health Care: A Conceptual Approach*, *Journal of Medical Ethics*. Retrieved from <http://jme.bmj.com/subscription>
- Sidek Baba. 2009. *Reevaluation Of The Integration Of Knowledge, The 7th World conference on Muslim Education*. Grand Blue Wave Hotel, Shah Alam, Selangor, 21st - 23rd Dec.
- Wan Mohd Nor Wan Daud. 2000 *A Muslim Perspective on the Intergenerational responsible and responsive Self*, Paper presented at the *Conferences on Civilizational Perspectives on Intergenerationally Responsible Responsive Self*, organized by the Institute for the Study of Future Generations, Kyoto, 14th – 16th July.
- Wehr, H.A. 1980. *Dictionary of Modern Written Arabic*. Cowan, J.M. (ed.) 3rd Printing. Beirut: Librairie Du Liban.
- Wulff, D.M. 1997. *Psychology of Religion: Classic & Contemporary*. 2nd edition, New York: John Wiley & Sons. <http://SearchERIC.org/ericdb/ED417248.htm>.

ISEPSS-2063

The Meaning of Family for adolescents who stays in Childs Penitentiary

Indri Oktavia Rospita

Center for Health and Indigenous Psychology (CHIP), Denpasar, Bali, Indonesia

indripsikounud@yahoo.co.id

Putu Nugrahaeni Wideasavitri

Center for Health and Indigenous Psychology (CHIP), Denpasar, Bali, Indonesia

Putu_psychologist@yahoo.com

Abstract

Families are the ones closest, family is the most precious treasure, family is everything, family is a place or container, the family is the most important part, and the family is life. The meaning of families can be different in each individual, it could be caused by factors such as age and family status (Dewi & Widayanti, 2011). However, how's view of the adolescents who stays in Child's Penitentiary and separate with their family about the meaning of family. The purpose of this study is want to know the meaning of family for adolescents who stays in the Child's Penitentiary.

This study uses a qualitative with Phenomenological approach. The subjects are fifteen adolescents that stays in Child's Penitentiary. Data collected by semi-structured interviews and observations with the techniques of Focus Group Discussion (FGD). The results of this study found four meaning categorization of family : they stated that the family is the most precious treasure and exceed the world and everything in it, the family are the ones we love forever even though they are away from us, the family is as the wheel of life that tell us about what we should and should not do, and the family is the place to share or vent complaints.

Another discovery is that subject confused about the meaning of family because the subject didn't get affection from their family and the family is not intact or divorced parents.

Keywords: Meaning of family, adolescent, child's penitentiary

ISEPSS-2082

Positive Impact on Adolescent Victims of Divorce: A Case Study

Putu Nugrahaeni Wideasavitri

Dept. of Psychology. Medical Faculty. Udayana University, Denpasar, Bali, Indonesia

putu_psychologist@yahoo.com

Indri Oktavia Rospita

Dept. of Psychology. Medical Faculty. Udayana University, Denpasar, Bali, Indonesia

indripsikounud@yahoo.co.id

Abstract

Wati (2010), have found that there were three main effects in children and adolescents due to the divorce of their parents. There were 63% of population who have subjective psychological problems, such as anxiety, sadness, mood-swing, phobias and depression. Then, 56% of the population have underachievement problem or achieving below their ability. The third effect is, 43% of the population were being aggressive to their parents. Negative things were not the only impacts of a divorce to their adolescent children (Olson & Defrain, 2000). If the parents were able to share their feelings about the divorce to their children, there would be no negative impacts shown. Moreover, a good adaptation will be shown by the adolescents than those whose parents live with their partner without a marriage. The purpose of this study was to determine the positive impact on woman adolescent whose parents were divorced.

This study used qualitative method with case study approach. One woman adolescent who has been the victim of her parent's divorce was being the subject of this study. Data collection has been conducted through semi-structured interviews and observations. This study has found, that there were five positive impact on woman adolescent who has been the victim of her parents' divorce. First, she becomes more independent; second, she becomes more mature; third, she can be a more competent individu; fourth, she is able to adjust to the divorce of her parents; as for the last, she becomes more free in managing her finance and chooses the job she wanted.

Keywords : positive impact, young woman, parent's divorce.

Background

Protection and guidance are needed in this stressful period, so they can pass it well. But if the parents do not give protection and guidance, the adolescent could have been taken the wrong path, as those adolescents who have been the victims of their parent's divorce, who withdrawn from social interaction and leave their favorite activities (Indriani, 2008). A few impacts of parental divorce on adolescent are shame feeling and low self-esteem that makes adolescents withdraw from their environment (Ningrum, 2013). Wati (2010) explained that there are three main effects in children and adolescents due to the divorce of their parents.

First, subjective psychological problems, such as anxiety, sadness, mood-swing, phobias and depression by 63%. Second, 56% who have been an under-achiever. Third, 43% of them, doing some aggression to their parents. However, parent's divorce does not always bring negative impact on adolescents (Olson and Defrain, 2000). If the parents could share their feelings to their adolescent child, there will not be any negative impact. Those whose parents have already divorced will be well-adapted than those whose parents are living with no marital status.

A study which was conducted at northern California to 522 adolescents with divorced parents, was found that they have a good adaptation and a good relationship with their parents (Olson & Defrain, 2000). One of the example is Oprah Winfrey. She was born in Kusciousko, Mississippi, at 29 January 1954 and was living with her mother who is a housewife.

A poor neighborhood and broken family made Oprah lost control. She was raped by her own cousin at 9 year old, and she has been on trouble while being an adolescent. However, due to the firmness of her father, Oprah started to change. Her career began from her victory in speech contest which was about racism.

Eventually she became a deputy in her high school to attend a youth conference in the White House who took her to get a scholarship for the speech, that's also when her ability to communicate, brought her on a great career path.

Her other accomplishment was she became one of the most influential people on the world. She became the richest women on entertainment, with more than 1.5 billion dollar wealth (Wati, 2010). Although she was a victim of her parent's divorce who lived in poor family and environment, and has many unpleasant experiences, she can be a great person because of her persistence in learning. From the example above, it is clear now that not all parental divorce have negative impacts on children. Therefore, researchers wanted to find a positive impact on young woman who are the victims of their parents divorce.

Method

Approach

This research was conducted by using a qualitative case study approach. The respondent in this study was one young woman who is 16 years old, working as a babysitter and chose to stay with her older brother from different father. This study was conducted at November 2013 and ended at January 2014. The data was collected every 2-3 times a week, using observation and interviews at subject and her significant others.

Observation method and in-depth interview was used to collect the data from subject and her significant others. In-depth interview was used to get a deeper understanding about this case, whereas observation was used to gain nonverbal information, such as facial expression and subject's gesture when she talked about her problem. The data which have been collected from in-depth interview, was written in to a field note that would be read and studied further.

Result

In this case, researchers have found several positive impacts on young woman who are the victims of their parents' divorce. Some of the results are, subject become more independent, subject chose to be a babysitter after she could not continue her school. She lived with her older brother who's already earned money by himself, but she said that she did not want to burden her brother, by paying her every needs. By working, she also has her own saving for her future needs. She said that she could be more mature, by being very calm and not being provocative although repeatedly hearing her father and older brother insulted her mother by saying her as a misbehave mother, and a wife who's not faithful to her husband. Moreover, she thought that maybe her father has a reason to say so because he's already broken heart because they got divorced and her mother married another man who put a spell on her so that she chose to marry that man and abundant her husband and children. She explained that however her father and brother hated her mother much, her mother is still has to be loved and respected. Yet she claimed that she had been hurt by her parent's divorce, but she still remain them as a mother and father who had delivered her and took care of her.

She and her significant others informed that she's often been humiliated because she had broke her brother's rule, which one of them happened because she preferred to choose a drunken boyfriend than obey her brother suggestion and keeping away from her boyfriend. One of her significant other informed that she has been slapped by her brother in front of public because her brother had found out that she was in a relationship with that drunken boyfriend. Her brother also took her phone away, so she could not communicate with her mother, father, friends, and her employer.

She does not hate her brother, because he loved her and wanted to protect her. She also thought that she is the one to be blamed because she had a relationship with a drunken boy. Once a time, her brother asked her to choose over her brother or her boyfriend, she decided not to have a relationship anymore with that boy. Another proof of her maturity is that she can manage her emotion well. One of her significant other stated that a few times she was crying while saying that she has problems with her brother and boyfriend, yet she still go to work and babysit the baby well, without being influenced by her problem.

She is also good in managing her financial, because she chose to save her money than spending it on unnecessary things. Once her significant other stated that she saved her money to buy some home appliances and a motorcycle. When her brother told her to buy a new mobile phone she refused to buy a new one, and decided to repair the broken one so that she can save her money more. Her significant other also stated that she can understand another people's situation well, it is proven when she did not ask for extra-charge, when she had to work overtime. She got well-adapted of her parent's divorce, by not taking drugs, and having free-sex. Otherwise, she became so independent by earning money and managing the saving on her own. Researchers have also found that she has more freedom in choosing and managing the career that she wanted.

Discussion

As been explained before, this case study has found that there are several positive impacts on young woman who has been the victim of her parent's divorce. Some of those positive impacts are compatible with those positive impacts which have been stated by Indriani (2008). First, the person can be more independent. It is proven by her decision to be a babysitter when she could not continue her school. Second, she can be more mature, as the neutral emotion that has been shown by her when her father and brother insulted her mother continually. She is mature by her thoughts, although she is often to be insulted verbally and physically by her brother in front of the buyer. Her maturity has also been shown by her ability to manage her emotion well. When she had problems with her brother and her boyfriend, she still managed to work well without showing bitterness. Third, she can be a competent person, which has been shown by her ability to save and manage her financial well. She chose to save her money than buying unnecessary things. Moreover, she also has a deep understanding for another person's condition, by not asking for extra-charge, when she had to work overtime. Fourth, she got well-adapted with her parent's divorce. She did not do any negative things, otherwise she chose to work as a babysitter.

Ningrum (2013) also stated that adolescent who has been a victim of their parent's divorce can accept their condition and solve their problem with a good emotion control, good self-esteem, open-minded, goal-oriented thoughts, and responsibility. Fifth, they have a greater freedom in choosing and managing the career they wanted. Olson dan Defrain (2000), also agreed on the statement above, that parent's divorce can bring several positive impacts on adolescents, such as: adolescents are able to getting adapt with their parent's divorce and doing the best effort for their career.

Conclusion

Researchers have found that there were six positive impacts on young woman who are the victims of parent's divorce. As for the positive impact, first, the individual becomes more independent, second, the individual becomes more mature, third, individuals become more competent, the fourth, the individual is able to adjust to parental divorce, and individual has a greater freedom.

References

- Aulia, S. (2005). Kemandirian Remaja yang Memiliki Orang Tua yang Bercerai. *Naskah Publikasi: Universitas Gunadarma*.
- Dewi, S. P. & Muhana S. U. (2008). Subjective Well-Being Anak dari Orang Tua yang Bercerai. *Jurnal Psikologi VOLUME 35, NO. 2, 194 – 212*.
- Indriana, N. F. (2008). Dampak Psikologis Perceraian Orang Tua terhadap Anak. *Skripsi SI Fakultas Psikologi*. Semarang: Universitas Katolik Soegijapranata
- Nasution, K.I. (2007). Stres pada Remaja. *Makalah Publikasi Fakultas Kedokteran*. Medan: Universitas Sumatera Utara.
- Ningrum, R.P. (2013). Perceraian Orang Tua dan Penyesuaian Diri Remaja. *eJournal Psikologi, 2013, 1 (1): 69-79*.
- Olson, H.D. & Defrain, J. (2000). *Marriages and Families* (pp. 470-471). New York: McGraw Hill.
- Papalia, E.D., Sally, W.O., Ruth, D.F. (2008). *Human Development* (pp. 534). Jakarta: Kencana.

ISEPSS-2069

Counselling Students Self-perceived Professional Competence: Responsibilities and Rapport between Supervisor and Self

Tom Yuen

City University of Hong Kong,
E-mail: dr.tomyuen@cityu.edu.hk

Karman Leung

City University of Hong Kong
E-mail: karmleung6-c@my.cityu.edu.hk

Ming Lai Cheuk

City University of Hong Kong
E-mail: mlcheuk4-c@my.cityu.edu.hk

Ki Ki Regine Chung

City University of Hong Kong
E-mail: kkrchung2-c@my.cityu.edu.hk

Abstract

Self-perceived competence forms the base for a sense of professionalism and a functioning identity. The present study, based on the grounded theory, investigated the learning experiences of the 25 counseling interns from a local university. It confirmed that the counseling interns went from the identity-searching stage, through the problem-solving stage, and finally reached the self-directing stage. A majority of the intern participants perceived their counseling competence increased as they moved along the practicum training. The findings pointed out when the self-perceived competence increased, the interns became less critical to their own mistakes, and showed more appreciations to themselves and supervisor.

The paper will also address the different motivations, needs and potential challenges of the students at different stages in the practicum training.

Key words: Counseling supervision, Counseling Student Competence, Supervisory Relationship, Grounded Theory.

Professional counseling competence does not only entail certain behaviors to resolve clients' problems. It involves a generative ability in which cognitive, thinking, life experience, and behavioral skills are organized into integrated course of action to serve in various situations in a counseling relationship. Counseling students in sessions with clients are learning to be competent to orchestrate and continuously improvise multiple tactics to manage ever-changing circumstances. Initiation and regulation of the counseling actions are partly governed by the personal judgments of operative abilities and partly by situational factors (Luke & Goodrich, 2010; Nelson & Jackson, 2003). The perceived counseling competence is concerned with how counseling students fulfill professional responsibility, make ethical decisions, and integrate experience throughout the course of professional training.

Gibson, Dollarhide and Moss (2010) maintained that there was limited research regarding professional counseling practicum. The studies that have been conducted have investigated the professional identity development in practicing counselors, early career counselors, and new counselors (Luke & Goodrich, 2010; Stoltenberg, 1998; Swickert, 1997). A lack of investigation exists within the literature as to how personal counseling competence develops, what stages the counseling practicum students go through to feel more autonomous, or with exactly what experiences they need from the supervisors to establish the sense of a realistic professionalism with strong and weak areas (Etringer, Hillerbrand & Claiborn, 1995; Leach, Stoltenberg, McNeill & Eichenfield, 1997; Loganbill, Hardy & Delworth, 1982; Murdock, Alcorn, Heesacker & Stoltenberg, 1998; Strupp, 1973). The purpose of this study was to explore the practicum experience of the students in a local university. It was to primarily investigate how the supervisory relationship evolves when both sides involved in an intense interaction.

Human Growth Through Developmental Stages

All life depends on information processing. Every organism receives stimuli, converts these into meaningful signals, and uses that information to make the decisions that guide its behavior. From infancy on people learn to set goals and strive to achieve them. This search for competence forms the basis for healthy psychological development and a sense of a cohesive and functioning self. Attaining competence in a given situation results in a state of well being, of which we call striving for superiority (Adler, 1964).

Rogers (1961) noted that there is a "directional trend that is evident in all organic and human life – the urge to expand, extend, develop, mature – the tendency to express and activate all the capacities of the organism, or the self" (P.351). Rogers' notion pointed out the human organism's innate evolutionary propensity for psychological expansion and progression.

These action ideas of trend, urges, and propensities suggest that the human organism is endowed with an intrinsically generated impulse to develop. This impulse is associated with particular developmental aims. In other words, the generalized drive within the human being to become as human as possible from time to time takes on specialized directions and objectives, for example, learning a language, honking a skill in any sports, committing to a career, all need to have a direction in an individual. Likewise, for all the interviewees in the present research to achieve the aim and realize their ends, they all have an inner drive to maintain a spirit receptive to positive expression and favorable to expansion.

People deal with challenges in all facets of life. Physically and emotionally, human growth and development involve various tasks in different stages (Erickson, 1980; Freud, 1986a; Freud, 1986b; Piaget, 1970). In case of mourning, which is defined as an adaptation to loss (Worden, 1991), may be seen as involving some essential basic tasks that the grieving person has to accomplish before mourning can be completed. Kubler-Ross (1969) discussed people go through a series of attitude changes when hit hard by the death and dying issues before hope can be restored.

Racial and ethnic identity development models have been considered one of the most promising approaches to the field of multicultural counseling (Sue & Sue, 1999). Several conceptual models posited for visible racial and ethnic groups, in particular, have often been presented and discussed in major textbooks of multicultural counseling (Atkinson, Morten & Sue, 1998; Pedersen, 1991; Ponterotto, Casas, Suzuki, & Alexander, 1995; Sue, 2006; Sue & Sue, 1999). All the work emphasized that acculturation takes place through stages.

Watkins' Supervisor Complexity Model (1994), Stoltenberg's counselor complexity model (1981, 1998), Hunt's Conceptual System Theory (1971), and Hogan's Supervision Model (1964) posited a developmental model of counselor learning and supervision that conceptualized the developmental process as a sequence of identifiable stages through which the supervisees progress. From the developmental perspective, the novice counselor is viewed not just as a counselor lacking specific skills but as an individual who is embarking on a course of development that will culminate in the emergence of a counselor identity (Destefano, Mann-Feder & Gazzola, 2010; Paladino, Minton & Kern, 2011). This end point constitutes the integration of skills, theory, and a more complete awareness of oneself and others. This process is placed in a developmental framework that takes into account the different motivations, needs, and potential resistances of counselors at different stages of development (Stoltenberg, 1981; Stoltenberg, Pace, Kashubeck, Biever, Patterson & Welch, 2000; Worthington, 2006).

Method

Participants

A total number of 114 graduate students in the past three years completed a 9-month counseling practicum in City University of Hong Kong. All of them were invited through emails to participate in the present study. 4 male and 21 female students were willing to share their learning in the practicum experience. Ten participants had a social work or a psychology degree. The rest of the sample reported they did not have any training in counseling. The average age was 33.7.

Analytic Approach

The qualitative methodological approach used in the present study is based on grounded theory (Glaser, 1978, 1992; Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1998) to develop a conceptual model which is able to explain the process during which the counselors develop their directive or nondirective counseling approach with different clients. Accordingly, the aim of grounded theory is to generate concepts, models or a theory from

empirical data and to explain what is happening in the area investigated. As a research method, grounded theory is used in the present study for its usefulness in condensing the complex experiences of multiple counselors into a parsimonious theory to explain the professional growth in a counselor and across different cases. It will also facilitate the inductive generation of a conceptual model and hypotheses for the further testing.

Procedure

There were 114 counseling program graduates from the past three years who took practicum stream to complete the training. All of them were contacted through emails which contained a cover letter explaining the purpose of the study, the interview questions, and an informed consent form.

Data collection was collected by means of in-depth interviews by a research assistant who was a psychology graduate from an oversea college. Each interview focused on the participants' perceived self-competence, practicum experiences, and relationship related to their supervisor. The interviews were conducted in an open and conversational manner and took place in a quiet room that was free of distractions. The introductory questions addressed in the interviews were broadly formulated so that the interviewer could learn what the participants thought, felt, and did and to receive a range of responses so that later on, the questioning had meaning for the further discussions (Potter & Hepburn, 2005; Potter & Hepburn, 2012). 'What was your background in counseling training?' 'How did you develop your interest in counseling?' 'How was the supervisory relationship with your supervisor?'

‘Were there any developmental stages in your competence level?’ ‘How would you conclude your practicum experience?’ Topics related to these questions were often raised spontaneously by the participants and were elaborated further in the interview. The interviews lasted between 1 and 2 hours and were tape recorded and transcribed verbatim.

The interviews were conducted by a researcher assistant who was a psychology graduate. Peer debriefing and discussions of emerging ideas in this project were used to explore meanings, to clarify interpretations and to protect against groupthink and bias. All the researchers in the study do not hold a priori assumptions concerning the nature or stages of professional competence development of the graduate students.

Data analysis

In order to confirm the trustworthiness of the study, we took various procedures to increase the credibility, transferability, dependability, and confirmability of the findings (Lincoln & Guba, 1985). Data collection and data analysis occurred simultaneously (Charmaz, 2000; Glaser, 1992; Glaser & Strauss, 1967; Strauss & Corbin, 1998). The analysis of the verbatim transcribed interviews started as soon as the first interview was transcribed. The units of analyses were all the stories and experience the informants shared during the interview.

The interview transcripts were broken into discrete parts and substantive codes were labeled to the key phrases (Bogden & Biklen, 2006). Each phrase was categorized and continuously compared with all other categories so as to secure the similarities and differences within or between them (Fassinger, 2005). In addition to open coding, the investigators discussed the codes derived from each transcript until a consensus is reached. In order to reduce the amount of data, higher order categories or core concepts were formed in a process of clustering related categories. In doing so, the underlying uniformities in the original set of categories were coming up to formulate a theory with a smaller set of higher level concepts (Bogden & Biklen, 2006; Fassinger, 2005; Glaser & Strauss, 1967).

To reduce the potential for researcher bias and the likelihood of coding errors throughout the process of data analysis, consultation sessions with other faculty staff who are teaching research methodology classes in the graduate school were arranged. The verbatim quotes and themes from the emergent grounded theory were presented for review the fit of the data with the emergent theory. There were not any substantial challenges to the findings, while positive feedbacks were provided for shaping the definitions of themes. We also include sufficient participant quotations to enable readers to judge the consistency of the data and the findings (Corden & Sainsbury, 2006; Kline, 2008).

Results

The analysis generated a conceptual model, which described a process of temporal change in the counseling interns' competence development. From the self-examination of the 25 participants in the research, there was a theme in the development of their professional competence. The developmental spiral provided in Figure 1 illustrates the developmental stages of the counseling interns.

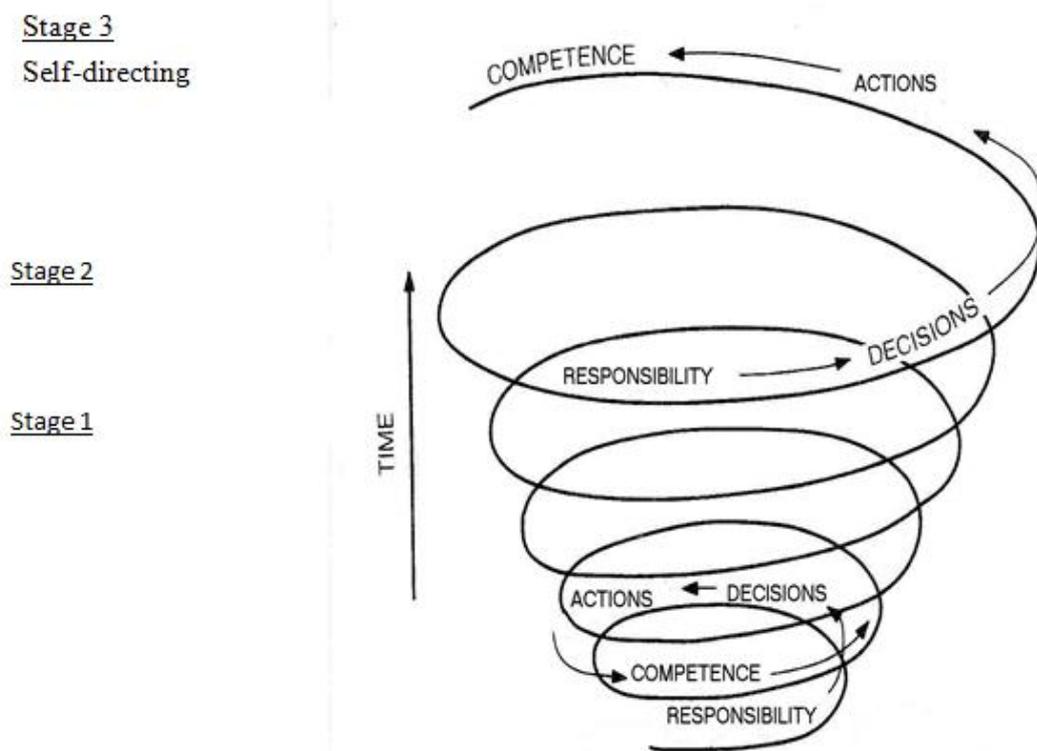


Figure 1. A developmental process of temporal change model illustrating the professional growth of counselors

As the figure illustrates, the competence in the counseling interns was the outcome of the ability in fulfilling responsibility, making ethical decisions and implementing actions in various situations. If the actions taken during the counseling sessions prove to be effective, it enhances the counselors' sense of competence. It provides an experience that serves as the basis for future decisions and actions in the ever upcoming responsibilities. This spiraling and expanding process are the developmental stages in the interns.

As we all know too well. Professional growth is not by any means an uninterrupted triumph march. At any time counselors may hit a bump along the journey. They make decisions that turn out to be erroneous; even when there does not seem to have faults, the action taken to implement the decision often is inadequate or questionable to others. The feeling of competence that is rightfully there is spoiled by some disappointment.

The Development of Competence and its Supervisory Implications

Stage 1. Identity-Searching Stage

The interns struggled with the heavy workload and the professional responsibility. A majority of the participants tried hard to adapt to the overwhelming demands caused by clients' various presenting issues, such as suicides, domestic violence, job loss, or identity crises. They had worked hard to presenting a professional image, of being skilled, successful, and strong helper, who appeared to be immune from human problems, as is described in the initial stage of the professional growth of a counselor.

Feeling competent brings up the professional identity and it is the trust in oneself as a professional, resulting in being responsible and effectively taking appropriate actions. Auxier, Hughes, and Kline (2003) stated that professional identity is equal to the therapeutic self, which is a combination of professional and personal selves. The therapeutic self creates frames of reference for counseling roles and decisions, attitudes concerning responsibilities and ethics, modes of thinking, and pattern of problem solving.

The "growth pain" that the participants shared was confusion, inadequacy, frustration whereas excitement, hopeful, and satisfaction were also common in the early training. They worked hard to present an image of a competent, flawless, and knowledgeable professional. Their daily work characterized by a workplace culture in which the counselor is perceived as an authority figure that is omnipotent and powerful to the service seekers.

All participants noted that empathy, respect, and altruism were the core traits that they found in counselors. They saw their role as providing emotional support to very vulnerable people. One interviewee explained how she felt motivated to study counseling. She said, "All people need respect and love. When I reach out for those people in crisis, I deeply respect them as a person. Just because they felt lost because they were abandoned in a relationship doesn't mean they should deal with it all by themselves. Somebody should step up to help."

Another former intern said: "I was young and inexperienced in life when I was starting the practicum. I tried my best to show my love... I would like to help the young people realize they can change. I think the benefits are that I am doing something that I love to do – it makes a difference in our world. It is meaningful to me. I have met some terrible people in the agency where I did my practicum, and they might be having issues, but other than that, they are still human beings. I am willing to do something not many people have got chances to do."

On one hand, the data presents a picture of the importance of not showing any weakness and on the other, working at full speed to show the toughness. The participants reported a fluctuation between feelings of vitality and tiredness. One interviewee described it this way:

“My training in counseling is not enough for me to deal with the clients. Some of them are psychotic, depressed, struggling with anxiety disorder. I don’t know how to support them. But I have to act strong and competent.”

When asked about the supervision experience that accompanied in the Identity-Searching Stage, most of the participants noted that the supervision was at its best when the supervisory relationship was structured, instructive with lots of demonstrations of techniques. One former intern recalled that she was very dependent on her supervisor. She said, ‘I was looking for a rigid structure in the supervision which had regularly scheduled meeting times that were clearly set as to place, time, frequency, and duration.’

Another participant recalled his experience in the first few weeks in the practicum, ‘I felt naive and inexperienced. There were so many things for me to learn, such as counseling theories and skills. I hope my supervisor would give me a clear direction for next session. At times, my mind was blank.’

Dealing with the directiveness in counseling, a participant shared, ‘I know what I should do with the clients, but then there were so many times I was not sure if I could be more directive or I just had to be more patient with myself. I wanted my supervisor to be there and be directive enough to guide me through.’

The experiences shared by most of the informants were consistent with Watkins’ Supervisor Complexity Model which denoted that the counselors in this stage need specific ideas and directions to function as a professional. More importantly, the beginning interns can feel more grounded and the self-awareness can begin to expand (Watkins, 1994).

Stage 2. Problem-Solving Stage

After a few months of counseling experiences under their belt, the interviewees started to settle down, feeling more competent in the counseling relationship. They seemed to accept more limitation and there might be some deadlocks within which they could do so little to change. Feeling overwhelmed with their own capacity as a helper, counseling interns in this stage usually experience conflict, fluctuating between feelings of incompetence and feelings of great ability (Loganbill et al., 1982).

Because of the different perception of time, most people in Hong Kong have their unique idea in counseling. They expect counselors to be pragmatic and down to the earth. One phenomenon in the indigenous culture is all about getting things done quickly. Clients are perceived as always pressing for time, and they tend to prefer brief counseling. No matter what the problem may be presented by the client, the counselors aim to identify and help the clients to deal with the problem and carry out the workable means. One counseling intern in the study shared, "Solution-focused therapy seems to be the most effective approach to me.

Counseling is like serving fast food. The outcomes should be instant. It is a service under limited time and the expectations from the clients. I don't like the approach but I have to try to modify the traditional counseling approach and make it more adjustable in Hong Kong."

The positive correlation between stress and depression has been well researched. The ability to identify one's feelings, the adoption of problem solving coping and the rejection of non-productive coping all acted as protective factors against depression in the presence of stress. One participant expanded: "I feel I don't have time to gather for myself, I am just on the go. Whatever ways work, I use them. I am not confined to any approach, I am eclectic.

While the focus of the counseling should be on the client, I was only concerned with my time and energy. I did not feel good in making the balance. When I look back now, I recall at times I talked to my supervisor, he could ensure my effectiveness, but he was not able to change the work setting which was the main source of my frustration."

Another former intern talked about how she dealt with stress, "I did not have much counseling experience when I first started the practicum. I went to a lot of movies which can inspire me about life. I want to broaden my vision, and I try to learn more about how to effectively solve various problems."

All the interviewees said that they were overwhelmed with the paper work or other professional responsibilities. The following excerpts show how they were overwhelmed with various duties:

Counseling intern, "The services in my placement needed me to be very resourceful and effective. We set reachable goals which are agreed on both sides. Every case was short-termed. It was the typical counseling relationship in Hong Kong.

Another former intern said, 'I think both of my knowledge and skills are important for my work responsibility, I was expected to hit the head of the nail, and the clients know what to do to deal with their problems. Although I am more able to control my flow, the clients were not patient enough to experience personal growth, which is not teachable.'

All of the participants felt that practicum experience had had a tremendous impact on how they perceived professional counseling. On the one hand, the stresses and demands took a great toll. Several interns reported that the intensity of the training served as a catalyst to intensify their personal problems and felt that they had thought of dropping out or seeking personal therapy to enable them to cope. Especially for the first 3 months, they felt that practicum was their whole life and that they had to give up other identities. On the other hand, most participants also noted that practicum had provided more growth, challenge, excitement, and learning than they had ever experienced before.

The experiences that the participants mentioned helped them change their counseling styles were supervision. In the beginning, they felt that the supervisor knew everything, and they worried about the supervisor's judgments and evaluations. Over times, they came to view the supervisor as a consultant who could facilitate their search for solutions but felt that they had to trust themselves for the ultimate decisions about how to proceed with clients.

Many of the participants saw their role as a problem-solver when they have to deal with lots of overwhelming tasks. They expected the supervisor to be more supportive. One of them explained, "The brief time limit of the sessions made me feel constrained and my performance was not just the only way to show off their ability. I wish my then supervisor was able to understand me in a more objective perspective."

Another former intern shared the similar view, "I was trying to do counseling in "the right way" and adopted whatever model was being offered. Although I became less dependent on my supervisor, I was stilling trying to rely on her judgment. When I was about five months into the practicum, I was very anxious about evaluations and my competence was more on myself rather than on the clients. All I could care for then was about getting through the practicum."

It was interesting to hear that while many of the participants stated that they were trying to be more theory based they became antithetical when the skills learned in the previous stage do not work in a specific instance or when another approach says to do things a different way.

Stage 3. Self-Directing Stage

The third stage is characterized by the counseling students' ongoing development to achieve a personal counseling approach, including focusing on their personal quality of life, budding out a personal style in helping clients (Hess, 1986), and staying more positive when the learning is getting tough. This stage characterizes a personal insight, a realization that personal development and effectiveness at school are affecting one another. The students reflected on keeping their mind fresh. They were in a process of changing their attitudes toward their own needs and wishes (Loganbill et al., 1982). They used other perspectives to overcome challenges and demands. This illustrates a self-directed change to achieve a higher level of competence. To carve out a personal counseling style, they learned to be more reflective. The following excerpts from the participants can illustrate this professional growth:

"I always review my professional development. In the initial stage, I tried to apply different counseling theories, Person-centered, Reality Therapy, RET, CBT, etc. Later, I started to modify the theories into my own use." Another former student said,

"Approaching to the end of the practicum, I gained a lot of experiences. I made mistakes, and I learned from them. It was a long process for me to get the insight. I tried to develop my counseling style. I read more books and went to various workshops. I regard it as going back to the fundamentals. Reflecting, paraphrasing, staying positive about life, and holding back myself to let the client take the lead... For me to decide to get that back after the counseling practicum shows respect for my clients, respect for the career, the respect that I want for the profession."

The student counselors at this stage are more able to integrate many techniques and theories into a consistent personal style and act in a way appropriate for the particular situation and client. One participant stated, "The whole practicum training was very packed. I focused a lot more on the intellectual development, less on my emotional growth. There were times I hated my slow growth. When I look back now, I have to say I was very impatient."

Most of the counseling students interviewed shared the fact that the supervisory relationship evolved as the practicum went on. The supervisor was perceived as a mentor in this stage. Students were more able to make professional judgments without too much relying on the supervisor's endorsement. A majority of the participants shared the following experience as one participant said,

"I became more confident and objective, more appropriately and professionally invested in clients, and more able to use personal reactions as tools to give feedback to clients. A truly integrated and personally consistent style is probably not developed, but I could see myself heading to a right direction. I have to thank my supervisor for giving me more room to grow.

She respected my struggles and tears. Without her empathic understanding, I would not have grown so much from the very beginning.”

The recalls of the participants are in accordance with Loganbill et al.’s (1982) argument which noted that counselors need to resolve eight critical issues before becoming master counselors: competence, emotional awareness, autonomy, theoretical identity, respect for individual differences, direction, motivation, and professional ethics.

Discussion

As with any stage theories, one would be remiss in assuming that all three levels discussed in the study are distinct and pure with no transition phases exist between them. However, we caution that the three levels of personal counseling competence and the challenges within each stage will provide a framework for conceptualizing the counseling students’ professional development and also highlight the unique supervisory relationship in each of the stage.

Although previous studies on counselors’ professional identity development have been discussed in various aspects (Auxier et al., 2003; Gibson et al., 2010; Luke & Goodrich, 2010; Nelson & Jackson, 2003; Stoltenberg, McNeill & Crethar, 1995); the present qualitative study is attempting to interview student counselors who had been through a 9-month practicum training.

There is little doubt that receiving a quality counselor education is important and necessary for all counseling interns to reach their full potential. The interns interviewed here generally agreed their complex roles and responsibilities requires close supervision and skills training.

They saw themselves as students, professional counselors, problem solvers, and diagnosticians. During practicum, they were involved in self exploration, parent education and case management as well as dealing with behavioral, emotional and/or psychological issues. Similar to the research by Hogan (1964), Hunt (1971), Stoltenberg (1981, 1998), and Watkins (1994), counseling students explained how their competence level developed through a developmental process as a sequence of identifiable stages. When we compare the learning experience between the participants from business sectors and other professional background, we do not find a noticeable difference in the learning stages between these two groups. The findings from this study concur that counselors felt more competent when they accepted professional responsibilities, made ethical decisions and took effective actions. The spiraling and expanding process is the formation of the professional competence.

As with any research, variable interpretations are always possible. The grounded theory carries with it heavier burden in this domain, because the themes that emerged from the interviews and the resulting proposed theory may be variously perceived and interpreted. To address this limitation, we acknowledged existing biases and assumptions and remained open to new discoveries in the data. The inclusion of 25 practicum students was an attempt to broaden the responses. In Hong Kong, graduate counselor education programs are offered by several universities, but only City University of Hong Kong requires counseling students to complete 120 counseling hours in two semesters. The learning process of the students throughout the practicum remains a big area to investigate. Despite the limited sample of counseling practicum students, the study does offer stimulating insights into professional development that might be used in counselor education.

The experiences the students shared with us suggest enhanced professional competence, attitudes, and behaviors with a great internal validation of their new professional work roles, responsibilities and qualifications. Since there is limited job opportunity in counseling, a majority of the participants did not have definite plans to shift their career path to professional counseling. Further research is necessary to investigate the later career development of the counseling graduates. If most of the counseling graduates are not able to secure a job in related fields, then counseling career is unlikely to be attractive in Hong Kong; lower manpower in counseling may destabilize the professionals reducing professional counselor's image further.

Conclusions

Recommendations for future research include the following:

First, consistently examine the developmental competency level of counselors in future research. Stoltenberg et al. (1995) noted that a majority of research studies on counselor supervision ignored examining the developmental level of the trainees. There is insufficient empirical support for the importance of this variable that needs to be investigated.

Second, more empirical tests on each developmental stage of counseling interns should be conducted to investigate the work and study related responsibility and specific supervisory interventions. How do the counseling students learn to handle the professional responsibility, make ethical decisions and take appropriate actions? How can the supervisors assess and assist junior counselors in proper encoding of information and experiences?

Third, from the sample in the present study, we did not find a significant difference in the stages of counseling competence between the business and other professional sector.

We encourage further studies to examine each stage across professional domains, such as teachers, science and technology experts, or business and finance executives. We need to move beyond a general classification of level and competence and examine domain specific factors. In a rat race like situation in Hong Kong, outcomes are emphasized more than anything. Does empathy from supervisors, feeling connected to colleagues, and understanding from clients at any given level help the counselors develop a higher competency in a faster pace?

In summary, good reviews and good models often raise more questions than providing answers. We are positive that the present study goes a long way in moving the future study into the counseling training and approaches into the next level of analysis.

References

- Adler, A. (1964). *Social interest: A Challenge to mankind*. New York: Capricorn.
- Atkinson, D. R., Morten, G., & Sue, D. W. (1998). *Counseling American minorities* (5th ed.). Boston: McGraw-Hill.
- Auxier, C. R., Hughes, F. R., & Kline, W. B. (2003). Identity development in counselor-in-training. *Counselor Education and Development*, 43, 25-38.
- Bogden, R. C., & Biklen, S. K. (2006). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Allyn & Bacon
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook of qualitative research*. (2nd ed., pp 509-535). Thousand Oaks, CA: Sage.
- Corden, A., & Sainsbury, R. (2006). Exploring “quality”: Research participants’ perspectives on verbatim quotations. *International Journal of Social Research Methodology: Theory & Practice*, 9, 97-110.
- Destefano, J., Mann-Feder, V., & Gazzola, N. (2010). A qualitative study of client experiences of working with novice counselors. *Counselling and Psychotherapy Research*, 10, 139-146.
- Erikson, E. H. (1980). *Identity and the Life Cycle*. New York: Norton.
- Etringer, B. D., Hillerbrand, E. & Claiborn, C. D. (1995). The transition from novice to expert counselor. *Counselor Education and Supervision*, 35, 4-17.
- Fassinger, R. E. (2005). Paradigms, praxis, problems, and promise: Grounded theory in counseling psychology research. *Journal of counseling Psychology*, 52, 156-166.
- Freud, S. (1986a). Three essays on the theory of sexuality. In J. Strachey (Ed. and Trans.), *The Standard Edition of the Complete Psychological Works of Sigmund Freud* (Vol.7, pp 125-245). London, England: Hogarth Press.

- Freud, S. (1986b). Some thoughts on development and regression-aetiology. In J. Strachey (Ed. and Trans.), *The Standard Edition of the Complete Psychological Works of Sigmund Freud* (Vol. 16, pp 339-357). London, England: Hogarth Press.
- Gibson, D., Dollarhide, C. T., & Moss, J. M. (2010). Professional identity development: a grounded theory of transformational tasks of new counselors. *Counselor Education & Supervision, 50*, 21- 38.
- Glaser, B. G. (1978). *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Mill Valley, CA: The Sociology Press.
- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. (1967). *The Discovery of Grounded Theory*. Chicago: Aldine.
- Hess, A. K. (1986). Growth in supervision: Stages of supervisee and supervisor development. *The Clinical Supervisor, 4*, 51-67.
- Hogen, R. A. (1964). Issues and approaches in supervision. *Psychotherapy: Theory, Research and Practice, 1*, 1739-1741.
- Hunt, D. E. (1971). *Matching Models in Education: The Coordination of Teaching Methods with Student Characteristics*. Toronto: Ontario Institute for Studies in Education.
- Kline, W. B. (2008). Developing and submitting credible qualitative manuscripts. *Counselor Educator and Supervisor, 47*, 210-217.
- Kubler-Ross, E. (1969). *On Death and Dying*. New York: Scribner.
- Leach, M. M., Stoltenberg, C. D., McNeill, B. W., & Eichenfield, G. (1997). Self-efficacy and counselor development: Testing the Integrated Developmental Model. *Counselor Education and Supervision, 37*, 115-124.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Newberry Park, CA: Sage.
- Loganbill, C., Hardy, E., & Delworth, U. (1982). Supervision: a conceptual model. *The Counseling Psychologist, 10*, 3-42.
- Luke, M., & Goodrich, K. (2010). Chi Sigma Iota Chapter leadership and professional identity development in early career counselors. *Counselor Education & Supervision, 50*, 56-78.
- Murdock, N., Alcorn, J., Heesacker, M., & Stoltenberg, C. D. (1998). Model training program for Counseling Psychology. *The Counseling Psychologist, 26*, 658-672.
- Nelson, K. W., & Jackson, S. A. (2003). Professional counselor identity development: a qualitative study of Hispanic student interns. *Counselor Education and Supervision, 43*, 2-14.
- Paladino, D., Minton, C., & Kern, C. (2011). Interactive training model: enhancing beginning counseling student development. *Counselor Educator and Supervision, 50*, 189-206.
- Pedersen, P. B. (1991). Multicultural as a fourth force in counseling [Special Issue]. *Journal of Counseling and Development, 70*(1), 6-12.

- Piaget, J. (1970). Piaget's theory. In P. H. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (3rd ed., pp 703-732). New York: Wiley.
- Ponterotto, J. G., Casas, J. M., Suzuki, L. A., & Alexander, C. M. (Eds.). (1995). *Handbook of multicultural counseling*. Thousand Oaks, CA: Sage.
- Potter, J. & Hepburn, A. (2005). Qualitative interview in psychology: problems and possibilities. *Qualitative Research in Psychology*, 2, 281-309.
- Potter, J. & Hepburn, A. (2012). Eight challenges for interview researchers. In J. F. Gubrium and J. A. Holstein (Eds). *Handbook of Interview Research* (2nd Ed.) (pp. 555-570). London: Sage.
- Rogers, C. R. (1961). *On Becoming a Person*. Boston: Houghton Mifflin Company.
- Strauss, A. (1987). *Qualitative Analysis for Social Scientists*. Cambridge: Cambridge University Press.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Strupp, H. H. (1973). On the basic ingredients of psychotherapy. *Journal of Clinical and Consulting Psychology*, 41, 1-8.
- Stoltenberg, C. D. (1981). Approaching supervision from a developmental perspective: the counselor complexity model. *Journal of Counseling Psychology*, 28, 59-65.
- Stoltenberg, C. D., (1998). A social cognitive - and developmental - model of counselor training. *The Counseling Psychologist*, 26, 317-323.
- Stoltenberg, C. D., & Delworth, U. (1987). *Supervising Counselors and Therapists*. San Francisco, CA: Jossey-Bass.
- Stoltenberg, C. D., McNeill, B. W., & Crethar, H. C. (1995). Persuasion and development in counselor supervision. *The Counseling Psychologist*, 23, 633-648.
- Stoltenberg, C. D., Pace, T. M., Kashubeck, S., Biever, J. L., Patterson, T., & Welch, I. D. (2000). Training models in counseling psychology: Scientist-practitioner versus practitioner-scholar. *The Counseling Psychologist*, 28, 622-640.
- Sue, D. W. (2006). *Multicultural Social Work Practice*. Hoboken, New Jersey: Wiley.
- Sue, D. W., & Sue, D. (1999). *Counseling the culturally different* (3rd ed.). New York: Wiley.
- Swickert, M. L. (1997). Perceptions regarding the professional identity of counselor education doctoral graduates in private practice: A qualitative study. *Counselor Education and Supervision*, 36, 332-340.
- Watkins, C. E. (1994). The supervision of psychotherapy supervisor trainees. *American Journal of Psychotherapy*, 48, 417-431.
- Worden, J. W. (1991). *Grief Counseling and Grief Therapy: A handbook for the Mental Health Practitioner*. New York: Springer Publishing Company.

Worthington, E. L. (2006). Changes in supervision as counselors and supervisors gain experience: a review. *Training and Education in Professional Psychology, 5*, 133-160.

Education III

Room C

14:50-16:20

Thursday, May 8

Session Chair: *Prof. Pattaraporn Thampradit*

ISEPSS-1870

The Development of a Ceramic Design Teaching Process Model for Deaf Student in Ratchasuda College, Mahidol University, Thailand

Ranee Sa-ngiam	<i>Ratchasuda College, Mahidol University</i>
Teerasak Srisurakul	<i>Ratchasuda College, Mahidol University</i>
Janya Chainam	<i>Ratchasuda College, Mahidol University</i>
Nattee Srithom	<i>Ratchasuda College, Mahidol University</i>
Seree Thianjalee	<i>Ratchasuda College, Mahidol University</i>
Aree Pharvasutipaisit	<i>Ratchasuda College, Mahidol University</i>

ISEPSS-2093

Contemporary Challenges in Implementing Strategic Enrolment, Graduation and Articulation (SEGA) Model in Self-financing Tertiary Education in Hong Kong

Jason KY Chan	<i>The Hong Kong Polytechnic University</i>
Peggy Ng	<i>The Hong Kong Polytechnic University</i>
Phoebe Wong	<i>The Hong Kong Polytechnic University</i>
Connie Mak	<i>The Hong Kong Polytechnic University</i>

ICSSAM-629

Models of English Learning Styles for Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang

Pattaraporn Thampradit	<i>King Mongkut's Institute of Technology Ladkrabang</i>
------------------------	--------------------------------------------------------------

ICSSAM-668

Evaluating the Effectiveness of Knowledge Management Tool in Learning Leadership Skills: A Study on Storytelling

Kai Wah Hen	<i>Universiti Tunku Abdul Rahman</i>
Peter Charles Woods	<i>Multimedia University</i>

ICSSAM-676

The Activities Learning by Social Networking Technologies and Project-based Learning Styles of Information Technology Subject

Saisuda Puntrakool *King Mongkuts University of Technology Thonburi*
Pichet Pinit *King Mongkuts University of Technology Thonburi*

ICSSAM-731

Does the Merge of Special Municipalities Make Service Delivery More Efficient?

Yi-jung Wu *Shih Hsin University*
Chin-Kuei Chen *National Taipei University*
Yao-Chang Kuo *Hsuan Chuang University*

ISEPSS-1890

The Study on Developing E-Family Functioning Survey for Families of the Health-Impaired Children in Taiwan

Chwen-Chyong Tsau *Fooying University*
Li-Chuan Hung *Fooying University*
Fu-Hao Yeh *Fooying University*
Reiko Yoshikawa *Tokai University*
Hsin-Yun Au *Edmonds Community College*

ISEPSS-1870

The Development of a Ceramic Design Teaching Process Model for Deaf Student in Ratchasuda College, Mahidol University, Thailand

Ranee Sa-ngiam^{a,*}, Teerasak Srisurakul^b, Janya Chainam^c, Nattee Srithom^d,
Seree Thianjalee^e, Aree Pharvasutipaisit^f

Mahidol University, Ratchasuda College, Salaya, Nakornpathom, Thailand

E-mail: raranee@hotmail.com^a, tum_nfe@live.com^b, janya.cha@mahidol.ac.th^c,
srithom_tee@hotmail.com^d, seree132@gmail.com^e, tg1532@hotmail.com^f

Abstract

The purpose of this study were to: 1) study states and problems of a ceramic design teaching process and 2) develop a teaching process model of ceramic design for deaf student.

Participants were 9 deaf students in the field of applied art in ceramic in Ratchasuda College, Mahidol University, Thailand who enrolled in an individual project course (RSDS 489). The research process consisted of 4 steps: 1) studying the states and problems of a ceramic design teaching process, including the states and problems of instructors, students, instruction, and educational environment; 2) designing the teaching process of ceramic design; 3) implementing the teaching process of ceramic design (80 hours) with the participants by studying supportive and obstructive factors of implementation; and 4) developing and evaluating the teaching process model of ceramic design for deaf student in Ratchasuda College, Mahidol University. The research tools used in this study were: 1) a record form for collecting the data about the states of ceramic design teaching process; 2) an interview protocol for collecting the data about the problems of ceramic design teaching process; 3) evaluation form of the ceramic design teaching process model; and 4) a focus group protocol for collecting the data about the ceramic design teaching process model for deaf student.

Results revealed that the main problem of the ceramic design instruction was perception problem of the deaf students affecting on instructional preparation. Thus, the ceramic design teaching process model that could solve this problem consisted of 9 steps: 1) introducing the lesson of ceramic design; 2) designing the topic and scope of ceramic design; 3) teaching how to collect the data of product; 4) searching the data of product; 5) searching the data source of ceramic design; 6) analyzing the data; 7) sketching and modeling; 8) selecting the designs and discussing about the details of product; and 9) evaluating the product. The key supportive factors that could enhance the effectiveness of ceramic design teaching process were: 1) instructor factor; 2) student factor; and 3) academic support factor, including interpreter, note taker, teaching assistance, and audio-visual technical officer.

The evaluation results about the ceramic design teaching process model from 10 experts revealed that the averages of appropriateness model were between 4.30 to 4.60 and the averages of feasibility were between 4.30 to 4.50.

Key words: A Ceramic Design Teaching Process, Deaf Student

ISEPSS-2093
**Contemporary Challenges in Implementing Strategic Enrolment,
Graduation and Articulation (SEGA) Model in Self-financing Tertiary
Education in Hong Kong**

Jason KY Chan^a, Peggy Ng^b, Phoebe Wong^c, Connie Mak^d

The Hong Kong Polytechnic University

Room 1205, PolyU Hung Hom Bay Campus, 8 Hung Lok Road, Kowloon, Hong Kong

^aJason.Chan@polyu.edu.hk , ^bsppeggy@speed-polyu.edu.hk,

^cspphoebe@speed-polyu.edu.hk , ^dspconnie@speed-polyu.edu.hk

Abstract

This paper is about the contemporary challenges, especially in financial aids, in implementing a conceptual management model of strategic enrolment, graduation and articulation (SEGA) in self-financing tertiary education in Hong Kong. Several differences in subsidizing students between Tertiary Student Finance Scheme (TSFS) and Financial Assistance Scheme for Post-secondary (FASP) are identified, while some differences affect the implementation of SEGA, as well as access, equity and participation in the self-financing education in Hong Kong. For example, no age requirement for TSFS; age restriction is imposed on FASP, however, implying that if an applicant aged 30 who pursuing a post-secondary programmes which last for more than 1 year, he/she couldn't apply FASP in the next academic year.

Applicant can apply TSFS from pursuing a sub-degree level programme up to a doctoral programme, provided that the programme is a recognized courses while applicant for FASP could only apply financial assistance up to a top-up degree. It is possible for TSFS applicants to receive a full grant covering all the cost including tuition fees, academic expenses and compulsory union fees. However, as FASP has fixed assistance ceiling, applicants may not receive a full grant covering all the study cost.

Keywords: Challenges, financial aids, strategic enrolment, graduation, articulation, self-financing tertiary education

1 Introduction

The Hong Kong SAR Government set a target of enabling 60% of Hong Kong's teenagers to participate in post-secondary education beginning in 2001. To meet this goal, the number of accredited self-financing post-secondary programmes offered by local continuing education institutions has grown significantly in the years following the government's pronouncement (Education Bureau 2006).

Since 2000, the Hong Kong Special Administrative Region (HKSAR) Government has been actively encouraging the private sector to contribute to the development of self-financing post-secondary programmes, especially top-up degree programmes, such that students would have more articulation opportunities upon completion of their associate degree qualifications.

As a result of this education policy, there has been a substantial increase in the number of self-financing local continuing education institutions in Hong Kong, thus providing a wide variety of full-time accredited local top-up degree programmes. (Ng et al. 2013)

As a result of the rapid development of self-financing local top-up degree programmes providing educational opportunities for secondary school leavers since 2000, the post-secondary participation rate for senior secondary graduates doubled in five years' time: from 33% in 2001/01 academic year to 66% in the 2005/06 academic year (Education Bureau 2006). The rate then levelled off in the 2006/07 academic year, and now maintains at slightly above 60%. (Ng et al. 2013)

2 Higher Education System in Hong Kong

In Hong Kong, there are multiple pathways for local students to access to higher education via publicly-funded programmes and self-financing programmes.

2.1 New Senior Secondary (NSS) academic structure and curriculum

"The New Academic Structure for Senior Secondary Education and Higher Education – Action Plan for Investing in the Future of Hong Kong" published in May 2005 has made a range of recommendations on changing the academic structure of Hong Kong in senior secondary and higher education. Starting from 2009, students have been given the opportunity to study three years of senior secondary education on top of the nine years basic education. There is only one public examination leading to the Hong Kong Diploma of Secondary Education under the new academic structure. (Education Bureau 2011b) The "3+3+4" academic structure has been implemented in the higher education sector in 2012/13.

This is a milestone of Hong Kong's education reform. The new academic structure provides opportunities for all students to receive six-year secondary education and four-year higher education. (University Grant Committee 2012)

2.2 Publicly-funded Programmes

There are eight degree-awarding institutions funded by the University Grants Committee (UGC), which provide 15,000 first-year first-degree places, including:

- City University of Hong Kong (CityU)
- Hong Kong Baptist University (HKBU)
- Lingnan University (LU)
- The Chinese University of Hong Kong (CUHK)
- The Hong Kong Institute of Education (HKIEd)
- The Hong Kong Polytechnic University (PolyU)
- The Hong Kong University of Science and Technology (HKUST)
- The University of Hong Kong (HKU)

These institutions admit students at their own discretion. Prospective students may refer to the institution websites for admission criteria. For students with Hong Kong Diploma of Secondary Education (HKDSE) results, they may apply through the Joint University Programmes Admission System (JUPAS). The Government also provides financial assistance to qualified students in need through the Student Financial Assistance Agency (SFAA). Outstanding local and non-local students can also be awarded scholarships through the HKSAR Government Scholarship Fund. (Education Bureau 2013)

Some of these publicly-funded institutions, such as City University of Hong Kong (CityU), The Hong Kong Institute of Education (HKIEd), The Hong Kong Polytechnic University (PolyU) and the Vocational Training Council also provide a number of publicly-funded sub-degree programmes. Moreover, an \$18 billion Research Endowment Fund (the Fund) was established in 2009 to provide stable research funding for the eight UGC-funded institutions. The Fund is administered by the Research Grants Council (RGC) of University Grants Committee (UGC). (Education Bureau 2013)

At present, around 14,600 first-year-first-degree (FYFD) places through the eight institutions funded by the University Grants Committee (UGC) are provided. For the 2010/11 academic year, the UGC-funded institutions also provided around 2,000 senior year undergraduate intake places for graduates of sub-degree programmes and students with other relevant qualifications.

In the 2010/11 academic year, the recurrent funding for the UGC-funded institutions from the Government and the Research Endowment Fund is \$10,910 million and \$675 million respectively. In the 2010-2011 Policy Address, the Chief Executive proposed to increase the number of FYFD places to 15,000 for each cohort from the 2012/13 academic year and double the number of senior year intake places progressively to 4,000 each year. (Education Bureau 2011a)

- **Admissions:** Institutions have autonomy in admission of students. Prospective students may browse the websites of the institutions for information on academic programmes and admission matters. For students with Hong Kong Diploma of Secondary Education (HKDSE) results, they may apply through the Joint University Programmes Admission System (JUPAS), which is a scheme and the main route of application to apply for admission to publicly-funded degree and selected sub-degree programmes offered by the eight UGC-funded institutions as well as the full-time self-financed bachelor degree programmes offered by the Open University of Hong Kong. (Education Bureau 2011a)
- **Financial Assistance:** The Student Financial Assistance Agency (SFAA) administers various student financial assistance schemes to ensure that no qualified students will be denied access to tertiary education because of a lack of financial means. In the 2009/10 academic year, SFAA disbursed \$829.9 million in grants and \$506.29 million in means-tested and non-means-tested loans to eligible students studying in publicly-funded institutions under the relevant schemes. (Education Bureau 2011a)
- **Scholarships:** The HKSAR Government Scholarship Fund provides scholarships to outstanding local and non-local students. Established in 2008, it is one of the measures to further develop Hong Kong as a regional educational hub. (Education Bureau 2011a)

2.3 Self-financing Local Programmes

Since the announcement of the Government's policy objective and a series of support initiatives to enable 60% of our young generation to have access to post-secondary education in 2000/01, there has been significant development in the provision of programmes at the sub-degree level and above by local institutions on a self-financing basis. Notably, there is a dynamic and responsive post-secondary sector that offers a wide range of education opportunities meeting the unique aspirations, interests and abilities of students. (Education Bureau 2012)

The number of sub-degree level and above programmes offered by self-financing institutions has increased significantly. There are a total of 27 institutions providing full-time locally-accredited self-financing sub-degree and degree (including top-up degree) programmes for the academic year 2013/14. (Education Bureau 2013)

The Government has subsidised the self-financing post-secondary sector through a basket of support measures including land grant at nominal premium, interest-free start-up loans, a HK\$3.5 billion Self-financing Post-secondary Education Fund to provide scholarships and support quality enhancement efforts of institutions; inject HK\$3 billion into the Research Endowment Fund for self-financing tertiary institutions to engage in research; and student finances. (Education Bureau 2013)

However, we can still see that publicly-funded programmes are heavily subsidised while self-financing programmes not comparatively.

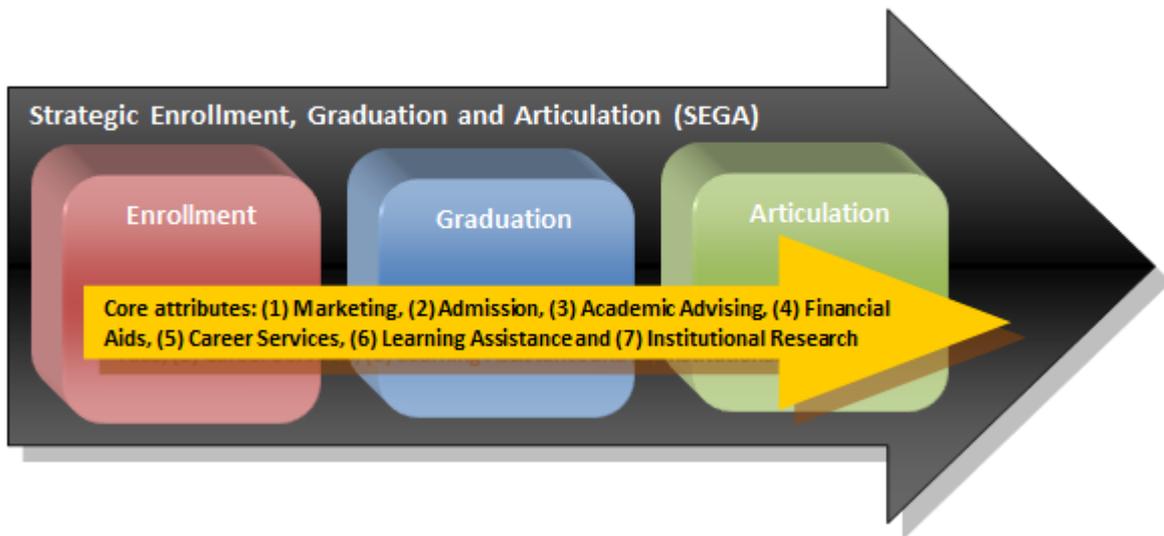
3 Strategic Enrolment, Graduation and Articulation (SEGA)

The concept of SEGA is modified from Strategic Enrolment Management (SEM) which emphasized the need for institutions to identify optimal goals within overall enrolment management strategies. SEM is a comprehensive process designed to help an institution achieve and maintain the optimum student recruitments, retention and graduation rates of students, where optimum is defined within the academic context of the institution (Dolence, 1993, 1996, 1997). In fact, SEM is a proven method for increasing enrolment and graduation rates of students in United States (Taylor et.al, 2008). The parameter of articulation is introduced as it was suggested that institutions providing articulation pathways for students (i.e. from an associate degree to a top-up degree or from a top-up degree to a postgraduate degree) help maintain positive relationships and foster loyalty (Bejou, 2005; Zamani, 2001).

Due to the rapid development of self-financing associate degree and top-up degree programmes in Hong Kong, articulation becomes a pressing issue. The situation that students completing an associate degree are unable to obtain a place at a university was explained (Kember, 2010). And it was further addressed that “all the students are focusing on academic results because they are longing for entering university” (Kember, 2010).

Therefore, it is necessary to develop a conceptual management model on the three dimensions of enrolment, graduation as well as articulation (See Figure 1). In this paper, the contemporary challenges on financial aids, which is one of the core attributes to the whole process of SEGA, is the focus.

Figure 1: SEGA Conceptual Management Model



3 Tuition Fees Charged in UGC and Self-financing Sectors

Generally speaking, the tuition fee of full-time self-financed sub-degree, undergraduate and top-up degree programs, no matter offering by locally- or non-locally-accredited institutions is much higher than that of publicly-funded institutions (Please refer to tables 1 and 2). For some programmes, the difference can be more than double. Moreover, there is large variation of the tuition fees of different self-financed programmes.

Table 1: Annual Tuition Fee of Full-time Publicly-funded Sub-degree and Undergraduate Programmes for the 2013/14 Academic Year

Institution	(HK\$)
UGC-funded Institutions	
Degree (including Senior Year Places) and above Programmes	\$42,100
Sub-degree programmes (except those offered by the Hong Kong Institute of Education (HKIED))	\$31,575
Sub-degree programmes offered by the HKIED ^[1]	\$15,040
Vocational Training Council	
Higher Diploma	\$29,500 - \$30,250
The Hong Kong Academy for Performing Arts	
Degree Programmes	\$42,100
Advanced Diploma	\$31,575

Note:

[1] Sub-degree programmes of HKIED are subject to a different scale of tuition fees. The bulk of HKIED's sub-degree programme tuition fees which are currently charged at \$15,040. http://www.ied.edu.hk/degree/fees_dse.htm

Table 2: Average Annual Tuition Fee ^{[1][2][3]} of Full-time Locally- and Non-locally accredited Self-financed Sub-degree, Undergraduate and Top-up Degree Programmes for the 2013/14 Academic Year

Institution	Local				Non-Local	
	Associate Degree (HK\$)	Higher Diploma (HK\$)	Undergraduate (HK\$)	Top-up Degree (HK\$)	Undergraduate (HK\$)	Top-up Degree (HK\$)
Caritas Bianchi College of Careers ^[4]	49,045	49,045 - 53,840	-	-	-	-
Caritas Institute of Higher Education	-	51,015 - 55,390	60,095	62,230	-	-
Comscentral College	-	-	87,000	92,000	-	-
Chu Hai College of Higher Education	-	-	61,500 - 62,333	-	-	-
City University of Hong Kong	47,250 - 56,250	-	-	78,750 - 90,300	-	61,750 - 89,220
Hong Kong Management College	48,000	-	66,500	68,000	-	-
HKU SPACE Po Leung Kuk Community College	52,500	52,500	-	-	-	-
Hong Kong Adventist College	39,600	-	-	-	-	-
Hong Kong Art School	-	45,000	-	-	81,400	-
Hong Kong Baptist University	48,750	50,000 - 66,978	-	63,000 - 82,500	-	-
Hong Kong Buddhist College	38,000	-	-	-	-	-
Hong Kong College of Technology ^[5]	-	41,000 - 49,480	-	-	-	-
Hong Kong Institute of Technology ^[5]	35,800	-	-	-	45,000	45,000
Hong Kong Shue Yan University	-	-	55,000	-	-	-
Kaplan Business and Accountancy School ^[5]	-	48,000	-	-	-	-
Lingnan University	50,000	43,800	-	-	-	-
Pui Ching Academy	-	41,000	-	-	-	-
SCAD Foundation (HK) Limited/ Savannah College of Art and Design, Inc	-	-	-	-	279,755	-
The Chinese University of Hong Kong	-	45,225 - 49,810	-	-	-	117,600
The Hong Kong Institute of Education	48,100	58,500	72,000 - 80,000	73,500 - 84,000	-	-
The Hong Kong Polytechnic University	50,400 - 53,760	50,400 - 55,440	-	66,650 - 85,000	-	-
The Open University of Hong Kong	-	45,000 - 66,365	52,000 - 65,000	52,000 - 79,067	63,800	63,800
The University of Hong Kong	52,500 - 72,000	52,500 - 62,000	-	-	59,200	74,400
Tung Wah College	52,500 - 76,250	79,200	66,000 - 99,200	66,000 - 90,000	-	-
Vocational Training Council	-	46,500 - 47,750	66,150 - 75,900	-	-	57,800 - 75,400
Yew Chung Community College ^[5]	53,550	-	-	-	-	-
YMCA College of Careers ^[5]	-	43,000	-	-	-	-
Overall	35,800 - 76,250	41,000 - 79,200	52,000 - 99,200	52,000 - 92,000	45,000 - 279,755	45,000 - 117,600

Notes: Provisional Figures as on 19 Jul 2013

[1] Information is obtained from the iPASS (<http://www.ipass.gov.hk>).

[2] Excluding 1-year Pre-Associate Degree / Foundation year Programmes.

[3] The average annual tuition fee is calculated by the total tuition fee divided by the normal programme duration of the respective programmes.

[4] The tuition fee is of 2012/13 academic year, the tuition fee level for 2013/14 is subject to revision.

[5] Not accepting intake for the 2013/14 academic year.

4 Different Kinds of Subsidies and Funding Models

There are some difference between the two sectors in terms of funding, kinds of subsidies to include fund allocation/loans for construction and land lease, and subsidies being used for support service (in the case of UGC sector).

Table 3: Comparison of the Subsidies and Funding Models for Publicly-Funded and Self-financing Sectors

	Publicly-funded	Self-financing
Advisory Body	The University Grants Committee (UGC) of Hong Kong is a non-statutory advisory committee responsible for advising the Government of the HKSAR on the development and funding needs of higher education institutions in the HK. (University Grant Committee 2006)	A basket of support Measures including offering land at nominal premium to non-profit-making postsecondary institutions and providing interest-free loans to support institutions in developing premises, grants are also provided to fund initiatives dedicated to enhancing the quality of teaching and learning
Recurrent Grant	The bulk of the recurrent grants are disbursed to institutions normally on a triennial basis to tie in with the academic planning cycle and in the form of a block grant to provide institutions with maximum flexibility. Once allocations are approved, institutions have a high degree of freedom in deciding on how the resources available are put to best use. Determination of the block grants is largely based on a methodology developed by the UGC, which comprises three elements in the 2009-12 triennium: Teaching (about 75%), Research (about 23%) and Professional Activity (about 2%). Nevertheless, the UGC also takes into account the special needs of individual institutions and other factors not captured by the funding formula and will introduce extra-formulaic adjustments where required. (University Grant Committee 2009)	The following forms of support to providers who are non-profit-making and providing full-time accredited post-secondary programmes are provided (iPASS 2013): (a) start-up loan; (b) land at nominal premium (including vacant school premises at nominal rent); (c) quality enhancement grant (QEGS) for non-works projects or initiatives dedicated to enhancing the quality of teaching and learning of self-financing post-secondary programmes; (d) accreditation grant (please refer to the Qualification Framework support schemes for details); and (e) reimbursement of government rents and rates.
Capital Grants	Capital projects carried out by institutions are supported by capital grants which are sought from the Administration on an annual basis by way of two avenues, namely the Capital Works Programme, and the Alterations, Additions and Improvements (AA&I) block allocation. The two avenues are characterized by a double-approval process through which all projects have first to be vetted by the UGC before the selected ones are put forward to the legislature for the seeking of funds. As regards the Capital Works Programme, there is an additional process for UGC selected projects to be subjected to a competitive selection process by the Administration. (University Grant Committee 2009)	Note : For the support measures (a), (b) and (c) above, we invite eligible institutions to each round of application. For Students – a. the Self-financing Post-secondary Scholarship Scheme; b. the Quality Enhancement Support Scheme (QESS); and; c. the Quality Assurance Support Scheme (QASS).

Table 3 has shown that there is a centralized advisory body for UGC institutions while no such body for Self-financing side. Regular triennial recurrent grants assigned for 8 UGC institutions in the form of a block grant which is calculated on the basis, allowing UGC institutions assign the use according to their respective needs. For capital works, capital grants are provided which are applied from the Administration of the respective institutions on an annual basis.

While for self-financing side, course providers have to apply various loan schemes for the purpose of constructing institutions premises through the Start-Up loan (iPASS 2013) However, no capital grant is available for self-financing course providers for construction/revamp of institutions' premises. For non-work projects and initiatives, course providers have to apply through the QESS annually, which are selected on a competitive status.

That said, UGC institutions enjoy a higher stability and flexibility as recurrent grants is provided on a triennial basis, allowing institutions adopt longer strategic planning. The form of block grant allows the institutions use the resources in the most flexible way. However, self-financing course providers have to apply the QESS on a project-basis that is restricting the use of resources and stability, and affecting a longer strategic planning.

5 Different Associated Criteria for Grant/Loan

According to Student Financial Assistance Agency (SFAA) of HKSAR Government, “we administer several publicly funded financial assistance schemes which ensure that no students in Hong Kong will be denied access to education because of lack of means.” (SFAA, 2009)

There are four main financial schemes for post-secondary and tertiary level:

- Tertiary Student Finance Scheme for Publicly-funded Programmes (TSFS)
- Financial Assistance Scheme for Post-secondary Students (FASP)
- Non-means-tested Loan Scheme for Full-time Tertiary Students (NLSFT)
- Non-means-tested Loan Scheme for Post-secondary Students (NLSPS)

Table 4: Comparisons of Financial Assistance Arrangement for the Applicants from Publicly-funded and Self-financing Institutions

	Tertiary Student Finance Scheme - Publicly-funded Programmes (TSFS) (SFAA 2013a)	Financial Assistance Scheme for Post-secondary Students (FASP) (SFAA 2013b)
Eligibility	Registered as a full-time student and take up an exclusively University Grants Committee-funded or exclusively publicly-funded student place of a recognized courses at UGC-funded institutions, the Vocational Training Council, the Hong Kong Academy for Performing Arts or the Prince Philip Dental Hospital	Full-time students aged 30 or below who are engaged in locally accredited self-financed post-secondary education programmes leading to a qualification at the sub-degree level or degree can apply for the FASP.
Form of Financial Assistance	Provided in the form of a grant and/or loan. The grant is for covering tuition fees, academic expenses and compulsory union fees. The loan is for living expenses and is interest-bearing at 1% per annum chargeable from the commencement of the repayment period. Eligible students who do not pass the means test for full grant may receive partial grants according to a sliding scale.	Provided in the form of a grant and/or loan. The grant is for covering tuition fees and academic expenses. The loan is for living expenses and is interest-bearing at 1% per annum chargeable from the commencement of the repayment period. Eligible students who do not pass the means test for full grant may receive partial grants according to a sliding scale.
Maximum Level of Financial Assistance	Tuition fee, Academic expenses and Compulsory union fees: The maximum grant for a student is equal to the tuition fee (not including continuation fee for postgraduate courses) payable to the concerned local institution and academic expenses for his/hers	Tuition fee: HK\$68,110 for 2013/14 Academic expenses: HK\$4,700 for 2013/14
	Living expenses interest bearing loan at 1% per annum: HK\$40,960 for 2013/14	Living expenses interest bearing loan at 1% per annum: HK\$40,960 for 2013/14
Loan Repayment	The living expenses loan borrowed by students and the interest accrued thereon are repayable in 15 years ('Repayment Period') by 180 equal monthly instalments, or in a shorter Repayment Period by equal monthly instalments as agreed by the SFAA	The living expenses loan borrowed by students and the interest accrued thereon are repayable in 15 years ('Repayment Period') by 180 equal monthly instalments, or in a shorter Repayment Period by equal monthly instalments as agreed by the Agency. When loan repayment commences, living expenses loan recipients may choose to repay the loan by 20 instalments in 5 years, 40 instalments in 10 years, or in a shorter period by equal quarterly instalments as agreed by SFAA

	Non-means-tested Loan Scheme for Full-time Tertiary Students (NLSFT) (SFAA 2013c)	Non-means-tested Loan Scheme for Post-secondary Students (NLSPS) (SFAA 2013d)
Aim	To complement the TSFS to provide financial assistance in the form of loan to eligible students to settle tuition fees of recognised full-time study courses	To complement the FASP to provide loan(s) to eligible students to settle tuition fees of locally-accredited, self-financing full-time post-secondary education programmes at the level of associate degree, higher diploma or degree.
Eligibility	Full-time student enrolled in the recognised courses offered by the institutions under the TSFS	Full-time student engaged in a locally-accredited self-financing post-secondary education programme at sub-degree (i.e. associate degree or higher diploma) or degree level
Life-time Maximum Ceiling	With effect from the 2012/13 academic year, a combined life-time loan limit is imposed on students eligible for receiving loans under the NLSFT and NLSPS. The loan limit will be price-adjusted annually thereafter in accordance with the Composite Consumer Price Index. For the 2012/13 academic year, the combined life-time loan limit is HK\$300,000. The life-time loan limit for the 2013/14 academic year is HK\$312,300 (SFAA 2013e)	
Current Interest Rate	Both NLSFT and NLSPS operate on a full-cost recovery basis. Interest rate is set at the Government of the Hong Kong Special Administrative Region (the Government's no-gain-no-loss rate which is currently set at 3.688% below the average best lending rate (BLR) of the note-issuing banks, plus a risk-adjusted factor which seeks to cover the Government's risk in disbursing unsecured loan. The current interest rate is 1.395% per annum (last updated on 1 June 2013) (SFAA 2013e)	
Loan Repayment	Both NLSFT and NLSPS loan(s) borrowed and the interest accrued thereon are repayable in 15 years (Repayment Period) by 180 equal monthly instalments upon completion of the programmes. (SFAA 2013e)	

6 Conclusion

Several differences can be found from the above comparison, while some differences affect the implementation of the whole process of SEGA, as well as access, equity and participation in the self-financing education in Hong Kong.

- No age requirement for TSFS; age restriction is imposed on FASP, however, implying that if an applicant aged 30 who pursuing a post-secondary programmes which last for more than 1 year, he/she couldn't apply FASP in the next academic year.
- Applicant can apply TSFS from pursuing a sub-degree level programme up to a doctoral programme, provided that the programme is a recognized courses which is on the course coding sheet (<http://www.sfaa.gov.hk/eng/schemes/tsfscs.htm>), while applicant for FASP could only apply financial assistance up to a top-up degree.
- There is no compulsory union fees for grant portion of FASP. This may be unfair to FASP applicants, as they should also have the right to access extra-curricular activities and participation, even though the union fees grant is about several hundred dollars only.
- It is possible for TSFS applicants to receive a full grant covering all the cost including tuition fees, academic expenses and compulsory union fees. However, as FASP has fixed assistance ceiling, applicants may not receive a full grant covering all the study cost. This grant ceiling implies equity issue.

References

- Bejou, D. (2005, March). *Treating Students Like Customers*. pp. 44-47.
- Dolence, M. G. (1993). *Strategic Enrolment Management: A primer for campus administrators*. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- Dolence, M. G. (1996). *Strategic Enrolment Management: Cases from the Field*. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- Dolence, M. G. (1997). *Strategic Enrolment Management: A primer for campus administrators*. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- Education Bureau (2006) *Review of the Post-secondary Education Sector*. Hong Kong.
- Education Bureau (2011a) *Publicly-funded Programmes*
<http://www.edb.gov.hk/en/edu-system/postsecondary/local-higher-edu/publicly-funded-programmes/index.html> (accessed 22 Nov 2013)
- Education Bureau (2011b) *Programmes Highlights on Secondary Education*
<http://www.edb.gov.hk/en/edu-system/primary-secondary/secondary/highlights/index.html> (accessed 22 Nov 2013)

- Education Bureau (2012) Self-financing Local Programmes
<http://www.edb.gov.hk/en/edu-system/postsecondary/local-higher-edu/self-fin-programs/index.html> (accessed 22 Nov 2013)
- Education Bureau (2013) *Post-Secondary Education: Overview*
<http://www.edb.gov.hk/en/edu-system/postsecondary/index.html> (accessed 22 Nov 2013)
- Information Portal for Accredited Post-secondary Programmes (iPASS) (2013a) Support Measures for Institutions http://www.ipass.gov.hk/edb/index.php/en/home/support_insti (accessed 19 Nov 2013)
- Information Portal for Accredited Post-secondary Programmes (iPASS) (2013b) Start-up Loan Scheme
http://www.ipass.gov.hk/edb/index.php/en/home/support_insti/support_insti_sls (accessed 19 Nov 2013)
- Kember, D. (2010). Opening up the road to nowhere: problems with the path to mass higher education in Hong Kong. *High Educ*, 59, 167-179.
- Ng, P., Chan, J.K.Y., Wong, P., & Mak, C. (2013) A conceptual management model of strategic enrolment, graduation, and articulation (SEGA) in self-financing tertiary education in Hong Kong, *EDULEARN13, the 5th annual International Conference on Education and New Learning Technologies*, 1-3 Nov 2013, Barcelona, Spain.
- Student Financial Assistance Agency (2009) *Welcome Message*
<http://www.sfaa.gov.hk/eng/about/welcome.htm> (accessed 17 Nov 2013)
- Student Financial Assistance Agency (2013a) *Tertiary Student Finance Scheme - Publicly-funded Programmes* <http://www.sfaa.gov.hk/eng/schemes/tsfs.htm> (accessed 20 Nov 2013)
- Student Financial Assistance Agency (2013b) *Financial Assistance Scheme for Post-secondary Students (FASP)* <http://www.sfaa.gov.hk/eng/schemes/fasp.htm> (accessed 20 Nov 2013)
- Student Financial Assistance Agency (2013c) *Non-means-tested Loan Scheme for Full-time Tertiary Students (NLSFT)* <http://www.sfaa.gov.hk/eng/schemes/nls.htm> (accessed 20 Nov 2013)
- Student Financial Assistance Agency (2013d) *Non-means-tested Loan Scheme for Post-secondary Students (NLSPS)* <http://www.sfaa.gov.hk/eng/schemes/nls3.htm> (accessed 20 Nov 2013)
- Student Financial Assistance Agency (2013d) *What's New*
http://www.sfaa.gov.hk/eng/schemes/nls_news.htm (accessed 20 Nov 2013)
- Taylor, J., Brites, R., Correia, F., Farhangmehr, M., Ferreira, B., & Jose Sa, M. (2008). Strategic enrolment management: Improving student satisfaction and success in Portugal. *Higher Education Management and Policy*, 129-145.

University Grant Committee (2006) *Overview*

<http://www.ugc.edu.hk/eng/ugc/about/overview/overview.htm> (accessed 22 Nov 2013)

University Grant Committee (2009) *UGC Activities: Funding*

<http://www.ugc.edu.hk/eng/ugc/activity/fund/funding.htm> (accessed 23 Nov 2013)

University Grant Committee (2012) *The “3+3+4” New Academic Structure*

<http://www.ugc.edu.hk/eng/ugc/publication/report/figure2011/d001.htm> (accessed 23 Nov 2013)

Zamani, E. M. (2001). Institutional responses to barriers to the transfer process. *New Directions for Community Collges*, 114, 15-24.

ICSSAM-629

Models of English Learning Styles for Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang

Pattaraporn Thampradit

Department of Applied Arts, Faculty of Industrial Education, King Mongkut's Institute of Technology Ladkrabang, Thailand 10520

Corresponding author, e-mail: tpattaraporn@yahoo.com

Abstract

The objectives of this study were: (1) to study models of English learning styles of Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang. (2) To compare models of English learning styles of Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang with different genders and English reading abilities. The sample were all 40 second year undergraduate Industrial Education Students in the field of Applied Arts, majoring in English and enrolling the course of "Reading2" during the first semester of 2012 academic year at King Mongkut's Institute of Technology Ladkrabang (KMITL). The research instrument used in collecting data was the questionnaire, having six categories of learning styles framework adopted from Reids (Reid, 1987). The quantitative data were analyzed using statistic programs: arithmetic mean, standard deviation, and Independent Sample t-test. The hypothesis testing was set at the 0.05 level of significance. Results of this study revealed that: (1) Visual learning style was the only learning style model that all students used at major levels (mean = 37.60), while other categories of learning styles: Auditory, Kinesthetic, Tactile, Group, and Individual learning styles, students appeared to use them only at minor levels. Surprisingly, there were no Negligible levels on any students' learning styles models. (2) Male students had different levels of learning styles models from those of female students in three categories: Visual, Kinesthetic and Group learning styles. That is, all these three categories of learning styles, male students used them in Major levels while female students used them in Minor levels. Interestingly, this study also illustrated that high reading ability students had different levels of learning styles models from those of mid reading ability students in categories of Visual, Auditory, and Tactile learning styles. That is, all these three categories of learning styles, high reading ability students used these styles in Major levels, while mid reading ability students used them in Minor levels. Last but not least, this study also found that there were statistically significant differences in the models of learning styles in the categories of Visual, and Kinesthetic learning styles in different genders: male and female at the 0.05 level ($t=2.643$, $p=.012^*$, and $t=3.046$, $p=.004^*$ respectively).

Moreover, the statistically significant differences were found in the differences of students' reading ability levels: high and mid in the models of learning styles of Visual, Auditory, and Tactile learning styles at the significant level of 0.05 ($t=2.245$, $p=.031^*$, $t=2.483$, $p=.018^*$, and $t=2.258$, $p=.030^*$ respectively) as well

Keywords: English learning styles, Industrial Education Students, King Mongkut's Institute of Technology Ladkrabang

Introduction

English has been used as a significant tool to compete in world markets and businesses, to negotiate either in political and social issues, to get better understanding and to have mutual collaboration among countries. Moreover, in our globalization, it's without doubt to say that learning English is more and more important for students, not only for their study, but for their daily life, their future career, and taking part in the contemporary globalization trend (Hou 2009). In Thailand, Office of Education Council also realizes how significant English is. The Second Decade of Education Reform (2011-2018) has focused on know-how of educational improvement by enhancing 3% per year of English ability and foreign language with economic significance (Office of Education Council 2011). Foreign languages, like English plays an essential role in learning for specific purposes: career, education or personal interest (Banbang 2010). According to the Thai National Education Act, it can be summarized that the curriculum in organizing learning process should indicate to the learner's needs (Singhasiri, Darasawang and Srimavin 2004). Meanwhile, the government's educational policy has focused on reform of learning process. Student-centered learning is an approach to education emphasizing on the students' needs, rather than those of others involved in the educational process, such as teachers and administrators. This approach has many implications for the design of curriculum, course content, and interactivity of courses (www.wikipedia.org, retrieved on 22 February 2011). Within this paradigm, education should be based on the principle that all learners are capable of learning and self-development, and are regarded as being most important. At the same time the teaching-learning process should aim at enabling the learners to develop themselves at their own pace and to the best of their potentiality (Thai National Education Act (NEA), 1999: section 22).

Thus, it's significant to investigate the model of learning style differences between students to understand the application of an individual's unique learning styles. That is, investigating in students' learning styles should be a significant way to realize different models of students' learning styles in order that teachers can enhance their students to learn at their own pace and to the best of their potentiality.

The present study, therefore, was designed to investigate models of English learning styles of Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang. Additionally, it was aimed to compare the models of English learning styles of these students with different genders and English reading abilities as well.

Research Questions

1. What are the models of English learning styles of Industrial Education Students at King Mongkut's Institute of Technology Ladkrabang?
2. Do KMITL Industrial Education Students with different genders and different English reading abilities appear to have the same models of English learning styles?

Materials and Methods

Research Instruments

The research instrument was the questionnaire. It consisted of two sections. The first section was students' demographic information that included students' gender and reading abilities: high, mid, low. The second section, having 30 statements, was the Models of Learning Styles Questionnaire adapted from Reid's framework (Reid 1987). There were six categories of learning styles altogether: Visual, Auditory, Kinesthetic, Tactile, Group, and Individual learning styles.

Procedure

1. The Models of Learning Styles Questionnaire

The Models of Learning Styles Questionnaire, having the reliability of 0.92, were distributed to all 40 students to interpret their models of English learning styles when they studied "Reading 2" during the first semester of 2012 academic year. All voluntarily participated students were asked to respond to each statement that was best applied to their models when learning English.

2. A 5-point Likert Scale

The students were informed to mark all statements of the questionnaire according to a 5-point Likert scale ranging from strongly agree to strongly disagree, as shown in Table 1:

Table 1: A 5-point Likert Scale

A 5-point Likert Scale	
Scale	Point
Strongly agree	5
Agree	4
Undecided	3
Disagree	2
Strongly disagree	1

3. Criteria for interpreting Variables

In this study, the criteria for interpreting the Mean Score were presented to the students. These criteria were applied according to the classification of the three levels of learning styles models adapted from Reid (Reid, 1987): major, minor, and negligible, as shown in Table 2:

**Table 2: Three Levels of Students' Learning Styles Models
(Adapted from Reid, 1987)**

Levels of Learning Styles Models	Scores
Major	38 - 50
Minor	25 - 37
Negligible	0 - 24

Data Analysis

All data were analyzed through computer program: both descriptive statistics and inferential statistics. For descriptive statistics, arithmetic mean and Standard Deviation (S.D.) were employed to classify the students according to their models of English learning styles. For inferential statistics, Independent Sample T-test were used to determine the level of significance if any of differences in the frequency mean do occur among the models of English learning styles of students from different reading abilities and genders. The hypothesis testing was set at the 0.05 level of significance.

Results and Discussion

The Results of Students' Demographic Information
Table 3: Students' Demographic Information

Students' Demographic Background	N=40	Percent
Gender		
Male	7	17.5
Female	33	82.5
Total	40	100
Reading Ability levels		
High	17	42.5
Mid	23	57.5
Low	-	0.00
Total	40	100

Table 3 showed the students' demographic information: genders and their reading ability levels. All 40 second year undergraduate Industrial Education Students in the field of Applied Arts, majoring in English and enrolling the course of "Reading2" during the first semester of 2012 academic year at King Mongkut's Institute of Technology Ladkrabang (KMITL) were 7 male students (17.5%) and 23 female students (82.5%). Interestingly, it showed that there were 17 students having high reading ability level (42.5%) and 23 students having mid reading ability levels (57.5%). No students having low reading ability level.

The Results of Research Questions 1: What are the models of English learning styles of Industrial Education Students at KMITL?

Table 4: Models of Students' Learning Styles

Categories of Learning Styles	Mean	SD.	Levels of Learning Styles
Visual	37.60	5.21	Major
Auditory	35.80	4.85	Minor
Kinesthetic	34.95	4.41	Minor
Tactile	35.90	4.13	Minor
Group	35.60	4.78	Minor
Individual	28.85	4.79	Minor

Table 4 indicated that the models of learning styles of all 40 second year undergraduate Industrial Education students in the field of Applied Arts, majoring in English and enrolling the course of “Reading 2” during the first semester of 2012 academic year at King Mongkut’s Institute of Technology Ladkrabang (KMITL) were in major levels only on Visual learning style (mean = 37.60), while other categories of learning styles: Auditory, Kinesthetic, Tactile, Group, and Individual learning styles, students appeared to use them only at minor levels (means = 35.80, 34.95, 35.90, 35.60, and 28.85 respectively). Interestingly, there were no Negligible levels on any students’ learning styles models.

The Result of Research Question Two: Do KMITL Industrial Education Students with different genders and different English reading abilities appear to have the same models of English learning styles?

Table 5: Models of Students' Learning Styles Classified by Genders

Categories of Learning Styles	Genders	N=40	Mean	SD.	Levels of Learning Styles
Visual	Male	7	42.00	6.33	Major
	Female	33	36.67	4.52	Minor
Auditory	Male	7	37.14	3.98	Minor
	Female	33	35.52	5.03	Minor
Kinesthetic	Male	7	39.14	4.14	Major
	Female	33	34.06	3.98	Minor
Tactile	Male	7	36.86	4.30	Minor
	Female	33	35.70	4.17	Minor
Group	Male	7	38.57	5.97	Major
	Female	33	34.97	4.34	Minor
Individual	Male	7	29.15	1.95	Minor
	Female	33	28.79	5.22	Minor

Table 5 illustrated that male students had different levels of learning styles models from those of female students in three categories: Visual, Kinesthetic and Group learning styles. That is, all these three categories of learning styles (Visual, Kinesthetic and Group learning styles), male students used them in Major levels (means = 42.00, 39.14, 38.57, respectively) while female students used them in Minor levels (means = 36.67, 34.06, 34.97, respectively). However, in the other three categories: Auditory, Tactile, and Individual learning styles models, both male and female used all these categories in Minor levels.

Table 6: Models of Students' Learning Styles Classified by RA (English Reading Abilities)

Categories of Learning Styles	RA	N=40	Mean	SD.	Levels of Learning Styles
Visual	High	17	39.64	4.76	Major
	Mid	23	36.09	5.10	Minor
Auditory	High	17	37.88	4.66	Major
	Mid	23	34.26	4.48	Minor
Kinesthetic	High	17	36.35	3.41	Minor
	Mid	23	33.91	4.84	Minor
Tactile	High	17	37.53	3.57	Major
	Mid	23	34.70	4.16	Minor
Group	High	17	35.88	3.57	Minor
	Mid	23	35.39	5.58	Minor
Individual	High	17	30.00	3.00	Minor
	Mid	23	28.00	5.69	Minor

Table 6 showed that high reading ability students had different levels of learning styles models from those of mid reading ability students in three categories: Visual, Auditory, and Tactile learning styles. That is, all these three categories of learning styles (Visual, Auditory, and Tactile learning styles), high reading ability students used these styles in Major levels (means = 39.64, 37.88, 37.53, respectively), while mid reading ability students used them in Minor levels (means = 36.09, 34.26, 34.70, respectively). However, in the other three categories: Kinesthetic, Group, and Individual learning styles, both male and female used all these categories in Minor levels.

Table 7: Comparison of Students' models of Learning Styles: Genders VS RA

Students' Models of Learning Styles	Genders: M & F		RA: High & Mid	
	t	P-Value	t	P-Value
Visual	2.643	.012*	2.245	.031*
Auditory	0.802	.427	2.483	.018*
Kinesthetic	3.046	.004*	1.775	.084
Tactile	0.671	.506	2.258	.030*
Group	1.869	.069	0.318	.752
Individual	0.176	.861	1.317	.196

* Significant Level at 0.05 ($p \leq .05$)

Furthermore, in comparing the models of students learning styles' mean scores between genders: male and female, and reading ability levels: high and mid, the results appeared fascinatingly. That is, there were statistically significant differences in the models of learning styles in the categories of Visual, and Kinesthetic learning styles in different genders: male and female ($t=2.643$, $p=.012^*$, and $t=3.046$, $p=.004^*$ respectively). The statistically significant differences were also found in the differences of students' reading ability levels: high and mid in the models of learning styles of Visual, Auditory, and Tactile learning styles ($t=2.245$, $p=.031^*$, $t=2.483$, $p=.018^*$, and $t=2.258$, $p=.030^*$ respectively).

Last but not least, the result of this study was compatible with Lin et al. (Lin et al, 2006). They found that students used Visual learning styles at high levels. This result was exactly the same as the result of this study, which found that students used the models of Visual learning styles at Major levels. Also, some of the results of this study were paralleled with those of many researchers (Stebbins, 1995; Simsek, 2005 and Banbang 2010). For example, Stebbins (Stebbins, 1995) found that Kinesthetic and Tactile learning styles were used by ESL students when compared to NESs. In this study, compared to female, Kinesthetic also used more for male students, and compared to students with mid reading ability, the high reading ability students also used Tactile learning styles models much more than those with mid reading ability levels.

Recommendations

Recommendations for Pedagogical Instruction

1. Teachers should design the curricula by integrating all models of learning styles into the course with various activities.
2. Teachers should provide classroom activities with the teaching methods that match students' models of learning styles, and be able to guide students to be able to use all six categories of learning styles at a high frequency level.
3. Teachers should try to enhance students to develop their skills in choosing learning styles suitably for their content areas, needs, interest, and classroom diversity in order that students will be able to understand and apply knowledge of what they are studying without difficulty.
4. The use or lack of use of different learning styles might affect the academic success of the student. If the course of study in school is to be meaningful, then it is essential that teachers should lead students to be aware of how they learn and about the factors affecting their own learning, thinking, and problem solving. Teachers, therefore, should observe students when they learn language to determine students' strengths and weaknesses, which in turn, will help provide effective and appropriate learning instruction.

Recommendations for Further Studies

1. Further research should be focused on both teaching styles and learning styles as it can significantly enhance academic achievements.
2. Further research should compare students' learning styles across disciplines, with different ages and grade levels by using both qualitative and quantitative methods.

Acknowledgements

I am tremendously grateful to Faculty of Industrial Education, KMITL for supporting this research fund. Without the support, this study would not have been feasible. I would like to extend my gratitude to Asst. Prof. Worasiri Thampradit for her valuable assistance, caring, and supportive comments. I would also like to thank all students who participated in this study. Their time and efforts are always appreciated. Special appreciation and thanks are also extended to my daughter, Rapeepan Maitree, who have provided inexhaustible support and shown implausible patience throughout my study. Finally, I would like to dedicate this study to the memory of my beloved mother who would have been so proud.

References

1. Anderson, N. (1991). Individual differences in strategy use in second language reading and testing. *Modern Language Journal*, 75, 460-472.
2. Baldwin, L. and Sabry, K. 2003. "Learning Styles for Interactive Learning Systems." *Innovations in Education & Teaching International*. 40(4): 325-340.
3. Banbang, J. 2010. "An Investigation of Student's Learning Styles in English Classroom at King Mongkut's University of Technology North Bangkok." Master's Thesis of King Mongkut's University of Technology North Bangkok.
4. Boonsuk, Y. 2008. "English Language Learning Styles of Pondok School Students in Southern Thailand." Master's Thesis of Master's Thesis of King Mongkut's University of Technology North Bangkok.
5. Carrell, P. L. and Monroe, L. B. 1995. "ESL Composition and Learning Styles." In Reid, J. M. (Ed.) *Learning Styles in the ESL/EFL Classroom*. New York : Heinle and Heinle
6. Chang, D. Y. 2003. "English Language Learning Strategies and Styles Preferences of Traditional and Nontraditional Student in Taiwan." *Dissertation Abstracts International*. 64(8).
7. Hou, Y. 2009. "An Investigation of Perceptual Learning Style Preferences, Language Learning Strategy Use and English Achievement: a Case Study of Taiwanese EFL Students." Ph.D. dissertation, La Sierra University.

8. Hsu, Y. L. 2007. *Elementary School EFL Students' Learning Style Preferences and Strategy Use and Their Relationship with the Students' English Learning Achievement*. Unpublished Master's Thesis, Providence University, Taiwan.
9. National Institute for Educational Research (NIER). *Foreign/Second Language Education in Asia and the Pacific* (Report of a Regional Seminar, 22 June-8 July 1994). Tokyo: NIER. 1994.
10. Office of Education Council. 2011. *The Second Decade of Education Reform (2011-2018)*. Bangkok.
11. Office of National Education Commission. 1999. *National Educational Act of B.E. 1999*. Bangkok.
12. Office of the Higher Education Commission. *Education Ministry's Notification Regarding High Education Standard*, 2010.
13. Oxford, R. L. 1990. "Language Learning Strategies: What Every Teacher Should Know." New York: Newbury House/ Harper and Row.
14. Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House Publishers Oxford, R. L. 1995. "Gender Difference in Language Learning Styles: What do They Mean?." In Reid, J. M. (Ed.) *Learning Styles in the ESL/EFL Classroom*. New York: Heinle and Heinle.
15. Reid, J. M. 1984. *Perceptual Learning Style Preferences Questionnaire*. [Online]. Available : <http://lookingahead.heinle.com/filing/l-styles.htm>
16. Reid, J. M. 1987. "The Learning Style Preferences of ESL Students." *TESOL Quarterly*, 21(1): 87-111.
17. Reid, J. M. 1995. *Learning Style in ESL/EFL Classroom*. Boston, MA : Heinle & Heinle.
18. Wikipedia. 2012. *Student-Centred Learning*. [Online]. Available : http://en.wikipedia.org/wiki/Student-centred_learning
19. Wikipedia. 2012. *Learning Styles*. [Online]. Available: http://en.wikipedia.org/wiki/Learning_styles

ICSSAM-668

Evaluating the Effectiveness of Knowledge Management Tool in Learning Leadership Skills: A Study on Storytelling

HEN Kai Wah ^{a,*}, Peter Charles Woods ^b

^a Senior Lecturer, Faculty of Accountancy and Management,
Universiti Tunku Abdul Rahman, Malaysia.

Email: henkw@utar.edu.my

^b Professor, Chair of Knowledge Management Center,
Multimedia University, Malaysia.

Email: woods@mmu.edu.my

Abstract

Within the uncertainty and robust organisational environment, particularly in educational institutions, leadership skills have undergone various changes. This has led to increased interest in the field of leadership training and learning. Various training methods on leadership skills have evolved from the traditional forms of case studies and standard lectures to new methods such as learning history and action learning. In such, there is a need to evaluate the effectiveness of the learning tool for leadership skills. This study is designed to compare the effectiveness of a knowledge management tool, namely storytelling, with traditional lecture mode in leadership training programme for new academics in a private higher education. An experimental research was conducted with 64 new academics in a university. Participants were divided into two groups namely traditional lecture mode and storytelling mode where the intervention modes were applied during the workshops. Total means scores of the pre-test and post-test results within and between the intervention tools were compared. Of the hypotheses tested between and within the groups, it showed significant differences on the learners' satisfaction whereas no significant differences were found on the effectiveness of the intervention tools. The study concludes that there is no clear evidence on the learning capability among the participants but storytelling mode did provide training satisfaction to the participants than the traditional mode.

Keywords: Storytelling, Leadership Development, Learning Effectiveness, New Academics.

1. Introduction

Due to the uncertainty and robust business environment in the new millennium, there is a need for a new set of new leadership skills [1]. Miller [2] highlighted that the traditional model of leadership has undergone various changes. Similar challenges were also faced by leaders and administrators in the educational institutions with the reformation and restructuring of the education systems [3]. Higher education institutions are moving towards the managerialism and business-oriented management styles [4, 5]. At the same time, it also transformed the roles of the academics [6]. However, few studies indicated that the existing leadership training programmes failed to address the development of academic leaders [7, 8] and failed to assimilate the leadership skills among new academics [9].

There is no shortage of learning methods in the leadership skills development and learning; ranging from the traditional methods such as case studies, presentations and standard lectures to alternative methods of learning history [10] and action learning [11, 12]. Amongst the learning tools that are available, storytelling is deemed to play an important role [13] as it is able to transform the organisational stories into easier understanding [14] and sensible meaning [15]. Therefore, it is important to evaluate the most effective tools for effective leadership skills development.

This research aims to determine the effectiveness of storytelling in delivering the elements of learning on leadership skills for new academic staff, in comparison with the traditional lecture mode. The following research question was developed:

- Is storytelling more effective than the traditional lecture mode in learning leadership skills for new academic staff?
- Is there any significant difference in satisfaction between the two learning modes?

2. Literature Review

2.1 Leadership Theories

Leadership is being defined as “the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives” [12]. Besides, it also can be identified as one of the management roles [16]. Power-influence, behavioural, traits, situational and charismatic forms the common focus in the leadership studies. Over the years, leadership’s requirements have evolved due to various forces, particularly in the new millennium. These forces include employee empowerment [2, 17], corporate restructuring and downsizing [18], information explosion and technology advancements [17, 19, 20], globalisation and global leaders [21] and robust change of pace [22].

These changes has attributed to the many challenges in developing leaders in organisations which eventually led to the development and employment of numerous leadership training programmes.

2.2 Storytelling Applications and Learning Effectiveness

Amongst the knowledge management tools used in the development and transfer of knowledge in organisations, storytelling has gained more attentions in the recent years. Pellowski [23] defines it as “the art or craft of narration of stories in verse” whereas Middleton [24] describes it as the uses of metaphors, narratives and myths in organisational development tools. Storytelling is vastly applied in organisations as it helps to influence changes, communicating corporate values, developing leaders, overcoming resistance [14, 25, 26, 27]. In view of the abundant leaning tools in the market, it is important to identify the most effective tools to be utilised by organisations in measuring the learning effectiveness. Assessment of the teaching tools can be measured through various models such as cost-benefit analyses [28], happiness indices [29] and the Kirkpatrick’s Evaluation Model [30] which consist of four stages namely *reactions*, *learning*, *change of behaviour* and *result*. Among the common evaluation methods are comparing the pre-test and post-test results within and between the groups and instruments; and learners’ satisfaction and preference on the learning tools. In comparison with the traditional learning methods, various studies showed significant improvement in interactive multimedia-based e-learning systems [31, 32], web-based materials [33, 34, 35] and storytelling [36, 37]. At the same time, there are also studies which indicated no significant improvement among the learners after applying the instructional learning tools [38, 39, 40].

2.3 Theoretical Framework and Hypotheses Development

Human Performance Technology (HPT) Model was used to examine the intervention tools in the learning process. HPT is defined as “a systematic combination of three fundamental processes: performance analysis, cause analysis and intervention selection” to influence human behaviour and accomplishment [41]. ISPI’s HPT model is shown in the Figure 1 below.

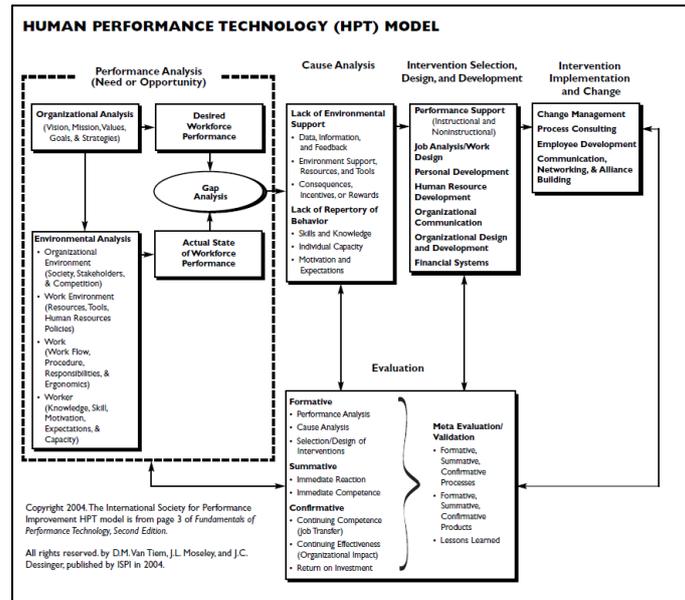


Figure 1. Human Performance Technology (HPT) Model (Source: [42])

An improved HPT model based on knowledge management applications, strategies and intervention tools was developed by Richardson and Woods [43] as shown in Figure 2 below.

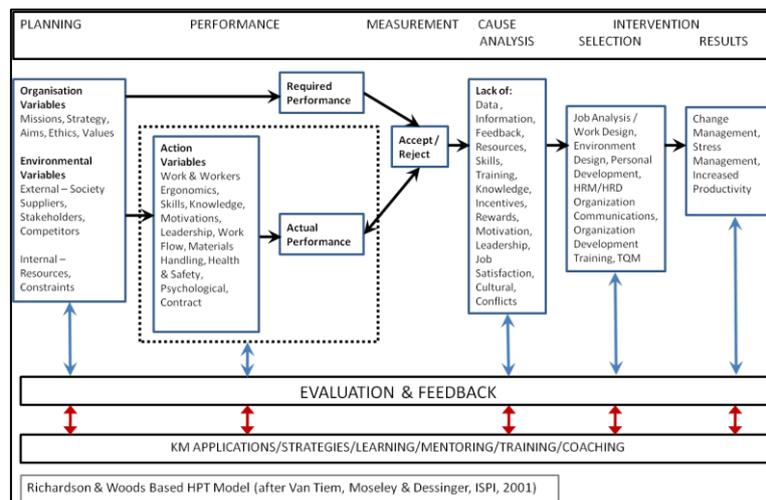


Figure 2. Richardson and Woods' Knowledge Based HPT Model. Source:[43].

Based on the Richardson and Woods' Knowledge Based HPT Model, a conceptual framework was later developed for this study as shown in Figure 3 below which emphasised on three major components of pre-intervention, intervention and post-intervention.

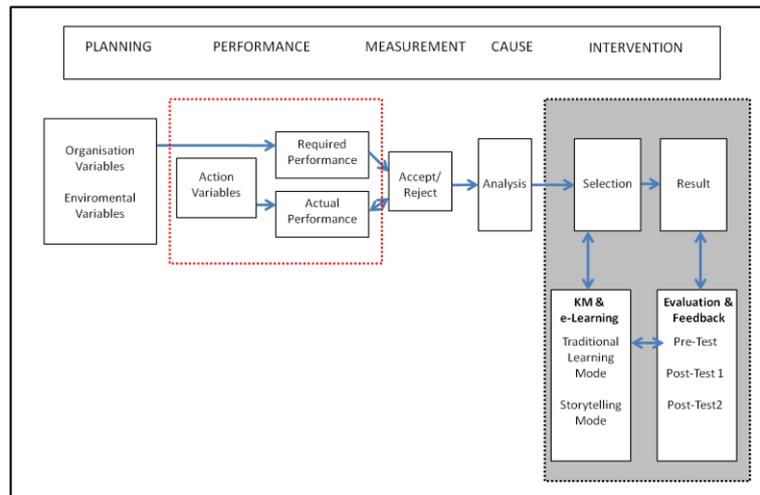


Figure 3. *Storytelling Experimental Model Conceptual Framework*

Gap analysis of the actual and required performance was performed through the pre-intervention (pre-test), followed by the application of the intervention tools (traditional lecture and storytelling) and Post-intervention was carried out to assess the effectiveness of the tools over the time (post-test). Four hypotheses were developed based on the storytelling experimental model to address the research questions.

H₁: There is a significant difference between Pre-Test and Post-Test mean score (competencies) in the Traditional mode and H₂: There is a significant difference between Pre-Test and Post-Test mean score (competencies) in the Storytelling mode. These hypotheses were developed to assess the significant difference on participants' competencies before and after the intervention tools were applied through the mean score between Pre-Test and Post-Test [33, 44].

H₃: There is a significant difference of Leadership Competencies among the participants between Traditional mode and Storytelling mode in Post-Test. This hypothesis is developed to compare the effectiveness between both intervention tools, in order to conclude if the learners in the storytelling mode will achieve a better improvement as compared to the traditional lecture model [31, 32, 45, 46].

H₄: Participants experienced greater satisfaction to Storytelling mode than the Traditional mode during the Post-Test . Comparisons were made to determine if storytelling mode's learners experienced greater satisfaction than the traditional mode's learners [32, 34, 47].

3. Methodology

Comparative and longitudinal study was carried to assess the effectiveness and learner's satisfaction of the two intervention tools over a period of time. This study was carried out at selected faculties of a private university in Malaysia with a total of 150 new academics who are undergoing probationary period being invited to participate in the workshop. The population provides an appropriate basis for sample selection as all the members would have to take on responsibilities as leaders in their capacity as lecturers, academic advisors and members of the various committees. Academic staff who joined the faculty for or less than two years were selected as the sample as they were perceived being new to the academic set-up and would required more training to further enhance their leadership skills, particularly in leading projects, staff, classes and groups of students. A total of 78 academics participated in the study with fourteen of them dropped out midway. In the end, thirty-two academics participated in the traditional lecture mode workshop and another thirty-two academics for storytelling mode.

Quantitative data was collected during the pre-intervention stage (Pre-Test) and post-intervention (Post-Test 2) using the Leadership Competency Model questionnaire [48] which has undergone a thorough process during its development stages at Central Michigan University. The competency model comprises of five major dimensions of leadership competency namely Self Management, Leading Others, Task Management, Innovation and Social Responsibility. The detailed technical paper is available at http://www.chsbs.cmich.edu/leader_model/Comp_Model/OnlineTech.doc. As part of the instrument validity testing, a bipolar scale test was conducted and the language was scrutinized. Experimental workshops were carried during the intervention stage. These experimental workshops consist of a traditional lecture mode with contents being adopted from the Leadership Competency Model and notes [49, 50, 51, 52, 53], whereas stories were adopted from training resources [54, 55] were used for storytelling mode. All reliability tests conducted for both traditional and storytelling modes for pre-test, and post-test returned high reliability with the Cronbach's alpha were above 0.6.

4. Findings

From the experimental workshops, sixty-four completed datasets were collected. Descriptive tests were carried out on the participants' demographic and it was summarised as per Table 1.

Table 1. Summary of the demographic

		Traditional Lecture mode (n=32)	Storytelling mode (n=32)	Total (n=64)
Gender:	Male	11	10	21
	Female	21	22	43
Age Group:	Below 30 years old	24	24	48
	30-45 years old	8	8	16
Years of Total Working Experience	Below 2 years	23	21	44
	2 to 5 years	5	8	13
	6 to 10 years	1	3	4
	11 to 15 years	2	0	2
	Above 15 years	1	0	1
Years of Teaching Experience	Below 2 years	31	30	61
	2 to 5 years	1	2	3
Number of Years in the Current Organisation	1	20	22	42
	2	12	10	22
Job Designation	Tutor	5	5	10
	Assistant Lecturer	2	4	6
	Lecturer	22	20	42
	Senior Lecturer	2	0	2
	Assistant Professor	1	3	4
Experience in Leading Team before	Yes	13	12	25
	No	19	20	39

Kolmogorov-Smirnov test was conducted to determine if the sample is normally distributed for H_1 and H_2 . For H_3 and H_4 , Levene's test was used to determine the equality of variances. Parametric testing of paired-samples t-test (H_1 and H_2) and independent sample t-test (H_3 and H_4) were used on the normally distributed set of data. The results of the tests carried on the hypotheses testing is summarised in Table 2. Of the four hypotheses tested, three hypotheses namely H_1 , H_2 and H_3 were not supported as the two-tailed significant value was more than 0.05. The other hypothesis tested returned a significant value of less than 0.05 and therefore were supported.

Table 2. Summary outcome of the hypotheses testing

Hypothesis	Test of Normality (Kolmogorov- Smirnov)	Type of Test	Tests Applied	Significant value (2-tailed)	Result
H_1	Normal Distribution	Parametric	Pair-Samples Test	0.231	Not Supported
H_2	Normal Distribution	Parametric	Pair-Samples Test	0.510	Not Supported
	Equality of Variance (Levene's Test)				
H_3	Not Significant, 0.960	Parametric	Independent T-test	0.796	Not Supported
H_4	Not Significant, 0.412	Parametric	Independent T-test	0.000	Supported

5. Discussions and Conclusion

This study was intended to identify the effectiveness of the training tools for leadership development with comparison being made between two learning modes namely traditional lecture and storytelling. The outcome of the hypotheses test on leadership competencies between and within the groups showed that there was no significant difference.

With such consideration, it can be concluded that there was no significant improvement among the participants of the both learning tools, thus showed that storytelling is as effective as traditional lecture in learning leadership skills. This concurred with studies carried out by Akdemir and Oguz [38] and Frydenberg [39]. For hypotheses tests on satisfaction, the result indicated that participants in the storytelling mode experience greater satisfactions as compared to those in the traditional lecture mode. Similar outcomes were evidenced in the works of Kekkonen-Moneta and Moneta [34] and Suanpang et al. [47]. This may serve as an advantage for the application of storytelling in the leadership development programmes.

From this research, there were few limitations encountered such as mortality rate due to the staff resignations and transfers, amount of anecdotes used in the learning modes particularly in the traditional lecture as compared to the storytelling mode, different timing of the staff joining the organisation and the accumulation of leaderships skills among the participants prior to the experimental workshops. For future research, it would be useful to look at the bigger sample size, to include student leaders as being part of the soft-skill development exercise, incorporate in-house or customized organisational stories and comparisons of different learning tools with the storytelling. With the high demand for competence leaders in the robust and dynamic environment, it is critical to identify the most effective learning tools in developing young leaders. Storytelling can be employed as an alternative training tool that may provide greater satisfaction to the participants. In this study, although there was no clear evidence of improvements in the learning capability, storytelling did provide greater training satisfaction to the participants.

6. References

- [1] Wohl R A, Wolter L J. *Navigating Organizations through the 21st Century: A Metaphor for Leadership*, Xlibris Corporation, 2011.
- [2] Miller W H. Leadership at a Crossroads. *Industry Week*, 1996, Aug 19, 245 (15): 42-56.
- [3] Davies B, Ellison L. *School Leadership for the 21st Century: A Competency and Knowledge Approach*. London: Routledge, 1998.
- [4] Davies J, Hides M T, Casey S. Leadership in Higher Education. *Total Quality Management*, 2001, 12 (7): 1025-1030.
- [5] Rayner S, Fuller M, McEwen L, Roberts H. Managing Leadership in the UK University: A Case for Researching the Missing Professoriate? *Studies in Higher Education*, 2010, 35 (6): 617-631.
- [6] Nevarez C, Keyes K Y. Higher Education Leadership Training: Learning to lead. *The John Ben Shepperd Journal of Practical Leadership*, 2007, 2: 81-95.

- [7] Raines S C, Alberg M S. The Role of Professional Development in Preparing Academic Leaders. *New Directions for Higher Education*, 2003, 124: 33-39.
- [8] Spendlove M. Competencies for Effective Leadership in Higher Education. *Journal of Educational Management*, 2007, 21 (5): 407-417.
- [9] Vong S K, Wong M. Towards a Formalised Teacher Induction System: The Macau Experience. *Research in Comparative and International Education*, 2009, 4 (1): 34-41.
- [10] Kleiner A, Roth G. How to Make Experience Your Company's Best Teacher. *Harvard Business Review on Knowledge Management*, The Harvard Business Review Paperback Series, Harvard Business School Publishing, Boston, 1997, pp.137-151.
- [11] Marquardt M J. Action Learning and Leadership. *The Learning Organisation*, 2000, 7 (5): 233-240.
- [12] Yukl G. *Leadership in Organisation*, 5th Edition, New Jersey: Upper Saddle River, Prentice Hall International, Inc, 2002.
- [13] Denning S. *The Leader's Guide to Storytelling: Mastering the Art and Discipline of Business Narrative*. San Francisco, CA: Jossey-Bass, 2005.
- [14] Collison C, Mackenzie A. The Power of Story in Organisations. *Journal of Workplace Learning*, 1999, 11 (1): 38-40.
- [15] Gold J. Telling Stories to Find the Future. *Career Development International*, 1996, 1 (4): 33-37.
- [16] Mintzberg H. *The Nature of Managerial Work*. New York: Harper & Row, 1973.
- [17] Pierce T M, Kleiner B H. Changes Affecting Leadership and its Importance in Organisations. *Management Research News*, 2000, 23 (7/8): 5-9.
- [18] Klagge J. Leadership Development Needs of Today's Organisational Managers. *Leadership & Organisation Development Journal*, 1997, 18 (7): 355-362.
- [19] Goldsmith M, Greenberg C L, Robertson A, Chan M H. *Global Leadership: The Next Generation*. Upper Saddle River, New Jersey: Financial Times Prentice Hall, 2003.
- [20] Nelton S. Leadership for the New Age. *Nation's Business*, 1997, 85 (5): 18-27.
- [21] Cohen E. *Leadership Without Borders: Successful Strategies From World-Class Leaders*. Singapore: John Wiley & Son (Asia) Pte. Ltd., 2007.
- [22] Nahavandi A. *The Art and Science of Leadership*. 3rd Ed. Prentice Hall, 2003, pg 294.
- [23] Pellowski A. *The World of Storytelling*. R.R. Bowker Company, New York, 1977.
- [24] Middleton N. Storytelling and Learning: Power, Purpose and Popularity. *Training Journal*, 2004, February: 26-30.
- [25] Denning S. *Squirrel Inc.: A Fable of Leadership Through Storytelling*. San Francisco, CA: Jossey-Bass, 2004.
- [26] Letiche H, Boeschoten R, de Jong F. Workplace Learning: Narrative and Professionalization. *Journal of Organizational Change Management*, 2008, 21 (5): 641-654.

- [27] Kaufman B. Stories that Sell, Stories that Tell. *Journal of Business Strategy*, 2003, March/April: 11-15.
- [28] Lewis P, Thornhill A. The Evaluation of Training: An Organisational Culture Approach. *Journal of European Industrial Training*, 1994, 18 (8): 25-32.
- [29] Paauwe J, Williams R. Seven Key Issues for Management Development. *Journal of Management Development*, 2001, 20 (2): 90-105.
- [30] Kirkpatrick D L. Evaluation of Training. In R. L. Craig and L. R. Bittel (Eds.) *Training and Development Handbook*. New York: McGraw-Hill, 1967.
- [31] Alavi M. Computer-Mediated Collaborative Learning: An Empirical Evaluation. *MIS Quarterly*, 1994, 18 (2): 159-174.
- [32] Zhang D, Zhou L. Enhancing e-Learning with Interactive Multimedia. *Information Resources Management Journal*, 2003, 16 (4): 1-14.
- [33] Frith V, Jaftha J, Prince R. Evaluating the Effectiveness of Interactive Computer Tutorials for an Undergraduate Mathematical Literacy Course. *British Journal of Educational Technology*, 2004, 35 (2): 159-171.
- [34] Kekkonen-Moneta S, Moneta G B. E-Learning in Hong Kong: Comparing Learning Outcomes in Online Multimedia and Lecture Versions of an Introductory Computing Course. *British Journal of Educational Technology*, 2002, 33 (4): 423-433.
- [35] Maki W S, Maki R H. Multimedia Comprehension Skill Predicts Differential Outcomes of Web-based and Lecture Courses. *Journal of Experimental Psychology: Applied*, 2002, 8 (2): 85-98.
- [36] Danzig A B. Leadership Stories: What Novices Learn by Crafting the Stories of Experienced School Administrators. *Journal of Educational Administration*, 1997, 35 (2): 122-137.
- [37] Gold J, Holman D. Let Me Tell You A Story: An Evaluation of the Use of Storytelling and Argument Analysis in Management Education. *Career Development International*, 2001, 6 (7): 384-395.
- [38] Akdemir O, Oguz A. Computer-based Testing: An Alternative for the Assessment of Turkish Undergraduate Students. *Computer and Education Journal*, 2008, 51 (3): 1198-1204.
- [39] Frydenberg J. Persistence in University Continuing Education Online Classes. *International Review of Research in Open and Distance Learning*, 2007, 8 (3).
- [40] Green R, Gentemann K. *Technology in the Curriculum: An Assessment of the Impact of Online Courses*. George Mason University, 2001.
- [41] International Society for Performance Improvement. *What is HPT?* [Online] Available: www.ispi.org. [2009, 10 June].

- [42] Van Tiem D M, Moseley J L, Dessinger J C. *Fundamentals of Performance Technology*. Washington D.C.: International Society for Performance Improvement, 2004.
- [43] Richardson S, Woods P C. Knowledge Based HPT Model. *Lecture Notes for Master of Knowledge Management*, 2007.
- [44] Moule P. Evaluation of the Basic life Support CD-ROM: Its Effectiveness as Learning Tool and User Experiences. *Journal of Educational Technology and Society*, 2002, 5 (3): 163-174.
- [45] Coates D, Humphreys B R. Evaluation of Computer-Assisted Instruction in Principles of Economics. *Journal of Educational Technology and Society*, 2001, 4 (2): 133-144.
- [46] McDonald D S. Improved Training Methods Through the Use of Multimedia Technology. *The Journal of Computer Information Systems*, 2000, 40 (2): 14-25.
- [47] Suanpang P, Petocz P, Kalceff W. Student Attitudes to Learning Business Statistics: Comparison of Online and Traditional Methods. *Educational Technology & Society*, 2004, 7 (3): 9-20.
- [48] Central Michigan University. *Leadership Competency Model*, Leadership Central, [Online] Available: http://www.chsbs.cmich.edu/leader_model/ [2007, 18 January].
- [49] Bass B M. *Bass and Stogdill's Handbook of Leadership*. New York: Free Press, 1990.
- [50] Judge T A, Piccolo R F, Ilies R. The Forgotten Ones? The Validity of Consideration and Initiating Structure in Leadership Research. *Journal of Applied Psychology*, 2004, 89 (1): 36-51.
- [51] Locke E A, Latham G P. *A Theory of Goal Setting and Task Performance*. Upper Saddle River, NJ: Prentice-Hall, Inc., 1990.
- [52] Phillips J M, Gully S M. Role of Goal Orientation, Ability, Need for Achievement, and Locus of Control in the Self-Efficacy and Goal-Setting Process. *Journal of Applied Psychology*, 1997, 82(5): 792-802.
- [53] Schreishem C A, Stogdill R M. Differences in the Factor Structure across Three Versions of the Ohio State Leadership Scales. *Personnel Psychology*, 1975, 28 (2): 189-206.
- [54] Schein E H. *Organisational Culture and Leadership*. 3rd Ed. San Francisco, CA: John Wiley & Sons, Inc., 2004.
- [55] Wacker M B, Silverman L L. *Stories Trainers Tell: 55 Ready-to-Use Stories to Make Training Stick*. San Francisco, LA: Pfeiffer, 2003.

ICSSAM-676

The Activities Learning by Social Networking Technologies and Project-based Learning Styles of Information Technology Subject

Saisuda Pantrakool ¹

Ph.D. Student Program in Learning Innovation and Technology

Faculty Industrial Education and Technology

King Mongkut's University of Technology Thonburi, Bangkok, Thailand, 10140

saisuda.pan@kmutt.ac.th

Pichet Pinit 2

Assistant Professor Program in Learning Innovation and Technology

Faculty Industrial Education and Technology

King Mongkut's University of Technology Thonburi, Bangkok, Thailand, 10140

pichet.pin@kmutt.ac.th

The corresponding author: Saisuda Pantrakool

Abstract

Social networking continues to evolve and become accessible to students in higher education. Concurrently, teamwork has become an important skill in education and students have adopted technology skills to support their learning in both individual and team project based learning. Given the emergence of social networking, the new technologies supported with group development processes underlying the development of teamwork skills as students completed a group project. In this study, the samples consisted of second year students of Business English Curriculum at Suan Dusit Rajabhat University who enrolled in information technology Subject in 2013. Data were collected through a variety of sources including individual interviews, reflection logs, and other group support tools provided by the instructor to see how students used the social networking technologies to support their group project based. Data analysis resulted in four themes: 1) social networking technologies are used to support group project based depended on individual team members and their attitudes about technology, 2) social networking technologies are most useful for the students working in team projects, 3) certain technologies are more useful at different stages of the project, and 4) social media technologies are used to produce educational media in project-based learning.

Keyword: Activities Learning, Social Networking Technologies, Project-based Learning

1. Introduction

Technology has supported the growth of blended and online education. Successful use of technology to support blended and online learning is based on two theories: technology acceptance and pedagogical presence [1]. From a student perspective, students have acknowledged the positive effect of the internet on their learning [2]. Offering to the students experience in using the social networking technology is important for adoption of social media technologies [3] [4] in that new social media technologies can support collaborative learning in online and blended environments. Large amount of information in social networking has strong effect on the teaching and learning management and classroom research is needed to explore how these new social media technologies help managing information and facilitate students working in team [5] [6].

Learning management based on the social networking technologies strongly drives the students' interest in the classroom through blended activities. However, access through the networking system considered as the essential tool has limitations, for example, connection and access points [7]. Teams within a classroom represent the creation of new constrained networks [8]. Depending on the diversity of the underlying student population and how teams are formed, individual student networks may or may not overlap with networks of other students. How the prior networked relationships of team members impact the use of social media technologies as teams develop is unclear. There is great promise as social media technologies, by definition, are collaboration and the potential to support students in their engagement with content, instructors, and their peers [9] [4]. This promise has direct implications on the potential to address the development of team skills through group work in a blended learning environment.

The purposes of this study are to study the learning activities supported by social networking technologies with integrated project-based Learning in information technology subject, second year students of Business English Curriculum, Suan Dusit Rajabhat University.

2. Research Methodology

The samples of this research were 38 students of the second year of Business English Curriculum at Suan Dusit Rajabhat University who enrolled in the information technology Subject in 2013.

2.1 Data collection

The instructor established Facebook as a social network for each team to use as a support tool in conducting the group project. This forum was provided for conversations among the group members as well as communication between the instructor and the work groups. Each group in the class had a designated discussion forum.

2.2 Data analysis

We analyzed data by transcribing the source data from various documents, notes, and other artifacts into Word documents. These summary documents were formatted.

2.3 Tools

We collected the data to answer the research questions using a variety of instruments: social media, individual reflection logs, team observations, and individual interviews [3][4][8][10].
Group Discussion Facebook: The instructor established discussion forums on Facebook for each team to use as a support tool in conducting the group project. This forum allowed for conversation among the group members as well as communication between the instructor and the work groups. Each group in the class designed a discussion forum.

Individual Reflection Logs: Beginning in week 3-15, the instructor also asked each student to keep an individual weekly reflection log on their participation in the group project. It was guided by an individual reflection question asking students to record their developing thoughts on both the task orientation and group dynamics aspects of the group project as they worked on it through completion of the term. Individual reflection logs were recorded by each student in the discussion thread on a blog established for each individual by the instructor. All individuals in the class completed weekly individual reflection logs. The instructor did not use the content of these reflection logs in the calculation of student grades.

Team observations, and individual interviews: To capture data snapshots of individuals' use of social media technologies during the course of the semester, we conducted the individual interviews, and observed group meetings. We interviewed individuals three times during the course of the semester (corresponding to the beginning, middle, and end of the term) using a semistructured, conversational format [10]. An important consideration in qualitative research that involves human subjects is establishing trustworthiness [11]. To establish trust with the individual participants, the first interview was conducted on site and in person.

We conducted the second and third interviews remotely, via telephone and internet enabled audio-visual networking technology. The first interview at the beginning of the term gathered information on individual group members' computer and technical skills, learning preferences, prior experience with group project work, and attitudes toward teams. The second and third interviews further explored each team member's sense of how the team was progressing toward completion of the task, the corresponding group dynamics, and his or her social technology use. We recorded individual interviews by handwritten notes in a field log while capturing the individual interviews in an audio recording.

Since all individuals in one group signed up to participate in the study, we observed them during three work sessions as a non-participating observer. The objective was to observe and capture for later analysis evidence of team stage development, references to use of technology, and actual use of technology, including social media technology, during the team sessions. Observations were structured to include meeting flow, individual and group activities, topics and tasks discussed, meeting outcomes, verbal and non-verbal interactions, and overall atmosphere. We recorded observations by handwritten notes in a field log while capturing the team meetings in an audio recording.

3. Results

Qualitative analysis: Data from individual interviews, observations, individual reflection, and threaded discussions were used to develop a list of detailed codes. The content from these data sources consisted of words, sentences, and paragraphs that illuminated the research topic. These data included: the names of the technologies (e.g., Facebook, and blog); individual participants' attitudes and experiences with the different technologies; and individual participants' attitudes and experiences with group project.

Data analysis resulted in four themes:

- 1) social networking technologies are used to support group project-based depended on individual team members prior use and attitudes about technology;
- 2) social networking technologies are most useful for the "students" aspects of team projects;
- 3) certain technologies are more useful at different stages of the project; and
- 4) social media technologies are used to produce project-based learning.

Social media technologies also helped to support the interpersonal dimension of the teams' activity early in the term. Facebook played a key part in establishing the infrastructure to support interpersonal relationships within the group.

Students relates that in her group, the idea to use Facebook early on came from, “one of the other girls in our group, students ” She think that it was in the beginning we were sort of getting everyone’s emails and then one of the girls said we can use Facebook and blog”

Work groups can approach group project work both cooperative and collaborative. In project-based, team members contribute component parts to a project deliverable whereas in a collaborative project team members work together to develop a shared project deliverable. The work groups in the study were short duration work groups. Therefore, social media technology did not help the work group overcome the completion of more difficult intellectual tasks. The data support gathering shown that while student work groups, they able to use social media technologies to support project-based, they unable to realize the fullest potential afforded by collaborative social media technology tools. In this study, similar reasons were cited.

The evaluation of learning achievement

Results of the evaluation of the activities learning achievement by social networking technologies and Project-based Learning styles of information technology subject, second year students of Business English Curriculum, Suan Dusit Rajabhat University; after learning achievement of students outperform before learning. The details are in table 1.

Table 1 The effect evaluation of learning achievement of the activities learning by social networking technologies and Project-based Learning styles.

achievement	N	\bar{X}	S.D.	t	p
t-test	38	10.89	0.48	-15.26*	.001
p-test	38	15.10	0.43		

The following discussion provides a generalized summary of the technologies was used. Facebook was the technology employed on teams populated by the majority – but not all – of the study participants. For example, from students 1 perspective, Facebook was the only technology used by his team for the entire term to support their group project-based. Students 2 and 3: How the work was using Instant Messaging through Facebook and we set up a time to meet and finished everything up like the Thursday before it was due in person, the only thing that lasted the whole semester was Facebook.

Blogs did not play a major role in the group project work in any of the stages in the linear and nonlinear frameworks presented.

Perhaps a major determinant why students did not get the value in the blogs because the instructor unable to devote the required attention to engage with the students in these blogs. Given that the nature of a blog is to have an individual lead a conversation, and the instructor was unable to engage with the students in this conversation, this feedback loop was not present.

4. Conclusion

Social networking continues to evolve and become accessible to students in higher education. Concurrently, teamwork has become an important skill in academia and students have adopted technologies to support their learning in both individual and team project based learning. Given the emergence of social networking, the new technologies supported with group development processes underlying the development of team skills as students completed a group project. Data analysis resulted in four themes: social networking technologies are used to support group project based depended on individual team members prior use and attitudes about technology; social networking technologies are most useful for the "students" aspects of team projects; certain technologies are more useful at different stages of the project; and social media technologies are used to produce project-based learning.

5. References

- [1] Moore, M. G. Three types of interaction. *The American Journal of Distance Education*, 1989, 3, pp.1-6.
- [2] Hernandez, S. Team learning in a marketing principles course: Cooperative structures that facilitate active learning and higher level thinking. *Journal of Marketing Education*, 2002, 24(1), pp.73-85.
- [3] Halic, O., Lee, D., Paulus, T., & Spence, M. To blog or not to blog: Student perceptions of blog effectiveness for learning in a college-level course. *The Internet and Higher Education*, 2010, 13(4), pp.206-213.
- [4] McAliney, P.J. *How undergraduate students use social media technologies to support group project work*. the Steinhardt School of Culture, Education, and Human Development, New York University, 2013.
- [5] Johnson, Johnson, R., & Smith, K. The state of cooperative learning in postsecondary and professional settings. *Educational Psychology Review*, 2007, 19(1), pp.15-29.
- [6] Hemmi, A., Bayne, S., & Land, R. The appropriation and repurposing of social technologies in higher education. *Journal of Computer Assisted Learning*, (2009), 25(1), pp.19-30.
- [7] Burt, R. S. Positions in networks. *Social Forces*, 1976, 55(1), pp.93-122.

- [8] Lubbers, M. J. Group composition and network structure in school classes: a multilevel application of the p^* model. *Social Networks*, 2003, 25(4), pp.309-332.
- [9] Norberg, A., Dziuban, C., & Moskal, P. A time-based blended learning model. *On the Horizon*, 2011, 19(3), p.9.
- [10] Evans, M. A., & Johri, A. Facilitating guided participation through mobile technologies: designing creative learning environments for self and others. *Journal of Computing in Higher Education*, 2008, 20(2), pp.92-105.
- [11] Ellis, Y., Daniels, B., & Jauregui, A. The effect of multitasking on the grade performance of business students. *Research in Higher Education Journal*, 2010, 8, p.1.

ICSSAM-731

Does the Mergence of Special Municipalities Make Service Delivery More Efficient?

Yi-jung Wu

Shih Hsin University
yijungwu@cc.shu.edu.tw

Chin-Kuei Chen

National Taipei University
akuei@mail.ntpu.edu.tw

Yao-Chang Kuo

Hsuan Chuang University
aircraft@ms8.hinet.net

Abstract

The Case of Education Policy for the Disadvantaged in Taiwan

Since December 25th, 2010, Taiwan has stepped into a new administrative milestone. The formation of five municipalities, including two brand new ones, Taichung and Tainan, has changed many approaches and rationales of doing business in government agencies in these two municipalities. As these new municipalities established under the rationale of “enhancing the national competitiveness” and “balancing the local development”, the newly elected administration is also required to make many adjustments. In the case of educational policy, the lack of educational resources, the dilemma of high turnover rate of relevant staff, and the low staff replacement rate in the remote areas have long been problematic. Now as the geographic area increases dramatically after the mergence of two cities (which makes one new municipalities), the new municipalities face a dilemma between comprehensive and efficient service delivery.

In this research, the researchers attempt to understand the shifting service delivery of the disadvantaged students in the following aspects: 1) How is the span of control between the central government and local municipalities changed service delivery? 2) How do the financial sharing between the central and local governments change the service delivery; 3) Do the newly established municipal laws and regulations in fact promote or prevent service delivery become more efficient?

The researchers employ case study methodology, along with in-depth interviews, focus group interviews, and document analysis approaches for data collection. Professionals from related service agencies, representatives from non-profit organizations, principals from elementary/middle schools, and parent representatives are all invited to interviews for further understanding of the issue.

The research findings reveals that: 1) the two municipalities adopt two different approaches to reorganize their service units; 2) the financial burden on the central and local governments makes many original-planned services postponed; 3) the newly established municipal laws and regulations on one hand make the bigger cities hold more financial responsibilities on service delivery; but on the other hand, promote cross-agency communication.

Moreover, professionals point out that most important factors to a successful administrative merge are mutual understanding and empathy. Otherwise, the process of merge will become a turf battle which may prolong the transitional time and jeopardize the administrative efficiency and effectiveness. Last, in the aspect of service delivery, due to the increasing financial burden, the local district and the municipality government have to make stronger cooperative ties with the non-profit organizations. It is important to connect with the non-profit organizations for more integrated and comprehensive services which meet the diverse needs of the disadvantaged students.

ISEPSS-1890
**The Study on Developing E-Family Functioning Survey for Families of the
Health-Impaired Children in Taiwan**

Chwen-Chyong Tsau
Fooying University
chwenchyongtsau@hotmail.com

Reiko Yoshikawa
Tokai University
ryoshi@keyaki.cc.u-tokai.ac.jp

Hsin-Yun Au
Edmonds Community College
aowu90266@hotmail.com

Fu-Hao Yeh
Fooying University
yehvolvo@gmail.com

Li-Chuan Hung
Fooying University
lichuan.hung@gmail.com

1. Introduction

The family-based intervention such as home-visiting or home-based education and bedside-teaching offered limit support comparing to medical treatment for health-impaired children and their families because of these children's physical and mental conditions. In hospitals, the viewpoint of 'patient as a passive medical healing objects' had been substituted for 'the family-centered perspective' that not even the sick children but also their families (parents and siblings) obtained good support from the hospitals, such as "Child Life Program" in USA.

In Taiwan, the home-based education and bedside-teaching were still the main education placement and special education services for the health-impaired children. Due to the diversity and changeable physical and mental needs of these children and their families, the one-by-one bedside teaching models always led home-visiting teachers facing tremendous challenges and dilemmas. The home-based services for preschool young handicapped

children were popular though, the service objects were not only the health-impaired and rare comprehensive family-based program were offered. We believed such program should base on a family ecologic framework and a family functioning survey should also be pre-evaluated to understand what the family functioning needs were.

Certain literature showed some background factors influenced the family function. For instance, social support, mental health and nuclear family had positive relationship with the cancer children's family function (Hong, 2006). Hohashi, Honda, & Kong (2008) indicated that the children's disease, parents' socioeconomic status/ marriage/ job/ parenting attitude/ depression/ family pressure and parenting pressure/ family's religious belief were the influencing factors to the sick children's family function. McMunn, Nazroo, Marmot, Boreham, & Goodman (2001) used the Strengths and Difficulties Questionnaire (SDQ) investigate 705 位 parents whose children were on 4~15-year-old, and found that family structure, socioeconomic index, employment were the influencing factors to children's mental health and family function, especially for the single mothers. Kaverman (2011) indicated the family conflict (including body-bully and alcoholism) was the predictor of the marriage and family dysfunction. Yet a better family function could improve the health and development of the children with chronic diseases. In order to improve the family function of the health-impaired children, it indeed was necessary to develop certain effective assessment tools.

There were many family function assessment tools developed in advanced countries especially in USA, and widely applied in the fields of health care and clinical psychology. Rare was translated into Chinese and used as graduate research tools in Taiwan; for instance, Family APGAR (Smilkstein, 1978) and McMaster Family Assessment Device (Epstein, Bishop, Balshop & Baldwin, 1983) were mainly used to investigate the family dysfunction of the sick adults and adolescents or adolescents with adaption or emotional problem. Only Feetham Family Functioning Survey (FFFS; Robert & Feethman, 1982) was for young children in Hong Kong. To develop the localized family function assessment for Taiwanese was still in need. Among all popular assessment tools after reviewing certain literatures, we found FFFS adapted Bronfenbrenner's family ecologic framework, and widely and inter-culturally applied in family study on healthy and sick young children. The Chinese version of FFFS was developed by Dr. Naohiro Hohashi and his research fellows (2008) with high reliability and validity established by sampling 317 mothers who had 2~6-year-old children studying in 6 kindergartens in Hong Kong. To accomplish our research purpose, FFFS would be suitable for our research, but still needed to be localized for our objects - young health-impaired Taiwanese since there were regional and cultural differences between the people in Hong Kong and Taiwan. And we believed it should be web-based for the social

worker and other experts easily use it in order to make Individualized Family Service Plan (IFSP) or treatment.

2. Research purpose

- (1) To understand what were the family support needs of the families of the young health-impaired children?
- (2) To understand what were the background factors influencing the family function of the young health-impaired children?
- (3) To develop the Questionnaire of the Status of the Health-Impaired Children and their Family Support Needs, and e- Chinese (Taiwan) (FFFS-e-CT), according to the above results.

3. Research Method

Independent variables were the current status of the health-impaired children including age, sex, health condition, medical and treatment status, educational placement, developmental ability, family structure, family socioeconomic status. Dependent variables were family social support needs and family function.

3-1 Subjects

The subjects of this research were primary caregivers (mainly parents) of health-impaired infants and young children, voluntarily filled the questionnaire. 48 (88.9%) effective questionnaires were received for pre-test.

The health-impaired children (23 boys and 25 girls) were 13~76 month-old (mean=53.02, SD=15.210), mental age from draw-a-person test were 0~108 month-old (mean=23.88, SD=33.141).

3-2 Research Tools

A. Self-edited “Questionnaire of the Status of the Health-Impaired Children and the family support needs”

Through our research team (2 nursing scholars, 4 special education experts and scholars, 2 early childhood education experts and scholars, 1 psychologist, 1 art therapist) discussed related references to make the draft for pre-test and experts validity. The draft included 3 parts: child basic reference, child current development status, primary caregiver reference, family current status and family support needs. The scoring for the family support needs were: score

'0' for 'no need', '1' for 'less need', '2' for 'need', '3' for 'greatly need', the higher the score, the higher the family support need.

B. Feetham Family Functioning Survey - e Chinese version (Taiwan) (FFFS-eCT)

With the consent of Dr. Naohiro Hohashi and Dr. Feetham, we discussed the content and the terms/words in English, Japanese and Chinese in order to modify this questionnaire more localized. There were 25 items with 3 sub-questions: (a) 'how much is there?' for actual family function, (b) 'how much should there be?' for 'perceived expected', (c) 'how important is this to you?' for 'importance score'. And the scoring followed 7 Likert-scale: from '1' for 'not important' or 'little' to '7' for 'very import' or 'much'. The score /a-b/ was 'the discrepancy score' which mean a discrepancy between the respondent's expectation of what is from their perception of what should be for a family function. The score (c) was the importance score, could indicate areas that need for assessment and intervention.

B. Parenting Stress Index (Chinese version) (Yung-Shew Weng, 2003)

This questionnaire was suitable for parents who had children under 12-year-old. There were 2 sub-scales: children sub-scale (6 sub-dimensions, 47 items) and parent sub-scale (7 sub-dimensions, 65 items), using 5 Likerts coring. The higher the score, the higher parenting pressure. This questionnaire was used here to get concurrent validity.

C. Draw-a-person Test

The purpose of this Chinese version developed by Shao-Chun (1997) was to speculate 2~12-year-old child's cognitive development degree through a person he or she drew. We used it here in this study was to understand the mental age and IQ of the subjects since we know some of them were unable or refuse to accept test, and it was the easiest and comfortable way to let children accept test.

D. Theme-Free Color painting

In this study, we let subjects who accept our personal interview and pre-test to draw theme-free picture. A professional art therapist analyzing the attention persition, line quality, boundary line, rhythm, topic, modeling, color, space of the painting to know the physical and mental development of the subjects.

3-3 Data analysis

All qualitative and quantitative data was discussed and analyzed through our research team meeting.

- A. qualitative data analysis a. personal and focus group interview using VIVO10 analyzed, the details was confirmed by the interviewers.
- B. the theme-free color painting was analyzed by teacher Ting-Chun Wu, an art therapist who had experience with young handicapped children including the health-impaired.
- C. quantitative data was analyzed through distributive analysis, cronbach's alpha, factor analysis by using IBM SPSS 22 conducted by Chwen-Chyong Tsau, Ling-Li Chu, Hsin-Yun Au , and Chia-Hua Hao.

3-4 Research Ethics

This research was funded by National Science Committee (renamed as ‘Ministry of Science and Technology’ since this March) to apply research ethics, and had consent from National Cheng Kung University Human Research Ethics Committee (case no: 102-051; approval date: December 18, 2013; expiration date: July 31, 2015.)

4. Results

We here showed the results of the pre-test only since we were still running our formal test.

4-1 subjects

Among the subjects (health-impaired children), 64.6% had certificate of the handicapped, 37.5% had catastrophic card, 6.3% had limit life span, and their diseases as showed in table 1. 8 children suffered 2 kinds of diseases, 1 child suffer 3 kinds of diseases. Rare diseases were: 1 Allah Geoghan syndrome, 1 SMA, 1 Cri-du-chat syndrome, 1 early cranial suture closure, 1 muscular dystrophy, 1 spinal muscular strophy, 1 hearts septal defect, 1 unknown. Others were: 2 CMV, 1 favism, 1 chromosomal abnormality, 1 allergy, 1 hydrocephalus, 1 france branded fallot, 1 otitis media, 1 down syndrome, 1 atrial septum missing, 1 allergic asthma, 1 allergies. It seemed some subject didn't know the classification of options.

Table 1 pre-test subjects' diseases

disease	heart	cancer	asthma	epilepsy	CP	Rare diseases	others	total
%	13.56	11.11	20.34	11.86	15.25	13.56	23.73	100.0

4-2 subjects' current developmental status

The results showed that 60~70% subjects (health-impaired children) has developmental delay or retarded in cognitive (45.8%), language and communicative (37.5%), and motor (35.4%) areas. Using factor analysis, the results showed the 1st eigenvalue (4.555) could explain the variation value was high (56.940%), the ratio between the 1st (4.555) and 2nd (1.153)

eigenvalue was high, it showed that all items owned one single common factor, the alpha value for all items distributed within .819~.857; see table 2. And this results supported the expectation: the total amount of the scores could represent the degree of children's developmental abilities.

Table 2 pre-test" statistic of the subjects' developmental status

item	mean	SD	eigenvalue	Alpha
motor	3.19	1.920	.711	.857
language	3.28	2.092	.903	.819
cognition	2.29	1.274	.830	.825
social	1.82	.906	.832	.840
emotion	1.62	1.174	.742	.845
Self care	2.08	.795	.809	.841
Learning motivation	1.22	.410	.317	.875
Learning ability	1.80	.853	.739	.847

4-3 Family Current Status

All most all subjects were from nuclear family (44.6%) and three-generation family (33.9%). Single-parent family (8.2%), new immigrant family (5.4%), grandparent-raising family (1.8%) were rare and those who responded to these options didn't check their family structure, so this questions needed to be modified.

The main primary caregivers were parents (85.4%) or grandparents, 75% of them were healthy. Their sources of caregiver's pressure were mainly from child's disease (21.6%), time and energy burden (20.6%), looking after health-impaired child (18.6%), economic problem (14.4%), job (11.3%).

4-4 Family Support Needs

From the statistic (factor analysis) results of 14 items of the dimensions of the family support needs showed that the 1st eigenvalue was high (63.200%), the ratio between the 1st (8.848) and 2nd (1.181) eigenvalue was also high (7.492), Cronbach's $\alpha = .953 \sim .951$, that mean all items tested one single factor, and the total amount of these 14 items could represent the degree of the family support needs; see table 3.

Table 3 pre-test: the family support needs

item	mean	SD	eigenvalue	correlation	Cronbach's α
Using community resources	1.62	1.074	.621	.566	.953
Family economic support	1.81	.992	.633	.581	.952
Understanding law and policy	1.53	.830	.809	.771	.948
Parenting education	1.79	.954	.907	.882	.945
Life education	1.64	.965	.916	.888	.945
Basic medical knowledge	1.83	.940	.871	.833	.946
Health and safety education	1.72	.902	.892	.862	.945
Computer technology teaching	1.53	1.018	.724	.686	.950
aids	1.13	1.191	.696	.651	.951
Parenting tools	1.83	.963	.800	.770	.947
Psychological and emotional support	1.70	1.041	.833	.803	.947
Recreation and sportst	1.72	.926	.831	.795	.947
Communication and coordination	1.45	.928	.721	.671	.950
Spiritual and religious development	1.23	1.026	.800	.766	.947

4-5 FFS-eCT

Table 4 was mean and SD of d score and c score. Table 5 was each item's Cronbach's Alpha Coefficient in FFS-eCT, d score was within .891~.902, all items' $\alpha = .899$; c score was within .903~.918, all items' $\alpha = .912$, showed high internal consistency. Table 6 also showed high internal consistency in 3 areas' d score ($\alpha = .615 \sim .820$, all areas' $\alpha = .895$), c score ($\alpha = .732 \sim .902$, all areas $\alpha = .911$); and in 6 factors' d score ($\alpha = .418 \sim .833$, all factors $\alpha = .895$), c score ($\alpha = .463 \sim .921$, all factors $\alpha = .911$).

Table 4 pre-test: mean and SD of d score and c score in FFFS-eCT

no	item	d score		c score	
		mean	SD	mean	SD
1	The amount of Discussion with friends	.60	.844	4.48	1.68
2	The amount of Discussion with relatives	.44	.769	4.92	1.62
3	The amount of time spending with spouse/partner	.69	1.291	5.58	1.89
4	The amount of discussion of concerns and problems w/spouse/ partner	.65	1.176	5.25	2.12
5	The amount of time sending with neighbors	.67	.975	3.48	1.79
6	The amount of time spending in leisure	1.08	1.302	4.48	1.84
7	The amount of help from spouse/partner	.81	1.065	5.44	1.72
8	The amount of help	.63	1.003	4.85	1.76
9	The amount of time with health professionals	.31	.624	4.27	1.73
10	The amount of help from friends with family task	.60	1.216	2.65	1.85
11	The number of problems child (ren)	.92	1.318	5.19	1.89
12	The amount of time spending with child (ren)	.58	1.048	6.04	1.35
13	The amount of time child (ren) miss school	.44	1.165	4.44	2.90
14	The amount of disagreements with spouse/partner	.81	1.104	4.65	2.24
15	The amount of time being ill	1.02	1.391	4.88	2.22
16	The amount of time spending doing-housework	.81	1.065	4.75	1.73
17	The amount of time missing work	.94	1.465	4.58	2.08
18	The amount spouse/partner missing work	.44	.943	4.19	2.29
19	The amount of emotional support from friends	.52	1.052	4.54	1.73
20	The amount of emotional support from relatives	.75	1.376	5.33	1.80
21	The amount of emotional support from spouse/ partner	.54	1.237	5.63	2.08
22	The amount of time of work routine disrupted	.92	1.217	4.25	1.77
23	The amount of time spouse's work routine disrupted	.60	1.005	4.31	2.08
24	The amount of satisfaction with marriage	.54	.944	5.73	1.78
25	The amount of satisfaction with sexual relations w/ spouse/partner	.42	.767	4.56	2.03

Table 5 pre-test: each item's Cronbach's Alpha Coefficient in FFFS-4

no	d score (/a-b/)	C score
1	.895	.912
2	.896	.908
3	.894	.907
4	.896	.903
5	.895	.911
6	.891	.908
7	.896	.904
8	.900	.914
9	.896	.910
10	.901	.913
11	.894	.910
12	.899	.910
13	.902	.918
14	.892	.906
15	.892	.906
16	.894	.908
17	.890	.907
19	.892	.904
20	.898	.909
21	.895	.910
22	.892	.907
23	.889	.909
24	.892	.904
25	.891	.905
all	.899	.912

Table 6 pre-test: each factor's and area's Cronbach's Alpha in FFFS-eCT

Area/factor	d score	c score
area		
1. relationship with family members (factor1,5)	.820	.902
2. relationship with subsystem (factor2,4)	.615	.732
3. relationship with society (factor3,6)	.773	.775
All areas	.895	.911
factor		
1. marital relationship (item3,4,7,14,21,24,25)	.833	.921
2. friendship (item 1,8,10,19,20)	.574	.653
3. economic activity (item 15,17,18)	.766	.773
4. disease and concern (item 2,9,11)	.515	.558
5. private time (item 6,12,16)	.418	.570
6. unexpected social events (item 13,22,23)	.530	.463
All factors (not including no.5)	.895	.911

Table 6 pre-test: Coefficient of Family Support Needs & FFFS-eCT & Parenting Pressure Index

	FFFS-eCT	Family Support Needs	Parenting Pressure Index
FFFS-eCT	1	.114	.120
Family Support Needs	.114	1	.182
Parenting Pressure Index	.120	.182	1

4-6 Establish network

2 questionnaires were modified after consulting experts' and scholars' opinions about the pre-test statistic results and analysis, and then establish website for formal test. The website (established and protected by Wei-Li Wang and Fu-Hao Yeh) is:

A. FFFS-eCT:

<http://goo.gl/efbVzR>

B. The Health-Impaired Children and their Family Support Needs

<http://goo.gl/xjJvIF>

5. Conclusion

Will be reported in the ISEPSS conference.

References

(Please contact 1st researcher if needed.)

Society & Social Science II

AV Room

14:50-16:20

Thursday, May 8

Session Chair: *Prof. Nor Faridah Abdul Manaf*

ISEPSS-1893

The Effects of Maternal Ethnicity and Community Factors on the Academic Performance of Elementary School Children

Chun-Hao Li *Yuan Ze University*

Shu-Yao Hsu *University of Kang Ning*

ICSSAM-726

The Human Trafficking Process in Residents of Mae La Temporary Shelter, Thasongyang District, Tak Province, Thailand

Patcharin Srirasoonthorn *Naresuan university*

Bandan Buadaeng *Naresuan university*

ICSSAM-501

Myth Smashers: Muslim Writers Positioning Muslims in a Post-Modern and Post-Feminist World

Nor Faridah Abdul Manaf *International Islamic University Malaysia*

Mazlen Arepin *Universiti Teknologi MARA*

ICSSAM-553

Religious Education within Malay Muslim Community in Terengganu, Malaysia

Asyraf Hj Ab Rahman *Universiti Malaysia Terengganu*

Wan Ibrahim Wan Ahmad *Universiti Utara Malaysia*

Hammadah Ab Rahman *Institut Perguruan Dato Razali Ismail*

ICSSAM-626

Long Distance Commuting or Change of Residence? Mobility Decisions in Germany between 2000 and 2009.

Simon Pfaff *Baden-Wuerttemberg Cooperative State University*

ICSSAM-834

A School in a Borderland: Practices of Sovereignty in States of Exception and the Appropriation of Displaced Myanmar Children

Worachet Chet Khieochan *Thammasat University*

ISEPSS-1893

The Effects of Maternal Ethnicity and Community Factors on the Academic Performance of Elementary School Children

Chun-Hao Li

Yuan Ze University
chl@saturn.yzu.edu.tw

Shu-Yao Hsu

University of Kang Ning
hsujune@ukn.edu.tw

Abstract

In this research, the researcher analyzes a stratified sample of 940 elementary students in a county in central Taiwan, including 555 children born to Native Taiwanese women and 385 children of ASEAN immigrant brides. The purposes of the research include: 1. to examine whether children born to ASEAN immigrant brides have different academic performance, 2. to investigate how other factors at the personal level affect the academic performance of school children, 3. to examine if there is any community contextual factors affecting school children's academic performance, and/or moderating the relationships between the factors at the personal level and children's academic performance.

The empirical findings from the analysis of individual factors include the followings. First, maternal ASEAN background is negatively associated with academic performance of school children. Second, social capital within family is important in predicting children's academic performance. Especially, parental educational expectation is critical to school children's academic performance. Third, preschool experience, attitudes about academic performance, schoolwork behaviors of school children all have positive effects on their academic performance.

However, the effects of predicting factors at the individual level can be moderated by the proportion of university graduates and the standard deviation of taxes paid by each tax unit. The former lowers the negative effect of sex and enlarges the negative effect of maternal ASEAN background on academic performance. The heterogeneity of socioeconomic characteristics among residents in school districts can reduce the negative effect of "male" on academic performance of school children, while it can enlarge the effect of the preschool education. Additionally, in the more heterogeneous school districts, the positive effect of parental educational expectation becomes smaller.

Keywords: ethnicity, community, school performance

Introduction

Since the 1990s, the immigration of foreign brides has dramatically changed the national ethnic landscape of Taiwan. The total population of foreign-born brides is 413,942, accounting for 3.6% of the national female population by the end of 2010.¹ In the school year of 2010, children who were born to immigrants account for 9.8% of the national elementary students, and 3.0% of middle school students.² The children born to the immigrant brides have accordingly altered the ethnic picture in the national system of education. The increase of school children born to the immigrant brides in elementary campuses have generated much concern among educators and social scientists about the educational experience of this particular group of children, especially those whose mothers are from the ASEAN countries. Conventionally, ethnic differences in academic achievement are believed to exist. In Taiwan, it is generally believed that minority students (including children of the aboriginal and the ASEAN brides) are inferior to their majority counterparts in schools. With the increase of school children of cross-border marriages enrolling in elementary and middle schools, the unequal performance in academic work has caught more attention.

In the present research, the researcher is interested in the factors that are related to school performance of children born to the immigrant brides and native Taiwanese women. There are a great number of factors influencing school performance of children. School performance is suggested to be relevant to children's attitudes toward schoolwork and academic performance (Fuligni 1997). Consequently, the first intention is to examine whether school children of ASEAN immigrant brides have a different academic performance from their Taiwanese counterparts. The further research interest is to investigate how other factors at the personal level are significantly related to the academic performance of school children. Additionally, the researcher will examine if the children's academic performance is different among school districts, and if there are any factors at the community level explaining the diverse academic performance.

¹ The figures are produced from the data provided by the Ministry of Interior, Taiwan (see <http://iff.immigration.gov.tw/lp.asp?ctNode=31549&CtUnit=17117&BaseDSD=7&mp=1>). The data are retrieved on October 12, 2011.

² The figures are produced from the data provided by the Ministry of Education, Taiwan (see http://www.edu.tw/statistics/content.aspx?site_content_sn=8168). The data are retrieved on October 12, 2011.

The next section presents theoretical perspectives explaining ethnic differences in school performance. It is followed by a section describing the sample and the data. The researcher presents the research findings in the fourth section and the “conclusion” section at the end.

Theoretical Background

At the micro level, the perspective of social capital is one of the theoretical perspectives that are relied on to frame research models to explain diverse academic achievement of school children. Generally, this particular perspective emphasizes on the importance of parental educational expectations in influencing children’s academic performance. Lately, it has been prevalently applied to investigate the diverse academic performance between the native-born and the immigrants in the United States. For example, Hao and Bonstead-Bruns (1998:175) viewed parent-child relationship and parental expectations as a form of within-family social capital and indicated that “high levels of parent-child interactions increase parents’ and children’s expectations and ...higher shared family expectations enhance achievement.....” Chao (1994, 2001), Gardner (2005), and Kao (2004) focused on the accountability of parent-child interaction on the differences in educational achievement between racial groups. They additionally reported significant differences by race or ethnicity in social capital.

The perspective of social capital has set a foundation for the educational studies of school children. However, it is worthy to note that the perspective of within-family social capital seems to ignore the function of children's academic attitudes and behaviors of schoolwork, which enhance the academic performance of school children.

Theory of social capital

J. Coleman is one of the most influential scholars in the field of contemporary sociology of education. He proposed the influence of social capital on academic achievement (Coleman 1988). Several types of social capital are also proposed to be critical. Fehrmann et al. (1987), Griffith (1996), Stevenson and Baker (1987), and Useem (1992) indicated that parental involvement is positively associated with the academic achievement of children. At-home education supervision is another form of social capital, which has a positive effect on academic performance of school children (Ho and Willms 1996; Muller 1993). Desimone (1999), Domina (2005), and McNeal (1999) focused on importance of parents participating in parent-teacher association.

Parent-child relationship is home-based social capital. Hao and Bonstead-Bruns (1998) and Pong et al. (2005) viewed parental educational expectations as social capital and indicated that through parent-child interactions parental educational expectations can be effectively conveyed to children.

It is generally argued that the social relationships within a family increase the social capital available to a child. The intensive parent-child interactions not only enhance the parent-child relationship, but also shorten the gap of educational expectations between parents and children. This argument can be extended to the racial and ethnical studies. Goyette and Xie (1999:22) pointed out that “all Asian American ethnic groups have higher expectations than whites,... [and] parental expectations generally explain a large portion of children's high educational expectations for all Asian American groups.” Meanwhile, studies in Taiwan likewise demonstrated the positive association of parental educational expectations with children’s school performance among the general population (Chang et al. 1997) and among the indigenous students (Lee 2007) as well. In general, researches in Taiwan, which compared the differences of academic performance between the indigenous and the Han (as known as the majority) school children indicated that lower academic achievement of the indigenous students resulted from lower parental educational expectations (Chang et al. 1997; Chen 1998; Wu 1999).

The findings of Goyette and Xie (1999), Hao and Bonstead-Bruns (1998), and Pong et al. (2005) suggest that the parent-child interactions shorten the parent-child gap of educational expectations. It implies that through the parent-child interactions children are socialized to accept the values of their parents. It further implies that school children may alter their attitudes about their school work and school children may become caring about what academic performance means to them.

Darling and Steinberg (1993) suggested to take "willingness to be socialized" into the consideration. As socialization agents, parents may alter children characteristics by exerting appropriate within-family social capital. Because this is an education research, the researcher is concerned with what factors can enhance the academic performance of school children. School-children's "willingness to be socialized" in the present research can be their attitudes toward academic performance, and further reflect on their behaviors of school work.

Consequently, the researcher suggests that the useful social capital for students’ successful performance in school includes not only setting high academic standards, but also appropriate parent-child interactions. At-home educational supervision is viewed as a way of parent-child interactions. Two useful forms of within-family social capital are hypothesized to promote positive behaviors and attitudes toward academic performance, and further to enhance school-children's academic performance.

Community contextual factors

Human beings do not live in vacuum. Human behaviors are more or less shaped by the environment. Neighborhood disadvantages or advantages influence individual behaviors (Sampson 1991). Wilson (1996) suggests that neighborhood characteristics shape the environment climate and role models that children are exposed to outside the home. He further argues that children residing in advantaged neighborhoods are more likely to value education because the constant interactions with adults steady holding jobs foster their positive attitudes toward school work and academic performance. However, those children living in disadvantaged neighborhoods lack the opportunities to foster the social norms and behaviors modeled by working adults.

Empirical researches indicate the influence of neighborhood risk factors on child development. Dornbusch et al. (1991) and Duncan et al. (1994) measure neighborhood characteristics with the proportion of single-parent families in neighborhoods and family median income within neighborhoods. These studies demonstrate the associations between children's academic performance and neighborhood characteristics. Ceballos et al. (2004) study African-American students and conclude that neighborhood characteristics can affect the school-related attitudes of youth. Specifically, in advantaged neighborhoods, school children are more likely to value education.

Not only the direct effect, can neighborhood characteristics play a moderating role that affects how individual factors influence the academic performance of school children (Baldwin, Baldwin, and Cole 1990; McLoyd 1990; Trickett et al. 1991). The empirical studies show neighborhood or community contextual factors moderate the association between individual characteristics and the performance of children (see Dornbusch et al. 1991; Gonzales et al. 1996). Scholars therefore suggest that ignoring community contextual factors may result in under- or over-estimating how individual factors influence children's academic performance. Steinberg (1989) explains that residents within the neighborhoods may act as socialization agents that are supposed to be played by parents or other family members. Natriello and Dornbusch (1984) suggest that schools in some neighborhoods may set higher standards for students to respond to the request of parents.

The integrative conceptual framework

Figure 1 shows the conceptual framework in which factors influencing school children's academic performance are at the individual and community levels.

Relying on the perspective of within-family social capital, the factors at the individual level include not only the parental marital status and the maternal ethnic characteristics, but also children's demographic characteristics, pre-school educational experiences, attitudes toward academic performance, and behaviors of schoolwork, and parental educational expectations and at-home educational supervision.

FIGURE 1 ABOUT HERE

Parental educational expectations and at-home educational supervision are components of within-family social capital that enhance academic performance of school children. Meanwhile, it is hypothesized that these factors foster positive academic attitudes and behaviors of school children. Further, community contextual factors are hypothesized to play two roles. First, the community contextual factors have direct effects on the outcome variable which is school children's academic performance. Second, they moderate how the factors, such as social capital within family, influence children's academic performance.

Methods

A. Sample

For the present study, researchers analyzed the stratified sample of 940 students from 50 elementary schools in central Taiwan.³ Researchers first randomly selected 50 elementary schools. With the assistance from the teachers of the selected schools and officers of the county government, researchers identified the first-, the third, and the fifth-grade school children who were born to immigrant brides. For comparison, researchers selected a same-sex child, whose ID number is next to the corresponding school of child of immigrant bride, into the sample. The sampled students got together at their schools to complete the questionnaires.

Among the analyzed elementary students, there are 468 males (49.8%) and 472 females (50.2%). The first, third and fifth graders respectively account for 50.5% (475), 26.2% (246), and 23.3% (219). There are 385 school children born to the ASEAN immigrant brides. In contrast, 555 analyzed school children were born to the local Taiwanese mothers.

³ The analytical data for the present research are extracted from a data set collected with the financial support of the National Science Council of Taiwan (Grant ID: NSC 96-2415-H-155-003-SSS). For the purpose of the research, the data of school children born to the local Taiwanese women and the ASEAN immigrant brides are extracted. It is worthy to note that the school children selected for the present research are all born to local Taiwanese fathers.

The mothers of students received different levels of education. Native Taiwanese mothers receive more education than their ASEAN counterparts.

B. Variables

The data at the individual level is collected by administering questionnaires. The data at the community is derived from the population census data of Year 2000 and governmental taxes data of Year 2008. There are 10 covariates included in the analysis at the individual level (see Table 1). *ASEAN*, *Male*, *Grade*, *KinderG*, *Parent*, *MaEduc*, *PExpG*, *HomeSup*, *AttdAP*, and *BhvSW* are all observed variables. However, some of them are formed from a set of observed indicators. For example, *HomeSup*, *AttdAP*, and *BhvSW* are means of observed indicators that measure certain constructs.

TABLE 1 ABOUT HERE

Specifically, *ASEAN* is a dichotomous variable. It measures the ethnicity of the mothers of surveyed school children. Those who are born to ASEAN immigrant brides are coded “1,” while those who are born to local Taiwanese women are coded “0.” *Male* is coded “1” for boys and “0” for girls. *Grade* records the grade levels of students. The possible categories can be 1, 3, or 5. *KinderG* is a dichotomous observed variable. Those students who have ever attended kindergartens at age 4 are coded “1,” while the rest of school children are coded “0.”⁴

Parent records parental marital status. “0” is coded to those students whose parents remaining married and co-residing with them, and “1” is coded to those whose parents are divorced, or widowed. Moreover, those school children who are coded "1" can be viewed as living in a single-parent family. *MaEduc* estimates the achieved educational level of the mothers of surveyed school children. It is measured in years. The mothers with an elementary school degree are assumed to receive 6 years of education. Those who have a junior high-school degree are assumed to have 9 years of education. We further assume 12 years of education for high-school graduates, 16 years of education for college graduates, and 18 years for post-graduates. The quantified *MaEduc* help estimate the mean of mother’s mean educational years, and is useful for further quantitative analyses.

⁴ In this sample, those who attended kindergarten at age 4 continued their preschool education at age 5. There are only less than 6% (44 out of 763) of school children who did not go on for next level of preschool education.

PExpG measures parental expectation on the performance of school children. It is an ordered categorical variable. It ranges from 1 to 5; the higher the *PExpG* value, the higher the parental expectation. For the analytical purpose, those who carry missing values or no parental expectation are excluded from the current sample. *HomeSup* measures the extent to which parents supervise school work of their children. It is a composite variable that is measured as the mean score of 7 indicator variables.⁵ The higher the *HomeSup* value, the more likely parents involve in supervising children's school work.

AttdAP measures school children's attitudes toward academic performance, while *BhvSW* measures school children's behaviors of school work. They both are composite variables which are measured from 5 observed variables. The estimate of internal consistency reliability is 0.75 for the former, while that is 0.55 for the latter. School children with higher *AttdAP* scores value more the importance of academic performance than those with lower *AttdAP* scores. The higher value of *BhvSW*, the better behaviors of schoolwork.

PUniv is the only community contextual factor in the research. It measures the proportion of university graduates among the population aged 15 and over within a school district. *PUniv* can measure the capacity of human capital within a school district. A school district with a higher *PUniv* can be a more advantaged community. The proportion of university graduate for each school district is calculated from the population census data of Year 2000. An additional community factor is *StddevTX*. It measures the diversity of SES of the community. The higher the *StddevTX* value, the more diverse the community in terms of socio-economic characteristics.

C. Descriptive statistics

Generally speaking, the ethnic diversity also reflects on some characteristics included in the analytical model (see Table 2). First, comparing the educational levels of students' mothers, the native Taiwanese women are 2.5 years more than the ASEAN immigrants. Second, children born to native Taiwanese women start their preschool education slightly earlier than those of ASEAN brides. As shown in Table 2, about 84.5% of children of native Taiwanese brides attend kindergarten at age 4, while 76.4% of children of ASEAN brides have their preschool education at age 4. Third, children of native Taiwanese mothers usually live in a family with higher social capital capacity than their ASEAN counterparts. As mentioned previously, parental educational expectations and parental at-home educational supervision are components of social capital within families.

⁵ The estimate of internal consistency reliability (Cronbach's alpha) of the 7 observed indicators is 0.72.

These components may alter children's attitudes toward academic performance, and their behaviors of schoolwork. School children born to native Taiwanese couples have higher social capital to foster their attitudes toward academic performance and better behaviors of schoolwork than their counterparts of cross-border marriage couples.

TABLE 2 ABOUT HERE

However, the diverse maternal ethnicity may not effectively reflect on school children's attitudes toward academic performance and behaviors of schoolwork. Children of native Taiwanese women are slightly higher in these two measures than children of ASEAN brides. However, the mean differences are not significant. Finally, children of native Taiwanese brides are superior to those of ASEAN brides in the examination scores. The summated examination score of the former is higher than that of the latter (mean difference is 0.436, $p < 0.001$).

Results

Two steps of data analysis are adopted for the present research. First, hierarchical regression analysis is performed to examine the effects of the predicting factors at the individual level. Second, hierarchical linear modeling helps to examine the effects of the predicting variables at the higher level (community level).

At the first stage, the researcher uses eight models to check the effects of the independent variables of 5 dimensions on school children's academic performance. In these regression analyses, sex (male), grade level in school, and living in a single-family are included as control variables. The first model in Table 3 is concerned with the effects of the control variables. , The additional predicting factor in model 2 is maternal immigrant status, which is a dichotomous variable. Two more predicting factors including mother's education is included in model 3.

TABLE 3 ABOUT HERE

Parental expectation on children's school performance and parental at-home educational supervision which measure the extent of within-family social capital are included in model 4 to be the predicting factors.

The additional factor in model 5 is school children's pre-school experience. Another two variables that measure "willingness to be socialized" of school children are added to the regression analysis in models 6 and 7. In the last model, most predicting factors that are insignificant in explaining academic performance of school children are removed.

Table 3 (model 1) shows that the combination of the three control variables can only explain about 1.4% of the variance of students' academic performance. The grade level in school and living in a single-family have no significant effects on academic performance of school children. Sex is the only control variable that has a significant effect on children's academic performance. The negative regression value of *Male* reflects that female school children are superior to their male counterparts. It is worthy to note that the effect of sex on academic performance of school children is steady across the eight models.

Without the consideration of any other covariates, maternal ASEAN background has certain effects on the academic performance of school children. Shown in the 2nd model, in addition to the increase of the explained variance of school children's academic performance, the effect of maternal ASEAN status is statistically significant. However, the effect of maternal ASEAN status is replaced by mother's education and other predicting factors (see models 3-7).

The inclusion of within-family social capital as the predicting factors has caused in the increase of explained variance of school children's academic performance. Parental educational expectation has a significant effect, while parental at-home educational supervision is not significant in explaining the academic performance of school children. However, the preschool education does not only have a significant effect on the academic performance of school children, but also mediate the importance of parental educational expectation to academic performance (see model 5).

In models 6 and 7, the predicting factors measuring school children's "willingness to be socialized" are included. Without the consideration of behaviors of schoolwork, students' attitudes toward academic performance are important to explain the academic performance of school children. Meanwhile, the appropriate attitudes about academic performance can partially replace the effects of parental educational expectation and sex. Their effects change from 0.23 to 0.19, and from -0.34 to -0.29, respectively. However, students' behaviors of schoolwork are more important than their attitudes toward academic performance.

The inclusion of students' behaviors of schoolwork leads to the significant reduction of the effect of attitudes about academic performance. It reflects that students' attitudes about academic performance can only influence their academic performance through appropriate behaviors of schoolwork, which are determined by appropriate attitudes toward academic performance.

To simplify the analysis, insignificant predicting factors are removed from the regression model. All predicting factors in model 8 are statistically significant. First, in terms of academic performance, boys are inferior to their girl counterparts. Second, controlling for sex and other predicting factors, maternal ASEAN status has a negative effect on children's academic performance. In other words, school children of ASEAN immigrant brides have lower examination results comparing to those of native Taiwanese women. Third, parental educational expectation is an important within-family social capital in explaining the variance of students' examination results. Those students whose parents set higher educational standards do better in the examinations. Fourth, the pre-school education at age 4 has a positive effect on school children's academic performance. Those who attended kindergartens at age 4 do better than those who skipped in 0.37 standard deviations of the examination scores. Finally, both variables showing school children's "willingness to be socialized" have significant and positive effects on the examination results. However, school children's behaviors of schoolwork are more important than their attitudes about academic performance. In some senses, children's behaviors of schoolwork at least partially reflects their attitudes toward academic performance.

The cross-level effects

The further analysis is concerned with the effects of the predicting factors at the individual level and at the school district level simultaneously. Meanwhile, the effects of cross-level interaction terms are also taken account. For fulfilling these purposes, the technique of hierarchical linear modeling is relied on. As shown in Table 4, the predicting factors at the individual level are those important or influential variables in the preceding analysis (see Table 3). At the school district level, the two predictors included are the proportion of population aged 15 and over with a university degree (*PUniv*) and the standard deviation of all taxes paid per household unit (*StddevTX*). The proportion of university graduates represents the contextual of school districts. The school district with higher proportion of university graduates is assumed to have higher human capital that may accumulate useful social capital for school children in the district to develop positive attitudes about academic performance. To a certain extent, it may additionally reflect the socioeconomic characteristics of the school districts.

Therefore, the school districts with higher proportion of university graduates can be wealthier than those school districts with lower quantity in the same particular characteristic. *StddevTX* measures the dispersion of the income distribution of residents within a same school district. Since incomes reflect personal or household wealth and opportunities of life, school districts with higher values of *StddevTX* are more heterogeneous in terms of socioeconomic characteristics.

TABLE 4 ABOUT HERE

Table 4 contains three models. The 1st model contains no predicting factors of school district level, while the 2nd and 3rd model include 1 or 2 level-2 predictors. Actually, the coefficients of model 1 are similar to the results listed in the 8th model of Table 3. At the individual level (as known as level-1), the significant factors to predict academic performance of school children are sex (male), maternal ASEAN status, preschool education experience, and attitudes about academic performance and schoolwork behaviors of school children.

However, the direct and interaction effects of the level-2 predictors on academic performance of school children are concerned. Model 2 includes *PUniv* as the level-2 predicting factor. It shows that the proportion of university graduates in school district has no significant direct effect on students' academic performance. However, *PUniv* moderates the influence of the predicting factors at the individual level. The effects of the predicting factors at the personal level on the outcome variable, academic performance of school children, can be either enhanced or diminished by the proportion of population accounted for by university graduates in school districts. In other words, The effects of the predicting factors at the individual level on academic performance of school children can be varied because of the diverse proportions of university graduates within school districts.

The characteristic of human capital within school districts in the present study is measured as the proportion of university graduates. This particular contextual factor adjusts how sex and maternal ASEAN backgrounds of school children are related with their academic performance. The negative coefficient in model 2 presents that male students are inferior to their female counterparts in academic performance. The male students are about 0.44 standard deviations of the examination score lower than the female students. However, the male-female gap does not remain the same across school districts in Zhanghua County. In the school districts with higher proportions of university graduates, the male-female deficit becomes shorter.

An increase of 10% of population with a university degree can shorten about 0.16 standard deviations of the examination scores between boys and girls. In contrast, in the school districts with lower human capital, the male-female gap becomes greater. The proportion of university graduates in school district also moderates the negative effect of maternal ASEAN background on school children's examination results. In general, school children of ASEAN immigrant brides have 0.31 standard deviations of examination score lower than those of native Taiwanese women. However, in school districts with higher human capital, the negative effect of ASEAN immigration background enlarges. In contrast, in school districts with lower human capital, the negative effect of ASEAN immigration background shortens.

In model 3, in addition to the characteristic of human capital, the heterogeneity of wealth within school districts is included. The interaction effects of *PUniv* almost remain the same. In the more heterogeneous school districts, the male-female deficit in academic performance becomes shorter. Additionally, in the more heterogeneous school districts, the preschool educational experience has a stronger positive effect on academic performance, but the effect of parental educational expectation becomes smaller.

In sum, the proportion of university graduates shows the extent of human capital in school districts, and the standard deviation of taxes paid by residents displays the heterogeneous socioeconomic characteristic of the school districts. The higher the former, the higher the capacity of human capital in that school district. The higher the latter, the more diverse the socioeconomic characteristics among residents in school districts. The proportion of university graduates in school districts lowers the negative effect of sex and enlarges the negative effect of maternal ASEAN background on academic performance. The heterogeneity of socioeconomic characteristics among residents in school districts can reduce the negative effect of "male" on academic performance of school children, while it can enlarge the effect of the preschool education. Additionally, in the more heterogeneous school districts, the positive effect of parental educational expectation becomes smaller.

Conclusion

The immigration of foreign-born brides has not only changed the ethnic landscape of Taiwan, but also altered the ethnic pictures in the nation's education system. In the last decade, social scientists and educators have shifted their research interests from the unequal academic performance of the indigenous students to that of children of immigrant brides. Recent researches of education rely on the theoretical perspective of social capital to study the diverse academic performance among different racial/ethnic groups.

In the present research, the researcher depends on the perspective of social capital to construct a conceptual framework to investigate the influence of ethnicity, social capital within family, and other factors at the individual level on school children's academic performance. In the conceptual model, parental educational expectations and parental at-home educational supervision are components of within-family social capital. Other factors that are hypothesized to be predictive include three control variables, mother's education, the preschool experience, and students' attitudes about academic performance and schoolwork behaviors..

The analysis of 940 elementary students shows that the effect of sex on academic performance is significant. Girls are superior to boys in academic performance. At the individual level, two other control variables have no significant effects on children's academic performance.

Furthermore, maternal ASEAN background is negatively associated with academic performance of school children. Social capital within family is important in predicting children's academic performance. Especially, parental educational expectation is critical to school children's academic performance. Preschool experience, attitudes about academic performance, schoolwork behaviors of school children all have positive effects on their academic performance.

However, the effects of predicting factors at the individual level can be moderated by two characteristics at school district level. The proportion of university graduates and the standard deviation of taxes paid by each tax unit represent the contextual of school districts. The higher the former, the higher the capacity of human capital in that school district. The higher the latter, the more diverse the socioeconomic characteristics among residents in school districts. The proportion of university graduates in school districts lowers the negative effect of sex and enlarges the negative effect of maternal ASEAN background on academic performance. The heterogeneity of socioeconomic characteristics among residents in school districts can reduce the negative effect of "male" on academic performance of school children, while it can enlarge the effect of the preschool education. Additionally, in the more heterogeneous school districts, the positive effect of parental educational expectation becomes smaller.

Reference

Ainsworth, James W. 2002. "Why Does It Take a Village? The Mediation of Neighborhood Effects on Educational Achievement." *Social Forces* 81:117-152.

- Baldwin, A., C. Baldwin, and R. Cole. 1990. "Stress-Resistant Families and Stress-Resistant Children." Pp. 257-280 in J. Rolf, A. S. Masten, D. Cicchetti, K. Nuechterlein, and S. Weintraub (eds), *Risk and Protective Factors in the Development of Psychopathology*, Cambridge, England: Cambridge University Press. 257-80. Cambridge, England: Cambridge University Press.
- Baumrind, Diana. 1967. "Child care practices anteceding three patterns of preschool behavior." *Genetic Psychology Monographs* 75:43-88.
- Baumrind, Diana. 1971. "Current patterns of parental authority." *Developmental Psychology* 4:1-103.
- Baumrind, Diana. 1989. "Rearing competent children." Pp. 349-378 in *Child development today and tomorrow., The Jossey-Bass social and behavioral science series.*, edited by W. Damon: San Francisco, CA, US: Jossey-Bass.
- Baumrind, Diana. 1991. "Parenting styles and adolescent development." Pp. 746-758 in *The encyclopedia of adolescence*, edited by R. L. J. Brooks-Gunn, and A. C. Petersen. New York: Garland.
- Ceballo, Rosario, Vonnie C. McLoyd, and Teru Toyokawa. 2004. "The Influence of Neighborhood Quality on Adolescents' Educational Values and School Effort." *Journal of Adolescent Research* 19:716-739.
- Chao, Ruth K. 1994. "Beyond Parental Control and Authoritarian Parenting Style: Understanding Chinese Parenting through the Cultural Notion of Training." *Child Development* 65:1111-1119.
- Chao, Ruth K. 2001. "Extending Research on the Consequences of Parenting Style for Chinese Americans and European Americans." *Child Development* 72:1832-1843.
- Darling, Nancy and Laurence Steinberg. 1993. "Parenting style as context: An integrative model." *Psychological Bulletin* 113:487-496.
- Dornbusch, Sanford M., Philip L. Ritter, and Laurence Steinberg. 1991. "Community Influences on the Relation of Family Statuses to Adolescent School Performance: Differences between African Americans and Non-Hispanic Whites." *American Journal of Education* 99:543-567.
- Dornbusch, Sanford M., Philip L. Ritter, P. Herbert Leiderman, Donald F. Roberts, and Michael J. Fraleigh. 1987. "The Relation of Parenting Style to Adolescent School Performance." *Child Development* 58:1244-1257.
- Duncan, Greg J., Jeanne Brooks-Gunn, and Pamela Kato Klebanov. 1994. "Economic Deprivation and Early Childhood Development." *Child Development* 65:296-318.
- Fehrman, Paul G., T.Z. Keith, and T. Reimers. 1987. "Home Influence on School Learning: Direct and Indirect Effects of Parental Involvement on High School Grades." *Journal of Educational Research* 80:330-37.

- Fuligni, Andrew J. 1997. "The Academic Achievement of Adolescents from Immigrant Families: The Roles of Family Background, Attitudes, and Behavior." *Child Development* 68:351-363.
- Gonzales, Nancy, Ana Cauce, Ruth Friedman, and Craig Mason. 1996. "Family, peer, and neighborhood influences on academic achievement among African-American adolescents: One-year prospective effects." *American Journal of Community Psychology* 24:365-387.
- Goyette, Kimberly and Yu Xie. 1999. "Educational Expectations of Asian American Youths: Determinants and Ethnic Differences." *Sociology of Education* 72:22-36.
- Griffith, James. 1996. "Relation of parental involvement, empowerment, and school traits to student academic performance." *The Journal of Educational Research* 90:33-33.
- Hao, Lingxin and Melissa Bonstead-Bruns. 1998. "Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students." *Sociology of Education* 71:175-198.
- Kao, Grace. 2004. "Parental Influences on the Educational Outcomes of Immigrant Youth1." *International Migration Review* 38:427-449.
- McLoyd, Vonnie C. 1990. "Minority Children: Introduction to the Special Issue." *Child Development* 61:263-266.
- McNeal, Ralph B., Jr. 1999. "Parental Involvement as Social Capital: Differential Effectiveness on Science Achievement, Truancy, and Dropping Out." *Social Forces* 78:117-144.
- Muller, C. 1993. "Parent Involvement and Academic Achievement: An Analysis of Family Resources Available to the Child." Pp. 77-114 in B. Schneider, and J. S. Coleman (eds.), *Parents, Their Children and Schools*. Boulder: Westview Press.
- Natriello, Gary, and Sanford M. Dornbusch. 1984. *Teacher Evaluative Standards and Student Effort*. New York: Longman.
- Pong, Suet-ling, Jamie Johnston, and Vivien Chen. 2009. "Authoritarian parenting and Asian adolescent school performance: Insights from the US and Taiwan." *International Journal of Behavioral Development*.
- Pong, Suet-ling, Lingxin Hao, and Erica Gardner. 2005. "The Roles of Parenting Styles and Social Capital in the School Performance of Immigrant Asian and Hispanic Adolescents*." *Social Science Quarterly* 86:928-950.
- Sampson, Robert J. 1991. "Linking the Micro- and Macrolevel Dimensions of Community Social Organization." *Social Forces* 70:43-64.
- Steinberg, L. 1989. "Communities of Families and Education." Pp. 138-168 in W. J. Weston (ed.), *Education and the American family: A Research synthesis*. New York: New York University Press.
- Stevenson, David L. and David P. Baker. 1987. "The Family-School Relation and the Child's School Performance." *Child Development* 58:1348-1357.

- Sui-Chu, Esther Ho and J. Douglas Willms. 1996. "Effects of Parental Involvement on Eighth-Grade Achievement." *Sociology of Education* 69:126-141.
- Thurston, Domina. 2005. "Leveling the Home Advantage: Assessing the Effectiveness of Parental Involvement in Elementary School." *Sociology of Education* 78:233-249.
- Trickett, Penelope K., J. Lawrence Aber, Vicki Carlson, and Dante Cicchetti. 1991. "Relationship of Socioeconomic Status to the Etiology and Developmental Sequelae of Physical Child Abuse." *Developmental Psychology* 27:148-158.
- Useem, Elizabeth L. 1992. "Middle Schools and Math Groups: Parents' Involvement in Children's Placement." *Sociology of Education* 65:263-279.
- Wilson, William Julius. 1996. *When Work Disappears: the World of the New Urban Poor*. New York: Alfred A. Knopf, Inc.
- Wu, Y.-I. 1999. Mechanism affecting elementary school students' achievement: A comparison between Taitung County and Taipei Municipality. *Bulletin of Educational Research* 43: 213-45. (in Mandarin)

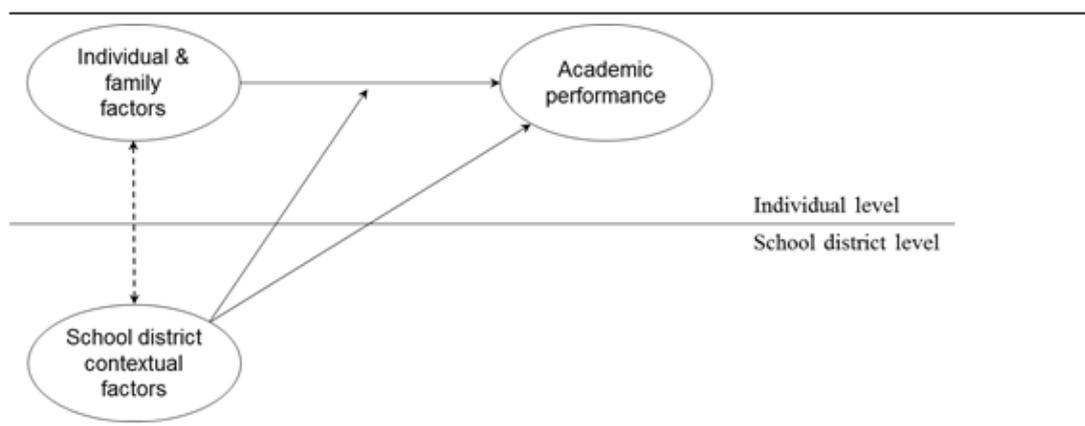


Figure 1. The conceptual framework

Table 1. Description of variables in the present research

Variable name	Note
Factors at the individual level	
1. Covariates:	
<i>ASEAN</i>	A dichotomous observed variable; ASEAN mothers
<i>Male</i>	An dichotomous observed variable; sex of the respondent students (0: female; 1: male)
<i>Grade</i>	An observed variable; grade level of the respondent students
<i>KinderG</i>	An dichotomous observed variable; attending kindergarten at age 4 (0: no; 1: yes)
<i>Parent</i>	An dichotomous observed variable; parental marital status (0: remained married; 1: divorced or widowed; living with single parent)
<i>MaEduc</i>	Mother's education; the estimation of mother's educational years
<i>PExpG</i>	An ordinal observed variable; parental expectation on grades
<i>HomeSup</i>	A observed variable that is a mean of 7 observed indicators which measure parents' at-home educational supervision
<i>AttAP</i>	An observed variable that is a mean of 5 observed indicators that measure school children's attitudes toward academic performance
<i>BhvSW</i>	An observed variable that is a mean of 5 observed indicators that measure school children's behaviors of school work
2. Outcome variable:	
<i>ZTestSC</i>	An observed variable that is the sum of standardized scores of Mathematics and Chinese tests.
Community contextual (factor at the school district level):	
<i>PUniv</i>	An observed variable at the school district level; measuring the proportion of the population aged 15 and above holding a university degree
<i>StddevTX</i>	An observed variable at the school district level; measuring the standard deviation of taxes residents paying

Table 2. Characteristics of School Children born to Taiwanese and ASEAN Brides

	Taiwanese	ASEAN	Mean diff.
Mother's education [MaEduc]	11.741	9.222	2.519***
Single parent family [Parent]	0.074	0.094	-0.020
Attending kindergarten at age 4 [KinderG]	0.845	0.764	0.081**
Parental educational expectation [PExpG]	4.344	4.187	0.157**
At-home educational supervision [HomeSup]	2.936	2.714	0.222***
Attitudes about academic performance [AttdAP]	3.494	3.473	0.021
Behaviors of schoolwork [BhvSW]	3.108	3.073	0.034
Standardized test-scores [ZTestSC]	0.251	-0.185	0.436***

Table 3. Regression models for academic performance of school children

	Model 1		Model 2		Model 3		Model 4	
	B	Beta	B	Beta	B	Beta	B	Beta
Control variables:								
Sex (1: Male) [Male]	-0.34**	-0.10	-0.34**	-0.11	-0.35**	-0.11	-0.34**	-0.11
Grade level in school [Grade]	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	0.00	0.00
Living in a single-family [Parent]	0.14	0.02	0.16	0.03	0.18	0.03	0.23	0.04
Maternal characteristics:								
Maternal ASEAN status [ASEAN]			-0.30*	-0.09	-0.21	-0.06	-0.17	-0.05
Mother's education [MaEduc]					0.04*	0.08	0.04	0.07
Within-family social capital:								
Parental educational expectation [PExpG]							0.27***	0.15
Parental at-home supervision [HomeSup]							0.08	0.03
Preschool experience:								
Attending kindergarten at age 4 [KinderG]								
Willingness to be socialized:								
Attitudes about academic perf. [AttdAP]								
Behaviors of schoolwork [BhvSW]								
Constant	0.43***		0.54***		0.10		-1.40**	
R ²	0.014*		0.022**		0.028**		0.049***	
Adj-R ²	0.010		0.017		0.021		0.040	

	Model 5		Model 6		Model 7		Model 8	
	B	Beta	B	Beta	B	Beta	B	Beta
Control variables:								
Sex (1: Male) [Male]	-0.34**	-0.11	-0.29*	-0.09	-0.28*	-0.09	-0.34**	-0.10
Grade level in school [Grade]	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01		
Living in a single-family [Parent]	0.25	0.04	0.28	0.05	0.28	0.05		
Maternal characteristics:								
Maternal ASEAN status [ASEAN]	-0.15	-0.05	-0.17	-0.05	-0.17	-0.05	-0.37***	-0.11
Mother's education [MaEduc]	0.04	0.07	0.03	0.07	0.03	0.06		
Within-family social capital:								
Parental educational expectation [PExpG]	0.23***	0.13	0.19**	0.10	0.17*	0.09	0.18**	0.10
Parental at-home supervision [HomeSup]	0.07	0.03	0.01	0.00	-0.02	-0.01		
Preschool experience:								
Attending kindergarten at age 4 [KinderG]	0.40*	0.09	0.39*	0.09	0.35*	0.08	0.37**	0.09
Willingness to be socialized:								
Attitudes about academic perf. [AttdAP]			0.35**	0.11	0.20	0.06	0.27*	0.09
Behaviors of schoolwork [BhvSW]					0.43***	0.13	0.47***	0.14
Constant	-1.51**		-2.37***		-2.96***		-3.08***	
R ²		0.057***		0.067***		0.082***		0.103***
Adj-R ²		0.047		0.056		0.069		0.097

***p<0.001; **p<0.01; *p<0.05

Table 4. HLM for school children's academic performance

	Model 1	Model 2	Model 3
Intercept	-3.0687***	-3.0909***	-3.3529***
Level-1 (individual level)			
Sex (1: Male) [Male]	-0.3472**	-0.4396**	-0.6003***
Maternal ASEAN status [ASEAN]	-0.4263***	-0.3141*	-0.3248**
Parental educational expectation [PExpG]	0.1979**	0.1912*	0.3053**
Attending Kindergarten at age 4 [KinderG]	0.3376*	0.3507*	0.1155
Attitudes about academic perform. [AttAP]	0.2992**	0.2947**	0.2957**
Behaviors of schoolwork [BhvSW]	0.4378*	0.4416*	0.4360*
Level-2 (school district level)			
Prop. of university graduates [PUniv]		0.0069	0.0061
Std. deviation of taxes paid [StddevTX]			0.0004*
Levels 1 and 2 interactions			
[Male] X [PUniv]		0.0163*	0.0166*
[ASEAN] X [PUniv]		-0.0199***	-0.0189***
[Male] X [StddevTX]			0.0002**
[KinderG] X [StddevTX]			0.0003**
[PExpG] X [StddevTX]			-0.0002***
Level-1 variance (R^2)	2.3155	2.3161	2.3094
Level-2 variance ($U_{0,00}$)	0.1028	0.1021	0.1089
Deviance (-2LL)	3420.2333	3438.8497	3494.9548

***p<0.001; **p<0.01; *p<0.05

ICSSAM-726

The Human Trafficking Process in Residents of Mae La Temporary Shelter, Thasongyang District, Tak Province, Thailand

Patcharin Sirasoonthorn

Associate Professor, Department of Sociology and Anthropology,
Faculty of Social Sciences, Naresuan University, Thailand.

E-mail: patcharins76@gmail.com

Bandan Buadaeng

Department of Sociology and Anthropology, Faculty of Social Sciences,
Naresuan University, Thailand.

E-mail: kamphang.b50@gmail.com

Abstract

Mae-La Temporary Shelter was established since 1996 in Thasongyang district, Tak province Thailand. The shelter was temporarily set up for Displaced Persons from Fighting (DPF) in Myanmar. It operated under agreement and conditions between international organizations, the United Nations High Commissioner for Refugees (UNHCR), and Thai government. The two counterparts have driven special policies and conditions to the shelter. As a result, quality of life, human rights and freedom of DPFs were limited. Smuggling for a better life, they were finally exploited by traffickers.

Methods: This article aimed to investigate the human trafficking process confronting by DPFs in Mae La Temporary Shelter. Qualitative method by case study was used before data was analyzed by content analysis. The author purposively selected 9 key informants for in-depth interview and participant observation.

Key words: DPF, human trafficking

1. Introduction

More than fifteen years, at least thirteen ethnic groups in Myanmar such as Karen, Burmese, Mon, Tai, Kashin, and Tongsu; has been taking refuge from war and other hazard in Mae-La Temporary Shelter, in Thasongyang District, Tak province, Thailand. In 2013, the Temporary Shelter has become the largest community shelter, leading to various socio-political problems. The situation provides the negative impacts at all level. The Shelter has 3 prominent characteristics include: 1) It is the biggest of its kind, spanning as much as 1,150 Rai (Mae-La Temporary Shelter, 2012). 2)

There are registered and unregistered refugees as much as 8,499 households, or 45,669 persons, resulting in overcrowded condition as dense as one person per one square meter (Mae-La Temporary Shelter, 2012). 3) Densest surrounding communities in 10 kilometers radius with seven villages, housing 4,920 persons (Command Post Office of Thasongyang and Maeramat District, 2010). 4) Most tangible impact on communities which includes environmental problem, dispute over resources, and criminal problem (Montree Kijwirojgul, 2008).

Above mentioned phenomenon has sparked our interests to further study other problems and conditions within the temporary shelter. After massive grounded studies, the author revealed social security problems. In-depth interview and participant observation also revealed the problem of human trafficking among the Displaced Persons from Fighting (DPFs). It is a crime with process of dividing duties, transferring checkpoints, and having connecting networks in several areas (Buadaeng, B, Sirasoonthorn,P and Siripornpibul,T, 2010).

From the problem found, the authors furthered investigated deeper regarding the human trafficking process and the root causes. By employing rough survey with temporary hypothesis, the problems concerning low quality of life of DPFs were targeted. First, the date was randomly collected from 430 samples in three political zones from the population of 45,669. Primary findings identified that there were 27 displaced persons who were considerably human-trafficked. Then, in-depth interview was applied to extract the victim of human trafficking under legal definition (National Decree on Prevention and Suppression of Human Trafficking B.E.2551). The author found that there were 14 DPFs who fall under that category. However, only 9 of DPFs currently remained in the Shelter. The rest of them were sold and delivered in the middle of nowhere.

The authors were thus concentrated on the 9 case studies. The major objectives were 1) to investigate causes, components, and method of the human trafficking among DPFs in Mae-La Temporary Shelter, in Thasongyang District, Tak province. 2) To provide a policy suggestion for involving organizations and actors. Findings from this study provided the tremendous benefits for social development planning for prevention and suppression of human trafficking problem.

2. Scope of the study

The authors based their investigation of human trafficking factors and methods on the National Decree on Prevention and Suppression of Human Trafficking B.E.2551 article 4 and article 6. As for the subject of the original cause of human trafficking, they employed the concept from Asia Regional Trafficking In Persons Project (ARTIP) which considers that the

cause of human trafficking originates from two factors which are: 1) Push Factors, which push individuals to move from origin point to destination point and 2) Pull Factors, which pull individuals to said alluring destination (ARTIP, 2011).

3. Research Method

This study employed qualitative research using case study technique with in-depth interviews and participatory observations from key informants. It highlighted the process by which the 9 samples falling into the victim to trafficking. Using in-depth interview and participant observation, the authors collected data from the original area. Then, the data was analyzed, synthesized, and concluded based on the concepts of human trafficking and cosmopolitanism.

4. Result

4.1 Cause of Human Trafficking

There are 3 crucial factors as follow:

4.1.1 Push Factors in the temporary shelter: they include low quality of life, which consists of 1) unstable, insufficient space, and insecure residential habitats; and 2) inadequate income due to the not allowing legal employment among DPFs according to regulations of Ministry of Interior, hence the only source of income of DPFs is the monthly relief supply.

4.1.2 Pull Factors consist of 1) the increasing demand of lower-level or unskilled labor in Thailand especially in the city or industrial areas, and 2) a better living standard of those who worked illegally working outside the Shelter.

4.1.3 Accelerator Factors include 1) the restrictions of certain rights especially the right to travel, 2) increasing materialism among DPFs, 3) bad experiences and past sexual-physical abused, and 3) persuasion from ethnic friends.

4.2 Components of Human Trafficking

4.2.1 Transfer Period

Our findings underline the crucial role of the middlemen in trafficking process. They coordinate and prepare transportations from the origin to final destination. By this, the middlemen receive huge amount of transportation fees. These middlemen employ several means of transportation and transferring methods to avoid inspections and apprehension. These include personal vehicles, public transportations, or mixing the automotive means with walking on foot; resting in intervals and subsequent deliveries at checkpoints. Aside from this, they also use dangerous means of transportation to avoid apprehension during the movement. Numerous death and injuries of the victims have been increasingly reported.

4.2.2 Exploitation while Working

Considering Thai law, 4 types of exploitation are revealed. These are 1) forced to prostitution 2) force to illegal unskilled labor 3) force to modern slave and 4) others exploited activities. However, the author found a new type of exploitation namely “exploitation from transportation by middleman”.

4.3 Method of Human Trafficking

4.3.1 During Transferring Period

In order to make the victims travel voluntarily, middlemen persuade victims by manipulating or disclose some certain facts regarding detail of the job, working condition, and transportation method. Then bind the victims using debts from transportation fees and gratitude so that the victims would rather willing to travel and later becoming sunk in debts.

4.3.2 During Working at the Destination

During this period, traffickers employ several methods as controlling mechanism to keep the victims working in a demanding condition without escaping. These methods are forcing, physical abused, acted of violence and threatening compelling all mechanisms to manipulate the victims.

5. Discussion

5.1 Causes of Human Trafficking

This article reveals that the causes of human trafficking are varied. Besides the push factor and the pull factor, the authors found another factors named ‘accelerator factors’. These factors are restrictions of certain rights bourn from rules within the temporary shelter, leading to lack of freedom especially freedom to travel. Moreover, there are causes from the borderless boundary and trusts of the people from same ethnic group. After long time co-fighting for freedom, the DPFs create a strong cultural bond. Unaware of socio-cultural changing of friends and neighbors, trust and friendship become the cruel tools used by the middlemen. These finding did not appear in any literature reviews (ARTIP, 2011). Besides, results from several studies on human trafficking found that economic issue or poverty are the crucial causes that leads to voluntary relocation and thus falling victims to human trafficking. Nonetheless, this study emphasizes accelerator factors especially persuasion by those from the same ethnic groups, friends, and close lay persons (Hans van de Glind and Joost Kooijmans, Finnegan, William, 2008, Pretorius, W., 2011, ARTIP, 2011).

Likewise, on the issue of low quality of life of DPFs in the Shelter especially concerning habitat and insufficient income which should be organized according to conditions and agreements between international organization (United Nations High Commissioner for Refugees/ UNHCR, Thai Burma Border Consortium/ TBBC) and initial receiving nation's organizations (Ministry of Interior, by the Office of Ministerial Secretary). This finding reveals poor housing designed and the problems of resettlement under the light of 'temporary' concept. In fact, this "temporary condition" has continued for more than a decade. Since Thailand has not yet signed the 1951 United Nations Convention on the status of displaced persons, the DPFs in the Shelter have maintained their temporary statuses for over ten years under those poor conditions because of unclear policy regarding the temporary shelter's framework. The condition has led to social problems especially human trafficking, corruption and modern slavery. Due to the concept of cosmopolitanism, the shelter should manage under good governance; there should be no violation of the agreed condition between organizations, or no restrictions of human rights on those who live inside, especially the basic human rights, to these global residents.

Nevertheless, illegally leaving the shelter due to the push factor, pull factor and accelerator factor as stated above had made the DPFs becoming illegal immigrants. Due to the UNHCR policy, living inside the Shelter; the DPFs are protected under the course of humanity. By leaving the area, the DPFs are denounced that right and protection. The DPFs, thus, become criminals that can be apprehended and sent back to their country of origin. Without identification document or passport, the DPFs become the victims of corruption and traffickers. This situation forces them to surrender to vulnerability, lacking negotiation power, and being exploited by various actors especially traffickers.

For DPFs, only two conditions allowed them to legally leave the temporary shelter, medical treatment and performing non-political ceremony. Those with other reasons have to illegally sneak out which automatically labelling them the illegal immigrant. To solve the problems, the mutual agreement between UNHCR and Thai government needs to be reconsidered. To secure socio-cultural status of these DPFs, more consideration on basic human rights especially the rights to safety from being caught, detained, controlled, or tortured are important. Owing to the concept of Cosmopolitan, which believes that "global agreement shall protect the citizens of each nation, especially when travelling between nations" (Kant, I 1970a), the DPFs should be reconsidered. To reduce the opportunity to unrightfully exploit those vulnerable group of individuals, and to eliminate the sense of 'other'; the root cause of human trafficking process is crucial. The authors provide social mapping as alternative development model (Figure 1).

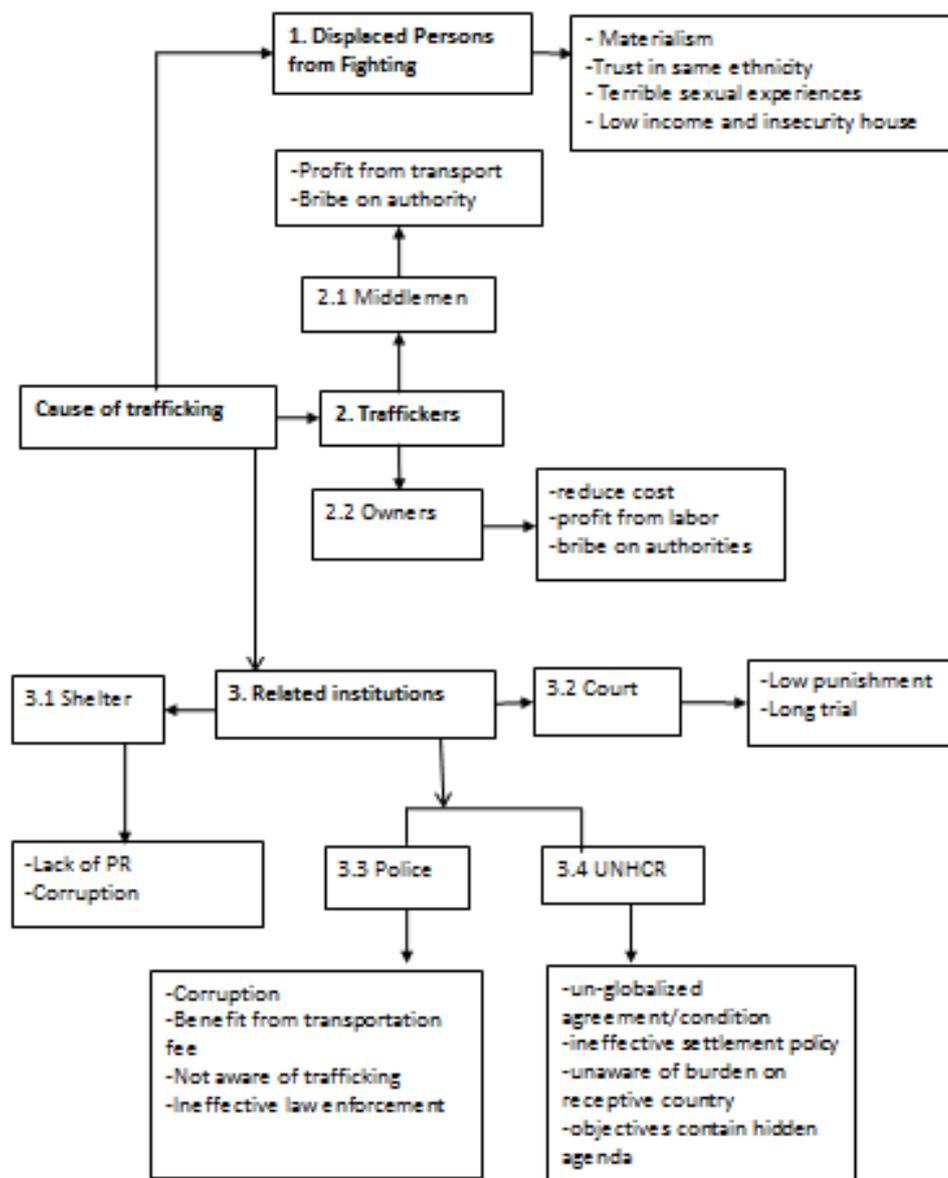


Figure 1 Cause of Human Trafficking

5.2 Components of Human Trafficking

Main component of human trafficking as defined by law is ‘there must be wrongful exploitation’ consists of 8 types according to article 4 in National Decree on Prevention and Suppression of Human Trafficking B.E.2551. However, this study has revealed the four types of exploitation as defined by law, plus another type of exploitation that is to ‘profit from transportation fee’. This profit includes the fee for sending illegal alien labors into inner area. The fee is a lump sum of money pay to the middlemen. Even though this activity is not under trafficking law, it creates the exploitation and dangerous to the live of the victims.

Methods of “wrongful exploitation” were mostly dine unto labors that immigrated illegally and hence cannot be categorized by law. It is the gap used by traffickers to avoid punishments on the crime of ‘human trafficking’. Therefore, to make certain that the law against human trafficking cover all behaviors of traffickers and catch on with their evolution, the ‘exploitation by seeking profit form transportation fee’ came to light in this study. The form should also be categorized as another type of exploitation in the article 4 in National Decree on Prevention and Suppression of Human Trafficking B.E.2551; or added to the existing category of ‘exploitation by extortion from individuals’. By this, a better definition is developing to cover the traffickers’ behaviors.

While the National Decree on Prevention and Suppression of Human Trafficking B.E.2551 is relatively new and has been in practice for less than 5 years, criminals have quickly learned the law and learned to slip away from its grasp. Some actions are still not answered or not definable whether they are part of human trafficking e.g. Sex Phones, Orgy (Swinging), and Surrogacy. There are also actions being debated whether they are accomplished act of human trafficking such as the case of 2008’s tragedy in which 54 Burmese were killed in a refrigerator car. These social phenomenon, when considered with the components of human trafficking according to lawful definition, are still debated whether they are human trafficking or not, especially issue of lacking the element of exploitation in acts of Sex phone, Orgies, and Surrogacy. On the other hand, the questions surrounding the tragedies of 54 deaths remain “who are the exploiters, how and why”.

In order to protect the right of these global citizens, this gap if legal practice need to be filled in (Kant, I 1970b). Moreover, the obstruction of social phenomena must be eliminated by improving a more practice. The article 4 on wrongful exploitation, for instance, needs to be readjusted so that it will be referred to similar cases without needing to refer other laws such as the Criminal Code.

This procedure obstructs the opportunity of organized crimes to commit illegal practices, and helps those existing exploitation to be effectively enforced by law. Moreover, it protects the right of cosmopolitan especially for alien individuals such as DPFs in Thailand. The components of human trafficking are presented in Figure 2 as follows:

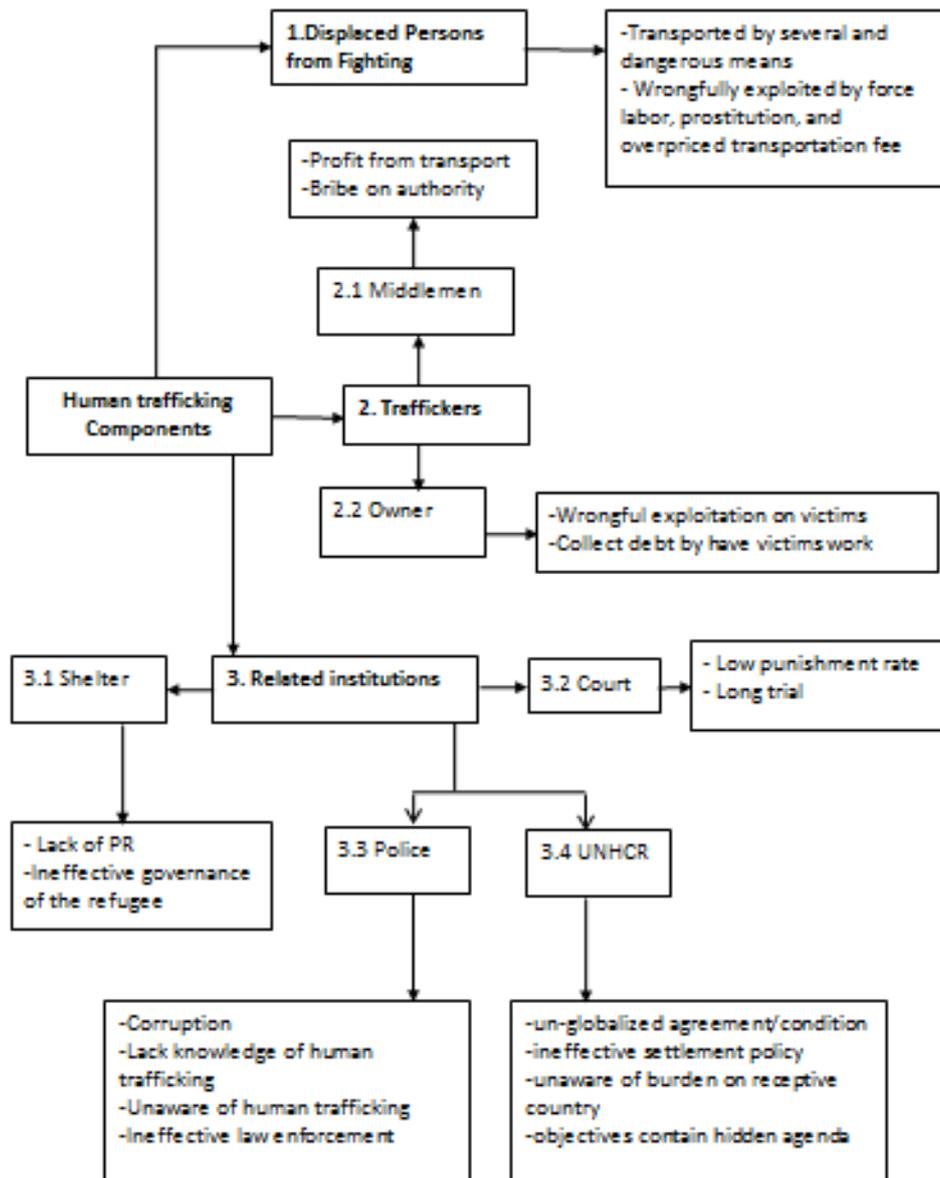


Figure 2 Components of human trafficking

5.3 Methods of Human Trafficking

All victims are commonly and voluntarily stepped into the vicious circle of human trafficking. However, that voluntariness was born from friendly persuasion by middlemen. This is entirely different from findings by studies of woman and child prostitution in the United States which found that most victims from Asia, Russia, Eastern Europe, and Latin America was forced, kidnapped, or abducted from their own guardians without the victims' consent (Hodge, David R, 2008).

Currently, method of human trafficking here tends to be friendly process. The victims are voluntarily traveling without suspicions, and smoothly enter into the process of human trafficking without any traces (Punya Chaemted, interviewed October, 8 2012). Nevertheless, article 6(1) of National Decree on Prevention and Suppression of Human Trafficking B.E.2551 defines condition of human trafficking crime as using methods of providing and transporting that are prohibited by law to wrongfully exploit victims which are: threatening, kidnapping, embezzling, swindling, power abuse, pay money or some kind of profit to their guardian so that the guardian would allow the exploitations from the victim. Although the law intends to protect children under 18 years of age by exclude the case of providing and transporting children, according to (2) article 6, that without the act being prohibited by law as mentioned, it will be charged as 'human trafficking crime'; the human trafficking cases we found none had employed the prohibited method especially threatening, overpowering, and kidnapping. Consequently, traffickers that deal with individuals over 18 years of age are not guilty of 'human trafficking'. This gap of law has become a way for trafficker to evade charges by having the victims travel voluntarily and choosing victims over 18 years old.

Furthermore, victims rescued by polices and interdisciplinary teams since year 2011 do not desire to be rescued. They had surrendered to the new types of exploitations, especially prostitution, in order to earn income to support their family and relieving the debts they have with the traffickers/owner. Getting rescued would cut them from extra income and ability to withhold their socio-cultural responsibilities (Punya Chaemted, interviewed October, 8 2012).

In our opinion, if the law has the intention to substantially and holistically protect the victims of any gender and age equally, and punish the guilty of human trafficking; it should not define the act of trafficker by prohibiting each or any of the seven identified in its article 6(1). By not identifying so would relieve the exception (2) article 6 regarding children trafficking.

Hence, in our opinion, the crime of ‘human trafficking’ would remain with only two components which are 1) activity or movement, and 2) exploitation; without having to refer to the methods prohibited by law, and it will be equally enforced in both children and adult.

By this, a rightful law to enforce upon the crime of ‘human trafficking’ would be created. It will also employ to all types of victims, at all ages. Kant (1970a) states that for people dwell together under rightful and equal law is civil right of individual.

6. Conclusion

The process of human trafficking among displaced persons from fighting in Mae-La Temporary Shelter—its causes, components, and methods; involves 3 groups of stakeholders which are 1) DPFs who have vulnerable status and prone to fall victim to human trafficking, 2) human traffickers who are exploiting the victims’ life and opportunity and 3) related actors from global social institutions and organizations. To solve the problems, DPFs should be reconsidered as the global citizens who have right to work, travel, and receive fair treatment wherever they are dwelling. In order to stop and eliminate human trafficking among DPFs, a better policy designation concerning standard of living, equity, basic needs and human right should be highlighted.

7. References

- Asia Regional Trafficking In Persons Project/ARTIP. 2011. “ASEAN Training Program On Trafficking in Persons for Specialist Investigators”, Participant Manual Thailand.
- Buadaeng, B, Sirasoonthorn,P and Siripornpibul,T (2010). “Social security of the surrounding communities of Mae La Temporary Shelter” The 4th **Asian Rural Sociology Association** Conference Legazpi City, Philippines.
- Command Post Office of Thasongyang and Maeramat District, 2010. “The reports”.
- Finnegan, William. (2008). “The Countertraffickers: International Organization for Migration”.: The New Yorker 84 (12):44.
- Hans van de Glind and Joost Kooijmans. (2008). “Modern-Day Child Slavery: Children And Society”. 22 (3):150-166.
- Held, D. 2010. “Cosmopolitanism: Ideal and Realities.” Cambridge.UK. Polity Press.
- Hodge, David R. (2008). “Sexual Trafficking in the United States: A Domestic Problem With Transnational Dimensions”.: Social Work53 (2):143-152.
- Kant, I. (1970a). “Metaphysics of Morals. In *Kant’s Political Writings* (pp. 131-175)” Cambridge: University Press.
- Kant, I. (1970b). “Perpetual Peace. In *Kant’s Political Writings* (pp.93-130)”. Cambridge: University Press.
- Mae La temporary shelter. (2012). “The reports”.

Montree Kijwirojgul, head of Mae La Local Administration Office. "Siamrat Newspaper", 10 January 2008. Retrieved on September 29, 2010, from <http://www.statelessperson.com>. Thailand Burma Border Consortium/TBBC. (2010). "Burmese border refugee sites with population : April 2006-2010". Retrieved on September 29, 2010, from <http://www.answers.com/topic/social-security>.

Willem Pretorius. (Presenter). (May 23-27 2011). "Identification and Treatment of Victims of Trafficking": in Human Trafficking Investigation Course. Bangkok.

ICSSAM-501

Myth Smashers: Muslim Writers Positioning Muslims in a Post-Modern and Post-Feminist World

Nor Faridah Abdul Manaf

English Language and Literature Dept, International Islamic University Malaysia
nfaridah@iiu.edu.my

Mazlen Bt Arepin

Education Faculty, Universiti Teknologi MARA, Malaysia
amazlen@hotmail.com

Introduction

Despite the information boom via the Digital Revolution which would bring details of the intricacies of the world to our bedrooms, we are still surrounded by prejudices, myths and ignorances of the 'other'. Despite assuming that we are living past modernity and that we abide and understand what feminism is, the 'other' continues to be demonized.

This paper explores how myths can be broken with regard to understanding Muslims in various locations and cultural backgrounds, from Kabul and Kuala Lumpur in Asia to London in the UK. The discussions are limited to writings by Muslim writers (both male and female) whose works were published after the tragedy of Sept 11, 2001. The paper argues that while writers should be treated as individuals as are their Muslim subjects, there are commonalities in all the writings selected in this paper: confidence and hope that humanity will prevail as well as the intensity and commitment of writers to articulate their own voice, telling their stories as they are, against all odds.

The writers studied are Nisah Haron, Mahaya Mohd.Yassin (Malaysian travel writer and memoirist respectively) and Khaled Hosseini, Robin Yassin- Kassab, two diasporic male novelists of Muslim cultural heritage.

Women on women

Women's oppression in Muslim world after September 11, 2001, is still spoken of and politicized. The issues of women wearing hijab, not allowed to seek knowledge, not permitted to work or drive in some Muslim world continue to be propagated in some Western media. Even in Malaysia, there are issues relating to Muslim women that are brought forth like the discrimination of veiled-women in non-Muslim's workplace, the issue of Muslim

women not having equal rights, Muslim women's right in their age of getting married, issue on the allocation of inheritance and so on.

In the heat of discussions, two books by two Muslim women were published in Malaysia, a country largely dominated by Muslims. The two books are *Kembara Sastera* by Nisah Haron (2012) and a memoir by Mahaya Mohd. Yassin (2012, printed three times). These books provide the evidence that it is possible for Muslim women to travel the world and share their journey with their readers. No doubt this would smash any myth that continues to project Muslim women as invisible subjects, often not to be seen or heard.

Mahaya's memoir (trans *Word Power*) is self-absorbing as it would make you laugh and cry at the same time as you read. For those who get the opportunity to read *Word Power* in which Mahaya details her life narrative as a poor young woman growing up chasing her dream to do well in life academically and later, in her career, you would probably be in awe of Mahaya's inner strength or envy it.

Nisah Haron is also another strong-willed woman and both of them possess courage that may not equate the courage of other male travel writers. Money is not a problem to many male writers to write and travel. Time is also hardly an issue to many male travel or memoir writers. Ibnu Battuta and Marco Polo for example, traveled to many states because of their stable status and this facilitated them in getting sponsors from Sultans and Kings. Marco Polo, after successfully creating an impression on Kublai Khan for his skill in gold searching, he was able to explore Mongolia and China as a paid traveler and messenger to Kublai Khan for 24 years.

In more recent years in Malaysia, two Muslim women from Malaysia also have made the Muslim women's community proud. They are Datin Paduka Sharifah Mazlina Syed Abdul Kadir who successfully crossed the Antarctic by skiing in 2004 and Marina Ahmad who successfully climbed Mount Everest in 2005. Indeed we already have the history of contemporary Muslim women who are strong-willed, and submit to no one in their mission except to Allah. Similarly, Nisah Haron as a solo Muslim woman traveler wrote in her travelogue that Allah has blessed her with the opportunity to travel and complete her travels safely – as she had long dreamt of. She was inspired by the National Laureate A.Samad Said's travelogue, *Warkah Europe* (Letter from Europe) and Aishah Aziz's (known as the late Tan Sri Dr. Aishah Ghani, former Minister of Social Welfare) book titled *Ibu Melayu Mengelilingi Dunia: Dari Rumah ke London* (Globe trotting Malay Woman: From Home to London) (1956). :

"Travel writing" would not be possible without His will. (p. xvii)

“InsyaAllah” or “By Allah’s Will” is an expression that Muslims regularly say. Clearly it is very meaningful for those who depend completely on the Almighty Creator when faced with hardship in life. This expression of submission can be seen throughout Mahaya's memoir as well. Readers may expect for her to moan "why me, why this and not that" every time things do not go as she has planned or when the opposite that what is wished for occurred. Instead, Mahaya would say, "I need to *muhatabah*" (p. 64) which means she needs to self-reflect and look for her own weaknesses. She would also say, "I'm sure Allah has planned something even better." (p. 134). When she was faced with defamation by those who were not happy with her, she prayed for patience and continue to put her trust in Allah:

Am I disappointed? No! I need to be patient and continue to *muhatabah*. Too many benefits that can I give and share with others. After Allah has given me knowledge, skills, wealth and more... Oh Allah, I pray to You that this heart of mine will continue to be strong and remember Your reminder in Surah Al-Imran verse 200:

"O you who believe! Be patient. And have outlasting patience. And be ever ready. And be ever God-fearing, so that you may be successful". (pp 184-5, trans Ahmad Zaki Hammad, *The Gracious Quran*, p.126).

Earlier in this discussion, I have mentioned that we already have the history of Malaysian Muslim women writing travelogues and memoirs. Some similarities could be seen if both memoirs of Mahaya and Tan Sri Aishah Ghani are compared.

1. Having a high level of self-motivation triggered by a strong religious conviction

Religion plays a very important role in Malay Muslim women’s lives. In order to uplift the socio-economic position not only of themselves but also their kins as well as having a strong desire to affect change in their country; these women were willing to part from their children and families. For Mahaya, she was determined to excel in her studies as she saw the hardships that her parents had gone through to raise their children during the pre and post-independence of Malaysia. The motivation that she received from her parents, siblings and teachers became her source of inspirations.

Tan Sri Aishah Ghani also received a lot of motivation from her family members especially her husband. In all three writers, they were encouraged and supported by their husbands who wanted to see their wives succeed in doing what they believed in. Based on their narratives, religion was projected as the main guide and provided them a strong support when there were conflicts and challenges hindering the women from achieving their missions and ambitions.

This debunks the common perception of religion and tradition as being the barrier which hinders Muslim women's self-development and social mobility:

Aishah Ghani: I'm thankful to Allah because when I was faced with the bitterness of life, I still could stand on my own and endure it. In my suffering, I realize that success can only be achieved after a series of hardships and challenges and it is these challenges which strengthen your faith.(pp. 6-7)

Mahaya Mohd.Yassin: If it were not meant to be then it would not happen - even though the Head of the Selection Panel knew my father. Allah has destined it to be so...the most important thing for me to do is to do the best that I could in seeking knowledge. (p. 35)

Nisah Haron: When I traveled alone, I have more time to ponder and be closer to Allah; even though in an environment so different from home. Indeed it has made me feel more peaceful and nearer to Him. I worked really hard, searching for ideas and prayed to Allah to ease my journey. I depended fully to Allah as I realized that I only had Him. (p. 207)

Based on excerpts above, it is proven that Malaysian Muslim women writers' inner strength came from having a strong faith in their religion and their writings were guided by their understanding of Islamic teachings and Islamic recognition of the female space. Having ambitions and making efforts to fulfill them are not considered as going against Islamic teachings.

2. All writer are well educated

Like most successful female writers in the world, these Malaysian Muslim women writers are also well - educated. Mahaya has a Master's degree in Malay Literature. Nisah Haron has Master's degrees in two different fields, Law and Literature. Tan Sri Aishah Ghani had an extensive work experience related to politics and journalism and she was trained professionally in journalism in London. She received an Honorary Philosophical Degree in Political Science from Universiti Kebangsaan Malaysia. So Allah's commandment in Al-Quran is verily true:

“Are those who know God and those who do not know Him equal? Indeed, only those who are endowed with ‘discretion and understanding and so heed admonition are ever mindful of God” (Az-Zumar:9, ttrans Ahmad Zaki Hammad, *The Gracious Quran*, pp. 794-5)

Gayatri Spivak, an expert in literary theory also a professor at Columbia University, New York, has voiced her concern over whether those who are 'oppressed' or marginalised due to race, class, gender, sexual orientation, ethnic and religion can articulate their opinion. If they can freely express their voice or opinion, they would no longer be seen as the 'subalterns'.

I have some difficulties in applying Western's theories to memoirs, autobiographies or travelogues which are written by Muslim writers like Nisah Haron and Mahaya Mohd.Yassin. I had faced a similar difficulty in reading Tehmina Durani, a Pakistani Muslim female autobiographer (her book *My Feudal Lord* was a best-seller in Europe for many years) or Azar Nafisi who has an Iranian Muslim heritage background. I had to refer to Islamic frameworks and points of view in trying to understand deeper the conflicts raised by these writers. I focus on the concept of *aiib* or honor in Islam which means face-saving and it is very core to the teaching of Islam. It is considered wrongful (or sinful) to expose not only other people's shame/embarassment but also anything that would shame oneself. Normally in a memoir or autobiography, the writer would directly mention the name of a person or group and any hard-hitting event that affects the writer.

In Tehmina Durani's writing, the cruel acts by her ex-husband inflicted on her were disclosed thoroughly. After interviewing a group of Islamic scholars (both male and female), an important question which is not often considered while studying life narratives is on the question of 'intent'. What is the purpose of writing life narrative? It would vary from one writer to another and in the case of Tehmina Durrani although she mentioned that it was to educate other women and create an awareness of their right to life (a happy life), only Allah and herself know the purpose of her writing the autobiography, said one Islamic scholar. If the purpose is to teach and remind the public especially women, to be careful and find their inner strength when facing domestic violence like that which she experienced, thus this is an excellent thing and must be encouraged. But if the purpose is to embarrass the ex-husband because he had an affair with other women including her own sister, then it is not fair to the accused. Justice is not one-sided and all defenses must be heard before a judgment is made. However, in the case of Durrani, her narratives must be taken seriously as the integrity and safety of a woman was severely abused. The only thing to remember is autobiography as a genre has many loopholes and these must be deliberated. This because the autobiography is only from the writer's perspective. There is no room for the accused to defend himself/herself/themselves. Smith and Watson (2010) point out that: memory has its' own distinctive political influence. What we choose to remember or what we choose to forget is 'political' (p.24) or as authored by Leigh Gilmore, memory has its own distinctive trauma.

Selective memory may not be seen negatively all the time. Naturally a writer would be selective in what he or she wishes to write. Sometimes it is to incorporate style, setting the tone and other literary elements to make your writing effective and attractive. This can be seen in Mahaya's memoir. She casually conveyed the unfairness of wild allegations that were thrown at her husband, family, and herself:

In 2000, when the Ministry of Education Malaysia first introduced KOMSAS (Literature Component) for secondary school, my short story titled "*Mama*" was selected for Form Two's reading material, while Rizal's short story, was selected for Form Three.

There were people who were not happy about the selection of both mother and son and criticized the selection in the local newspapers.

"Mahaya, Shazmee Rizal, and Agus Salim's short stories were selected? The whole family received a windfall!"

Obviously the protest was frivolously written and embroidered with defamation, because Agus Salim's short story was not selected. It was Mahaya Mohd Yassin and Shazmee Rizal Agus Salim's short stories that were selected. Subhanallah! Why was not that friend of mine be extra careful and did not validate the fact before writing? (pp. 183-4)

Mahaya then reminded the readers on the importance of being patient. She also quoted verse 200 from surah Al-Imran to highlight that only those who were patient and had piety to Him would obtain victory.

Although travelogue, memoir and autobiography as a genre is not considered as literary, they have importance in the analysis of gender and women's writing. They now have become an industry that is rapidly growing and have been used in various fields and disciplines (medicine, sociology, history and politics). However, due to the fact that memory can be distorted through time, memoir or autobiography cannot be fully used as historical materials.

It was mentioned earlier that women memoir writers are amongst those who are well-educated. Based on the title of this paper, today's Malaysian Muslim women writers are not against the current when choosing travelogue or memoir as genre of writing. This is because earlier Muslim women writers had already done it. They are Tan Sri Aishah Ghani, Shamsiah Fakeh, Khadijah Sidek and Ibu Zain.

The difference may be in terms of delivery and approach chosen by these wise and determined women. Like English women in the 16th century, they could not possibly be free to voice their views without having special positions in the society. Women who could speak and write were often women of privileged positions: they belonged to the court or they were well-educated.

However, not all Malaysian Muslim women with all these criteria can or want to write. There is a difference between women who are well-educated as well as well-to-do with those who CHOOSE to write and share their experience without feeling inhibited about going public with their voices. The difference is that, writing about themselves (travelogue and memoir) can be wrongly perceived as being 'self-absorbed' or "vain". The same situation is also faced by the women writers in the west who choose the similar genre. If not because of the advantage of being well-informed in the field of religion and other matters, Alendra David-Neel who wrote in the 1920s would have been easily misinterpreted for wandering into men's world and foreign world (Tibet). An Australian feminist, Robyn Davidson wrote in the 1970s about her journey crossing Australia. She was accused of wanting to commit suicide, seeking cheap publicity, and living a high class life. But for her, she only wanted to take control of her life. Although they have explained in their book, I have yet to interview both writers studied here and ask them why they choose the genre for their recent work: Nisah (travelogue) and Mahaya (memoir). Among the reasons given by freedom fighter Shamsiah Fakehon why she wrote her book was to clear her name as she was charged with murdering her own baby while she was fighting in the jungle to free her land from colonization. Sometimes I also felt that Mahaya was doing the same thing; as if she needed to explain what, why and why not, on her life decisions that she had made and gone through.

3. All writers are financially stable

Logically, when a person is well-educated, that person is likely to be financially stable and having a job that would pay the bills. Although this may not necessarily be true in all cases, Virginia Woolf in her essay 'A Room of One's Own' (1929) believed that women writers could only be a successful writer if she had her own source of finance.

From their writings, we can see how Nisah Haron and Mahaya successfully realized their dream as writers. Nisah who traveled without anyone's sponsorship, had brilliantly planned her journey to England, Scotland and Ireland. With a tight budget, she explored the North Pole and watched His Greatness and was able to meet diverse individuals who were from different races and ethnicities.

Mahaya on the other hand had to raise money on her own in order to enter a university. Although she was forced to borrow from her parents, she was able to repay her parents double from what she had borrowed from money received from her writings and later, her teaching job. Here, Mahaya teaches us the meaning of total submission to God and one need not depend on anyone to achieve one's dream.

4. All writers have their own personal space

Virginia Woolf highlighted that in order to become a successful writer, one needed to have a personal space. She believed that a woman who did not have her own financial freedom would not have her own personal space. However, this opinion was refuted by an African American feminist who said that, a slave from Africa named Phillis Wheatley did not only have no personal space of her own but she also did not have any right as a free person. Despite that, she was a successful poet in Boston. We might be reminded of J. K. Rowling when she was poor, she wrote on trains, in free cafes and other public places.

I believe that many women including Nisah Haron, Aishah Ghani and Mahaya have their own personal space but just as limited as most women mentioned earlier. It is definitely a luxury that must be used at its most maximum level. If a comparison is made between male and female travelogue writers, there are marked differences. Male travelogue writers have more contents because they have more time to travel; female travelogue writers have shorter length in their writing and often had to be concise. This is observed by Datuk A. Samad Said in his preface for *Kembara Sastera* (Literary Journey)

Mahaya also wrote of her difficulties in finding her own personal space to write especially when being a student at University of Malaya. She had to go out to type her writings so that she would not disturb her roommate during the night or when her roommate wanted quiet time for her own studies.

5. All writers received blessings and supports from their husband / family

Something that was not mentioned in Virginia Woolf's descriptions of successful female writers is the family's blessings and supports. Woolf was neglected by her own father. A historian and climber who believed that providing education to daughters would not bring any benefits to the family. She was not sent to the school like the rest of her brothers who later on went to Cambridge. She was homeschooled by her father and suffered severe depressions throughout her lifetime especially after her father's death and she was sexually abused by her step-brothers. However, she then succeeded in getting enrolled at the Ladies' Department of King's College London and met many great writers which later on formed a literary group called the Bloomsbury Group.

Nisah, Aishah and Mahaya may have a better fate compared to most women writers (including those in other regions). Their success was blessed and supported by their parents or husband. In fact, it is their husband who often gave them the motivations.

This advantage may be something that is only available to the Muslim women writers in Malaysia who are from the middle-class (this could be triggered off by the education received by middle class men taught by values of traditional Malay culture and Western humanism embedded in local education, making them so sensitive to their wives' need for personal space).

Male writers on Muslim women

The 9/11 onslaught had traumatised and shocked many and had tremendously affected the world community. The West is seen as becoming increasingly paranoid of Muslims especially those from the Middle East and Muslims are generally portrayed as barbaric and backward (Merskin, 2004, Marandi & Tari, 2012). A study by Mishra (2007) spotted that words like "suspects", "detained", "deported", "terrorism", "illegal immigrants", "suicide bombers", and "violence" had increased fear and suspicion of Muslims men. Likewise, Muslim women were represented as veiled and hence, oppressed and victimised (Navaro, 2010).

There are many writings which address the impact of Sept 11 on the lives of both Muslims and the world in general. Two male writers of Muslim background who have shown concern and contributed to this quest are Khaled Hosseini, a Palestine - born novelist and Robin Yassin-Kassab, a British Syrian novelist. Hosseini's work gratifies readers with stories that embedded thirty years of cultural and political landscape in Afghanistan while Yassin-Kassab's vast travelling and teaching experience in many Arab countries, such as Turkey, Syria, Morocco, Saudi Arabia and Oman would have informed them considerably about the fate of the 'other'. In addition, their works do not fall short in showing the images of the 'other', but both Hosseini and Yassin-Kassab have established dynamism in their portrayal of Muslim women; the images of Muslim women resisting against patriarchal order and their struggle for self-assertion have defied the westerners' belief that Muslim women are passive actors. Hosseini and Yassin-Kassab have responded in their novels to challenge the stereotype against Muslim women and their writing have in effect conveyed that Muslim women possess strong spiritual insights and unwavering principles that would go unshakable by any form of adversity.

A glimpse at Khaled Hosseini's work *A Thousand Splendid Suns* (2007) would indicate that the tragic lives of two Afghan women in Afghanistan corresponds well with that of US political rhetoric which campaigns for Muslim women's liberation (Lughod, 2002). Like his second novel, *The Kite Runner*, it also documents the repercussions of war that had devastated and also changed people's lives.

Hosseini asserts that when he writes *A Thousand Splendid Suns*, he would like “readers to walk away with a sense of empathy for the Afghans and more specifically for Afghan women, on whom the effects of war and extremism have been devastating” (see interview with Hosseini p. 2). From the historical perspective, warfare and confrontations were the reasons for the hardships faced by Muslim women, but life had to go on and nothing could prevent these women from achieving their dreams amidst unremitting domestic violence. Das (2006) reported that the effect of war in Afghanistan had witnessed critical neglect of basic human rights for women such as in educational, health, civil and political areas. In his novel Hosseini delves into the lives of Afghan women whose strength is garnered through the force of love and the power of self- sacrifice which Hosseini believes to be key factors that empower the women;

“characters seek and are saved by human connection...it is ultimately love that draws characters out of their isolation, that gives them the strength to transcend their own limitations..” (See Hosseini’s interview).

In the same vein, Yassin- Kassab’s *The Road from Damascus* (2008) portrays Muslim women as positive and stable individuals despite perpetual intervention from the western culture that intimidates their personal and religious identity. When asked about what he thinks of the role of women, basically Yassin- Kassab gives an optimistic view;

“I do think that women tend to be more stable and balanced than men, perhaps particularly in Arab families (this is what I have observed in any case)...I wanted to write against vthe polpular notion in the West that Muslim women are weak, passive, and do what their men tell them. My sisters decided to wear the hijab against the wishes of my father. My wife decided to wear the hijab against my wishes. The arab women I know personally are usually the strong point of their families. And women are very often the connectors between individuals, those who make families and communities cohere...” (See Yassin- Kassab’s interview).

In comparison, both Hosseini’s and Yassin- Kassab’s works argue against the stereotyping of Muslim women as oppressed subjects and that both writers acknowledge the female space in the public domains, thus breaking the myth that Muslim women are the oppressed and victimized lot.

1. Muslim women are inspirational and engaging in their own way

As a Muslim who spends most of his time in the West, Hosseini will be easily accused of being bought by the Orientalists. Hosseini had a privileged upbringing. His father was a diplomat and his mother was a Persian language teacher and having grown in Kabul, a thriving and cosmopolitan city, he knew very little of discrimination and suffering.

Hosseini regards himself to be a secular Muslim and he recalls that his parents had never been too pushy about religion and this explains why he rejects religious extremism (<http://muslimsinpopularmedia.weebly.com/khaled-hosseini.html>)

However, he introduces Muslim women in the novel by emphasizing that they are not the classic examples of abuse victims who would just let go most of their dreams and hopes in life. Then, life begins to shatter into pieces and these women would just dissolve into despair. Hosseini conversely emphasizes that Muslim women are not as easily classified as the exploits of religion or exploits of patriarchal power. But their misfortune is largely due to cultural disorientation and thus this condition is transformed into a catalyst that steers them to a better change. Mohanty (1991) asserts that generally women regardless of class, religion and culture, are predisposed to oppression. However, the Orientalists' view had misconstrued that patriarchal system is a tradition established in that of Islam but in reality Muslim women are predisposed to discrimination and oppression due to cultural obsession developed by the men to control women such as honour killing, sati, child marriages and many others that contradict Islam (Lughod, 2002, 784).

Although the 'othering' of Mariam in the context of the novel saw her as a muted and exiled woman whose life would only be recognized once she was claimed either by her father or husband, Mariam was given the opportunity to speak up and this liberated her from a further deadlock of a 'subaltern'. Through her struggle she defended herself verbally and physically. Her resistance stimulated a positive reaction that she would never resign easily to the obnoxious and sadistic husband. Mariam was not easily confined by patriarchal constraints; her emotions were also kept at bay when she discovered a new promising life with other female characters such as Laila and Aziza. Life in turn becomes inspirational to the women since they are willing to sacrifice anything in support of their sisterhood even though through the hard way. Though Mariam dies in the hands of law, she reclaims and asserts her supremacy by making her own decision to live her life or to end it if that is the best.

On the same note, Yassin- Kassab's female protagonist, Muntaha appears stronger and more resilient than her husband Sami who suffered greatly in his quest for identity. Muntaha finds religion as irrelevant to life when she was younger, but then as the novel opens she becomes very religious to not only subscribe to religious practices, but strong-willed, she becomes defiant against the adversity that follow; the father's death and the husband's betrayal.

As a woman who is equally challenged by the threat of modernization she stands up for her own native cultures and religious beliefs and thrusts aside the encroaching English culture that brings her into conflict with her own identity, husband, brother and the majority of English friends who may find her choices as eccentric.

2. Muslim women should have access to work and basic human rights to secure a better life

Tribal laws and the orthodox cultural systems have long been curbing Muslim women's potential and confined them to the margins of being unemployed and incompetent. Likewise, during the Taliban reign, women were barred from participating in social and political affairs. Their privileges were neglected which consequently lowered their chances for employment. At the time of the Taliban, women were kept to their domestic spheres and women with professional jobs were forced to resign and expected to stay indoors⁶.

Such an appalling state has caused Muslim women to depend solely on men for provision and support. If women are mobilized there is possibility that they might be able to fall upon many opportunities that can help them progress in life. And sadly enough, through seclusion, these women were confined only to their homes and domestic affairs and have to suffer poor relations with men who are culturally and politically more dominant than the women. The US- led campaign to saving Afghan women, was seen as a propaganda not only justified for salvaging these women but rather a military one which was aimed to impose further colonial presence in women's lives (Bahramitash, 2005).

Hosseini also makes us realize that the despondency in Afghan women's life was mainly crippled by cultural intervention which warrants men to dictate women's lives. The Taliban's practices prescribe women's oppression by negating their social, educational, and political rights and such opportunities were only made available for men⁷. Consequently, this leaves very little chance for Muslim women to stand out and govern their own life. This major loophole is habitually inclined towards the man- made rules which are prone to gender discrimination and not the rules sanctioned by the teachings of Islam. Hence, Hosseini makes a lucid distinction between confusions caused by cultural baggage and religious devotion that have impaired the way most men behave towards women.

⁶ For further information, read Das, 2006, Taliban's War on Women: Live Experiences of Afghan Women in Transit on Ethnicity and their Identity

⁷ See A Report By Physicians For Human Rights The Taliban's War On Women A *Health And Human Rights*crisis In Afghanistan

In the novel, Mariam was deprived of love and respect and demonized by lack of social standard. As a 'harami' she became a less desirable company as opposed to other women of the higher social standard. Her status posed a threat to the father who took her presence as humiliating and burdensome.

Yassin- Kassab portrays Muntaha as an independent woman who had a stable job as an English teacher to support her financially. Socially, she established impressive social network in the workplace that even a Jewish friend became amazed by her charm and confidence. Refused to submit herself to the expectation of other people especially Sami's secular belief, she strongly stood firm by her religious conviction. The author also treats the other female characters such as Nur and Hasna in non- traditional manner. Their presence in the novel does not anticipate them to conform to patriarchal expectations. Hasna had complete control over the house and enjoyed full privilege as Marwan's wife, while Nur did not hesitate to rebel against Mustafa's secular views and kept to her religious belief.

3. Muslim women must be given access to high education

Both Hosseini and Yassin- Kassab believe that education is the best solution to upgrade Muslim women's well-being. Education is primarily important to ensure that Muslim women could thrive as individuals and survive through gender discrimination. However, education was one of the missing elements in the lives of Muslim women in Afghanistan notably during the time of the Mujahidin and the Taliban (Moghadam, 1999). As declared by a report concerning Taliban's ill- treatment of Afghan women, the following scenario was reported: "The denial of education also contributes to Afghan women's deteriorating mental health. All of the women interviewed by PHR indicated that they had become unemployed due to Taliban policies, and 74% indicated that they are now unemployed as well. The interviews revealed that women attributed the anxiety and depression that affects the vast majority of them to their fear of limited opportunities for their children, specifically denial of education to girl children" (Physicians for Human Rights, 1998)

While there were many examples that show Muslim women were vexed with violence and oppression, little attention was given to the stories of their triumph and struggles. Hence, Hosseini breaks the myth by looking into the details of Muslim women's heroic act of sacrifices and endurance in reaching for their goals. Mariam set herself free from her problems through the seeking of knowledge. Through the Mullah she learned how to read the Quran and therefore became more enlightened despite other limitations. Defeating Rasheed and ready to take the blame for his death was a sign of her liberty to choose for what she deemed right.

Laila continued with her struggle to restore education for the needy in Afghanistan especially the girls who have been denied schooling during the Taliban reign. Surely the women's dreams have not shed away or shoved aside as long as they are mentally optimistic and affirmative.

4. Muslim women are active agents who preserve and assert Muslim identity and heritage

Outwardly, Muslim women's portrayal in the novels seems to adhere much to the common stereotype; they are veiled, humble and exclusive. However, as Hosseini explores, his novel mainly reflects that amidst political instability which is one of the root problems to have affected Afghan women, their invincibility and superiority over male characters are unmistakable and geared through their ability to secure their Muslim identity and resist the pressure of global modernization.

Not surprisingly in the novel, the issue of burqa is highlighted and it does not call for much hassle since Hosseini was not keen to deal with it from the religious perspective though personally he was concerned. Fahmy (2004) explained further the cultural effect of burqa, which she found to be traditionally a deep-rooted culture in Afghanistan. Having worn the veil herself with the Tarabin tribe, in Sinai Peninsula, she can make enough sense why taking it off is a bit awkward. She adds that Afghan women kept to their burqas because it carries cultural familiarity. In light of the issue, burqa or hijab was not the main reason why these women should not guaranteed freedom and happiness in life. Though hijab does bring in side effects to other people's misunderstanding of Islam, Hosseini without doubt is also slightly bought by the idea, but women who chose to wear what they are comfortable at wearing cannot be mistaken for a victim, save the practice was damaging to the party. In the novel he describes how Mariam is a bit distressed when putting on her hijab (p.29) but in a different occasion he also demonstrates Jalil's wives were pretty much comfortable in their scarves "tied loosely around the neck like an afterthought" (p. 53).

Yassin- Kassab explores the quest of self-identity within the intricate world of two incompatible philosophies; the Islamic and the secular. In the characters like Sami and Muntaha, the author reveals that the process of assuming identity cannot be merely confined to the Western's stereotype. Religion is experienced through one's own religious understanding and preference and that Muslims can be born in a variety of facets and quality. Sami fails himself not only as a Muslim but confusion with his own religious identity has brought him further to end his PhD journey and temporarily cease his marriage.

As one who worships modernity and secularism, Sami inherits his ideals on secularism from his academically acclaimed father, Mustafa who recognizes religion as something outdated and impedes progress in life.

Muntaha leads a life as a religious Muslim and wants to personify her culture and religion even though Sami's modernized and westernized outlook ridicules her devotion. She still respects and compromises with her husband's urban lifestyle. In the end, she becomes the turning point for Sami to change his view on religion and becomes aware of his flaws. In the hands of Yassin- Kassab, Muntaha becomes the power and force that illuminates darkness in a man's life.

Conclusion

While the portrayal of Muslim women in the media continue to be those of oppressed and marginalized position, Southeast Asian Malay Muslim women writers had been fighting for their society and country through their writing. With the encouragement and support from their husbands and families, they led and participated in the public space, often a man's world. They are not fighting against the current, but actually traveling upstream along with the men. Regardless of their reasons of choosing this genre (travelogue or memoir), we as reader should be grateful because they serve as role models for our next generation of women.

Female oppression is not an idea that is bred and shared by Islam and Muslims. But somehow tribal traditions are often manipulated and misrepresented as elements of religion (read Islam). Both Hosseini and Yassin- Kassab diffuse this idea in their novels by criticizing the way in which women were mistreated by the men who they called 'father' or 'husband'. Muslim women portrayed in the novels are women of courage and strength and it is evident that the authors advocate the idea female emancipation as one in which women themselves are capable of resisting and overcoming oppression.

Since colonisation days, subjects of former colonies have been trying to end the generalized marker of the 'other', resisting the images of being backward and violent. Islamophobia in the modern times is another manifestation of colonial thought and if the world continues or encouraged to be divided, it will be dragged back to the past and human beings are reduced to being like "flies to wanton boys" in which being killed is a sport.

Definitely, there will be much to be written about - not only by men but women as well.

References

- Ahmad Zaki Hammad (trans) *The Gracious Quran*, Lisle, USA: Lucent Interpretations, 2007.
- Bahramitash, Roksana. (2005). The War On Terror, Feminist Orientalism And Orientalist Feminism: Case Studies of Two North American Bestsellers Critique. *Critical Middle Eastern Studies*, 14 (2), pp 221–235.
- Bullock, Katherine. (2002). *Rethinking Muslim Women and The Veil: Challenging Historical & Modern Stereotypes*. London: IIT
- Chamber, Claire. (2011). *British Muslim Fictions: Interviews with Contemporary Writers*. Hampshire: Palgrave Macmillan
- Buss, Helen. *Repossessing the World: Reading Memoirs by Contemporary Women*. Waterloo, Canada: Wilfred Laurier University Press, 2003.
- Chattopadhyay, Payel. (2010). Quest for Identity in Home and Beyond—Asian Women In *Literature. Woman Studies (special issue)*, 3 (13), pp 1-6.
- Das, Minakshi. (2006). Taliban's War on Women: Live Experiences of Afghan Women in Transit on Ethnicity and their Identity. *Asia Research Centre*. London School of Economics and Political Science, London.
- Chejne, Anwar G. "Autobiography and Memoirs in Modern Arab Historiography." *The Muslim World* 52.1 (1962): 31-38.
- Cooke, Miriam. "'Ayyām min Ḥayātī': The Prison Memoirs of a Muslim Sister." *Journal of Arabic Literature* 26.1/2 (1995): 147-164.
- Chattopadhyay, Payel. (2010). Quest for Identity in Home and Beyond—Asian Women In *Literature. Woman Studies (special issue)*, 3 (13), pp 1-6.
- Das, Minakshi. (2006). Taliban's War on Women: Live Experiences of Afghan Women in Transit on Ethnicity and their Identity. *Asia Research Centre*. London School of Economics and Political Science, London.
- Dassetto, F. (2003) After September 11th: Radical Islamic Politics and European Islam in
- Marechal, B. Et al. (eds), *Muslimas in the Enlarged Europe: Religion and Society*, Leiden: Brill, pp.489-530
- Fahmy, S. (2004) Picturing Afghan Women A Content Analysis Of AP Wire Photograph During The Taliban Regime And After The Fall Of The Taliban Regime N Gazette. *The International Journal for Communication Studies*, Vol 66(2), pp 91–112. London: Sage Publications
- Geesey, Patricia. *Collective Autobiography: Algerian Women and History in Assia Djebar's L'amour, la fantasia*. *Dalhousie French Studies* 35 (1996): 153-167.
- Golley, Nawar Al-Hassan. *Reading Arab Women's Autobiographies: Shahrazad Tells Her Story*. University of Texas Press, 2003.

- Gilmore, Leigh. *The Limits of Autobiography: Trauma and Testimony*. Ithaca: Cornell University Press, 2001.
- Hosseini, Khaled, (2003). *The Kite runner*. London: Bloomsbury.
- Hosseini, Khaled. (2007). *A Thousand Splendid Suns*. London: Bloomsbury Publishing.11
- Kanafani, Fay Afaf. *Nadia, Captive of Hope: Memoir of an Arab Woman*. ME Sharpe, 1999.
- Landry, Donna. *The Spivak Reader: Selected Works by Gayatri Chakravorty Spivak*. New York: Routledge, 1995.
- Lughod, Lila Abu. (2002). Ethics Forum: September 11 and Ethnographic Responsibility Do Muslim Women Really Need Saving? Anthropological Reflections on Cultural Relativism and Its Others. *American Anthropologist*, 104(3), pp 783-790.
- Mahaya Mohd. Yassin. *Kuasa Kata: Dari Lisan Mengalir ke Lautan Aksara*. Seremban: Mahaya Mohd. Yassin, 2012.
- Marandi, S. M. & Tari, Zeinab, G. (2012). Orientalist Feminism; Representation of Muslim Women in Two American Novels: *Terrorist and Falling Man*. *International Journal of Women's Research*, Vol.2, No. 1, pp. 5-20.
- Merskin, Debra. (2004). The Construction of Arabs as Enemies: Post-September 11 Discourse of George W. Bush. *Mass Communication & Society*, 7(2), 157–175
- Mishra, S. (2007). "Saving" Muslim Women and fighting Muslim men: Analysis of representations in The New York Times: *Global Media Journal*: Vol 6:Iss.11, Article
- Mitsch, R. H., and Benjamin Stora. "Women's Writing Between Two Algerian Wars." *Research in African Literatures* 30.3 (1999): 78-94.
- Moghadam, Valentine M. (1999) "Revolution, Religion, and Gender Politics: Iran and Afghanistan Compared" *Journal of Women's History* Vol. 10, No. 4, pp. 172-204.
- Mohanty, Chandra. (1991). Under Western Eyes: Feminist Scholarship and Colonial Discourses. In C. T. Mohanty, A. Russo, & L. Torres (Eds.), *Third World Women and the Politics of Feminism* (pp. 51-80). Bloomington: Indiana UP.
- Naghibi, Nima. "Revolution, Trauma, and Nostalgia in Diasporic Iranian Women's Autobiographies." *Radical History Review* 2009.105 (2009): 79-91.
- Najmabadi, Afsaneh, ed. *Women's Autobiographies in Contemporary Iran*. Harvard CMES, 1990.
- Navarro, Laura. (2010) "Islamophobia and sexism: Muslim Women in the Western Mass Media," *Human Architecture: Journal of the sociology of Self- Knowledge*: Vol. 8: Iss. 2, Article 10.
- Nisah Haron. *Kembara Sastera*. Kuala Lumpur: ITBM, 2012.
- Nor Faridah Abdul Manaf. 'Pakistani Women Writers: Voices of Progress', *International Research Journal of Arts and Humanities (IRJAH)*, Vol. 34 No. 34 (2006): 1-23.
- 'Contemporary Malaysian Women Writers: Writing Beyond Race, Gender and Class', *Malay Literature Journal*, Vol. 17. No 1&2 (2007):96-105.

- “On Becoming Good Women: A Study on ‘The Fragmented Self’ in Malaysian Muslim Women’s Writing in English”, *Feminist Studies in English Literature* 15.2(2007):113-133.
- “Notions of Home for Diasporic Muslim Women Writers”, *European Journal of Social Sciences* – Volume 9, Number 4 (2009)
- Rak, Julie. Are Memoirs Autobiography? A Consideration of Genre and Public Identity. *Genre* XXXVI (Fall/Winter 2004):305-26. 10 Oct 2013. <www.academia.edu/2381597/Are_Memoirs_Autobiography_A_Consideration_of_Genre_and_Public_Identity>.
- Robin, Yassin-Kassab. (2008). *The Road From Damascus*. London: Penguin.
- Said, E.W. (1978). *Orientalism*. Great Britain: Cox & Wyman Ltd.
- Smith, Sidonie. *Moving Lives:20th Century Women’s Travel Writing*.Minneapolis:University of Minnesota Press, 2001.
- Smith, Sidonie and Julia Watson.*Reading Autobiography: A Guide for Interpreting Life Narrative*. Minneapolis:University of Minnesota Press, 2010.
- Tan Sri (Dr.) Hajah Aishah Ghani. *Ibu Melayu Mengelilingi Dunia: Dari Rumah ke London*. Kuala Lumpur: ITBM, 2012 (terbitan semula).
- Zine, J. (2002). Muslim Women and the Politics of Representation. *The American Journal of Islamic Social Sciences*, 19 (4).
- Vinson, Pauline Homsy. "Shahrazadian Gestures in Arab Women's Autobiographies: Political History, Personal Memory, and Oral, Matrilineal Narratives in the Works of Nawal El Saadawi and Leila Ahmed." *NWSA Journal*20.1 (2008): 78-98.
- Weber, Beverly M. "Freedom from Violence, Freedom to Make the World: Muslim Women's Memoirs, Gendered Violence, and Voices for Change in Germany." *Women in German Yearbook: Feminist Studies in German Literature & Culture* 25.1 (2009): 199-222.
- Zayd, Laylá Abū. *Return to Childhood: The Memoir of a Modern Moroccan Woman*. University of Texas Press, 1998.

Report

The Taliban’s War on Women: A Healthy and Human Rights Crisis in Afghanistan. A Report by Physicians for Human Rights. Boston and Washington, DC.

Websites

<http://muslimsinpopularmedia.weebly.com/khaled-hosseini.html> retrieved on January 2014

<http://www.marysmith.co.uk/Robin%20Yassin-Kassab.pdf> retrieved on January 2014

ICSSAM-553
**Religious Education within Malay Muslim Community in Terengganu,
Malaysia**

Asyraf Hj Ab Rahman^{a*}, Wan Ibrahim Wan Ahmad^b, Hammadah Ab Rahman^c
(*corresponding author)

^aCentre for Fundamental and Liberal Education
Universiti Malaysia Terengganu
asyraf@umt.edu.my

^bSchool of Social Development
Universiti Utara Malaysia
wiwa@uum.edu.my

^cInstitut Perguruan Dato Razali Ismail
Kuala Terengganu

Abstract

Religious education in the context of this paper refers mainly to the traditional mode of Islamic education in selected mosques and traditional Islamic schools known as *pondok* in the state of Terengganu, Malaysia. Terengganu is known as one of the center of traditional educations since many decades ago. The emergence of several traditional religious schools known as *pondok* has had a great impact on Muslim community in the area. The school used traditional mode of teaching methods and commonly handled in a study circle or *halaqah* guided by *kitab kuning* or old book as text books. Up to the present day, though some *pondok* schools are gradually replaced by modern schools receiving financial supports from the government, the traditional mode of teaching in the *pondok* are still popular including in some mosques of the state. This paper discusses the forms of teaching methods of religious education in the mosques and the *pondok*, besides looking at some challenges facing both institutions. Data for the study were collected through unstructured interviews with key informants, coupled with participant observations conducted in selected mosques and *pondok*, besides published materials from secondary sources. All the data were analyzed using thematic approach. The study shows that there are various forms of classes and teaching methods conducted in the mosques and *pondok* schools whilst students attending the religious classes divided into two categories, the young and the older person.

Among the challenges in the running of the religious classes are various educational backgrounds and social status of the students which require the instructor to have additional skills to attract students of different levels. With the continuing efforts by the government particularly in terms of providing the infrastructures and financial supports, it is hoped that religious education may again showing its attraction to the surrounding Malay community.

Keywords: Islam, Malay Community; Religious Education; Mosques

1. Introduction

Muslim populations are majority in Malaysia and constitute more than 60% of the whole population. This is in line with the Federal Constitution which states that Islam is the official religion of this country. Article 153 (1) of the 1957 Constitution also states that *Bahasa Melayu* become ‘the national language’ and Islam the official religion {Article 3 (1)}.(Abdul Rahman, 2011). Considering the existing historical evidences and facts, Islam has long been a significant component of Malay socio-political life and culture. Among the Arab merchants and Sufis who contribute a lot to the Islamization of the Malay Peninsular are Syed Abdul Aziz, Sheikh Abdul Qadir and Syarif Karim al-Makhdum. They came from Jeddah, Saudi Arabia in the early 15th century and were responsible towards Islamisation of Malay local people including the ruler of Malacca (Chelliah,M: 1947). According to some other sources, Islam came into this Peninsular with the commitment and hard work of Persian Muslim merchants who had business dealings with the local Malays. Most of them came from the families of the religious elite such as the family of Asyraf Ibn Dhiauddin, the family of Jawani al-Kurdi and the family of Sabankarah (Wan Husein Azmi, 1980).

Up to the present days, Malaysian government’s Islamization policies have put the role of Islam in the proper place as guaranteed by the constitution. Various religious programs and activities were carried out by the government to meet the spiritual needs of Muslims in this country, and at the same time would not prevent the followers of other religions to practice and perform their religious activities freely. Those programs include the establishment of new Islamic religious schools in urban and rural areas, and building new mosques as a response to the increasing numbers of Muslim population. Most of the religious programs were provided by the Malaysian government through Directorate of Islamic progress in Malaysia (JAKIM) and State Islamic Religious Departments with a strong supports from the Ministry of Education. Since 1986 for instance, the government has located a total of RM32.6 million for religious education including classes conducted in mosques and selected schools and so far, a total of 3692 religious instructors available throughout the country (Abdullah Mohamad, 2011).

After 25 years of the class operations, the program turned out great benefit and has a positive impact on Muslims in terms of financial allocations spent and students attending the classes.

In additions, the continuous effort by JAKIM in directing the mosques management committees to consistently improve the role of mosques by organizing activities and services has further enhanced perception of surrounding community towards the mosques. Thus, a question that comes into the mind, how was the teaching method employed during the class session which successfully gave an impact for students? What type of classical books used for the class session which at the end capable of developing a good Muslim who has a solidly grounded faith, which gives him and the people around him inner and outer strength? Considering these questions, the paper therefore tends to discuss religious education programs carried out in the selected mosques and *pondok* schools, besides analyzing its current contents and methods in producing students having ability in terms of religious knowledge and skills.

The study was conducted in selected mosques in Besut district, Terengganu since 2009 and two *pondok* schools in the district of Kuala Terengganu. Both two districts are important for this study because, both exhibits and represents characteristics of traditional Malay Muslim life where Islamic rituals are practiced as part of the Malay culture.

2. Review of literature

Ahmad Shalabi in his *Tarikh al-Tarbiyyah al-Islamiyyah* (History of Muslim Education) devotes a section to 'Travel for Study'. He quotes the Prophet's Traditions: 'Obtaining knowledge will not be possible with bodily ease' and 'whoever sets out seeking knowledge will be walking in the path of Allah till he returns and whoever dies while travelling for learning will be regarded as a martyr (Ahmad Shalabi, 1973). Describing religious education among the Malay Muslim community in the 14th century, Abdullah Munsyi notes that there are three important elements emphasized that always linked with Islam and centered around the Quran, tradition and religious law. These elements could be described as follows: 1) Studying the classical books emphasized the Oneness of Allah (*tauhid*), His actions (*af'al*) and His attributes (*sifat*). 2) Studying the books of *fiqh* (Islamic jurisprudence) that stress on Muslim relations (*mu'amalat*) and their obligations such as prayer, fasting, zakat and pilgrimage and 3) Studying various disciplines and branches of knowledge that would benefit them in their daily life such as the biography of the Prophet and the classical Islamic tales (Harun Din and Sobri Salamun, 1980). These subjects were taught in mosques and pondok while an instructor called *Tok Guru* sat at the front reading a classical text and explaining its lessons words by words.

There are many literatures on *Pondok* (among others by Ismail Ishak, 1990, Azmi Omar, 1993 and Hasan Md Man, 1990) which focused on building structure of the schools and syllabus that are taught. Albeit none of the available literatures discuss the survival of the *pondok* in the contexts of the modern day demands. In the 14th to early 20th century, mosques and pondok worked together closely in providing traditional Islamic education as preparatory life for students before getting into the real life in society. Mosques for instance, during the early Islam, has become not only as a place of worship, but also as social gathering and education centre for Muslims. Many studies conducted to describe role and function of mosque from the Prophet's era up to this day. According to Muhammad Uthman (2006), the success of mosque functions becomes the responsibility of the ruling government to build, develop, manage and promote religious activities for Muslims.

A study by Muhammad Abu Bakar (1987) on the other hand, stresses historical aspect of the mosque and its role in regards to Muslim affairs when parents sending their children to study basic Islamic knowledge and the Quranic recitation and memorization hoping that their children one day become imams for prayers or Islamic scholars as once exemplified by companions of the Prophet pbuh (al-Būtiy 1999). According to Winstedt (1961), religious studies which became their main focus in the mosques during the early day were *ilm al Hadith*, *ilm al-Kalam*, *Tasawwuf* and *Shari'ah*, and titles such as *Ihya' Ulum al-Din* by Imam al Ghazali, *Kitab al tawhid* by Abu Shukur, *Talkhis al-Minhaj* by Imam al nawawi are said to have become their text books.

3. Methods

Data for the study were collected through unstructured interviews with key informants, coupled with participant observations conducted in selected mosques and *pondok*. These approaches are important as to look in depth how the religious teachings are conducted, type of books known as *kitab kuning* are selected and teaching methodology employed. In additions, published materials from secondary sources related to the subject are also reviewed. All the data were analyzed using thematic approach.

4. Religious Education in Terengganu

The development of Islamic education in Malaysia began since the coming of Islam into this country in the 13th century. This could be traced back through various sources among which was archaeological evidence; the discovery of Batu Bersurat (stone) Terengganu, known as *Prasasti* of Terengganu at Tersat River, Kuala Berang in 1902/1320H. The writings on the stone indicated the existence of an Islamic government which implemented Islamic laws in this area (al-Attas, 1970, Awang Koding, 2003). Besides, there was other evidence including the conversion of Malacca Ruler into Islam.

Since then, Muslim rulers have had great influence on the rapid spread of Islamic teachings in the country. The conversion of the past rulers to Islam successfully prompted their subjects to embrace the same religion. Various Islamic traditional educations emerged and were conducted in mosques and pondok school to fill the spiritual needs of the local community. Since then, Terengganu considered as one of the earliest state in Malaysia to receive Islam.

At the earlier stage, learning activities were centered at teachers or ulama houses and mosques. Such learning system was known as '*halaqah*'. From time to time, religious education run in the house and mosques reached a climax in terms of an increase in number of students and the problems of study space. Accommodation became another crucial problem for students coming from very distant areas. Then, small huts were built near the mosque and house of *ulama* for temporary living space known as *pondok*, from which the name of the type of school is later derived. The same *ulama* known as *Tok Guru* was responsible to teach students in both mosques and *pondok*. Student who missed the class at the mosques may again repeat his lesson at the *pondok* with the same instructor. This practice is continued until the present days. *Pondok*'s students sometimes reached up to 1000 students and education at the mosque also receives great support from the surrounding Muslim community. The involvement of well-known religious figures as instructors also contributed to the increase number of students. In the past, names like Sheikh Abdul Malik and Tokku Paloh were well known for their commitment and contribution to the development of the Islamic education in Terengganu (Shafie Abu Bakar, 1977).

Today, government's supports for religious education in mosques and *pondok* are immense. Through Directorate of Islamic progress in Malaysia (JAKIM), State Islamic Religious Departments, and Counsel for Islamic and Malay Cultural Affairs (Maidam), various educational programs under the names of *Takmir*, *Kafa*, *Muallaim* and *Da'i* were introduced. Most of the financial supports came from the *zakat* collections of individual Muslims and Islamic organizations. In Terengganu, Counsel for Islamic and Malay Cultural Affairs (MAIDAM) is responsible for collecting *zakat* from those Muslims eligible for its payments and later distributed the money to the religious activities mentioned above. Almost RM100,000 were allocated for registered *pondok* institutions. There are more than 30 *pondok* school in Terengganu eligible for the financial supports. For Kafa program, the financial supports were allocated through Islamic Foundation of Terengganu to be distributed to religious education at primary schools in Terengganu. Most of the money was for salary payment to Kafa teachers.

4.1. Religious classes in selected Mosques (Besut District)

Religious education program in the mosques refers to religious classes conducted in the selected mosques in Besut District, Terengganu. The class consists of one religious instructor sitting in front of his students reading traditional Islamic texts related to faith, ethics and laws. Students sit around the instructor and listening to his teachings. The teaching is in the form of *halaqah*. There are four categories of religious classes conducted by different group of instructors namely weekly *Aqidah* classes, *Fardhu Ain* classes, *Fardhu Kifayah*, and other religious programs (Abdullah, 2011). Based on the unstructured interviews, it was found that *Aqidah* classes received great number of students compared to other religious programs. Majority of the students are the elderly aged varies between 30 to 60 years old. Factor contributed to this positive response was that the classes are organized according to the students' needs and the instructors' teaching ability in attracting students' attendance to the mosques. This include his ability to customize his talk with students of all levels and their ability to make student felt unbored and laugh while listening to examples given related to the teaching subjects.

An in-depth interviews with some of the respondents showed that their attendance to religious classes are due to their own will to deepen religious knowledge as a preparation for life in the hereafter. Religious instructors appointed by the government and most of them are religious teachers in schools and *pondok*. Classical text books used normally based on instructors' preference and mastery such as *Sairus Salikin*, *Faridah*, *Munyatul Musolli* and some others. Most of the instructors are capable in understanding Jawi (Malay inscription) writings or Arabic language or both. The use of traditional Arabic text book as teaching materials seems to be not of interest to some students even though they are reluctant or less agrees to listen to religious teaching without text books. Looking to the demographic profile, it was clearly stated that many of the respondents coming from those with low incomes and academic qualification. They work as farmers and fishermen and thus, did not have Arabic mastery and did not even understand Arabic texts. The overall findings however revealed that majority of respondents are happy with their instructors and the latters' method of teaching since the instructor successfully manage to elaborate the Arabic text clearly and suit with the real scenario of their daily life.

In general, teaching environment in the mosque is in the form of informal style whereas student can come and go whilst listening to the teaching session. There are question and answer sessions which related to the daily life of the students.

In this regard, the mosque management committee need to play an important role to create a more conducive environment so that the learning session will be more attractive with modern teaching aids such as PA system and air-conditioning halls. This as one respondent notes ‘feel comfortable and ready to be in the hall till the morning...’.(Azhar, 2013)

4.2. Religious Classes in *Pondok* Schools

Religious classes in *Pondok* schools refers to two *pondok* schools namely *Pondok Dar al-Salam* and *Pondok Moden* (INSPI, *Pondok Darul Iman*). *Pondok Moden* is fully sponsored by Islamic Foundation Terengganu and Maimam, while the other private *pondok* school only receives financial supports from Maimam. There are more than 30 registered *pondok* in Terengganu. In regard to the teaching methods of these *pondok*, most of the schools apply similar methods where study circle (*halaqah*) become popular methods. At *Pondok Dar Salam*, the class schedule is as the following:

Table 1: Class Schedule in *Pondok*

Time	Lesson	Venue
After Fajr Prayer 6.00-7.15am	Reading Classical Text (Aqidah/Fiqh/Sirah/Akhlaq)	Mosque
8.00 – 12.30 pm	Formal religious classes	Classroom
After Zuhr Prayer 1.30-2.30pm	Reading Classical Text (Aqidah/Fiqh/Sirah/Akhlaq)	Mosque
After Asar Prayer 4.30-5.30	Reading Classical Text (Aqidah/Fiqh/Sirah/Akhlaq)	Mosque
After Maghrib Prayer	Reading Classical Text (Aqidah/Fiqh/Sirah/Akhlaq)	Mosque

From the schedule, it clearly states that classical texts become most popular source for teachings. Those instructors should be someone capable and mastery of reading and understanding *Jawi* writings and Arabic writing and syntax. Normally *pondok* instructors are appointed from former student of the same institutions or those graduating from Middle East universities such as al-Azhar University in Cairo and Medina Islamic University in Saudi Arabia. Amongst well known classical books used are *Jawharat al-Tawhid*, *Sirah Nurul Yakin*, *Hisyiyah Bajuri*, *Sairus Salikin*, *Tafsir Jalalain*, *Bulugh al Maram*, *Syarah Ibn Aqil*, *Kawakib ad-Duriyyah*, *Matan Arbain An-Nawawi*, *Hashiyah Dusuki Ala- Ummil Barahin* and several others. Teaching classical text session usually conducted through one way method from the instructor, who will read the text, explain its meaning and content together with examples, whilst students listen and make notes.

This method is also known as content centered activity. The session is so important because it touches on important Islamic teachings related to divinely attributes, permissible and forbidden actions in Islamic teachings, somethings related to *ghaibiyat* and *sam'iyat* (unseen world) and thus require students to fully concentrate on the lessons. In this regard, utilizing human sense such as hearing sense and observing are so important throughout the session. Those brilliant students are appointed as *Ketua Mutala'ah* (assistant instructor) who will be available to explain any possible questions arise after the class session.

Personal visits to a number of pondok schools in Terengganu reveal that most of the schools provide opportunity for students to get involved with community services such as cleaning the Muslim cemetery, mosques and performing *jenazah* prayer (prayer performed upon the body of the deceased). They join together with surrounding community in Islamic festival such as celebrating the Prophet Muhammad's Birth and other religious programs. The local community are also invited to join religious classes at the *pondok*. This approach is good for the local Malay community to get exposure and knowledge from the classes, but to some other extents, it brings about some problems for instructor since the instructor has to insure that his teaching and explanation are understood by all students with different background and ages. Pondok students are normally age between 13-20 years old, whilst the local community are adults whose age ranging between 30-70 years olds. At the end of the study, students will be conferred a *pondok* certificate to conform his completion of the study.

Educational system at *Pondok Moden* (Inspi and Pondok Darul Iman) is different from the private *pondok*. There are two class sessions which is after Maghrib prayer from 7.30 till Isya prayer. The formal class begin at 8.00am till 1.00 pm. Religious class after Maghrib prayer focus on modern books such as *Aqidah ahlu Sunnah wal Jamaah* and the instructor read and explain the text. It is during the formal class (8.00am – 1,00pm) that classical texts like *Iqna'*, *Sabilal Muhtadin* and *Kifayatul Ahyar* are taught to students. This mean that religious class at *Pondok Moden* differ from the private *pondok* in that the latter focus on classical texts after five daily payers. Another different aspect is that *Pondok Moden* offer formal certificate for students namely certificate for *Itmamum Dirasah*, STAM and Diploma of *Tahfiz al-Quran*. With these certificate, students are able to further their study at higher level and up to the university level. Most of the certificates are recognized by the government and JAKIM in particular. It seems at this point that religious education at *Pondok Moden* are more towards exam oriented whereas religious education at private *pondok* is more towards preparing students with skills as a Muslim preacher in the societal life.

5. Contribution of Religious Education to the Malay Community

As noted earlier, religious educations in the mosques and *pondoks* have successfully received good response from the Malay community and thus showing its relevant to the current needs of Muslims. Eventhough religious classes in the mosques are less strict as compared to the *pondok* system, both classes offer opportunity for the sorrounding community to study and to deepen their Islamic knowledge. The running of religious classes in the mosques for instance, enable Muslims to strengthen their brotherhood and relationship amongst them regardless of their economic status, educational background and social status as a whole.

After the class session, food and beverage are served and sponsored by the mosques or inviduals for all attendees of the class. This practice successfully attract other fellow Muslims to attend Mosques' activities. Majority of the respondents acknowledge that after attending religious classes, their knowledge about Islam enhance and they have a fear feelings to commit sins. The appointment of good religious instructors understanding the spiritual needs of their students will also enhance the smooth of the classes as the students feel that their teacher knows how to solve their daily spiritual problems.

The objective of *pondok* system of education is more towards producing students with skills as a Muslim preacher to suit with the community spiritual needs. However, with the establishment of *Pondok Moden* where students may receive certificate of completion throughout their study, it open the new era for the *pondok* educational system. More importantly, both *pondok* schools has provided students with strong basic knowledge and skills as well as Islamic worldview as a vanguard for them in facing current social problems such as drug addiction, free sex and other hedonistic life.

6. Suggestions and Conclusion

The above discussions clearly indicate the important role of the mosque and *pondok* schools in Muslim life particularly preparing students with basic Islamic teachings in regards to life, divinely attributes, permissible and forbidden action and human interactions one another. Thus, proper management of the appropriate religious education and class in both mosques and *pondok* schools is vital and should be fully monitored so that it would bring spiritual benefits for the Muslims. Strong supports from the government morally or financially are important, besides commitment on the part of mosque and pondok committee members, and religious instructors. Selection of good religious instructors with vase knowledge and experience will attract surrounding Muslim community to attend to their classes.

With the advancement of technology, there is a need for some modifications in conducting religious classes in terms of teaching methods and the use of modern teaching facilities such as slide show and power point so that there will be interactive learning environment between students and their instructor. This is important because teaching is not a linear, one-way delivery of knowledge, but an interactive process which requires adapting to shifting contexts, demands of content, and student input.

7. References

- Abdullah Mohamed. 2011. Kajian penilaian program pemantapan aqidah di masjid negeri Terengganu'. Unpublished PhD Thesis. Kuala Terengganu: Universiti Malaysia.
- Abdul Rahman Embong, Tham Siew Yean. 2011. *Malaysia at a crossroads: can we make the transition?*. Bangi: UKM Publication. pp. 181-190.
- Al-Būtiy. 1999. *Fiqh al-sīrah al-nabawīyyah*. Beirut: Dār al-Fikr al-Muāsīr.
- Chelliah, M. 1947. *A short history of the education policy of straits settlement*. Kuala Lumpur: Government Press.
- Harun Din and Sobri Salamun. 1980. *Masalah pendidikan Islam di Malaysia*. Kajang: Sincere Press Ltd.
- Muhammad Uthman al Muhammady. 2006. 'Institusi masjid yang bersifat futuristik'. Kertas kerja di Konvensyen ke Arah Pemantapan Institusi Masjid 30 Januari 1997 di Pan Pacific Kuala Lumpur.
- Winstedt, R.O. 1961. *The malays, a cultural history*. London: Routledge and Kegan Paul Ltd.
- Wan Husein Azmi. 1980. 'Islam di Malaysia: kedatangan dan perkembangan (Abd 7-20M)'. in Khoo Kay Kim. *Melaka dan sejarahnya*. Kuala Lumpur: Persatuan Sejarah Malaysia.
- Ahmad Shalabi. 1973. *Tarikh al-tarbiyyah al-Islamiyyah*. Cairo: Dar al-Ittihad al-Arabi lil Tiba'ah.
- Muhammad Abu Bakar. 1991. "Tok Syeikh Duyong" dalam Muhammad Abu Bakar (ed.), *Ulama Terengganu: suatu sorotan*. Kuala Lumpur: Utusan Publication & Distributors Sdn. Bhd.
- Awang Koding. 2003. *Heritage of Terengganu*. Kuala Terengganu: KUSTEM.
- Shafie Abu Bakar. 1985. 'Institusi pondok dan kesan pendidikan di zaman silam'. *Islamika*. V.3. 198.
- SM Naquib al-Attas. 1970. *The correct date of Terengganu inscription*. Kuala Lumpur: Muzium Negara.
- Firdaus Khairi. 2014. Personal interview, 10 Mac 2014.
- Azmi Tengah. 2014. Personal interview, 20 Mac 2014.
- Khalid Abd Rahman. 2014. Personal interview. April 2013.
- Azhar Idrus. 2013. Personal interview. September 2013.

ICSSAM-626

Long Distance Commuting or Change of Residence? Mobility Decisions in Germany between 2000 and 2009.

Simon Pfaff

DHBW Stuttgart, Zentrum für empirische Forschung,
Paulinenstr. 50, 70178 Stuttgart, Germany
simon.pfaff@dhbw-stuttgart.de

Abstract

While the rate of internal migration in Germany has been declining continuously over the last number of decades, commuting is becoming more and more essential. Despite the high costs, workers decide more often in favor of commuting long distances and against a change of residence. This paper focuses on the determinants to commute long distances and addresses the question whether long-distance commuting permanently substitutes migration. The empirical analysis is based on data from the German Socio-Economic Panel (GSOEP) for the years 2000 to 2009 supplemented by geographical information. The survival analysis confirms the expected effects of individual characteristics, household context and regional infrastructure on commuting decisions. Furthermore, the results indicate that a considerable share of the employed permanently commutes long distances. Consequently, commuting is a substitute for internal migration.

Keywords: Mobility Decisions; Commuting; GSOEP; Discrete-time Survival Analysis.

1. Introduction

The average commuting distance of the working population in Germany has increased considerably in the last number of decades. It is striking that the share of commuters with long distances between their residence and place of work continuously rises. Despite the high monetary and non-monetary costs, employees decide more often for this form of mobility [1, 2]. Simultaneously the willingness to relocate within Germany for job-related reasons is declining [3].

An examination of these mobility decisions is needed for various reasons: The current state of research in Germany shows that the available studies focus on single forms of mobility. Existing surveys usually concentrate on certain types of mobility like labor migration [4, 5] *or* commuting [6]. Hence, comparative studies are scarce [7]. Furthermore, there is scant empirical evidence to explain the relationship between the two forms of mobility. To date, studies on the topic have been primarily conceptual.

One of the few studies focusing theoretically *and* empirically on this issue was conducted by Kalter [4] using data from the mid 1980's. More recent surveys are rarely available in Germany.

Against this background, the paper focuses on the following three problems: First, do workers consider long-distance commuting, as often assumed, as a truly permanent substitute for a work-related change of residence? The second part of the analysis is concerned with the determinants of commuting long distances. Do individual *and* household characteristics significantly influence the decision to commute 50 kilometers or more on a regular basis? What effect do regional characteristics have on the willingness to become mobile?

The next sections initially describe the theoretical framework (2.), the data set used in this study and the statistical methods applied to answer the research question (3.). Thereupon the development of spatial mobility in Germany is discussed (4.1). The following section contains the statistical analysis of the above stated research questions with discrete-time survival analysis (4.2 und 4.3). The concluding discussion of the results summarizes the causes which lead to a decline of internal (e.g. work-related) migration and an increase in commuting (5.).

2. Theoretical Framework

Answering the research questions requires a theoretical approach that is able to explain the decision to commute long distances. The applied model is based on the assumption that workers decide rationally between different places of residence and work [4, 8, 9, 6]. The possible locations and their characteristics are thereby differently attractive. Workers choose the one combination of work and living that is expected to be most beneficial.

It is usually more difficult to find new employment than a new domicile. This justifies the opinion that the choice of residence is determined by the occupational situation and the present place of work [6, 10]. If several comparable domiciles are available, the choice between the alternatives is determined by the particular rent paid to the landlord and the commuting expenses. Workers choose the place of residence with the lowest costs. This way, the joint utility of a combination of place of residence and work is maximized [9]. Due to a change of the occupational situation, the opposite case is also possible. Then workers keep their present home and choose a new workplace. The choice of new employment is strongly influenced by income levels and by the resulting commuting expenses [9].

But when do workers change their place of residence? And when do people decide against a move and in favor of commuting? Since those decisions can't be grasped in their complexity in the present paper, a simplified point of view is chosen to analyze those mobility decisions [6]. In doing so it is assumed that workers keep the commuting time as short as possible to reduce the financial costs and the physical strain. However, the ability to realize this intention depends on several factors: the individual characteristics of the worker, the household structure as well as the regional conditions and the job-market situation [6, 11]. The following examples illustrate the implications: First, the educational background is of great importance. Increasing education levels lead not only to rising wages but also to changing job responsibilities and more flexible work hours. Therefore, high-qualified workers can avoid rush hours more easily than workers with lower qualifications [6]. In addition, people with higher levels of education can find career opportunities often only if they are willing to search locations which are considerable distances away. The reason for this lies in the distribution of jobs: the higher the status of the job, the lower the chance of employment in the vicinity of the place of residence [12].

Second, workers with a spouse or life partner and in multi-person households do not arrive at a mobility decision independently. This is especially true for the decision to commute long distances, which has extensive consequences not only for the worker but also for the entire household. In conclusion, resulting conflicts between the household members are to be taken into account. This explains the reluctance of multi-person households to become mobile [5, 13, 14].

Third, the conditions and opportunities in the living environment are of great importance. In regions with a poor employment situation, for example, workers have to accept longer distances to work. Cities with 500 000 residents or more, on the other hand, offer a good infrastructure and various job opportunities. In such a living environment, jobs are more likely available than in sparsely populated areas. Hence, workers can avoid long journeys to work. The high density of traffic in the metropolitan areas and the resulting costs of commuting are another reason for a reduction of the commuting distance. Altogether, this decreases the willingness to commute long distances in cities with 500 000 residents or more [6]. The following analysis will therefore not only consider the individual characteristics of workers but also the attributes of the household and those of the living environment and test the respective influence on mobility decisions.

3. Research Data and Statistical Analysis Methods

The article is based on longitudinal data from the German Socio-Economic Panel (GSOEP), one of the most important social scientific panel studies in Germany.¹ The GSOEP was originally started in 1984 by the German Institute for Economic Research (DIW Berlin) and has been conducted yearly since then. The design of the longitudinal study is very similar to that of the Panel Study of Income Dynamics (PSID) in the USA: All members of the randomly chosen private households having reached the age of 17 are interviewed about a broad range of different issues. Additionally, the head of household completes a household questionnaire. It gathers information on household characteristics, for instance the number of persons living in the household or the square-footage. Furthermore, the SOEP offers regional and space-related information in addition to the individual and household data (Wagner et al. 2008). Due to data protection regulations these are not part of the SOEP Scientific-Use-File. The required information about the municipal size classes is only provided if an extended data protection concept is implemented.

The analysis focuses on the working population in Germany and uses SOEP data from 2000 to 2009. The resulting sample contains employees aged 17 to 65 years starting with the time of their first employment. Respondents who were not employed at all in the observation period are not included. The study considers, however, that an interruption of employment is an important reason for breaking up an existing combination of residence and workplace. The corresponding observations are therefore part of the sample. Thus, the used data set contains a total of 117877 person-years.

The survey requires a definition of long-distance commuters. It is commonplace to refer to a definition of the German National Bureau of Statistics (Statistisches Bundesamt), which considers workers and students whose workplace is not identical with their place of residence as commuters [16]. Based on this terminology workers with a distance of 50 kilometers or more between home and work are regarded as long-distance commuters in research literature [4; 9]. Regardless of the frequency of commuting, the present paper examines the question why workers decide for this form of mobility and against a change of residence. Therefore, all respondents covering a distance of at least 50 kilometers to their place of work on a regular basis are regarded as long-distance commuters [8; 17]. Thereby, the survey does not only focus on daily commuting. Since 1997, the GSOEP has collected the required information with the help of the following question: "How far (in kilometers) is your job from your place of residence?" Generating the required variable is therefore possible.

3.2 Discrete-time Survival Analysis

¹ The used dataset was extracted using the Add-On Package PanelWhiz (<http://www.PanelWhiz.eu>) for Stata® [20].

In a panel analysis it is possible that some respondents have already been exposed to the risk of an event before the observation period began. These types of episodes are referred to as left-censored in the literature [18]. Guo [19] considers samples with such observations as left-truncated. In consideration of this problem, several analytical methods have been developed which are based on a conditional likelihood. Among those methods is discrete-time survival analysis which is, in the following, used to analyze a *binary dependent variable indicating* if and when a relevant event occurred during the observation period [21]. Similar to continuous-time models, discrete-time survival analysis is based on calculating the hazard rate $h(t_{ij})$ which “is the conditional probability that individual i will experience the event in time period j , given that he or she did not experience it in any earlier time period” [21, 18].

Several approaches are available for estimating the risk of a state change. In the following, a logit link function is used for this purpose [21]:

$$\text{logit } h(t_{ij}) = [\alpha_1 D_{1ij} + \alpha_2 D_{2ij} + \dots + \alpha_J D_{Jij}] + [\beta_1 X_{1ij} + \beta_2 X_{2ij} + \dots + \beta_P X_{Pij}]$$

The regression model contains two kinds of independent variables: The dummy variables D_1, D_2, \dots, D_j represent the different time periods in which an event may occur. Furthermore, the individual, household and context covariates X_1, X_2, \dots, X_P are included.

The formula illustrates a feature of discrete-time survival analysis: Time or rather the duration in an initial state is included as the central explanatory variable.² Thus, in contrast to other regression models, there is not a single intercept. The parameters α_1 through α_J “act like multiple intercepts, one per time period, indicating the value of the outcome in each particular period” [21].

4. Empirical Results

4.1 Development of Long-Distance Commuting and Job-Related Migration in Germany

This paper is based on the supposition that the mobility behavior of the working population in Germany has changed. Prior to the analysis of the research questions this assumption needs to be verified. Thereby, several aspects are relevant: Has the willingness to migrate within Germany declined in the last decades? As a result, has commuting instead of moving become more important? Data of the National Bureau of Statistics suggest that this is the case.

According to the data, the share of long-distance commuters with distances of at least 50 kilometers between home and work has continuously risen [22]: While in 1980 1.7 percent of the labor force covered a distance of 50 kilometers or more to the place of work, the number

² In the following analysis, a categorical variable captures the duration on the job market and with it, at the same time, the effect of age.

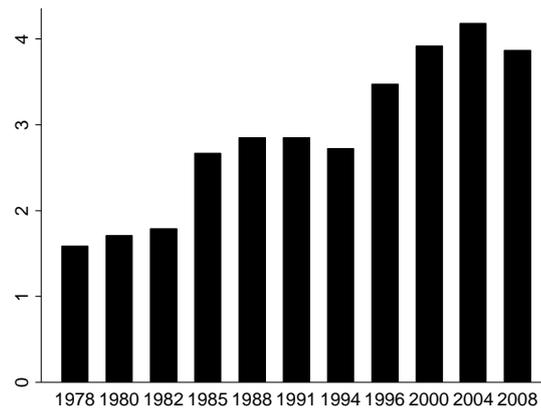
had already reached 2.8 percent in 1991 and 4.2 percent in 2004. Thus in spite of the resulting strains, long-distance commuting is gaining in importance.³

On the contrary, the analyses of the migration statistics of the National Bureau of Statistics show that the willingness to migrate long-distances has declined conspicuously in the last number of decades [23, 3, 24]. Whereas job-related mobility was largely equivalent to migration between 1950 and 1970 [11], changes of residence across state borders declined strongly between 1971 and the reunification of Germany in 1990. After opening the Inner German border large East-West migration streams emerged and internal migration rose until the end of the 1990s [3]. Between 2001 and the end of 2006, however, the number of migrants declined again. In the last years, the numbers remained constant but relatively low.

A connection between the increasing commuting mobility and the decreasing number of relocations seems obvious: Apparently, workers accept long journeys to work to avoid a costly move. If this is true, the positive development of long-distance commuting justifies, why fewer people relocate in Germany for job-related reasons. This assumption is often stated in the literature [8; 11; 6; 25]. However, the relationship between the two forms of mobility has rarely been investigated empirically. This is necessary though, because commuting long-distances causes strains, which may reduce the life satisfaction and the well-being of commuters [11].

Figure 1: Proportion of long-distance commuters (in percent) in the labor force 1978 to 2008

³ Vogt et al. [9] show, that long-distance commuters with at least 50 kilometers generate 25% of the traffic. Even though the share of long-distance commuters may appear to be low at first sight, this group of commuters influences the traffic thereby considerably during rush hours.



Source: Based on Statistisches Bundesamt [eds.]: Fachserie 1, Reihe 4.1.2 (different volumes), Wiesbaden.

It is therefore possible that workers do not decide to commute permanently, but only for a short period of time. Workers could, for instance, accept long distances to the place of work only until a suitable apartment is available there. Conversely, it is conceivable that workers put up with the consequences of commuting only until a job opportunity is available close to the place of residence. If this is true, one cannot expect the increasing commuting flows to explain the decline in job-related migration. In fact, in both cases the decision to commute would probably have structural causes rooted in shortages on the housing and labor market. It cannot then be assumed that commuting is a permanent substitute for migration.

4.2. The Relationship of Long-Distance Commuting and Job-Related Migration

Does long-distance commuting de facto substitute job-related migration permanently? Or is it rather a temporary solution and therefore a short-term replacement? Examining the stability of the combination of residence and work provides an answer to those questions. To do so, the analysis investigated whether long-distance commuters maintain a combination in the long run. The analysis is carried out using survival analytical methods and the Kaplan-Meier estimate of the survivor function which, generally reports "the probability of surviving beyond time t " [26]. In the present application, the Kaplan-Meier estimator indicates the proportion workers, which have not terminated a combination of residence and work yet.

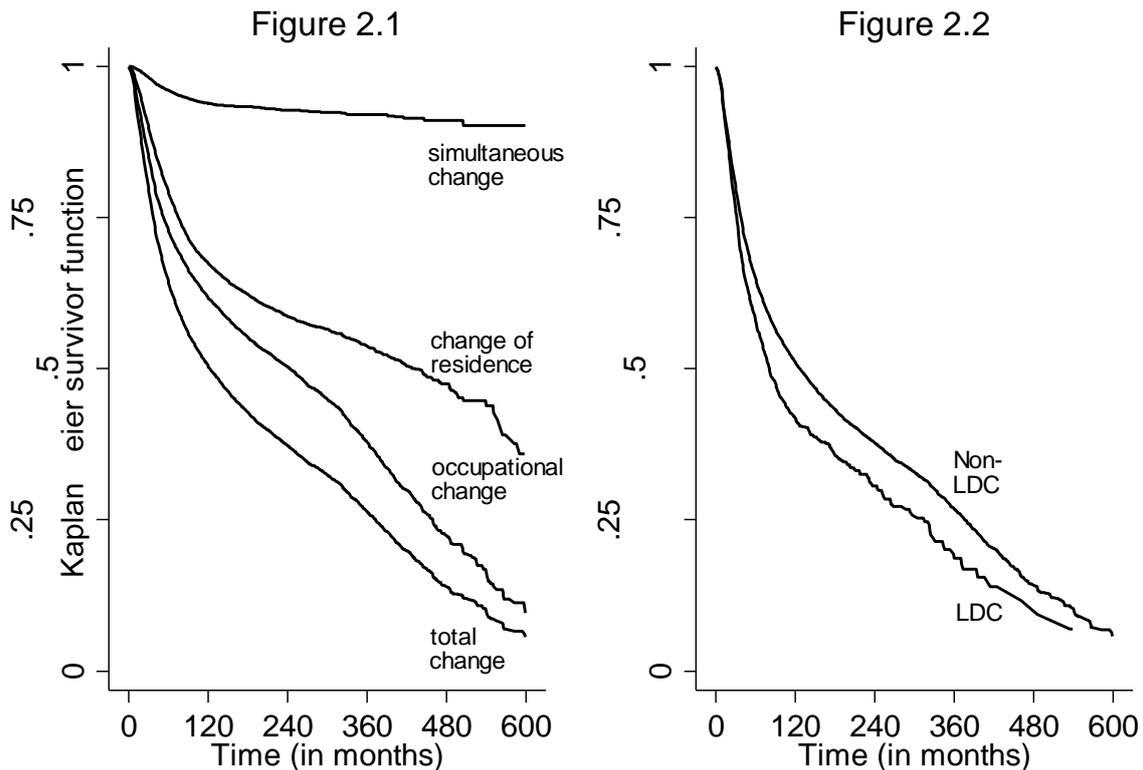
The last change of residence or employment before the observation period determines the beginning of a place of residence and work combination. The first relocation or the first

occupational change (e.g. change of residence, occupational change and simultaneous change of place of residence and work⁴) after the start of the observation terminates an episode, i.e. combination. If there are not any occupational or residential modifications until the end of the observation period, the episode is right-censored. This is also the case if a person leaves the study [4].

Figure 2.1. displays the survivor functions for the observed events (e.g. change of residence, occupational change and simultaneous changes). Additionally, the figure shows the estimate of the survivor function which does not distinguish between the different events. According to this, workers terminate a combination of residence and work most often by an occupational change and rarely by a simultaneous change of residence and work. The propensity to relocate declines clearly after 100 months or approximately eight years, while the willingness for a career change remains high. This result points to a relative high mobility of workers on the labor market and a low propensity to relocate, which decreases over the years. A corresponding constellation requires the willingness to commute. Otherwise this stability of the place of residence is not possible over time.

Figure 2: Stability of place of residence and work. Fig. 2.1: Time period upto a change of residence, a occupational change or a simultaneous change of residence and work. Fig. 2.2: Survivor functions for long-distance commuters and non-long-distance commuters.

⁴ A simultaneous change of place of residence and work occurs, if workers make a career change *and* choose a new place of residence within a three-month period. By considering this time-period, delayed changes can be captured. Those delays are for instance possible, if the housing market does not offer any apartments momentarily.



Source: Based on GSOEP: waves 2000-2009.

The previous analysis does not allow for conclusions about the importance of commuting mobility. Therefore figure 2.2 is dedicated to the differences between long-distance commuters and non-long-distance commuters. It becomes apparent that long-distance commuters terminate a present place of residence and work combination more often than non-long-distance commuters. The p-values resulting from the Wilcoxon test and the Logrank test both show that the difference is highly significant ($p < 0.01$).

Thereby, the central research question, i.e. if workers really choose to commute long distances permanently, still is not answered. Re-examining the survivor function in figure 2.2 offers an answer to this question: After 5 years, 58 percent of the long-distance commuters and 65 percent of the non-long-distance commuters still maintain the original combination of place of residence and work. After 10 years this is true for 42 percent of the long-distance commuters and 51 percent of the non-long-distance commuters. After 20 years 31 percent of the long-distance commuters and 38 percent of the non-long-distance commuters still keep up the same combination of place of residence and work. This shows that commuting is not predominantly an interim solution, but for many workers a permanent by-product of the professional life [27].

Consequently, job-related mobility demands are often met by commuting mobility. As a result, the domicile can be retained and a change of residence is not necessary.

4.3 Which factors have an impact on the decision to commute?

Existing research indicates that the decision to commute is not only influenced by an employee's individual traits but also by household features and the structural conditions in a region [27, 23, 4, 9, 6, 28, 29]. But which characteristics in each of these categories are important?

To answer this question, table 1 displays the effect of chosen covariates on the willingness to commute. To begin with, the regression models 1 and 2 clearly show the negative correlation between the duration on the job market and the propensity to commute: Since the mobility requirements are high at the beginning of working life, young employees especially opt for commuting long distances. Furthermore, commuting can have a negative long-term impact on health due to psychic and physical stress, which older employees are less often willing to accept [1, 6].

A close proximity of the residence to the place work is less important for people with a higher salary. They care more about the quality of life in their residential environment, which, moreover, has to meet certain demands. This is why the tendency to commute long distances increases with income.

In addition, the level of education has a positive effect: Academics can organize their working hours more flexibly and are thus, as expected, more prone to commuting long distances than the other groups of people.

It is assumed that the influence of a worker's sex is not constant over time. Hence, regression model 2 contains interaction terms to capture time-varying effects [21]. The coefficients show, that men and women do not differ significantly in their propensity to commute long distances at first. With increasing time spent on the job market, female workers have on average a considerably lower propensity to commute long distances though. The models indicate thereby, that there are differences between the sexes during the observation period. Furthermore, the results suggest that the differences reduce over the course of time, probably due to the increasing female labor force participation and the development of new role perceptions.

Homeownership does not have the expected effect on the propensity to commute long distances yet. This is in line with previous studies [8, 9]. The conceivable effect of property can supposedly be traced back to co-varying factors like age, marital status or the size of household [11].

Children in the household also do not significantly influence the propensity to commute long distances. This result corresponds to previous findings [9]. Workers with children can probably cover long commuting distances if child care is assured. Otherwise even short distances between the place of residence and work are problematic. Testing this assumption is not possible with the data from the GSOEP, yet. Further analyses in this area are therefore needed.

The effect of the size of household is, in contrast, significant: The propensity to commute long distances increases with each person in the household. This form of mobility is therefore appropriate especially for workers living in a multi-person household. In this case long distance commuting facilitates job-related spatial mobility without generating high migration costs (e.g. moving costs or costs of searching for a job).

The effect of marital status is also significant: Married workers are less prone to long-distance commuting than unmarried workers. Also, a full-time employed spouse or partner reduces the willingness to commute long distances in accordance with existing studies [4]. The results confirm altogether, that the propensity to become mobile is low in two-person households due to the potential for conflict and the complex negotiations that are necessary prior to mobility decisions [14].

Table 1 Multivariate Models – Effects on the Propensity to Commute Long Distances

	Model 1		Model 2	
Duration on the Job Market				
Interval 1: 1-8 Years	0.015 ***	(0.002)	0.013 ***	(0.002)
Interval 2: 9-18 Years	0.011 ***	(0.001)	0.011 ***	(0.001)
Interval 3: 19-28 Years	0.007 ***	(0.001)	0.007 ***	(0.001)
Interval 4: 29-38 Years	0.004 ***	(0.001)	0.005 ***	(0.001)
Interval 5: 39-48 Years	0.003 ***	(0.000)	0.003 ***	(0.000)
Equivalence Income (reference category „0-1200 Euro“):				
1201-1600 Euro	1.314 ***	(0.105)	1.325 ***	(0.106)
1601-2200 Euro	1.563 ***	(0.132)	1.575 ***	(0.133)
> 2200 Euro	1.936 ***	(0.184)	1.951 ***	(0.186)
No Response	1.319 *	(0.196)	1.337 *	(0.199)
Education (reference category „Vocational Education“):				
No Vocational Education	0.837 **	(0.075)	0.846 *	(0.075)
Akademiker	1.623 ***	(0.105)	1.617 ***	(0.105)
Sex (reference category „Male“):				
Female	0.576 ***	(0.034)		
Female X Interval 1			0.929	(0.103)
Female X Interval 2			0.630 ***	(0.064)
Female X Interval 3			0.491 ***	(0.055)
Female X Interval 4			0.338 ***	(0.050)
Female X Interval 5			0.314 ***	(0.092)
Housing and Family Situation				
Child under 6 Years	0.917	(0.075)	0.912	(0.075)
Child 6-16 Years	0.948	(0.069)	0.934	(0.068)
Size of Family	1.047 *	(0.029)	1.052 *	(0.029)
Property Owner	1.062	(0.066)	1.067	(0.066)
Married	0.824 ***	(0.058)	0.807 ***	(0.057)
Spouse Working Full Time	0.767 ***	(0.050)	0.784 ***	(0.051)
Regional Infrastructure and Control Variables				
Metropolitan Area	0.612 ***	(0.056)	0.612 ***	(0.056)
East Germany	1.956 ***	(0.114)	1.976 ***	(0.116)
self-employed	0.698 ***	(0.073)	0.693 ***	(0.073)
Full-time Employed	2.076 ***	(0.141)	1.976 ***	(0.138)
Living Space	1.000	(0.001)	1.000	(0.001)
N	117877		117877	
Nagelkerke R Square	0.07		0.08	

* p < 0.1; ** p < 0.05; *** p < 0.01

Discrete-time Survival Analysis (Hazard-Ratios i.e. exp(beta)). Robust Standard Errors in Parentheses. Source: Based on GSOEP: waves 2000-2009.

As compared to other regions, the willingness to commute is lower in cities with 500 000 residents or more, as a consequence of the economic conditions and the high traffic density. The analyses show in addition, that workers in East Germany are more willing to commute long distances than workers in West Germany [7]. This is due to the relatively poor employment situation in the eastern parts of Germany. There, workers have to accept longer journeys to their place of work.

5. Summary and conclusion

The number of people moving house has steadily been on the decline in Germany [3]. A secondary analysis with data from the German Socio-Economic Panel (GSOEP) for the years 2000 to 2009 shows that this decrease can be explained by the simultaneous increase in long-distance commuting. A vast share of employees permanently opts for commuting long distances instead of changing their place of residence, irrespective of the material and immaterial costs that a long way to work necessarily involves.

The changing mobility behavior may have many possible reasons. Continuously commuting far distances causes considerable travel expenses which, however, become less important with increasing prosperity. Moreover, the progressive developments in communication and transport infrastructure both diminish the relevance of the distance between home and work [7; 30].

Furthermore, home owner's allowances, paid by the German state until 2006, have also led to a separation of the place of residence and work as they have promoted the construction of new houses and perpetuated suburbanization: As stated by Papanikolaou [30], the image of the private home surrounded by a garden has become people's ideal of living, and they are willing to commute long distances for this vision [11].

Additionally, the increasing number of women working also changes mobility behavior in Germany. A long-distance move is harder to accomplish for households with more than one employed member than for singles or families in which only one member brings home the pay. In situations like these, commuting can be a compromise which makes sure that both partners can go to work without having to change their place of residence [8, 9].

As demonstrated by this investigation, individual features significantly influence people's preference for commuting. These findings confirm the results of earlier studies dealing with the decision to commute [9, 6]. Furthermore, the results indicate that living conditions and family life also have an effect on the decision-making process. Thus conflicting interests and ongoing negotiations play a crucial role and must be taken into account.

The quality of empirical data on spatial mobility in Germany has significantly improved in the last number of years. Against this background, the data of the GSOEP can, for instance, be complemented and extended with detailed contextual information. However, the potential of this approach has not yet been seized. It seems worthwhile to take the available regional data into account as the economic and social conditions of the workers' environment have an impact on their mobility decisions [30].

The effects of mobility decisions have so far been evaluated differently [8, 1, 31]. For example, previous studies do not allow a clear answer to the question whether the benefits of commuting balance the stress-related consequences of commuting, or whether the workers' satisfaction with life is reduced due to the latter. A further investigation of those consequences is promising and desirable as commuting mobility is becoming more and more important nowadays.

Acknowledgments

I would like to thank Agnes Oed, Marjorie Delbaere as well as Edmond McDonnell for their helpful comments.

References

- [1] Stutzer A, Frey B S. Stress that Doesn't Pay: The Commuting Paradox. *Scandinavian Journal of Economics*, 2008, 110(2): 339-366.
- [2] Rüger H, Ruppenthal S. Advantages and Disadvantages of Job-Related Spatial Mobility. In: Schneider N F, Collet B (eds.). **Mobile Living Across Europe II. Causes and Consequences of Job-Related Spatial Mobility in Cross-National Comparison**. Barbara **Budrich, Opladen**, 2010, pp. 69-93.
- [3] Statistisches Bundesamt. Datenreport 2008. Ein Sozialbericht für die Bundesrepublik Deutschland. Bundeszentrale für politische Bildung, Bonn, 2008. URL: <https://www.destatis.de/DE/Publikationen/Datenreport/Downloads/Datenreport2008.pdf> [15.03.2014].
- [4] Kalter F. Pendeln statt Migration? Die Wahl und Stabilität von Wohnort-Arbeitsort-Kombinationen. *Zeitschrift für Soziologie*, 1994, 23(6): 460-476.
- [5] Kalter F. Partnerschaft und Migration. Zur theoretischen Erklärung eines empirischen Effekts. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 1998, 50(2): 283-309.
- [6] Abraham M, Nisic N. Regionale Bindung, räumliche Mobilität und Arbeitsmarkt. *Schweizerische Zeitschrift für Soziologie*, 2007, 33(1): 69-87.
- [7] Schneider N F, Ruppenthal S, Lück D, Rüger H, Dauber A. Germany – A Country of Locally Attached but Highly Mobile People. In: Schneider N F, Meil G (eds.). *Mobile Living across Europe I. Relevance and Diversity of Job-Related Spatial Mobility in Six European Countries*. Barbara **Budrich, Opladen**, 2008, pp. 105-147.
- [8] Nolte R. Soziale Wohnungspolitik und Arbeitskräftemobilität. Beiträge zur Raumplanung und zum Siedlungs- und Wohnungswesen 193. Institut für Siedlungs- und Wohnungswesen, Münster, 2000.
- [9] Vogt W, Lenz M, Kalter, F. Tägliches Fernpendeln und sekundär induzierter Verkehr. Berichte der Bundesanstalt für Straßenwesen. *Verkehrstechnik* 88. Wirtschaftsverlag NW, Bremerhaven, 2001.

- [10] Abraham M, Schönholzer T. Pendeln oder Umziehen? Entscheidungen über unterschiedliche Mobilitätsformen in Paarhaushalten. In: Kriwy P (eds.). Klein aber fein! Quantitative empirische Sozialforschung mit kleinen Fallzahlen. VS-Verlag, Wiesbaden, 2009, pp. 247-268.
- [11] Schneider N F, Limmer R, Ruckdeschel K. Mobil, flexibel, gebunden. Familie und Beruf in der mobilen Gesellschaft. Campus: Frankfurt a.M., 2002.
- [12] Jürges H. Berufliche Umzüge von Doppelverdienern. Eine empirische Analyse mit Daten des SOEP. Zeitschrift für Soziologie, 1998, 27(5): 358-377.
- [13] Auspurg K, Abraham M. Die Umzugsentscheidung von Paaren als Verhandlungsproblem. Eine quasiexperimentelle Überprüfung des Bargaining-Modells. Kölner Zeitschrift für Soziologie und Sozialpsychologie, 2007, 59(2): 271-293.
- [14] Nisic N. Mitgegangen – mitgefangen? Die Folgen von Haushaltsumzügen für die Einkommenssituation von Frauen in Partnerschaften. Kölner Zeitschrift für Soziologie und Sozialpsychologie, 2010, 62(3): 515-549.
- [15] Wagner G G, Göbel J, Krause P, Pischner R, Sieber I. Das Sozio-oekonomische Panel (SOEP): Multidisziplinäres Haushaltspanel und Kohortenstudie für Deutschland. Eine Einführung (für neue Datennutzer) mit einem Ausblick für erfahrene Anwender. AStA Wirtschafts- und Sozialstatistisches Archiv, 2008, 2(4): 301-328.
- [16] Statistisches Bundesamt. Fachserie 1, Reihe 4.1.2. Statistisches Bundesamt, Wiesbaden, 2004.
- [17] Kley S. Migration im Lebensverlauf. Der Einfluss von Lebensbedingungen und Lebenslaufereignissen auf den Wohnortwechsel. VS-Verlag, Wiesbaden, 2009.
- [18] Blossfeld H-P. Survival- und Ereignisanalyse. In: Wolf C, Best H (eds.). Handbuch der sozialwissenschaftlichen Datenanalyse. VS-Verlag, Wiesbaden, 2010, pp. 995-1016.
- [19] Guo G. Event-History Analysis for Left-Truncated Data. Sociological Methodology, 1993, 23: 217-243.
- [20] Haisken-DeNew J P, Hahn M H. PanelWhiz: Efficient Data Extraction of Complex Panel Data Sets – An Example Using the German SOEP. Journal of Applied Social Science Studies, 2010, 130(4): 643-654.
- [21] Singer J D, Willett J B. Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence. Oxford University Press, Oxford, 2003.
- [22] Statistisches Bundesamt. Fachserie 1, Reihe 4.1.2. Statistisches Bundesamt, Wiesbaden, different volumes.
- [23] Wagner M. Räumliche Mobilität im Lebensverlauf: Eine empirische Untersuchung sozialer Bedingungen der Migration. Enke, Stuttgart, 1989.

- [24] Statistisches Bundesamt. Datenreport 2011. Ein Sozialbericht für die Bundesrepublik Deutschland. Bonn: Bundeszentrale für politische Bildung, Bonn, 2011. URL: <https://www.destatis.de/DE/Publikationen/Datenreport/Downloads/Datenreport2011.pdf> [15.03.2014].
- [25] Ruppenthal S, Lück D. Jeder fünfte Erwerbstätige ist aus beruflichen Gründen mobil. Informationsdienst soziale Indikatoren, 2009, 42: 1-6. URL: <http://www.gesis.org/fileadmin/upload/forschung/publikationen/zeitschriften/isi/isi-42.pdf> [15.03.2014].
- [26] Cleves M A, Gould W W, Gutierrez R G. An Introduction to Survival Analysis Using Stata. Stata Press, College Station, 2004.
- [27] Ott E. Pendlerprobleme in der Region Fulda. In: Ott E (eds.). Arbeitsbedingtes Pendeln. Entwicklungen und Probleme einer besonders belasteten Arbeitnehmergruppe. Verlag für Arbeit und Gesellschaft, Marburg, 1990, pp. 147-190.
- [28] Champion T, Coombes M, Brown D L. Migration and Longer-Distance Commuting in Rural England. *Regional Studies*, 2009, 43(10): 1245-1259.
- [29] Schneider N F, Meil G (eds.). *Mobile Living across Europe I. Relevance and Diversity of Job-Related Spatial Mobility in Six European Countries*. Barbara **Budrich, Opladen**, 2008.
- [30] Papanikolaou G. Berufspendlermobilität in der Bundesrepublik Deutschland. Eine empirische Analyse des Einflusses der Raumstruktur und individueller Merkmale auf das Pendelverhalten von Berufspendlern. Wissenschaftlicher Verlag Berlin, Berlin, 2009.
- [31] Schneider N F, Collet B (eds.). **Mobile Living across Europe II. Causes and Consequences of Job-Related Spatial Mobility in Cross-National Comparison**. Barbara **Budrich, Opladen**, 2010.

ICSSAM-834

A School in a Borderland: Practices of Sovereignty in States of Exception and the Appropriation of Displaced Myanmar Children

Worachet Khieochan^{a,*}

^a Master of Arts Program in Anthropology, Faculty of Sociology and Anthropology,
Thammasat University, Thailand.
Email: pintobook@gmail.com

Abstract

The study aims to apply anthropological analysis on schools. The area of the study is located at Baan Ta Aat School, Tha Sai Luad sub district, Mae Sod district, Tak province. As an area of the state of exception, that the maximum power (Sovereignty) operating on the displaced children of Myanmar.¹ Using the concept of State of exception and Graduated Sovereignty from Aihwa Ong, the study intends Baan Ta Aat School is an area that resembles a state of exception, however. Maximum power (Sovereignty) of any school district from operating in the state. Each type of maximum power (Sovereignty), however. There is convergence or not. And displaced Myanmar students with a maximum power of these negotiations, however.

This research is based on field studies. Supplemented by the documentation. I proposed that the Baan Ta Aat School is the education system in the form of the Thai government in the face of authority of other state except, but with the educational system in this school also aims to ensure the stability of the state prevail. Sovereignty of the Thai government does not operate in flexibility and digests it in a state of exception, however.

There are direct powers and indirect powers in Baan Ta Aat School that exercise through school's policies and activities that cooperate with learning centers. Direct power is belong to Thak academic area office, while Indirect powers are exercised by NGOs, ASEAN and international organizations that play a big role in executing this school, especially when the school located in special economic zone. Negotiation of these children is shown obviously, they travel back and forth across border and they have an identification card, which permitted by Thai Government. Most of all, entering to Thai school is the way to distinguish themselves from other Burmese children and it's an opportunity to progress in Thai academic system that is their main goal.

¹ I defined Burmese Displaced children as children who cross the border from Myanmar side, which out specifying any ethnicities. I emphasize the areas that they came from rather than ethnic aspects of the children.

Keywords: displaced Myanmar children, education, school, sovereign power, state of exception.

1. Introduction

The article on “A School in a Borderland: Practices of Sovereignty in State of Exception and the Appropriation of Displaced Myanmar” aims to analyze Thai state’s sovereignty operating on a borderland, where is special areas. The research emphasizes on displaced Myanmar children who study in a school of Thai State, in Mae Sot District, the borderland of Thailand – Myanmar. The study aims to understand; How about the characteristics of the state of exception in Baan Ta Aat school?, Except the sovereignty, what type of maximum powers do operate on this school, How does each power operate ?, Isn’t them meet each other?, How?. Additionally, to study how do displaced Myanmar students adjust and negotiate with the maximum powers?

The key argument is “the educational system of Thai governmental school, as an operational area of the power of Thai state in facing other maximum powers under the condition of state of exception, aims to ensure the stability of the state prevail. However, sovereignty of Thai state does not practice in flexibility or gradually. Nevertheless, these displaced Myanmar children do not only yield to sovereign powers, but also, can negotiate toward them”

The literature review on this issue was conducted. The researcher uses anthropological methods; a key method is field studies consisting of in-depth interview and participating observation by engaging to students in school; in teaching process and all kinds of activities in this school. Moreover, the researcher went to Myawaddy, Myanmar to interview and learn about the life style of students and their parents.

2. Main Body

Regarding the field studies, Baan Ta Aat School, located on the borderland Thailand – Myanmar, Ta Sai Luad division, Mae Sot district, Tak province, is a compulsory educational school of Thai state. Even though the displaced Myanmar children come to interact with this area in different context and culture, they have the same purpose; that is to study in Thai educational system. Meanwhile, Thai state intents to arrange the academic system for them.

It brings about the primary attention toward the researcher; how does school system practice on these displaced Myanmar children? Consequently, the researcher focuses on studying on the groups of children who study in the school of Thai state, with anthropological point of views.

Conceptual Framework

Considering the view through the glasses and conceptual framework of an anthropologist, Aihwa Ong (2006), on the concept of state of exception; Ong keenly questions and criticizes on the ideas of Agmben on “homo sacer sovereign power and bare life”, including “the state of exception”. Ong states that Agamben’s idea toward the state of exception is too narrow. It is just the basis of “homo sacer sovereign power and bare life”.

He argues that the state of exception can be boarder understanding namely; the state of exception, as a policy adjustment, can be both integrated and separated. Meanwhile, practically, homo sacer sovereign power can be conducted in various strategies. However, sometimes, they contradict to each other and confront several challenges. Thus, instead of being simply singular or opposite traits toward the normal customs and the state of exception as Agamben presented, the “homo sacer sovereign power” can be the flexible and dynamic quorum in calculating the options and the formation and stability of exception. (Ong : 2006, in Anusorn : 2010)

Furthermore, this article employs the view of “Graduated Sovereignty” presented by Ong (2006). He proposed that Neoliberalism, which is often understood as an economic doctrine, actually, is the latest developmental stages of biopolitics, a set of individual controls to extract the life force from them, or powers of governmentality, which politically applies knowledge and market calculation to cultivate individuals and build an identity.

This kind of governmentality power practices in the state of exception, in order to challenge with global market, controlled institutes, and multinational non-profit organizations (NGOs). Most of underdeveloped countries do not have any alternative, except depending on the state of exception by establishing the special economic zone, where the state permits the regulations from other sources to practice concurrently. In this state of exception concept, the state turns to be the graduated sovereignty and changes from restrictedly national protector to be an administrator of area and people from all walks of life, who connect to global market (Ong : 2006, referred in Anusorn : 2010)

Regarding the concept of Aihwa Ong, the researcher selects Mae-Sot distract, Thak province, as the study area because of several special features of the area, namely; (1) being borderland of Thailand – Myanmar (2) being port of the international trade (3) being special economic zone (4) being a self-governing city in form of Mae-Sot municipality (5) being the hub city of the ASEAN Community.

All are special geographical characteristics and pattern of government of Mae-Sot. As a result, Thai state have to act in various rules; to support for creating new rules, to comply with the

coming rules and regulations, and to interact with people of Myanmar in form of either trading, laboring, or educational development for migrant labors' children.

As seen, regarding the anthropological framework, this area is very motivating. In consequent of those, the researcher is interested on the confrontation toward global market of Thai government. The obvious operation is to establish the special economic zone and self-governing area, which is different from other area. Because of the special economic zone structure, several agencies of Thai government practices on Mae-Sot area. Meanwhile the government also provides more flexibility, and permits various organizations operate on this area, likewise its agencies.

A School in a Borderland

Baan Ta Aat School, located on Ta Sai Luad division, Mae Sot district, Thak province, is a study area, as a compulsory educational school of the Education Ministry, under the supervision of the Thak Office of Educational Service Area 2. The researcher selects this school because of 5 reasons consisting of;

1) Among state schools, there are the largest numbers of Myanmar students enrolled in the school system. Here, therefore, becomes a model of teaching system organized for displaced Myanmar children, from kindergarten to primary level (Grade 6).

Previously, Baan Ta Aat School had only about 60 Thai students. Nowadays, there are more than 1,000 students, which about 90% are Myanmar children. This school has intensive teaching courses for displaced Myanmar children, same as to the compulsory curriculum in all respects.

2) Regarding the data in 2011, there is almost 100% of displaced Myanmar children studying in this school; 1,177 displaced Myanmar children, and only 27 Thai students.

3) In 2010, the school was recruited from the ASAEN community, which has policy to promote knowledge about neighborhood countries in ASEAN to students, to be one of the master school models of the ASEAN Community, including obtains academic and budgets support from many ways.

4) Baan Ta Aat School has school within school system, which, in 2009, Tak Education Service Area Office 2 conducted MOU with 5 vicinity-learning centers; consisting of Pa Yan Doa Learning Center, Nong Bua Dang Learning Center, New Day Learning Center, Terasa Learning center and Kwai Kor Bong Learning Center.

5) This school gets subsidization and teaching-methodological promotion from various organizations, both from international organization, such as, International Labor Organization,

UNICEF, and national organization, such as World Education Consortium. Including, multinational NGOs from other area, as well as local organization, such as Mae Sot civil society, local governments and private learning center.

In sum, the researcher selected to study on Baan Ta Aat School, located on Ta Sai Luad division, Mae Sot district, Tak province, as a part of Thai state, where values, regularities, and operational rules are practice on the school.

The study displayed that school and education are just parts of endurance of the state to sustain national prevail. Even though Thai state establishes the special economic zone and the state of exception, providing other organizations and sovereignty to interfere with, as well as practicing the educational system in governmental school as an operational power to encounter other maximum power in the state of exception, the educational system in this school mainly aims to ensure state security.

Hence, Thai state sovereignty does not operate flexibly and gradually in the area where the state of exception is practiced. However, the displaced Myanmar children are able to negotiate those powers in several forms.

Cross-border life beyond frontier

Being a student brings about life beyond frontier as this status makes the displaced Myanmar children, who live in Myanmar can cross border legally without any identity document. Most Myanmar students travel back and forth across border to school by taking boat across Moei river from natural riverbank, then riding bicycle to school.

Likewise, 2 brothers, named “Joke”, 16 years old, and “Num”, 15 years old, studying at Baan Ta Aat school since grade 1 to grade 6, across border to study for 6 years. Their family have 5 members; father, mother and 3 siblings, live in Myawaddy, Myanmar. Their father works as a boat rider to across the Moei river, while mother is a vendor. Their younger sister studies in Myanmar. They both study in the same class, same grade. Being leader students, president and vice-president, they have a lot of responsibilities in school such as being a precentor to sing Thai national anthem, pray, sing royal anthem, and lead almost all morning rituals, in front of flag pole.

During the interview, Joke said, “I never want to stay in Myanmar. I want to be Thai. I think that if I have a higher education, I would have rights to get Thai identification card. Anyway, I don’t know isn’t it possible? It is quite difficult indeed. He continually mentioned, “Actually, we, Karen, don’t have our own country, so we can live anywhere”

His mother gave more information “Joke never watch Myanmar TV program or even any Myanmar drama. He prefers to watch Thai drama and listen to Thai music. Sometime, his younger sister wants to watch Myanmar drama, but he doesn’t allow her to do that. He often asks his sister to watch Thai TV programs”

Joke's mother told more "Joke took class in Myanmar for a year, then leaved to study at Bann Ta Aat School, in Thailand, with his younger brother. That why, so far, they are studying in the same class. They both prefer to be Thai. At school, when getting recruit for competitions, they can't join in any activity. As they don't have ID card. They, frequently, complain to me that they feel very slight. Again and again, they tell me that they want to get Thai identification card and have surname. And ask me why we don't have it, like others. Moreover, when going to school, they always come back home late. They don't want to go home. On the weekend, they also go to school either to play with friends or to attend special classes. Several times, they try to motivate me to buy land at Thailand and build house over there. I have to explain them that it is unaffordable for us. Significantly, we don't have surname and ID card. Therefore, we can't buy land. That all I try to clarify to them.

It could say that when Myanmar students across border to studying in Thailand, with student status, they can adjust their living on the borderland well as they act like there is borderless. They feel that to cross Moei river, the international border between Thailand – Myanmar, is like crossing river in front of their houses, not borderland. It could be considered as utilization of benefits from state policy of these displaced Myanmar children.

Result and Summary

As presented through stories of the displaced Myanmar children, parents, Myanmar teachers in learning center, when they are in uniform in Thai state school, which is a pattern of a technology of the state, they can adapt themselves under influent powers, regarding the concept of Ong (2003 : 276), migrants, as citizens who are independent.

However, Ong notes that humanity in each citizen can be socialized and built identity in unconventional patterns. They can negotiate or disobey in several ways. Looking the technology of state through Ong's point of view, the researcher found that there are plenty of technologies of state in the area of displaced Myanmar children. They penetrate to be a part of their living, in daily life basis, operating through various forms. For example, the technology to regulate subject of "Foreign Representatives", controlled by the unregistered identification card, so called "10 years ID card", the name changing after enrolling Thai school system, while migrant children in learning centers still use the originally ethnic name. Furthermore, the technology of Thai state to control the displaced Myanmar children (students) is to bring them to Thai school system and provide them education, so as to state security. Whatever, this technology is a critical way for them to obtain education in Thai school system.

Additionally, the technology of bringing displaced Myanmar children in learning center to study in governmental school causes a lot of children have their name in Thai state system. They need to learn Thai language as well as do intensive examination. That means they have

to pay more attention to learn Thai language also, joint to Thai students in several activities, such as; sport day, the graduated ceremony, giving certificates to graduated kindergarten and grade 6 students, so called “Little Graduate Day”

Moreover, when looking at displaced Myanmar students, they take the technology of government to appropriate and give sovereignty the new meanings. Even so, they are controlled by sovereignty; it is beneficial to their survival.

As regards, a boy named Kraisak try to attend Thai school and pay his endeavor to study Thai language, even if it is very difficult to him. Including studying together with classmates who have various ages. He persists and waits for 10 years ID card. As he believes that the card would make his existence in Thailand flexible, easy and is possible to work in further places. To Num and Joke, although they have permanent address in Myanmar, they successfully struggle to study in Thai school. They are able to negotiate to school enrollment system and also travel across border back and forth. With diligence and curiosity to learn Thai language, they become top students of the class. Obeying teachers and restrict regulations, they are entrusted from teachers and schoolmates to be a president and vice-president. Strictly practicing on school’s rules and regulations, they are delegated, from teacher, to control and look after other students. Their adaptation toward the technology of state does not obviously paradoxical display, but it is in form of negotiating with the technology harmoniously. They only aim to gain further study in good Thai school or have independent life in Thailand. The ultimate goal is to get Thai identification card and also surname.

Another immigrant from learning center who has chance to enroll in Thai school is Manop. He is an orphan from Myanmar. Previously, he thought that it is impossible to enroll Thai school, as his family is very poor; his parents do not only lack of knowledge, but also are unaffordable. When getting an opportunity to study because of working for Thai governmental school and learning centers in that area, he strictly complies with the rules and regulations. It makes him know Thai language, get 10 years ID card and opportunity to study further in Thailand.

Regarding mentioned case studies, they are in the place of state and Thai educational system. They realize on benefits of education and utilize them. During living on the borderland, they are able to adapt the relationship between them and school as well as educational system. As shown, the displaced Myanmar students have to strive, over 6 years, to achieve their ultimate goal. At least, aforementioned-4-displace-Myanmar students have a great opportunity to go to the center of Mae-Sot by the uniform named “Education”

It could be seen that the displaced Myanmar students in Baan ta Aat school, where there are numerous practices of sovereignty toward areas, from both state and multinational NGOs, have to face Thai state, especially, in educational aspect.

Thai state contently collaborates with those multinational organizations to figure out the assembly working point and appearance of state in practicing on human rights basis. For instance, to provide education coverage to all children living in Thailand, to against child labor trafficking, and to give children chances to study Thai language and Thainess through curriculum, state activities, and symbols in school. In addition, the state hands out technologies to children, teachers, learning centers, and schools.

Recommendation

As this study is still on process, the researcher considers the result as a basic phenomenon happening in the studying period, of which 2011, an educational year of Baan Ta Aat school, in semester 1 and 2.

As this study had some limitation on study area and target group accessibility. The target group was confined in only group of displaced Myanmar children who can speak Thai and study in Thai educational system. They have been socialized, given knowledge, established loyalty toward nation, religious, and monarch. Nonetheless, they feel alien from other displaced Myanmar children who are child labors, uneducated children, or children in NGOs' learning centers.

Moreover, the research conduction could not cover over all interesting dimensions such as, gender, social class; and target group, such as groups of students in learning centers, parents. In the future, if the researcher has an opportunity to conduct further research, these dimensions will be taken in to consideration. Predictably, it would have much more interesting groundbreaking.

3.References

Ong, Aihwa

2003 Buddha is Hiding: refugee, citizenship ,the new America.Berkley and London : University of California Press.

Ong, Aihwa

2006 Neoliberalism as exception: mutations in citizenship and sovereignty : Duke University Press.

Unno,Anusorn

2010 “We Love Mr.King” : Exceptional Sovereignty,Submissive Subjectivity,and Mediated Agency in Islamic Southern Thailand : University of Washington

Management & Marketing III

AV Room

16:30-18:00

Thursday, May 8

Session Chair: *Prof. Nirawit P Piarasd*

ICSSAM-714

Concept Paper ELOTIS: Enhancing Leadership of Outsourced Teams in Industrial Service Environments

Nathalie Ascher

Baden-Wuerttemberg Cooperative State University Stuttgart

Prof. Dr. Stefan Huf

Baden-Wuerttemberg Cooperative State University Stuttgart

Prof. Dr. Marc Kuhn

Baden-Wuerttemberg Cooperative State University Stuttgart

ICSSAM-761

Guidelines to Promotion of Agro-Tourism : Case Study Strawberry de Namnao Farm, Phetchabun Province, Thailand

Rossukon Khonkumkard

Vongchavalitkul University

ICSSAM-793

Training Technique with Coaching: A Case Study on High Performance Organization (HPO) in Nakhon Ratchasima Province Thailand

Nirawit P Piarasd

Nakhon Ratchasima Rajabhat University

ICSSAM-977

Depreciation Report In Strata Management: Lessons Learnt From British Columbia, Canada

Nor Asiah Mohamad

International Islamic University

ICSSAM-782

The Characteristics of Board of Supervisors and Earnings Management: An Empirical Study

Yuedong Li

The Southwestern University of Finance and Economics

ICSSAM-700

Using Social Network Analysis to Explore the Internet Purchase Intention of Consumers

Yi-Fen Chen

Chung Yuan Christian University

Po-Hung Lin

Chung Yuan Christian University

ISEPSS-2067

Value Chain Strategies for Maximizing the Value of IoT Service Providers

Chi-Yo Huang

National Taiwan Normal University

Josh Kuo

Radiantech, Inc.

ICSSAM-714

Concept Paper ELOTIS: Enhancing Leadership of Outsourced Teams in Industrial Service Environments

Nathalie Ascher

Baden-Wuerttemberg, Cooperative State University Stuttgart, Paulinenstr.50
70178 Stuttgart
nathalie.ascher@dhbw-stuttgart.de

Stefan Huf

Baden-Wuerttemberg, Cooperative State University Stuttgart, Paulinenstr.50, 70178 Stuttgart
huf@dhbw-stuttgart.de

Marc Kuhn

Baden-Wuerttemberg, Cooperative State University Stuttgart, Paulinenstr.50, 70178 Stuttgart
kuhn@dhbw-stuttgart.de

Abstract

In the context of today's homogenization of goods, industrial services are of increasing importance in order to differentiate products and generate comparative advantages. There are a rising number of small and middle-sized companies focusing on industry related services such as development services, financial services, technical services, consulting services, sales services, HR services, and logistics services [1]. From a HRM point of view, these companies operate under special conditions as an increasing number of outsourced teams are being sent out to work directly on-site at the client's company. Often members of these out-sourced teams have spent little to no time working at their actual employer's headquarters. These outsourced teams are often deeply incorporated in organizational structures, procedures and processes of the client resulting in employees' disorientation, frustration and lacking motivation while working in this area of conflict between the employer and the client.

Furthermore, due to a lack of career development possibilities the industrial service companies often only employ these employees for several years and then encourage them to look for a better job afterwards. Therefore, an emphasis is placed on professional development and further qualifications [2, 3, 4, 5]. These types of industrial service companies have not received much attention within the fields of human resource management (HRM) and leadership and therefore often lack HRM instruments that are appropriate for their particular operating context [2, 3].

ELOTIS, which stands for Enhancing Leadership of Outsourced Teams in Industrial Service Environments, is a cooperative founding project between the Baden-Wuerttemberg Cooperative State University in Stuttgart and an industrial partner company. The goal of this conceptual paper is to investigate the following research questions and derive a research design.

- 1) What are the critical success factors for leading outsourced teams of industrial service companies?
- 2a) Which HRM and development tools are particularly suitable in order to increase medium-term commitment of outsourced teams in industrial service companies?
- 2b) How can conventional HRM and development tools be specifically adapted to the particular operating context of the industrial service company?

The theory-based analysis of the research questions outlines aspects within the fields of commitment [6-20] and leadership [21-25] and their applicability to the situation of outsourced teams in industrial service environments. Based on these findings an empirical research design including method and data triangulation [26] will be developed in order to evaluate essential requirements for HRM and development tools and best/good practices for leading outsourced teams of industrial service companies. Within this benchmark study quantitative surveys and qualitative interviews (method triangulation [26]) will be conducted with both industrial service companies and other institutions with short-term employment such as the military (data triangulation [26]). The responses will ultimately be used to develop the framework structure for an HRM concept focusing on human resource development for industrial service companies, which provide their services with the help of outsourced teams on site at the client company.

Outsourced Teams – Definition and Differentiation

HRM literature focuses in general on the typical employee-employer relationship. However, some authors have already examined specific leadership situations similar to the set-up of the outsourced teams analyzed within ELOTIS [2, 3, 5, 19]. George and Chattopadhyay, whose work about “contracted workers” matches the ELOTIS set-up best, define contract workers as “relatively high-skilled employees who have limited physical contact with their primary employer and who have limited temporal and administrative contact with their client organization”. They are employees of one organization who work on site at another organization and can work for different clients simultaneously [3]. Other related studies include Kinnie and Swart [2] who analyzed service firms in a cross-boundary context where employees fulfill obligations for more than one entity, and Meyer [19], who describes the “relatively new but increasingly common situation in which employees are contracted out and therefore have a relationship with both the contracting and the client organization”.

Within ELOTIS we restrict ourselves to outsourced teams who work exclusively and permanently for one client. Furthermore, for our purposes the employing organization refers to the organization which employs and leads the members of the outsourced team. Often employees are especially recruited to work for one particular customer. The client organization refers to the organization on site which the outsourced team works and to which the members of the outsourced team provide the service. We do not include temporary or subcontracted workers, intermediate agencies, self-employed employees who sell their service to a client organization for a specific time and task or alliances and partnerships.

Commitment as dependent variable

Within ELOTIS commitment is defined as a dependent variable. Therefore, a definition of the term and construct of commitment, the different types and the different foci of commitment is necessary.

Definition of the term: Within the literature there is a lack of consensus in construct definitions concerning various competing approaches and conceptualizations of the commitment construct [6, 7, 8, 9, 10]. In 2009 Klein, Molloy and Cooper [9] identified eight “distinct conceptualizations of commitment” which can also be overlapping [10] in certain characteristics: Commitment as an attitude, a binding force, a bond linking employees and organizations, investments/exchange, identification, congruence, motivation or continuance. In consideration of the previously described situation of outsourced teams that is analyzed within ELOTIS we chose to use the definition of commitment as identification following Mowday, Porter and Steers [11] who define commitment as “*the relative strength of an individual’s identification with and involvement in a particular organization*”.¹ According to this definition commitment can be characterized by at least three factors 1) a strong belief in and acceptance of organizational goals and values 2) a willingness to exert considerable energy on behalf of the organization 3) a strong desire to maintain membership in the organization [11].

In the specific situation of outsourced teams the employees are not formal members of the client organization (although there is high interaction and daily contact) nor is the employing organization a part of the employees’ social identity as they have very limited interaction [3].

¹ also used in [3, 12, 13, 16]. - Vandenberghe and others [e.g. 6, 2] in contrast define identification as a potential antecedent of commitment and therefore prefer the commitment definition of Klein [9] who defines commitment “as a perceived bond between the individual and the organization”.

Therefore one aim of the ELOTIS project is to identify the organizational identification of members of outsourced teams.

Types or Components of Commitment: Most researchers [cf. 6, 7, 10, 14, 15] use Meyer and Allen's "Three-Component Model of Commitment" [7, 14, 15], which differentiates affective, continuance and normative commitment. The different types of commitment are not exclusive, rather they co-exist in varying degrees and characteristics [7, 14, 15].

Affective commitment is related to the employee's emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so [6, 10, 14, 17].

Continuance commitment refers to an awareness and recognition of the costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so [6, 14]. Other authors use the term calculative commitment with the same explanation. For the remainder of this paper we will use this latter term (calculative commitment) to describe commitment based on a consideration of the cost and benefits associated with organizational membership [10, 17].

Normative commitment reflects a feeling of moral obligation towards the company, its values and targets or the other employees resulting in a sense of loyalty toward the organization [7, 14, 17] and the obligation to continue employment. "Employees with a high level of normative commitment feel that they ought to remain with the organization." [7]

Foci of Commitment: Employee commitment can have different foci. „Foci of commitment are the particular entities, such as individuals and groups, to whom an employee is attached" [18] e.g. the employing organization, the profession/occupation and career or the client organization [6, 10, 17]. The different foci can be complex and sometimes problematic especially when multiple commitments create incompatible demands and cause a "commitment dilemma" [6, 9, 10, 18]. In addition to Reichers' regularly applied "model of multiple organizational commitments" further research studies confirm the existence of multiple foci of commitment [2, 12, 13, 19, 20]. In their research on contracted workers, George and Chattopadhyay [3] identify "Dual Organizational Commitment" as the result of their findings which indicate that "contract workers identify with both the employing and client organizations", based on perceived characteristics of the organization and social relations within the organization, whereas Kinnie and Swart assesses the role of the client organization and profession as especially important within service companies [2].

Within ELOTIS we want to find out what it is that employees in outsourced teams of industrial service companies are committed to and identify the differing patterns of commitment to the various internal and external groups, possibly resulting in a matrix (cf. Table 1 modelled after Meyer and Allen [14]), and allowing us to answer the research questions.

	Nature of Commitment		
Focus of Commitment	Affective	Calculative	Normative
e.g. Employer Organization			
e.g. Client Organization			
e.g. Profession			

Figure 1: Possible framework for commitment profiles for employees in outsourced teams of industrial service companies

Leadership as independent variable

In order to answer the second research question leadership is defined as independent variable within ELOTIS. Therefore research will be carried out on literature of Distance Leadership, E-Leadership and Leading of Virtual Teams in order to find possible HRM Instruments to enhance leading of outsourced teams of industrial service companies.

Distance Leadership: Often Distance Leadership is described as a consequence of globalization. Distance, however, does not only refer to the rising geographic distance of collaborating teams but also to demographic, social, structural and functional distance [21, 22]. Several researchers state a negative impact of distance on leadership success and the relationship between leaders and employees as it decreases efficiency, performance and satisfaction and increases resisting behavior and fluctuation [21, 22]. According to Eichenberg this negative influence can be partially mitigated with the help of task- and employee-oriented styles of leadership as well as the use of compensatory incentives and extensive media [21].

E-Leadership: E-Leadership can be defined as “social influence process mediated by AIT (Advanced Information Technology) to produce a change in attitudes, feelings, thinking, behavior, and/or performance with individuals, groups and/or organizations” [23]. This is possible in a one-to-one as well as one-to-many way.

At the same time AIT is changing the working environment, influencing leadership processes and challenging “leadership in the form of directly leading employees” [21]. This is why

leaders will need to “play a more proactive role in creating the social structures that foster the implementation of AIT” [23]. Furthermore there is the need for impersonal forms of interaction with the increasing role of Advanced Information Technology. Organizational members communicating with the help of AIT create new forms of collaboration e.g. Leading Virtual Teams.

Leading Virtual Teams: As outsourced teams do not have regular contact with the employing organization, the theories of leading virtual teams could also be applied to the leader-employee relationship in this context. According to Weibler, despite the steady improvement of communication and information technologies Virtual- and E-Leadership are not yet able to approach the effectiveness of face-to-face leadership [21]. Within virtual teams, trust building is one major critical aspect as employees are led at a distance [21, 24, 25]. Therefore, control via direct supervision is not possible. Cascio and Shurygailo suggest leaders tailor their leadership style to the virtual work arrangement (e.g. generating norms and procedures in an early stage of the teambuilding process, recognizing and encouraging aspiring employees, etc.) [21, 25]. Some leadership aspects have to be completely redefined when leading virtual teams. One example is the process of providing feedback, supporting, rewarding and enhancing motivation. In a virtual environment members tend to focus on their tasks instead of taking time to get to know each other and maintain close relationships.

Therefore, developing relationships [21] and trust [24] in virtual teams is of increased importance. In their research Malhotra, Majchrzak and Rosen [24] found further success factors such as ensuring that “distributed diversity is understood and appreciated”, a proper management of the virtual work-life cycle, regular monitoring of the team progress, enhancing external visibility of the team and its members and ensuring each employee individually benefits from the team [24]. Within ELOTIS we will be investigating whether these aspects also play a decisive role for leading outsourced teams in industrial service companies.

Proposed research design

Based on the theoretical findings a research concept will be set up as illustrated in Figure 2. Using the implications of commitment and leadership theories we will derive an empirical research design in order to evaluate essential requirements for HRM and development tools and best/good practices for leading outsourced teams of industrial service companies.

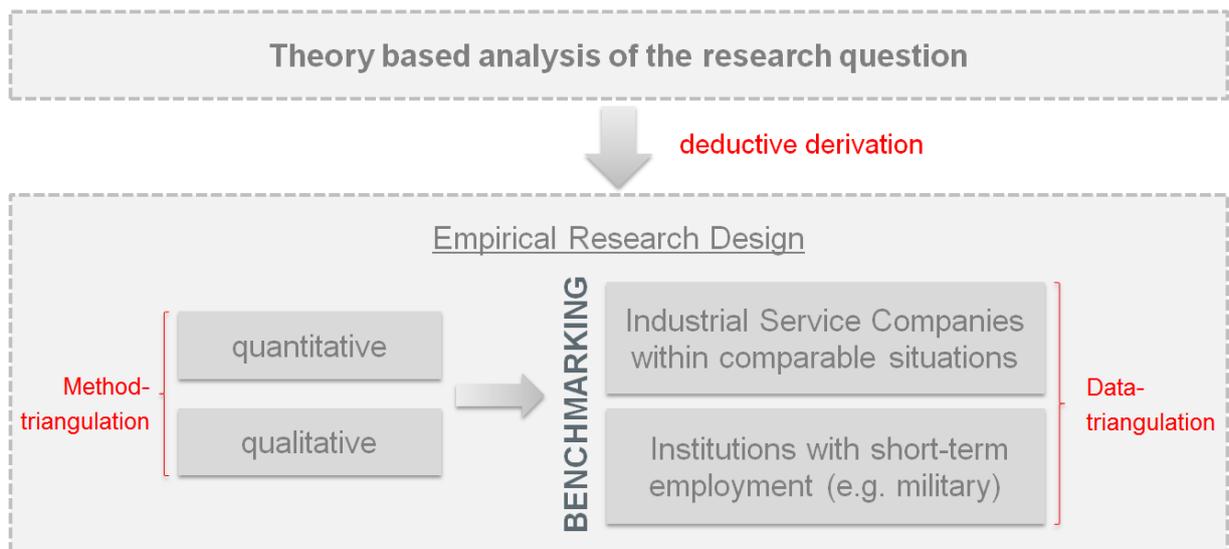


Figure 2: ELOTIS Research Design

We plan to begin with a qualitative approach in order to better understand the situation of outsourced teams in industrial service companies and identify commitment profiles and leadership perceptions. The focus of qualitative approaches is to identify, describe and understand empirical circumstances and social processes and to develop classifications or typologies [27]. Thus guided interviews will be conducted with members of outsourced teams and their leaders in the industrial service company. Additionally we plan to consult other institutions with short-term employment (e.g. the military) to identify possibilities of professional development and further qualifications. The combination of these two data sources (data triangulation – [26]) enables us to gain new ideas for the human resources development of members of outsourced teams. The findings and developed HRM instruments will be tested with the help of a quantitative survey afterwards. The combination of qualitative and quantitative methods in order to mutually verify the results or complete the findings is called method triangulation [26]. Furthermore the quantitative survey aims to identify factors that influence the development of commitment. These questions will be checked with the help of bi- and multivariate analysis techniques, including linear regression models will be applied.

References

- [1] Kuhn M, Zajontz Y, Kollmann V. Erfolgsfaktoren industrieller Dienstleistungen – eine branchenübergreifende Homogenität von Erfolgsgaranten?. In *Industrie Management*, vol. 25, 2009, pp. 16-20.
- [2] Kinnie N, Swart J. Committed to whom? Professional knowledge worker commitment in cross-boundary organisations. In *Human Resource Management Journal*, vol. 22, 2012, pp. 21- 38.
- [3] George E, Chattopadhyay P. One Foot in Each Camp: The Dual Identification of Contract Workers. In *Administrative Science Quarterly*, vol. 50, 2005, pp. 68-99.
- [4] McElroy, J C, Morrow P C, Laczniak R N. External organizational commitment. In *Human Resource Management Review*, vol. 11, 2001, pp. 237-256.
- [5] Coyle-Shapiro J, Morrow P, Kessler I. Serving two organizations: Exploring the employment relationship of contracted employees. *LSE Research Online* (<http://eprints.lse.ac.uk>), London, 2006.
- [6] Vandenberghe C. Organizational Commitments. In Klein H J, Becker T E, Meyer J P (editors). *Commitment in Organizations. Accumulated Wisdom and New Directions*, New York, 2009, pp.99-136.
- [7] Meyer J P, Allen N J. A three-component conceptualization of organizational commitment. In *Human Resource Management Review*, vol. 1, 1991, pp.61-89.
- [8] Becker T E, Klein H J, Meyer J P. Commitment in Organizations: Accumulated Wisdom and New Directions. In Klein H J, Becker T E, Meyer J P (editors). *Commitment in Organizations. Accumulated Wisdom and New Directions*, New York, 2009, pp.419-452.
- [9] Klein H J, Molloy J C, Cooper J T. Conceptual Foundations: Construct Definitions and Theoretical Representations of Workplace Commitments. In Klein H J, Becker T E, Meyer J P (editors). *Commitment in Organizations. Accumulated Wisdom and New Directions*, New York, 2009, pp.3-36.
- [10] Cooper-Hakim A, Viswesvaran C. The Construct of Work Commitment: Testing an Integrative Framework. In *Psychological Bulletin*, vol. 131 (2), 2005, pp. 241-259.
- [11] Mowday R T, Porter L W, Steers R M. *Employee-Organization Linkages – The Psychology of Commitment, Absenteeism, and Turnover*, Academic Press Inc. San Diego California, 1982.
- [12] Becker T E. Foci and bases of commitment: Are they distinctions worth making?. In *Academy of Management Journal*, vol. 35 (1), 1992, pp. 232-244.
- [13] Becker T E, Billings R S, Eveleth D M, Gilbert L. Foci and Bases of Employee Commitment: Implications for Job Performance. In *Academy of Management Journal*, vol 39 (2), 1996, pp. 464-482.
- [14] Meyer J S, Allen N J. *Commitment in the workplace- Theory, Research, and Application*, SAGE Publications Inc. Thousand Oaks, California, 1997.

- [15] Meyer J P, Herscovitch L. Commitment in the workplace. Toward a general model. In *Human Resource Management Review*, vol. 11, 2001, pp.299-326.
- [16] Riketta M, Van Dick R. Foci of attachment in organizations: A meta-analytical comparison of the strength and correlates of workgroup versus organizational identification and commitment. In *Journal of Vocational Behaviour*, vol. 67, 2005, pp. 490-510.
- [17] Gmür M, Thommen J-P. *Human Resource Management – Strategien und Instrumente für Führungskräfte und das Personalmanagement*, 3rd edition, Versus Verlag AG, Zürich, 2011.
- [18] Reichers A E. A Review and Reconceptualization of Organizational Commitment. In *Academy of Management Review*, vol. 10 (3), pp. 465-476.
- [19] Meyer J P. Commitment in a Changing World of Work. In Klein H J, Becker T E, Meyer J P (editors). *Commitment in Organizations. Accumulated Wisdom and New Directions*, New York, 2009, pp. 37-68.
- [20] Redman T, Snape e. Unpacking Commitment: Multiple Loyalties and Employee Behaviour. In *Journal of Management Studies*, vol. 42 (2), 2005, pp.301-328.
- [21] Weibler J. *Personalführung*, 2nd edition, Verlag Franz Vahlen, Munich, 2012, pp. 552-567.
- [22] Hertel G, Lauer L. Führung auf Distanz und E-Leadership – die Zukunft der Führung?. In *Die Zukunft der Führung* (Grote S ed.), Springer-Verlag, Berlin/Heidelberg, 2012, pp. 103-118.
- [23] Avolio B J, Kahai S, Dodge G E. E-Leadership: Implications for theory, research, and Practice. In *Leadership Quarterly*, vol. 11 (4), pp. 615-668.
- [24] Malhotra A, Majchrzak A, Rosen B. Leading virtual teams. In *Academy of Management Perspectives*, vol. 21(1), 2007, pp. 60-70.
- [25] Bell B S, Kozlowski S W. A typology of virtual teams: Implications for effective Leadership. In *Group & Organizational Management*, vol. 27 (1), 2002, pp. 14-49.
- [26] Flick U. *Triangulation – Eine Einführung*, 2nd edition, VS Verlag für Sozialwissenschaften, Wiesbaden, 2008, pp. 27-94.
- [27] Diekmann A, *Empirische Sozialforschung*, 19th edition, Rowohlt Verlag, Hamburg, 2008.

ICSSAM-761

Guidelines to Promotion of Agro-Tourism : Case Study Strawberry de Namnao Farm, Phetchabun Province, Thailand

Rossukon Khonkumkard ^a

^aLecturer of Tourism and Hotel, Faculty of Business Administration,
Vongchavalitkul University, Thailand.
Email: rossukon.cm@gmail.com

Abstract

This Abstract Journal “Guidelines to Promotion of Agro-Tourism : Case Study Strawberry de Namnao Farm, Nam Nao District, Phetchabun Province, Thailand. The objectives aim to 1) To study the context of agro-tourism at Nam Nao District, Phetchabun Province 2) SWOT analysis on agro-tourism at Strawberry de Namnao Farm 3) to propose guidelines to promoted agro-tourism in Strawberry de Namnao Farm, Nam Nao District, Phetchabun Province.

Finding of the study is divided into the context of ago-tourism Strawberry de Namnao are ready to learn agro-tourism. Guidelines to promotion of agro-tourism is divided into 5 section; tourist attraction, accommodation, accessibility, amenities, activities. Suggestion The marketing focus publicity through social media.

Keywords : Promotion, Agro-tourism, Strawberry de Namnao farm

Introduction

Tourism can be defined as an industry that provokes income distribution for population since it is important for the country’s development as it has a relationship to other areas. Natural resources are highly utilized by the push from tourism. Besides, it also promotes 1) the preservation and restoration of arts, cultures and traditions; 2) development of public utility, education and technology; and 3) the decrease of immigrations (Ketsa-ard, W. and Suwanit, P., 2011). Regarding to the importance of tourism, Thailand pronounces policies promoting this industry in order to meet the tourists’ needs. Consequently, developing tourist attractions and new forms of services becomes a guideline to promote a more attractive tourism for both domestic and foreign travelers.

Recently, the tourism trend has changed. Travelers' preference seems to be on nature, for example, new-found natural places or local life without nature damage and threats (Ketsa-ard, W. and Suwanit, P., 2011). In accordance with the fundamental structure of Thailand, it is found that two third of the population concerns agriculture. Their careers are differed by locations to do agriculture. This causes interesting particularities for agro-tourism which include agricultural concepts and tourism. This kind of tourism provides travelers with not only fun but also knowledge which can be applied to life or careers. In addition, among beautiful natural scenes handled by agriculturalists and villagers, the travelers can experience the villagers' ways of local life, traditions, cultures, conventions, patterns of activities and a variety of agricultural careers.

At the present, many regions in Thailand are able to be potentially developed into agricultural tourism attraction, for instance, Nam Nao district in Petchabun. This district is four-side surrounded by national parks; Phuluang, Phurue, Phukradueng, Phuphaman and Nam Nao national park. These jungle areas make Nam Nao year-long cool and full of beautiful sceneries. Regarded, the climate is suitable to plant cool- and warm-season vegetables. So, the attractions in Nam Nao can be sorted as agro-tourism (Manageronline, 2006).

In Nam Noa district, Strawberry De Namnao Farm is an attraction which offers activities for customers to participate. The farm has been considered as a good sample of a learning-center which emphasizes agro-tourism, for example, how to grow cool-season vegetables, lettuce and strawberry. In Thailand, strawberry farm tourism is very popular. A farm in Samerng, Chiang Mai, was firstly admired. Strawberries are grown and processed into products in order to gain higher price and increase higher profits for the villagers. Therefore, this research aims to study the guideline to promote agro-tourism from Strawberry De Namnao Farm in order to further develop and promote the agro-tourism in Nam Nao.

Objectives

1. To study the contextual information of agro-tourism at Wangkwang, Nam Nao district in Petchabun.
2. To analyze SWOT for ago-tourism at Strawberry De Namnao Farm.
3. To create a guideline of argo-tourism for Strawberry De Namnao Farm.

Scopes

1. Location

- Strawberry De Namnao Farm's area at Wangkwang, Nam Nao district in Petchabun.

2. Content

- Contextual information of agro-tourism, perspectives on surrounding areas, perspectives from entrepreneurs and SWOT analysis.

Methodology

This research was conducted in a Qualitative Research and the data was from an in-depth interview which had co-operation from the owner of Strawberry De Namnao Farm, the community's leader and relevant governmental agencies as the key informants of this research.

Findings

Agro-Tourism's Contextual Information: Strawberry De Namnao Farm

Perspectives on Surrounding Areas

Wangkwang village was established in 1842, Nam Noa, Petchabun. It is located on Petchabun Mountain Range in Nam Noa national park and there is a creek flowing down Phong River (Fong in local language). The village's popularity is approximately 4,750 people. The villagers live idyllically and most of them are agriculturalists (Thailand Information Center, 2012). Wangkwang sub-district is moderately cool and not too hot in summer because of its topography; mountainous and 114-meters from sea level. During the damp time, fog will cover the sceneries beautifully, and it is a proper time to visit (Prakraiwan, T., 2006).

The village borders the Phukradueng national park II of Thailand. It is a large highland on sandstone mountain which teenage to middle-age travelers fancy climbing to the top to see the sceneries and feel the atmosphere (Kontong, K., 2013). As mentioned, Wangkwang village is suitable to an agro-tourism attraction which has adequate potential to successfully fascinate visitors.

Perspectives from Entrepreneurs

Strawberry De Namnao Farm has a family-like administration; family members co-operation. There is no an obvious division or sector but the farm manager will take control and administer the farm in general. From the analysis of SWOT ; Strength is that strawberries are grown in a tenement which utilizes insects to control. It reduces the use of chemicals. Visitors and tourist are offered with a house or tent to stay overnight, and there are various attractions to visit such as Nam Nao national park, Nam Nao Grand Canyon, Phukradueng national park, Nam Nao big cave, hydroponic lettuce beds, strawberry farms and Fong Tai home-stay village. Moreover, the landscape is private and beautiful. The climate and location are also suitable to plant cool-season vegetables.

Visitors can also find various and good-quality agricultural products at the farm like no-chemical vegetables, lettuce, hydroponic vegetables and strawberry. Nevertheless, the Weaknesses are for example; the farm is recently operated, the products have not been quality-guaranteed, advertising and direction signs are not precise, there is a lack of continuous public relations. For Opportunities, the farm gains popularity of agro-tourism; especially strawberry that is famous and needed by the tourists. Consistent to Cai's (2003), agro-tourism has a impact on agriculture in term of job hires and income earning, plus the government promotes and supports agriculture and agro-tourism public relations. Finally, the Threats can be the difficult accessibility, road holes from traffic construction, and the uncertainty of climate which affects production like strawberry's delay bearing.

The Guideline to Promotion of an Agro-Tourism at Strawberry De Namnao Farm, Nam Nao District, Petchabun

1) Attraction

Since attractions are the most important factor for tourism, there should be an agro-tourism development for Strawberry De Namnao Farm in term of remarkableness and identity for strawberry products. Otherwise, there should be an association which purposes to increase the number of agricultural products and increase the advantage in negotiation. Moreover, defensive measure must be taken into account so that there will be no selling interference of products from other places. To protect product quality and consumers' rights, the co-operation amongst the relevant agencies should be launched, and people need to be part of making traveling routes, for example, building learning centers along the road with presentation of interesting ways of agriculturalists' life, background of Wangkwang sub-district, Nam Nao, Petchabun. Consistent to Steven, P.'s (2008), tourist attractions are the combination of traveling experiences, products and natural resources presented to tourists.

2) Accommodation

There should always be a development and increase of service staff to strengthen the ability to serve tourists at standard level and to meet the number of tourists. Also, the farm should hire administrative experts to take responsibility for accommodation achievement.

3) Accessibility

There should be an attendance for accessibility, especially road maintenance. Tourists are able to access the attractions with ease if the accessibility is in a good quality. They should also be provided with adequate buses and bus lines.

4) Amenity

There should be a development of amenity, for example, constructions, plants' information tags, security for theft, natural disasters, wild animals, and accidents. Moreover, tourists should have guidebooks for their traveling convenience.

5) Activities

There should be an activity which tends to present tourists with steps to plant non-chemical vegetables, so the farm can be both a learning center and a tourist attraction. This activity should involve agriculturalists in the community and governmental agencies should support and develop their service and agricultural competency. Meanwhile, the villagers should have received financial support from private agencies to create network and also distribute income over the community. Finally, each attraction should have a guide whose duties are to serve and give information, knowledge and explanation to tourists.

Conclusion and Suggestions

Strawberry De Namnao Farm is located in Banwangkwang, Nam Nao district, Petchabun. It began from the desired experiment of growing cool-season vegetables in Nam Nao, an area with suitability of climate. At the beginning, strawberries were grown in a building with co-operation from Faculty of Agriculture, Khon Khaen University to utilize insects to get rid of agricultural pests instead of using chemicals (Kontong, K., 2013). This provoked people to visit the farm and study the growing-plant methods and later on it became an agro-tourism.

The farm's remarks are the suitable climate to grow cool-season vegetables, home-stays, and its border to back of Phukradueng national park—the second national park of Thailand and a large highland on sandstone mountain which teenage to middle-age travelers fancy climbing to the top to see the sceneries and feel the atmosphere (Mangkung,S., 2013). As seen as an agro-tourism, the farm gains popularity from tourists and supports from the governmental agencies in term of public relations. However, there are obstacles giving an impact on visiting the farm, for example, the road in construction that causes a difficulty to access the farm, and the uncertain climate that delay bearing of strawberries. Nevertheless, the guideline to promote the agro-tourism of the farm is developed with the use of 5A's.

Suggestions

There should be promotions for marketing in which governmental agencies, private agencies and communities are involved in order to equally distribute profits as follows;

- A promotion through Thailand's Tourism and Nam Nao's Tourism websites.
- A promotion through printing medias such as guidebooks, newspapers or health books.

- A promotion through free TV channels such as Channel 3, Channel 5, Channel 7 or MCOT in Thailand.
- A promotion through Thailand's radio broadcasts to penetrate the domestic tourists.
- A promotion through guidebooks, handbills or brochures.

References

- Cai, J. (2003), Peri-urban Agriculture Development in China, *Urban Agriculture Magazine*, Number 9, April 2003.
- Ketsa-ard, W. and Suwanit, P., 2011. *Potential Assessment of Agro-Tourism in Thawee Watana District*, Bangkok Metropolitan. Mahidol University.
- Kontong, Kongrud. 2013. *Management Strawberry de Namnao farm*. Interview April 01, 2013, Strawberry de Namnao farm
- Manageronline. 2006. *New Agro-Tourism in Nam Nao*. Retrieved August 21, 2012, from <http://www.manager.co.th/Travel/ViewNews.aspx?NewsID=9490000030896>
- Prakruiwan, Thinikan. 2006. *The Development and Management of Agricultural Farm to be Agro tourism Site: A Case Study of the NOMI "Royal Tropics" Farm*. Master of Business Administration Thesis in Tourism Management, Graduate School. Khonkaen University.
- Steven, P.'s. 2008. *Destination Marketing : an integrated marketing communication approach*. Butterworth-Heinmann, Burlington, MA.
- Mangkung, Sumate. 2013. *Agro-tourism management*. Interview April 21, 2013, Strawberry de Namnao farm
- Thailand Information Center. 2012. Retrieved January 25, 2014, from <http://phetchabun.kapook.com>

ICSSAM-793

Training Technique with Coaching: A Case Study on High Performance Organization (HPO) in Nakhon Ratchasima Province Thailand

Nirawit Piarasd

Human Resource Management Department, Faculty of Management Science
Nakhon Ratchasima Rajabhat Univerisity 340 Ruranarai Rd,
Nakhon Ratchasima Province, Thailand 30000
Email address: piarasd-work@hotmail.com

Abstract

The purposes of this research were to study the located area and the management of a car-dealer company in Nakhon Ratchasima and to study training techniques used by a car-dealer company in Nakhon Ratchasima. The research instruments were questionnaires of the located area and the management used by high performance organization (HPO) and training techniques with coaching used by the car-dealer company in Nakhon Ratchasima, and the interview which answered by heads of the departments of the organization. The samples of this research were 35 employees who work for the car-dealer company in Nakhon Ratchasima. This company is divided into three departments including sales, marketing and customer services, and executives. It received the honours called President Award for the great performance in 2001 and 2005, selling in 2006, and customer services and satisfactions awarded by JD Power Institute in 2007-2012. Training techniques with coaching used by the car-dealer company was in high level. Considering for dimensions, the motivation and rewards was in the highest level. For the interview, the step of objective setting, which was the first step of the coaching and lead the coaching to accomplish the objectives, was paid attention as the most important of all steps. In addition, feedback or suggestion caused the process of the coaching ran smoothly and guided ways to improve the later coaching.

Keyword: Performance Organization/ Training Technique/ Coaching

1. Introduction

In the 21st century, things have been changed rapidly. Societies are connected easily. Relationships are more difficult to understand. Economic structure and social structure have been changed to sciences and industrial structure. The Globalization makes new organizations such as learning organization, innovation organization and high performance organization. These organizations could survive and compete with the others in the new century because they emphasise on knowing in dramatic changes and qualities of staffs in the organization. Therefore, the staffs learn things together with the success of the organization,

[1] The 21st century is a very difficult moment because it provides both creation and destruction. So, persons live in the 21st century is a changing generation. They have to understand the change of new century and their roles in order to accomplish their goals, [2] To establish a Good to Great Organization needs to emphasise on changes of individual and organization paradigms because the paradigms are important for learning in work and living, [3] Therefore, ways and patterns of improving staffs in a high performance organization are emphasised on changes of paradigms to improve staffs as potential staffs in the Globalization.

The Globalization, Free Trade, Free Flow Labour, and Asian Economy Community (AEC) have shown the importance of intangible asset, human capital, intellectual capital, or social capital. Changing of Knowledge Base society to Post Knowledge Base society makes knowledge as a power. Because value added in intangible asset is important for being a successful or failed organization, the organization with old ways of managing, which emphasised on tangible asset, has to change their points of view to know how to add values of intangible asset. Therefore, the organization has to emphasise on human capital in order to accomplish organization goals. On the same page [4] definition that a **High Performance Organization (HPO)** as organization that achieves financial and non-financial results that are better than those of its peers groups over a period of time of at least five to ten years. In the future, the roles of the executives are being become to be the leader of changing, the partner of organization strategies, and the consult of other organizations in order to get a **high performance work system (HPWS)**.

To improve the staffs' potential in the organization as high performance staffs together with being ready for AEC in 2015 has to have continuing plans via training. The changing society causes **techniques in training** such as strategies, patterns, and trainers. The organizer also has to adapt the training sessions to suit curriculum, trainees, time, and atmosphere to accomplish to objectives.

Coaching by good executives, colleagues, and experts inside and outside the organization is a process of allowing staffs to show their potentials. Therefore, techniques in training by coaching are ones of processes to improve staffs' potential. The training aims to add knowledge to the staffs, getting them to be experts in their fields.

The researcher realised the important of technique in training so this study was studied on how the training which took place in a car dealer company in Nakhon Ratchasima was used.

2. Objectives of the Research

- 1) To study the area and the management of a car dealer company in Nakhon Ratchasima.
- 2) To study technique in training of a car dealer company in Nakhon Ratchasima.

3. Definition of Terms

High Performance Organization (HPO) is the translation or definition Organizations results that are better than those of its peers groups. In study focus a car dealer company in Nakhon Ratchasima.

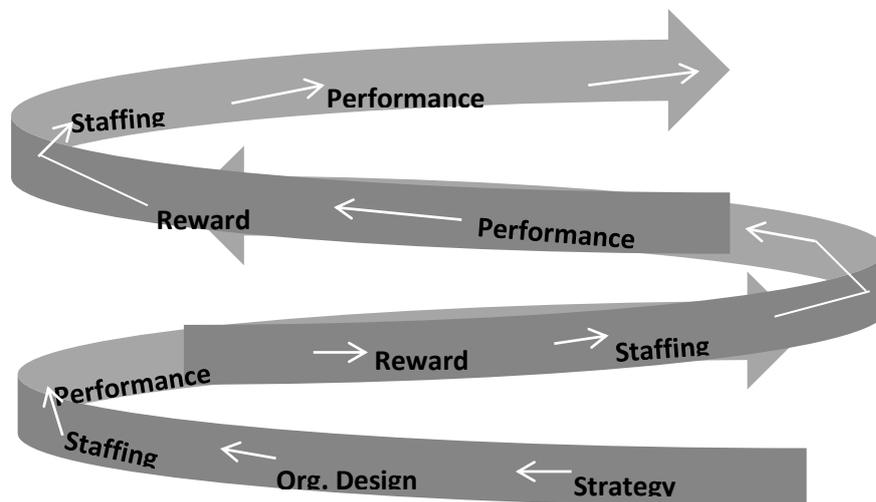
Coaching is the translation or definition Training Technique is On the Job Training with Strategy in teaching to help practitioners develop or enhance their skills in practical activities to ensure correction. Giving feedback and help give advice or provide more information.

4. Theoretical frameworks and related literature

High Performance Organization (HPO)

A reason of organization needs to be HPO is the relationship between the organization and its staffs. The organization employs the staffs with long-term contracts which called Royalty Contract. However, it has been changed to a new relationship. The organization has to attract and keep the staffs by rewarding them according to their performance in order to get high performance. AS virtuous Spiral, the starting point is from attracting good staffs, improving staffs, and keeping in touch with them. With this technique, working will be more exciting and the organization will be HPO. This technique is difficult to copy. **(Figure 1)**

Figure 1: Virtuous Spiral



Source [5]

Jim Collins [6] has written a book called Good to Great, which said that the organization is having a long great successful if the staffs feel they are a part of the organization. Therefore, to get the staffs having the same popularity will push the organization to be the High Performance Organization (HPO).

Some defined High Performance Organization (HPO) as a Modern Practice which is always attracted by the good staffs and always push the staffs to continue developing their potentials. In Thailand, the policy of the PTT Group is being the High Performance Organization forever. Hanna [7] stated that High Performance Organization has to have survival skills such as a business analysis, getting opportunities in business, being flexible, and getting the staffs to feel that they are a part of the organization. This is important for running business in the 21st century.

Linda [8] studied the qualification of being High Performance Organization (HPO) and summarised that being HPO should be 1) focus on the Right Things, 2) integrate Reconcile Different and Potentially Connecting Stakeholder needs, and 3) aim for Sustainable Success over the long term. Later, De Waal [9] also studied about High Performance Organization (HPO) and stated that HPO is 1) growing and growing, 2) able to survive in any situations, 3) reflex to the situation immediately, 4) focus on long-term successful, 5) integrate whole things in the organization, 6) develop the Core Competency continuingly, and 7) always give opportunities to the staffs.

According to a case study by De Waal and Jiraprapha [10] the PTT Group had a qualification of being High Performance Organization (HPO) set by Thailand Quality Award (TQA), and the staffs evaluation had to be planned and set Key Performance Indicators (KPIs) based on the objectives of the organization.

In summary, High Performance Organization (HPO) is the organization which being one of successful and also being in front of other organizations in the same field of business.

Training

Training is a process of allowing trainees to gain knowledge, to understand, and to have skills in their fields and the trainees also accomplish the objectives of the training.[11] explained that training is an important instrument or method which makes knowledge, skill, and positive thinking.

The management of training is different from others. It depends on what the trainer wants the trainees to gain. There are two types of trainings; 1) On the Job training, which train the trainees in an authentic situation and the trainees are took care by the expert, and 2) Off the Job Training, which emphasise on knowing and understanding.

Technique in Training

Methods or techniques in training are coaching with different styles which make trainees learn and change their permanent characters to be as the objectives like. Technique in training provides four types as follows; 1) A trainer centre, 2) A trainee centre, 3) An individual improvement, and 4) An instrument assistance training.

The result of the study by Training Magazine was found that most organizations or 91 percent of all surveyed organizations normally used classroom method in their training. [12] Trainers had to choose the training method which suits the topic of the training. In addition, trainers had to choose topic which suits themselves according to their jobs, ages, education, and training time as well.

Coaching

Coaching is a process that supports staffs to accomplish their assigned jobs, [13] Coaching has to be flexible [14] and suits the trainee because coaching is a centre of showing individual potential. Bacon, O' Connor and Lages quoted in [15] explained that coaching is a co-working method between the trainer and the trainee. It is also a way to know trainee's attitudes and characters. Studies found that good coaching could predict performance. Good coaching should be set steps as follows; Objective Setting, Motivation or Reward, Tell and Show, Test, Action, Check, and Feedback and Suggestion.[16]

Researches and this study was found that training by good coaching has various roles and should be use one which suits the trainee. The role the trainer should do is being friendly with the trainee to make the trainee believe and trust in the trainer. The trainer should also give feedback to the trainee to improve one's performance to accomplish organization goals.

4. Research Methodology

This study aimed to study technique in coaching at High Performance Organization (HPO) a car dealer in Nakhon Ratchasima. Research instrument was coaching technique. Coaching was divided into seven steps and five levels according to 5-scale Likert Scale; 1) do disagree, 2) disagree, 3) not sure, 4) agree, 5) do agree. The 35 samples were selected by purposive sampling method. The statically analysis used in this research were percentage, mean, standard deviation. The data analysis was divided into three parts as follows; 1) individual analysis; sex, age, marriage status, education, and work experience. The statistic used in this analysis were frequency and percentage, 2) analysis for coaching explanation. The statistic used in this analysis were mean and standard deviation, 3) content analysis and inductive analysis. The statistic in this analysis was summarising with qualitative method from deep interview.

5. Research Results

According to Cronbach's Alpha, the reliability of the questions in the questionnaire were between .72-.86. They were higher than .70 so the questionnaire was reliable. The validity of the questionnaire was corrected by training and coaching experts. (Table A)

This company is divided into three departments including sales, marketing and customer services, and executives. It received the honours called President Award for the great performance in 2001 and 2005, selling in 2006, and customer services and satisfactions awarded by JD Power Institute in 2007-2012

The 35 samples, staffs in the car dealer company in Nakhon Ratchasima, were 19 males and 16 females. 19 samples were between 31-40 years of age, 9 samples were under 30 years of age, and 7 samples were older than 40 years of age. For marriage status, 21 samples were single, 12 samples were married, and 2 samples were divorced or widowed. In education, 25 samples have not got a bachelor degree, 9 samples have got a bachelor degree, and one sample has got higher degree than a bachelor degree. Job experience in this company, 19 samples have been working for one to five years, seven samples have been working for six to ten years, one sample has been working for a year, and two samples have been working for more than ten years. **(Table B)**

The mean of opinions in general about training by coaching for the staffs was 4.27. **(Table C)** Furthermore, the mean of opinions in each question was also in a high level. Opinions in motivation and reward were commented most. The objective setting was the second and knowing and understanding came later.

According to the table of training techniques with coaching, (Table C) it contained seven dimensions. The table showed that **objectives setting** dimensions was in high level and affected job accomplishment. This dimensions **Motivation and rewards**, which **commission** and being beside the staff in the difficult situation were important, were also in high level. Explained and illustration were in high level as well. This dimension **Tell and showed** that having discussion about customer services was very important. Moreover, having illustration of **closing sell** helped the staff understand clearly. Always having comprehensive **test** after coaching, which was in high level, was important to support the staffs to accomplish their goals, for instances, closing sell and products presentation. Furthermore, **best practice** should be included. This dimensions **Action**, which was one of training techniques with coaching, was in high level. Always applying knowledge provided by the heads of the department, such as introducing themselves and the products, showed that the staffs could integrate knowledge provided with individual skills. The organization could assess jobs by job evaluation. This dimensions **Check**, which was done by discussions on sale, job evaluation, qualification standard, and goals or objectives, with the heads of the department, was in high level, too. This dimensions **Feedback and suggestions**, which the heads of the department always suggest and listen to staffs' opinions, was in high level as well.

According to opened-questions in the questionnaire was found that 85 percent agree that coaching was important, but 15 percent disagree. For deep interview, 35 percent thought training by coaching with steps and closing the sell was important. Customer welcoming was found in 25 percent and knowing and understanding about goods was the least, just 10 percent.

6. Conclusion and Discussions

In case of training, to develop human resources is a try of the organization to use the training as a work evaluation. [17] So, training produces analysis, confidence, and knowledge. The core of training is to get the staffs accomplish objectives and also develop their potential during training or on the job training.

Efficiency training, a good coach should have various roles and should use technique which suits the trainee. The role the trainer should do is being friendly with the trainee to make the trainee believe and trust in the trainer. The trainer should also give feedback to the trainee to improve one's performance to accomplish organization goals.

Therefore, coaching is a process that analyses current authentic situations and suggests ways to solve the problems to the trainees for their lives.

This research was found that 85 percent agree that coaching, steps of coaching, illustration of closing sell, welcoming customers, and also technique in training were important. For coaching, motivation and rewards were in high interested whereas commission and being beside the staff in a difficult situation were also important.

Coaching the staffs helped them evaluated their potentials during training or on the job training, and the training also helped the trainees to discover ways for improving themselves. In addition, coaching also develop selling skill, negotiation, management, and others. Champathes [18] suggested that a model of coaching with clarifying need gave understanding, being hungry to learn, and objective setting to the trainees. This model helped the organization to plan intelligently, which led the organization to have a clarifying action plan designing. Furthermore, setting objective, results, and goals could predict the final result. Coaching could develop the staffs' potentials continuingly to suit the objectives, and coaching always gets the staff to have a work improving.

7. Acknowledgments

This research could not be completed without the help by the Faculty of Management, Nakhon Ratchasima Rajabhat University. Great thanks must be given to all heads of the departments for their kindnesses for the interviews. I am thank Yuttakorn Ritthaisong, Nattinee Thongdee, Suthatip Hoprapaspong, for opportunity this research and Conference. A special thankfulness must belong to Nakhon Ratchasima Rajabhat University as well.

8. Appendix

Table A: Reliability of the Questionnaire (Cronbach's Alpha)

Training Technique with Coaching	Cronbach's Alpha
Objective Setting	.74
Motivation or Reward	.78
Tell and Show	.72
Test	.81
Action	.75
Check	.83
Feedback and Suggestion	.86
Total	.80

Table B: Descriptive statistic with percentage of employees in the car-dealer company (n=35)

Personal Data	Frequency	Percentage
Sex		
Male	19	55
Female	16	45
Age		
Under 30 years of age	9	25
31-40	19	55
More 40 year of age	7	20
Marriage status		
Single	21	60
Married	12	35
Widowed/Divorced	2	5

Education		
Under bachelor degree	25	70
Bachelor degree	9	25
Higher than bachelor degree	1	5
Work experience		
Less than 1 year	7	21
1-5 years	19	47
6-10 years	7	21
More than 10 years	2	11

Table C: Descriptive statistic mean (\bar{x}) of opinions in general about training with coaching for employees in the car-dealer in Nakhon Ratchasima

Training Technique with Coaching	(n = 35)	
	\bar{x}	<i>SD</i>
Objective Setting	4.35	0.48
Motivation or Reward	4.60	0.50
Tell and Show	4.05	0.82
Test	4.33	0.58
Action	4.10	0.71
Check	4.15	0.48
Feedback and Suggestion	4.30	0.57
Total	4.27	0.59

9. References

- [1] Drucker, P. F. (2004). Management Challenges for the 21st Century: Elsevier Butterworth Hilversum.
- [2] Vichai, W. (2011). Innovation Curriculum and Learning for Citizen. Bangkok : R&R Printing
- [3] Martin, J.(2011).The meaning of the 21st Century. Riverhead Penguin, New York.
- [4] De Waal, A. (2010). The Characteristics of a High Performance Organization, Center for Organization Performance, Hilversum
- [5] Lawler, E.E. (2005). Creating High Performance Organization Asia Pacific Journal of Human Resource, 43(10).
- [6] Collin, J.C. (2001). Good to Great : Why some Companies make the Leap and other Don't London : Random House Books.

- [7] Hanna, D.P. (1988). *Designing Organization for High Performance*. New York : Addison-Wesley Publish Company.
- [8] Holbeche, L. (2004). HR and The High Performance Organization. *Strategic HR Review*, 5(2).
- [9] De Waal, A. (2005). *The Foundations of Nirvana, The Characteristics of A High Performance Organization*. Hyperion white paper, 2005 :12-13
- [10] www.hpocenter.com/case-studies.
- [11] Cronk, T.(et al.). (1994).*Human Resource Management*. South Melbourne.
- [12] Werner, M. J., and Simone, L. R. (2006).*Human Resource Development*. 4th ed. USA: Thomson South-Western.
- [13] Werner, M. J., and Simone, L. R. (2006).*Human Resource Development*. 4th ed. USA: Thomson South-Western.
- [14] Phillip, R. (1996). *Coaching for higher performance*. *Employee Counseling Today*. 8 (4) : 29 – 32.
- [15] Williams, S. (2005). *Research and Reality: Innovations in Coaching*. Modernization Agency Leadership Centre. [Online]. Available: <http://www.modern.nhs.uk>.
- [16] Noppadon, P.(2009). *Coaching and Self-Efficacy Factors Influencing Job Performance of Car Sales Representatives in Lower North-Eastern Region*. Thesis Master Degree's Suranaree University of Technology.
- [17] Raymond. J. R. (1999). *Organizational Behavior: A Diagnostic Approach*. 6th ed. New Jersey: Prentice-Hall, Inc.
- [18] Champathes, R. M. (2006). *Coaching for Performance Improvement: The “COACH” Model*. *Journal of Development and learning in organization*. 20 (2):17-18.

ICSSAM-977

Depreciation Report In Strata Management: Lessons Learnt From British Columbia, Canada

Nor Asiah Mohamad

Civil Law Department

International Islamic University Malaysia

P.O.Box 10, 50728, Kuala Lumpur, Malaysia

nasiahm@iium.edu.my

Abstract

The purpose of this paper is to outline the law relating to the implementation of depreciation report in strata management and assess their relevance and applicability to the Malaysian strata management. The paper sets out the nature, scope and the principal legal framework relating to depreciation report and its significant in the Malaysian strata laws. It assesses the relevance and the possible application of the report within the ambit of the strata laws in Malaysia. The paper shows how depreciation report works and its viability within the contemporary strata laws. Depreciation report is a planning tool to indicate the scope of the responsibility of the strata managers. It shows what the strata managers needs to plan within the life expectancy of strata, what the cost is and how the budget should be planned for the payment. Hence, it is a useful tool and relevant to be implemented. The question is are the Malaysian ready for the expectation?. The Malaysian strata managers should look beyond of what they have been implementing. The time will come where the Malaysian will be looking for a more transparent ways of calculating the figures that cost the maintenance of building.

Keywords: Strata properties, depreciation reports, strata management, finance

1. Introduction

Strata management requires day to day maintenance as well as long term plan maintenance. Preparation of a depreciation report is now made as a mandatory function of a strata corporation in British Columbia. (CHOA, 2012). It took effect as on December 13, 2011 and must be complied with by December 13, 2013. As of March 1st 2012, a strata corporation is required to produce a depreciation report via Form B Information Certificate. A copy of the report must be attached if one already existed. A depreciation report help strata corporations plan for the repair, maintenance and replacement of common property, limited common property and common assets.

Strata corporations in British Columbia need to acquire depreciation reports every three years unless they hold an annual 3/4 (three quarter) vote to exempt or have four, or fewer, strata lots. There are different timing requirements for the first depreciation report depending on when the strata corporation was formed (<http://www.housing.gov.bc.ca/strata/regs/>). For strata corporations formed on or before December 14, 2011, a depreciation report is required by December 13, 2013. For strata corporations formed after December 14, 2011, a depreciation report is required within 6 months after their second AGM. A depreciation report is basically a planning tool that can be used by strata corporation to understand what the strata corporation is responsible to maintain and repair as part of their building system, the age of the building system, the projected life expectancy, when it should be planned for renewal, what it will cost when the time comes to renew the component, and how the strata will have to pay for it. (CHOA, 2012). The implementation applies to all except a few categories of buildings. Any strata corporation with fewer than five strata lots, and those strata corporations who pass an annual three quarter vote, are exempt from the requirement. As the report is new to many strata corporation, there is a sample request proposal provided online by Home Owner's Association to assist any strata corporation to choose a qualified person to prepare the report. Most importantly, the qualified person or a company or a consultant must understand that the report must meet the requirements of the laws and regulations and to establish the total cost for all services, which include third party inspections and surveys (CHOA, 2012). One of the requirements as required by the regulations is that the person who is providing the report must state their qualifications, and indicate whether the person preparing the report is covered by the appropriate insurance such as errors and omission insurance and it is also emphasised that the parties should also declare the relationship of the person preparing the report and the strata corporation.

A depreciation report is a document which shows what upcoming repairs, expenses or improvements will be needed over time. The depreciation report is a document which shows what upcoming repairs, expenses or improvements will be needed over time. Depreciation report requires for an inventory on the onsite inspection and this shall include an inventory list of the components that form the common property, limited common property and also other items included in the strata bylaws that the strata corporation has to maintain and repair. This includes the structure of a building, the exterior parts such as roof, roof decks, doors, windows, skylights, electrical, heating, plumbing, common amenities and facilities, parking and roadways, utilities including water and sewage, landscaping, interior finishing, green building components and it may also include other possible features that may be unique to certain stratas. In Canada, the work is done by strata engineering expert which provides services in building sciences (www.strataengineering.ca.)

2. Background to Depreciation Report in British Columbia Canada

The needs lie behind public policy cause. The requirement for depreciation reports arises out of the view that planning is necessary for each strata scheme in order to properly plan for future maintenance of a building. With this, each strata corporation would be able to protect common property and other common assets of Strata Corporation. This is in line with the view that proper maintenance and design will reduce the cost related to common property and asset (Wilson E.L., 2012). Preparation for long term planning of building maintenance will help to prolong the age of buildings. The depreciation report will estimate the service life of the assets over the next few years. It works through a report on all repair, renewal and maintenance costs anticipated for each asset for a 30 year planning horizon.

3. Who can Prepare Depreciation Reports?

Having acknowledged the various and wide range of strata properties, the management corporation is given some flexibility in selecting the company or consultant of their choice to inspect and prepare their depreciation report. In Canada, the report must be prepared by a 'qualified person' with reference to the Strata Property Act (SPA) which defined 'qualified person' as any person who has knowledge and expertise to understand the individual components, scope and complexity of the strata corporation's common property, common assets and those parts of a strata lot or limited common property, that the strata corporation is responsible to maintain or repair under the SPA and to prepare a depreciation report in compliance with the SPA. The strata corporation needs to assist the qualified person or company or consultant by providing them the access to strata corporations' records and documents. Among others; the qualified person or company must look at the copy of the registered strata plan, the bylaws, the operating budget, insurance certificate, related invoices and ledger, any agreement entered by the strata corporation, annual fire inspection reports, prior or previous investigation reports on maintenance, repair or etc or lawsuits or arbitration decisions that impact the property use, maintenance repair or renewal alteration and any other related document about the strata corporation.

4. The advantages and disadvantages of the Report

The depreciation report is an important planning tool for strata corporations to ensure they establish an on-going schedule of maintenance and renewals, and it is an opportunity to make conscious decision regarding financial and maintenance planning. The report may likely improve the value and marketability of the strata lots in the building. (Wilson E.L., 2012). A depreciation report that identifies significant deferred maintenance issues of looming major capital expenditures, will obviously negatively impact the value and marketability of the strata lots. (Wilson E.L.,2012). The existence of report may not only helpful to the potential

buyers but also to the financial providers or the mortgagees. It is anticipated that the mortgagee will use depreciation report as a reference when considering mortgage application. Any property that is used for investment purposes can be depreciated. It is worth to obtain a tax depreciation report to see the value of tax benefits arising from aging strata properties. In some countries such as Australia, tax depreciation is calculated though sometimes overlooked by property investors despite being a perfectly legal way of minimising taxation. A number of people do not claim depreciation on their investment property because either they do not understand that they are allowed to do so or they do not realise how much money they are missing out on by failing to claim. It is reported that typically the value of depreciation that can be claimed for a residential property may range between \$1,500 and \$ 15,000 per year (<http://realestatereportaustalia.com.au/2014/02/can-i-depreciate-an-old-property/>). When it is common for other properties to decline in value, so does an investment property. The owner as part of the depreciation claim may proportionally claim areas of ‘common property’ such as corridors and stairways, a gym, pool, and basement parking in a strata scheme. In the end, by utilising the benefits of property depreciation, the investor can turn what may otherwise be a negative cash flow into a positive cash flow.

In Canada, there is a clear indication that show how valuation of residential strata properties are made. As strata lots are legal lots on a strata plan thus for the purposes of assessment and taxation, each strata lot, together with its share of common property, facilities and other assessable assets, is separately assessed. Strata properties are assessed by calculating the market value of each strata unit. This is done by analyzing sales of similar units within a local market (BC Assessment). In doing this, the valuers consider all factors that may affect value, including the size of the unit, view, location, number of bedrooms, construction quality, floor level and number of parking stalls. The depreciated building value of each unit is also determined, taking into account the differences between units such as floor area, finishing and features. The depreciated building value of common properties (swimming pool, fitness centre, etc.) is determined and apportioned to each unit on the registered strata plan (or improvement value). Lastly, the total depreciated building value of the unit is subtracted from the total market value of the unit. The difference is recorded as “land” on the assessment notice (or land value). Depreciating value of property is taken into account in determining the value of the property.

5. Depreciation Report in the Malaysian strata scenario

It is certain that there is no document called depreciation report mentioned in the strata titles laws in Malaysia. The Strata Titles Act 1985, the Building and Common Property Act (Management and Maintenance) 2007 (BCPMMA 2007) as well as the newly enacted law that is the Strata Management Act 2013 which will make an end to the implementation of the BCPMMA 2007 have no word of ‘depreciation report’. Malaysian strata law is lagging behind other laws in different jurisdiction in several aspects of its law and management,

among others, the depreciation report. At present, the law especially the BCPMMA 2007 is introduced with a lot of new provisions with the aims to strengthen the law on management of strata titles. This Act has introduced a new body to look into the problems of management of strata titles before the Management of Corporation is established. The body is called Joint Management Body is required to manage maintenance fund and to open and manage a sinking fund account. This provision is absent in the Strata Titles Act 1985 while the provision on sinking fund is only available in Schedule H of the Housing Development Act 1966 (amendment 2000) which makes it the responsibility of the developer to open up a sinking fund account when the strata titles are not issued. It is obvious that there is no provision on depreciation report in the Acts. The weaknesses of Strata Titles Act 1985 (Act 318) and the BCPMMA 2007 have been addressed in the Strata Management Act 2013(Act 2013). The Act 2013 continues to provide for the maintenance account (s. 50;s 52;s 60; s 62; s 65; s 66 of the Act 2013), sinking fund (s. 51; s. 52; s. 61; s. 68 of the Act 2013), deposits to rectify defect , insurances as well as the establishment of Tribunal to resolve problems relating to strata management. Nevertheless, the need for depreciation report to help owners or future owners to determine the value of their strata properties is yet to be seen important. Likewise, there seems to be no urgency for any depreciation report in Malaysian strata scenario. The readiness of the Management Corporation to prepare such a report and the demand of the potential buyers do not seem to arise. At the moment, people do not worry about the age of the building when they consider buying a property. Instead, the duration of the title, whether it is a freehold or leasehold creates more concern as it relates to the ownership of the property and it also contributes to the value of the properties. It is doubtful whether there is awareness on the importance of having such kind of report that shows the future cost of maintaining a strata property among the Malaysian strata owners and managers. The other related issue in Malaysia despite the doubt as to the readiness of the strata managers to provide such report is, whether there are 'qualified person' such as consulting firm that will be able to provide report which simplify complex technical and financial data into a format that makes the "tool" accessible, and "user friendly". Obviously, there will be another cost to be reserved from the management fund.

6. Conclusion

It is believed that the need for depreciation report for strata properties in Malaysia is due. The demand for high-rise properties as future living and investment is tremendous. Developers looking into strata properties as the most profitable ways in housing industries. As such, depreciation report is crucial to help owners and future owners assess the value of their properties and the expected expenditure for their investments. It is obvious that with no legislation, pre and post strata laws, many JMB or MC have fallen behind in planning and funding, both are crucial in strata management and maintenance. Some strata properties decay or ageing as they fall short of fund for repair or replacement of certain objects. For

strata managers, either JMB or the MC re-investment may come in the form of developing, and funding and long term maintenance plans. Those plans can only come from an understanding that all the various systems that supporting common properties have predictable life-spans.

7. Acknowledgment

This research is made possible with the research grant provided by the National Institute of Valuation (INSPEN) and the IIUM.

References

www.choa.bc.ca

www.strataengineering.ca

Edward L Wilson, 2012. in www. Lawsonlundell.com.

The Building and Common Property (Maintenance and Management) Act 2007 (Act 663)

The Strata Management Act 2013 (Act 747)

The Strata Titles Act 1985 (Act 318)

“Valuation of residential Strata Properties” in

<http://www.bcassessment.ca/public/Fact%20Sheets/Valuation%20of%20Residential%20Strata%20Properties.aspx> retrieved on 9th Nov 2013.

John B. Grubb. n.d. The Depreciation Report for Strata Corporations in British Columbia, can be accessed at

<http://www.unityservices.ca/depreciation-report-strata-corporations-british-columbia>

<http://www.choa.bc.ca/members/pdf/400/...>

<http://realestatereportaustralia.com.au/2014/02/can-i-depreciate-an-old-property/>

ICSSAM-782

The Characteristics of Board of Supervisors and Earnings Management: An Empirical Study

Yuedong Li

School of Accountancy, The Southwestern University of Finance and Economics
liyuedong@swufe.edu.cn

Abstract

According to the Corporation Law in China, one of functions of board of supervisors is to oversee the financial misstatement of firms. The author defined the characteristics of board of supervisors from three aspects, including expert of the board, activity of the board, and independence of the board, and did empirical study to find whether there is a relation between the characteristics of the board of supervisors and earnings management. The purpose of this article is to check whether the board of supervisor can implement function of financial oversight well. The author used the rate of employee representative and the rate of members who have title of professional position to evaluate the expertise of the board of supervisors.

The author used the rate of supervisors who do not get salaries from the firms to evaluate the independence of board of supervisors. The author used the frequency of meeting to evaluate the activity of board of supervisors. According to the empirical study results, the author found that the rate of members who have title of professional position has a negative relation with earnings management, but the rate of employee representative has a positive relation with earnings management. Both the frequency of meeting and rate of supervisors who do not get salaries from the firms have a negative relation with earning management. In sum, the board of supervisors really can supervise the financial misstatement in the firms. Finally, the author gave some suggestions and pointed out the limitation of this article.

Key words: the board of supervisors; financial oversight; earnings management; independence

Introduction

The board of supervisors usually is set up in China, Japan and Germany. In China, the Corporation Law requires all the listed companies must set up the board of supervisors, which is parallel with board of directors, but they have different functions. Both of them subordinate to shareholder's meeting.

The function of board of directors include: (a) holding the shareholders' meeting and reporting to shareholders; (b) implementing the decision of shareholders' meeting; (c) determining the operation plan and investment strategy; (d) drafting the budget plan; (e) drafting the plan of profit distribution and loss compensation; (f) deciding the increase or decrease of registered capital and issuance of bond; (g) determining the consolidation, separation, or dissolution of corporation; (h) deciding the installation of internal management organizations; (i) determining the hire and discharge of managers, as well as the salaries of managers;(j) drawing up the regulations of management of corporation. The function of board of supervisors includes: (a) overseeing the accounting and financial reporting processes; (b) monitoring the performance of directors and managers, and proposing to dismiss or sue the directors and managers who break the law or regulations or decision of shareholder's meeting; (c) suggesting to have a temporary meeting when the board of directors does not implement the responsibility of holding the shareholders' meeting; (d) advancing proposal to shareholders' meeting. In sum, the board of directors in China does not need to oversee the accounting and financial reporting process, but to decide and implement the operation plan of the corporation. Whereas, the board of supervisors have the responsibility to monitor the activities of directors and managers. Their relation can be see in Figure 1. Insert Figure 1 in here.

On the other hand, In U.S.A, there is no board of supervisor, and the independent director or audit committee are installed in the board of directors to perform the function of oversight of accounting and financial reporting processes. Actually, the independent director or audit committee are installed in the board of directors to perform the function of oversight of accounting and financial reporting processes in some companies in China too. So three supervision organizations coexist.

Although the board of supervisors has the function of oversight the accounting and financial reporting processes, it did not really perform this function well according to pervious studies.

Therefore, in 2005, the government in China changed some contents of regulation of board of supervisors in Corporation Law. From this new law, we can know that the board of supervisors become more and more important part in the companies. In this article, we emphasized on whether the board of supervisors implements the function of oversight of the accounting and financial reporting processes well, and we want to verify whether the characteristics of board of supervisors mentioned in new Corporation Law really strengthen the function of oversight of the accounting and financial reporting processes.

Therefore, We investigate the relation between the board of supervisors' characteristics (expertise, independence, and activities) and earnings management on the sample of listed firms in China. The sample is selected from the listed companies in both Shenzheng Stock Exchange and Shanghai Stock Exchange from 2003 to 2006. We deleted the financial companies and the companies with imcomplete datum, and finally we got 1341 companies.

This paper contributes to the literature on the association between the board of supervisors' characteristics and earnings management in two ways. First, we checked whether the board of supervisors in China really implements the function of oversight of the accounting and financial reporting processes well. Second, we can find which characteristics of board of supervisors mentioned in New Corporation Law need to be improved according to the study.

Literature Review

In China, the study about the board of supervisors include:

- (a) The study of systems of the board of supervisors. Yuan (2003) compared the board of supervisors in China and that in other countries. Although companies in Japan and Germany also have this board, there are many difference between them and China. Some other professional people compared the system of board of supervisors and the system of independent directors, as well as audit committee. For example, Li(2005) studied which system is effective in listed companies of fabric and costume industry, and found that the system of independent directors is more effective. Wang.et al.(2005)found that although there is a function conflict between board of supervisors and audit committee, they are still independent with each other and they should reconcile this function conflict.
- (b) The study of characteristics and function of board of supervisors. Zhao & Wang (2003) made a descriptive statistics of board of supervisors. Zhang. et al.(2006)made an empirical study between board of supervisors and earning management, and found that size of board of supervisors has a significant negative effect on the earning management, and the frequency of meeting of board of supervisors has no effect on the earning management. In sum, the board of supervisors can apply the function of oversight of the accounting and financial reporting processes. Liu & Cao (2004) studied the function of board of supervisors in chinese private companies, and found that the independence and professional skill of members in board of supervisors are poorer than those in board of directors. Therefore, the board of supervisors cannot implement the function of oversight of the accounting and financial reporting processes well.
- (c) The study of evaluation index for the board of supervisors. There are few articles related to the evaluation of the board of supervisors. Li & Zhang (2005), and Li & He(2006)pointed out the evaluation index system of board of supervisors.

Earnings management generally implies a “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain”(Schipper 1989). Although management may intervene in the process to signal private information and make the financial reports more informative for users, we concentrate on the negative aspect of earnings management, i.e., “to mislead stakeholders (or some class of stakeholders) about the underlying economic performance of the firm”(Healy and Wahlen 1999). The study about earnings management includes:

- (a) The study of earnings management in capital market. Lu(2002) studies earnings management in listed corporations of A stocks from 1993 to 2000, and found that the listed corporations maintained the ROE higher than 0 or 6% or 10% in order to avoid loss or get the stock quota right.
- (b) The study of audit and earnings management. Xia & Yang(2002) took an empirical study of audit opinion and earnings management using the sample of listed corporation in 2000. Cai(2005) checked the relation between the abnormal accruals and audit quality.
- (c) The study of corporation governance and earnings management. Zhang(2006) and Su & Wang(2006) studied the characteristics of board of directors and earnings management.

From the summary of literature, we know that the current study about board of supervisors mainly focus on normal study, and empirical study is few, and there is few articles studying the relation between board of supervisors and earnings management. Besides, the analysis of characteristics of board of supervisors emphasizes the size and the frequency of meetings. In this article, the author analyzes the characteristics of the board of supervisors from three aspects: expertise, independence, and activity. We investigate the relation between the board of supervisors’ characteristics (expertise, independence, and activities) and earnings management on the sample of listed firms in China.

Hypotheses

Hypothesis 1: Firms with expert board of supervisors are less likely to engage in earnings management.

We use the rate of employee representative and the rate of members who have title of professional position to evaluate the expertise of the board of supervisors. If the rate of employee representatives is high, the board of supervisors should know the company well. However, the board of supervisors cannot consist of 100% employee representatives because the board of supervisors will lose the independence if it consists of 100% employee representatives. Besides, if the board has more expert financial people, the board can find the misstatement easily and exert financial oversight well.

Hypothese 2: Firms with an independent board of supervisors are less likely to engage in earnings management.

We use the rate of supervisors who do not get salaries from the firms to evaluate the independence of board of supervisors. If the supervisors keep independence, the management of company cannot influence them. Therefore, the board of supervisors can perform the function of supervision well.

Hypothese 3: Firms with active board of supervisors are less likely to engage in earnings management.

The author uses the frequency of meeting to evaluate the activity of board of supervisors. Usually, on the meeting, the board of supervisors will discuss the situation of supervision. Therefore, if the frequency of meeting is increased, the oversight of financial and accounting process should be good.

Research Design

Selection of sample and data source:

The sample is selected from the listed companies in Shengzhen Stock Exchange and Shanghai Stock Exchange from 2003 to 2006. We deleted the financial firms and the firms with incomplete datum, and finally we got 1341 firms. The reason why we chose the datum from 2003 to 2006 is that The Corporation Law was modified on No. 18 meeting held by Practice Committee of No.10 National Representative Conference on October 27, 2005. The regulations about the board of supervisors were changed so as to strengthen the oversight function of board of supervisors. Therefore, the level of earnings management in 2005 and 2006 should be less than that before 2005. All datum come from CSMAR Database, and the description about characteristics of the board of supervisors comes from published annual reports in the website of China Securities Regulatory Commission (<http://www.csrc.gov.cn>).

Earning Management Estimation:

The abnormal component of total accruals is estimated with the modified Jones (1991) cross-sectional model (DeFond and Jiambalvo 1994; Francis et al. 1999; Becker et al. 1998). Abnormal accruals (AbnAccruals) for each firm i in industry j are defined as the residual from the regression of total accruals (the difference between cash from operations and net income) on two factors that explain nondiscretionary accruals, the change in revenue and the level of fixed assets subject to depreciation.

$$\text{AbnAccruals}_{ijt} = \text{TAC}_{ijt}/\text{A}_{ijt-1} - [\alpha_j(1/\text{A}_{ijt-1} + \beta_{1j}(\Delta\text{RE}_{ijt}/\text{A}_{ijt-1} + \beta_{2j}(\text{PPE}_{ijt}/\text{A}_{ijt-1})))] \quad (1)$$

where:

AbnAccruals_{ijt} = abnormal accruals for firm i from industry j in year t;

TAC_{ijt} = total accruals for firm i from industry j in year t;

A_{ijt-1} = total assets for firm i from industry j at the end of year t-1;

ΔRE_{ijt} = change in net sales for firm i from industry j between years t-1 and t;

PPE_{ijt} = gross property, plant, and equipment for firm i from industry j in year t;

$\alpha_j, \beta_{1j}, \beta_{2j}$ = industry-specific estimated coefficients from the following cross-sectional regression;

$$\text{TAC}_{ijt}/\text{A}_{ijt-1} = \alpha_j(1/\text{A}_{ijt-1} + \beta_{1j}(\Delta\text{RE}_{ijt}/\text{A}_{ijt-1}) + \beta_{2j}(\text{PPE}_{ijt}/\text{A}_{ijt-1})) + e_{ijt} \quad (2)$$

.Insert table 1 here.

The control variables:

- (a) ROE: it is equal to net income divided by average of net assets, and the average of net assets is equal to average of opening balance and ending balance of net assets. It is a very important index to evaluate the performance of companies. Therefore, the management has incentive to manipulate the profit so as to change this index.
- (b) ROAt-1: ROA is equal to net income divided by average of total assets, and the average of total assets is equal to the average of opening balance and ending balance of total assets. ROA is also a crucial index to evaluate the performance of companies. Here, we use the prior year's ROA because if last year's ROA is high, the management has incentive to keep ROA at the same level in this year, so they will manipulate the profit.
- (c) Asset-liability ratio (DEBIT): it is equal to ending balance of total liabilities divided by the ending balance of total assets. It is an important index to evaluate solvency of companies. If the firms have a big liability, it will influence the company to get finance from bank or other firms and it also will result in financial difficulties of companies. Thus, the companies have incentives to reduce this ratio.

Empirical Model:

$$\text{EM}_t = a_0 + a_1 * \text{LNMT} + a_2 * \text{NSR}_t + a_3 * \text{ER}_t + a_4 * \text{EXR}_t + a_5 * \text{ROE}_t + a_6 * \text{ROA}_{t-1} + a_7 * \text{DEBIT}_t + e$$

Results

Descriptive analysis:

Insert Table 2 here.

From Table 2, we know that the average size of the board is 4 supervisors, and according to the Coporation Law, the board of supervisors should include more than 3 people. So almost all the companies obey this regulation².The average of frequency of meeting is 3 times in one year, but there are about 43.89%³ companies have less than 3 meetings in one year.

According to the Coporation Law, the board of supervisors should take at least one meeting in one year, so all the companies obey this regulation. The average of rate of supervisors who do not get salaries from the firms is 45%, so the indepedence of the board is not so strong.. The average of rate of employee representative is 4.22%. Compared with the regulated rate of 1/3, only 21.42% ⁴companies reach this standard, and 78.58% cannot satisfy this regulation. The average of rate of professional people is 16.6%, and 76.74%⁵ companies have no Professional people.

Insert Table 3 and Table 4 here.

Multivariate analysis:

From table 5, we know that the characteristics of the board of supervisors indeed influence the earnings management. The rate of professional people has a negative relation with earning management, that is firms with expert board of supervisors are less likely to engage in aggressive earnings management. The rate of employee representative has a possitive relation with earnings management, and this is different from our hypothesis. So hypothesis one is not completely proved.The frequency of meeting has a strong negative relation with earnings management, that is firms with active board of supervisors are less likely to engage in earnings management, So hypothesis three is proved. The rate of supervisors who do not get salaries from the firms has a negative relation with earning management, that is firms with an independent board of supervisors are less likely to engage in aggressive earnings management. So hypothesis two is proved too.

Conclusion

The characteristics of the board of supervisors indeed influence the earning management. So the author suggests that:

(a) The board of supervisors should increase the number of professional people.

² There are about 1.18% companies who has less than 3 supervisors. See table 2.

³ From table 3, we know that the number of firms whose meetings in one year less than 3 is 105+229=234. and the percentage should be 13.8%+30.09%=43.89%.

⁴ There are 163 firms whose rate of employee representative is equal to or more than 1/3.

⁵ There are 584 firms who have no professional people in the board of supervisors.

If the board of supervisors wants to implement the financial oversight function well, it needs professional people to figure out the financial problems in the firms. According to the empirical result, we know that the rate of professional people have a negative relation with earnings management, that is firms with expert board of supervisors are less likely to engage in earnings management. Therefore, the number of professional people in board should be increased.

- (b) The board of supervisors should increase the times of meeting in one year.

The frequency of meeting reflects the activity of the board, and the activity of the board makes sure that the board of supervisors to implement the function of financial oversight well. According to the empirical result above, we know that the frequency of meeting has a negative relation with earnings management, that is firms with active board of supervisors are less likely to engage in earnings management. Thus, the board of supervisors should increase the times of meeting in one year.

- (c) The board of supervisors should strengthen the independence.

Independence is the soul of supervision organizations. If the board of supervisors can keep high independence, it can implement the function of financial oversight well. Besides, according to empirical study result above, we found that the rate of supervisors who do not get salaries from the firms has a negative relation with earnings management, that is firms with an independent board of supervisors are less likely to engage in earnings management. So the board of supervisors should strengthen the independence.

Limitation

This study is subject to a number of limitations:

- (a) our results demonstrate an association, not a causal link, between the board of supervisors' characteristics and the level of earnings management.
- (b) Our measure of earnings management is subject to measurement errors. First, When estimating earnings management, the author used the difference between the total profit and profit coming from operation instead of Jones model, which is more objective. Second, There are only three control variables mentioned, and actually there are other omitted variables such as IPO, CPA firms, and Cash from operation. Third, In China, there are several supervision organizations coexisting in the companies, such as independent directors, audit committee, and so on. The author did not consider the influence of other supervision organizations. Because of this coexistence, the individual characteristics of board of supervisors has no significant influence on earnings management although the total characteristics of board of supervisors have significant influence on earnings management.
- (c) The sample is just selected from Shanghai Stock Exchange, not including the listed

companies in Shenzhen Stock Exchange. And the sample just is limited to the listed companies in 2005.

References

- Healy, Paul M. and James N Wahlen (1999). "A Review of the Earnings Management Literature and Its Implications for Standard Settings". *Accounting Horizons*, 113(4):365-383.
- Li, Xiangfeng (2005). "The Board of Directors and Independent Directors in Listed National Companies". *Research of the Plan & the Market*, 1:74-75
- Li, Weian. and Chen He (2006). "An Empirical Reserch of Supervisory Board Governance in China's Listed Companies". *Journal of Shanghai University of Finance & Economics*, 8(3):78-84.
- Li, Weian.and Guoping Zhang (2005). "Corporation Governing Evaluation Index: Analyzing Current Situations and Trends of China Corporation Governing". *Economic Theory and Business Management*, 9: 58-64.
- Liu, Changcui. And Xiaoyan cao (2004). "An Empirical Analysis of Function of Independent Directors and Supervisory Board in Private Corporations In China ". *Shandong Economy*, 121(2):132-136.
- Long , Xiaogang (2006). "the improvement of regulation of board of supervisors in China". *Group Economics Research*, 10:188
- Lu,Yujian (2002). "An Analysis of Earnings Management in Chinese Listed Companies from ROE and ROA". *Inquiry Into Economic Problems*, 3:63-69.
- Miller, Judith L.(2002). "The Board as a Monitor of Organizational Activity—The applicability of Agency Theory to Nonprofit Boards". *Nonprofit management & Leadership*, 12(4) :429-447.
- Qing, Rongsheng (2005). "Gorporation Governance and Operation of Board of Supervisors". *Current Finance*, 12(253):105-108
- Schipper, Katherine (1989). "Commentary on Earnings Management". *Accounting Horizons*, 3(4):91-102.
- Su, Weidong. And Jiasheng Wang (2006) "An Analysis of Earnings Management and Charactristics of Board of Directors in China". *World Economic Papers*, 6:56-62.
- Tian, Fenfei (2003). "How to improve regulations of board of supervisors of listed companies". *North Economic Trade*, 1:57-59
- Udueni, Henry(1999). "Power Dimensions in the Board and Outside Director Independence:Evidence from Large Industrial UK firms". *Corporate Governance*, 7(1):62-70.
- Wang, Tao. and et al.(2005). "Analysis of Supervisory Board and Audit Committee". *Finance and Accounting Monthly*, 12: 42-43.

- Xia, Lijun. and Haibing Yang.(2002). “Audit Opinions and Audit Quality- An analysis on Audit Opinions of Financial Statements of Listed Companies of the Year 2000”. *The Chinese Certified Public Accountant*. 10:23-26.
- Yuan, Qinhong (2003). “A Study of Index of Board of Directors in Corporation Evaluation”. *Nankai Business Review*, 3: 19-21.
- Zhao,Xuebin. And Lijie Wang. “Analysis of Supervisory Board in Chinese Listed Companies”. *Finance and Accounting monthly*, 12:42-43.
- Zhang, Yijie. And et all. “Empirical Research on Supervisory Committee Efficiency”. *Journal of Shanxi Finance and Economics University*, 28(2):132-136.
- Zhang, Yijie. And et all. “Empirical Research of the Relationship between Directorate Characteristics and Earnings management”. *Management Review*, 18(3):14-18.

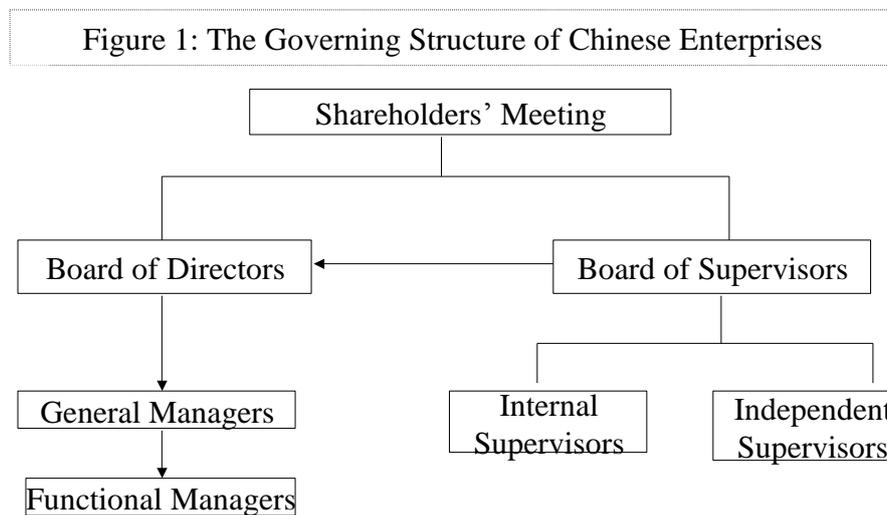


Table 1: The variables of board of supervisors

Dependent Variables	Earning management (EM)
Independent Variables	
Expert	Employee representative rate(ER) = the number of employee representatives / the total number of supervisors
	The rate of members who have title of professional position(EXR) =the number of professional people/ the total number of supervisors
Independence	The rate of supervisors who do not get salaries from the firms(NSR) = the number of supervisors who do not get salaries from the firms / the total number of supervisors
Activity	the frequency of meetings(LNM)= Ln(how many meetings held in one year)

Table 2: The Results of Descriptive Analysis:

	Earnings management	Frequency of meeting	Size of the board	The rate of non-salary	The rate of employee representative	The rate of professional people
Mean	-0.003	3.029	4.235	0.450	0.042	0.167
Median	-0.001	3	4	0.5	0	0
Maximum	0.250	10	13	1	0.667	1
Minimum	-0.820	1	2	0	0	0
Std. Dev.	0.043	1.563	1.513	0.272	0.118	0.331
Observations	761	761	761	761	761	761

Table 3: The Statistics Results of Board Size

Size of Board	Number of firms	Percentage
2	9	1.18%
3	369	48.49%
4	24	3.15%
5	264	34.69%
6	27	3.55%
7	47	6.18%
8	7	0.92%
9	11	1.45%
11	1	0.13%
12	1	0.13%
13	1	0.13%
Total	761	100.00%

Table 4: The Statistics Results of Board Meetings

Times of meetings	Number of firms	Percentage
1	105	13.80%
2	229	30.09%
3	181	23.78%
4	125	16.43%
5	70	9.20%
6	26	3.42%
7	14	1.84%
8	6	0.79%
9	4	0.53%
10	1	0.13%
Total	761	100.00%

Table 5 : Results of Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.0020	0.0060	0.3265	0.7441
LNМ	-0.0044	0.0027	-1.6348	0.1025
NSR	-0.0072	0.0053	-1.3679	0.1718
ER	0.0194	0.0122	1.5943	0.1113
EXR	-0.0036	0.0043	-0.8278	0.4080
ROE	-0.0646	0.0057	-11.2820	0.0000
ROAt-1	0.0019	0.0268	0.0707	0.9436
DEBIT1	0.0065	0.0082	0.7955	0.4265
F-statistic		23.98578		
Prob(F-statistic)		0		

ICSSAM-700
**Using Social Network Analysis to Explore the Internet Purchase Intention
of Consumers**

Yi-Fen Chen

Graduate Institute of International Business, Chung Yuan Christian University
200, Chung Pei Rd, Chung Li City 32023, Taiwan ROC
E-mail: fen1307@ms21.hinet.net

Po-Hung Lin

Graduate Institute of International Business, Chung Yuan Christian University
200, Chung Pei Rd, Chung Li City 32023, Taiwan ROC
E-mail: pohunglin0975@gmail.com

Abstract

Opinion leaders are very important role in interpersonal communication and the most efficient ways to deliver product information by way of positive word-of-mouth. If marketers dig out the opinion leaders, and communicate effectively to opinion leaders, marketing communication helps to reduce costs and improve overall communication effects. This study is based on social network analysis as a method to measure the opinion leaders; the purpose is to understand the possibility of consumers to become opinion leaders. After a measure of the opinion leaders, then use perceived risk and shopping value detection of opinion leaders for consumers purchase intention. Marketers can customize according to opinion leaders and different marketing strategies in order to improve the effectiveness of marketing.

Keyword: Opinion Leaders, Social Network Analysis, Perceived Risk, Shopping Value

ISEPSS-2067

Value Chain Strategies for Maximizing the Value of IoT Service Providers

Chi-Yo Huang

Department of Industrial Education, National Taiwan Normal University

georgeh168@gmail.com

Josh Juo

Radiantech, Inc.

ilivingtek@gmail.com

Abstract

The Internet of Things (IoT), extensions of the Internet into everything in the real world, enables computation all over the world. The introductions of the IoT into value chains enhance the service values. Albeit important, very few studies addressed how the value chain strategies can be selected so that the service value can be maximized with constraints in resource availability. So, this research aims to propose a hybrid MCDM framework to derive appropriate value chain strategies so as to maximize the service value of some specific IoT service provider. Possible value chain strategies as well as the criteria for selecting the value chain strategies will first be derived based on literature review results. Then, the candidate strategies and criteria will be evaluated by using the modified Delphi method. Then, the causal relationship and weights versus each criteria will be constructed by using the Decision Making Trial and Evaluation Laboratory (DEMATEL) based Network Process (DNP).

Finally, the performance score versus each strategy will be aggregated by using the fuzzy integral method. The strategies with higher performance scores will be selected as the most suitable strategies for maximizing service values of an IoT service provider. An empirical study results based on opinions being provided by Taiwanese IoT service experts will be used to verify the feasibility of the proposed framework. The empirical study results can serve as a basis for enhancing the service value of the IoT service providers.

Keywords: Internet of Things (IoT), Service Provider, DEMATEL based Network Process (DNP), Fuzzy Integral, Multiple Criteria Decision Making (MCDM).

Oral Sessions - May 9

Management & Marketing IV

Room B

09:00-10:30

Friday, May 9

Session Chair: *Prof. Marc Kuhn*

ICSSAM-502

“Devil-may-care!”- Sector-related Pricing Potentials for Sustainable Products

Marc Kuhn	<i>Cooperative State University Stuttgart</i>
Vanessa Reit	<i>Cooperative State University Stuttgart</i>
Yvonne Zajontz	<i>Cooperative State University Stuttgart</i>

ICSSAM-888

American Professional Baseball Infielder Starting with Bench Analysis

Kai Way Lee	<i>Chung Hua University</i>
Wen Sheng Chiu	<i>Chung Hua University</i>
Yun Tien Ma	<i>Chung Hua University</i>
Pei Yu Hsieh	<i>Chung Hua University</i>

ICSSAM-717

Consideration of Green Issue for Inbound Supply Chain

Yi-Chun Kuo	<i>Chung Yuan Christian University</i>
Hui-Hsin Lai	<i>Chung Yuan Christian University</i>

ICSSAM-851

Examining the Cross-strait Content Collaboration Networks between Taiwan and Mainland China~ The Perspective of the Creative Talent

Hsiao-Ling, Chung	<i>National Cheng Kung University</i>
-------------------	---------------------------------------

ICSSAM-971

Outcomes of Apprenticeship for Employers: an Actor-System Managerial Framework

Stephanie Pougnet	<i>Lausanne Hotel School Switzerland</i>
-------------------	------------------------------------------

ICSSAM-904

How Can We Build Social Capital and Self-esteem by Controlling Motivation for SNS Usage?

Hye Yoon Bae

*Korea Advanced Institute of Science and
Technology(KAIST)*

ICSSAM-935

Knowledge Sharing Behaviour and Group Innovation

Rajiv Khosla

La Trobe University

Mei-Tai Chu

La Trobe University

ICSSAM-502

“Devil-may-care!”- Sector-related Pricing Potentials for Sustainable Products

Marc Kuhn

Baden-Wuerttemberg, Cooperative State University Stuttgart, Paulinenstr.50, 70178 Stuttgart
kuhn@dhbw-stuttgart.de

Vanessa Reit

Baden-Wuerttemberg, Cooperative State University Stuttgart, Paulinenstr.50, 70178 Stuttgart
reit@dhbw-stuttgart.de

Yvonne Zajontz

Baden-Wuerttemberg, Cooperative State University Mosbach, Paulinenstr.50, 70178
Stuttgart
zajontz@dhbw-mosbach.de

Abstract

The debate about potential market success for sustainable products has heated up as a result of occurrences like the major oil spill in the Gulf of Mexico in 2010, the nuclear disaster in Fukushima in 2011 and the widespread meat scandal in Germany in 2005, in which some German meatpacking firms were selling out-of-date meat as being fresh. Yet sector markets for sustainable products such as renewable energy or organic food seem to only partially benefit from this broader market environment, and their market shares remains quite low despite high growth rates. The usual explanation for this discrepancy is that consumers are not willing to pay the price premium prompted by a sustainable claim [1]. Prevalent discussions in the practitioners' environment mostly act on the assumption that especially younger consumer groups, even affected by the aforementioned environmental occurrences, consider themselves to be sustainable- oriented but without showing a significantly higher willingness to pay for sustainable aspects [2]. An additional willingness to pay could only be identified in individual cases where the purchase of a sustainable product would lead to a higher direct and personal value for those younger consumers [3].

Consequently, this paper sets out to analyze sector-related values of additional willingness of young German adults to pay for sustainable products. Based on the findings of an extended contingent value approach [4], we further examine possible reasons for differences identified between the sectors in focus based on the assumption that a higher willingness to pay among younger adults strongly corresponds with the sustainability character of the product leading to a higher personal “egoistic” value for the consumer.

Theoretical Background

In this paper, we refer to some basic assumptions of the contingent value method (CVM) which was developed over twenty years ago as the most commonly applied method for obtaining monetary values for a wide range of environmental changes and entities [5]. The theoretical background for contingent valuation is individuals expressing their preferences in order to maximize their utility subject to an income constraint, or to minimize their expenditures subject to a utility constraint [4]. Typically, a CVM survey asks how much money people would be willing to pay or willing to accept to maintain the existence of (or be compensated for the loss of) a general sustainable feature, such as biodiversity or water quality in the seas.

Among the large amount of publications on the subject over the last decade, a wide range of critiques have appeared, especially regarding the content and meaning of the values are being derived. One main criticism is that the utilized values are mostly in some sense non-economic [6]. Based on these criticisms, Stern has developed a value-belief-norm model of human behavior which intends to explain three basic value orientations influencing the willingness to pay for general sustainability aspects [7]. Stern considers them as “awareness of consequences” (AC):

- egoistic value orientation: e.g. people concerned about their own health and well-being
- social altruistic value orientation: e.g. people concerned for the health and well-being of other people
- biospheric value orientation: e.g. people concerned about general environmental, social or health conditions

Individuals may hold different AC-related concerns simultaneously and these vary between cultures [4].

In the context of this paper, we used the basic framework of this extended CVM for the research question regarding additional willingness to pay for sustainable products. While CVM considers the value-based willingness to pay for mostly general non-market or indirect market resources, such as environmental preservation or the impact of contamination, our

view of the extended CVM focuses on value-driven willingness to pay for sustainable products in selected sectors. In particular Stern's approach of enriching CVM analyses with more deeply economic-driven value perspectives leads to the application of our research referring to the extended AC-based CVM framework. Consumers decide on paying for the "sustainable effect" of a product depending on their personal value orientation. A consumer with high biospheric value-orientation may, for example, show a higher willingness to pay for renewable energy as there seems not to be any direct personal benefit from using green energy instead of conventional energy but there may be a contribution to reduced pollution in general. Buying toys without plasticizers as gifts for the children of other parents may be the consequent behavior of consumers with high social altruistic value orientation. Consumers with low biospheric and low social altruistic value orientation may still show a high willingness to pay for organic food as its consumption may cause some direct personal benefit to the consumer (egoistic value orientation).

Research Question and Hypotheses

Most German companies involved in sustainable businesses state that "sustainable self-considerations" of young adults does not lead to a higher willingness to pay for sustainable products [2]. Belz and Peattie [3] admit that additional willingness to pay for sustainable products among younger consumers only occurs in cases of a higher direct and personal value of those products [3]. Referring to the extended CVM framework of sustainable-focused value orientation [7], our central research question is:

"Do younger adults in Germany show a high egoistic value orientation when deciding to buy sustainable products?" Reflecting on this research question, we tested the following hypotheses focusing on young German adults:

H1: There is no significant correlation between the self-consideration of "being sustainable" and the additional willingness to pay for sustainable products among younger consumers

H2: The willingness to pay for sustainable products among younger consumers is higher in "egoistic-value-driven sectors" and lower in "biospheric and altruistic-value-driven sectors"

H3: The "egoistic orientation" of young consumers has a greater influence on the willingness to pay more for a sustainable brand in "egoistic-value-driven sectors" than the "biospheric orientation".

Research Methodology

The following results are based on an empirical research design with a quantitative research method. According to the defined research question, the available research method is an internet-based standardized questionnaire survey among young German consumers. We selected the respondents through a "snowball" sampling process via internet platforms and social networks. The field research was carried out at the beginning of 2012.

In a period of four weeks, 456 questionnaires were completed. Table 1 provides the details of our sample characteristics. More than half (53.4%) of the sample were males. The sample has a mean age of 27.62 years. Almost 86% of the sample is between 15 and 34 years old. We can therefore assume that the survey represents a representative sample within the defined target group.

The additional willingness to pay more for a sustainable product was collected for each sector (food, cosmetics, toys and energy) individually (see Table 1). These variables are central to the examination of our hypotheses. In the ordinal regression models, these four variables were the dependent variables.

According to the research question, we wanted to investigate if there is a difference between those people who show a high egoistic value and those who do not. Therefore, we choose two statements for every sector. The first one is a statement with a biospheric orientation and the second one with an egoistic orientation. For the cosmetics sector, for example, we selected the following two statements:

- 1) “The use of natural cosmetics is an active contribution to environmental protection!”
(biospheric-oriented)
- 2) “Natural cosmetics have a positive effect on my own body!”
(egoistic-oriented)

The test persons were asked to decide on a 4-point scale whether they “strongly agree”, “agree”, “disagree” or “strongly disagree”. On this basis, we developed a new dichotomized variable that separated those who seem to be biospheric-oriented (“strongly agree” and “agree”) from those who are not (“disagree” and “strongly disagree”). The result was a variable with only two scales: “biospheric” and “non-biospheric”. We did the same for the egoistic orientation. These two variables, “biospheric” and “egoistic”, were the independent variables in our ordinal regression analysis.

We assume that organic food or cosmetics are products with high egoistic value orientation because there is a personal benefit in “using” those products whilst toys and energy are rather sectors with social altruistic and biospheric value orientation due to the fact that there is a general benefit for the environment or other people. For the further analyses, this differentiation is essential.

Analysis

We use two different statistical procedures for analyzing our three hypotheses: Kendall's tau correlation coefficient and an ordinal regression model. Kendall's tau coefficient measures the association between two measured quantities [8]. It is a non-parametric hypothesis test for evaluating statistical dependence. Since our research model includes an ordinal-valued dependent variable (additional charge for sustainable products) with more than two parameter values, we also performed an ordinal regression analysis. For this purpose, we chose the SPSS Ordinal Regression procedure, or PLUM (Polytomous Universal Model), which is an extension of the general linear model to ordinal categorical data [9], [10], [11], [12]. We used the procedure to calculate a logit model [13]. The parameter estimates are of capital importance in interpreting the results and should therefore be considered first. If the estimates are positive, the elected category tends towards a higher category of the corresponding dependent variable. If the parameter estimates are negative, it tends towards a lower category.

Our main explanatory variables, "biospheric" and "egoistic", are dichotomized as shown above. The ordinal regression now analyzes the parameter value in comparison with a reference category. In our case, the parameter value "biospheric" is compared with the parameter value "non-biospheric". We can thereby ascertain whether there is a difference between those who seem to be "biopheric-oriented" and those who are not. For the performance criteria of the whole model, we look at the adj. R2 McFadden, R2 Nagelkerke and the R2 Cox & Snell [14]. We also checked the quality of the model through the Likelihood Ratio Test and the Test of Parallel Lines. The quality of the model can therefore be considered at least sufficiently valid.

Results

In H1, we proposed that there is no significant correlation between the self-consideration of "acting sustainable" and the additional willingness to pay for sustainable products in our defined young consumer group. The results of our analyses are shown in Table 2. In all four sectors (food, cosmetics, toys and energy), there is a significantly high correlation. Kendall's tau-c coefficient results in negative correlations. We can conclude that the higher the willingness to pay more for a sustainable product, the higher the self-consideration of being sustainable, and vice versa. This applies for all four sectors investigated. The strongest correlation was found regarding the food sector, the weakest regarding the energy sector.

We can conclude that those young consumers who consider themselves to be "acting sustainable" show a significantly higher willingness to pay an additional charge for sustainable products, no matter in which sector. Consequently, our hypothesis must be false.

H2 stated that the willingness to pay for sustainable products is higher in "egoistic-value-driven sectors" and lower in "biospheric and altruistic-value-driven sectors". To analyze this hypothesis, we used the four sectors and constructed two groups of sectors.

According to our theoretical framework, the first includes the willingness to pay an additional charge for sustainable food and cosmetics – labeled "egoistic-value-driven sectors". The second one includes the sectors toys and energy and is called "biospheric or altruistic-value-driven sectors". For the purposes of comparison, we calculated the mean values of the respective percentages. Looking at the distribution of the variable "willingness for additional charge" (see Table 3) illustrates some small differences between the two defined sector groups. For egoistic-value-driven products, 43.2% of our young consumers are willing to pay an additional charge of more than 10% whilst only 40.27% would pay an additional charge of more than 10% for biospheric or altruistic-value-driven products. The difference is small but obvious. As a result, our hypothesis can be verified.

In the third hypothesis, we suggested that the "egoistic orientation" of young consumers has a greater influence on the willingness to pay more for a sustainable brand in "egoistic-value-driven sectors" than the "biospheric orientation". To ascertain whether this assumption is true, we developed an ordinal regression model (see Table 4). We can state that those young consumers who show an egoistic orientation have a significantly higher probability of being willing to pay an additional charge in the two egoistic-value-driven sectors (food and cosmetics) than those who do not show this orientation. In the biospheric and altruistic-value-driven sectors (toys and energy), the consumer's egoistic orientation plays no highly significant role. Furthermore, we can notice that test persons who possess a biospheric orientation are significantly more likely to pay more for a sustainable product than those without such an orientation in three of the four sectors (food, cosmetics and toys). For more precise findings about the relative impact strength of the various explanatory factors, we have to calculate the "odds ratio" (effect coefficients). The effect coefficient $\exp(\beta)$ shows the change in the odds ratio if the variable is increased by one [15]. We want to examine which variable, "egoistic orientation" or "biospheric orientation", has a stronger influence on the willingness to pay more for a sustainable product in the egoistic sectors (products that lead to a direct personal benefit). For the cosmetic sector, we can state that the "egoistic orientation" ($\exp(\beta) = 4.46$) has a higher influence than the "biospheric orientation" ($\exp(\beta) = 2.20$). Looking at the food sector, however, we only notice a small discrepancy between

“egoistic orientation” ($\text{exb}(\beta) = 2.02$) and “biospheric orientation” ($\text{exb}(\beta) = 2.00$). Interestingly, in the two biospheric and altruistic sectors (toys and energy), the effects are contrary to these findings. The analyses indicate that “biospheric orientation” has a greater influence. Ultimately, hypothesis three can also be verified.

Conclusion and Limitations

In summary, we found highly significant correlations between the self-consideration of "acting sustainable" and the willingness to pay more for a sustainable brand. When the young consumers are already "acting sustainable" (in our example by buying sustainable products), they are willing to pay more for those products. We also found that consumers are willing to pay more for those products that lead to a direct personal benefit: for food (products that go directly into the body), and for cosmetics (products that are applied directly to the body).

However, we identified a strong willingness to pay an additional charge in all defined sectors. It seems that young consumers are paying more and more attention to sustainable products in their everyday lives.

Finally, some limitations and directions for future research should be mentioned. Firstly, our research has the character of a “pre-study”. We also concentrated only on a young consumer group. Future research might analyze whether these findings can be transferred to other groups of consumers. A study with more cases and other sectors would be desirable. Secondly, the strongest criticism of the study is that we could not examine the real buying process. A future study might use a study design that enables examination of actual purchasing behavior, such as a special experimental design.

References

- [1] Van Doorn, J. & Verhoef, P. (2011). Willingness to pay for organic products: differences between virtue and vice foods. *International Journal of Research in Marketing*, 28 (3), 167-180.
- [2] Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU) (2010). *Umweltbewusstsein in Deutschland*. Berlin: BMU.
- [3] Belz, F.-M. & Peattie, K. (2010). *Sustainability Marketing. A Global Perspective*.
- [4] Spash, C. L. (2006). Non-economic motivation for contingent values: Rights and attitudinal beliefs in the willingness to pay for environmental improvements. *Land Economics*, 82, 602-622.
- [5] Carson, R.T. , Wright, J., Alberini, A., Carson, N. & Flores, N. (1994). *A Bibliography of Contingent Valuation Studies and Papers*, La Jolla, CA: Natural Resource Damage Assessment.

- [6] Hausman, J. A. (1993). *Contingent Valuation: A Critical Assessment*. Amsterdam: North-Holland.
- [7] Stern, P. C. (2000). Toward a Coherent Theory of Environmentally Significant Behaviour. *Journal of Social Issues*, 56 (3), 407-424.
- [8] Bühl, A. (2012). *SPSS 20: Einführung in die moderne Datenanalyse unter Windows*. München: Pearson.
- [9] Gerpott, T.J. & Mahmudova, I. (2006). Ordinale Regression: Eine anwendungsorientierte Einführung. *Wirtschaftswissenschaftliches Studium*, 35, 495-498.
- [10] Fahrmeir, L. & Tutz, G. (2001). *Multivariate Statistical Modelling Based on Generalized Linear Models*. Berlin: Springer.
- [11] O'Connell, A. (2006). *Logistic regression models for ordinal response variables*. Thousand Oaks: Sage publications.
- [12] Schendera, C. F. (2008). *Regressionsanalyse mit SPSS*. München: Oldenbourg.
- [13] McCullagh, P. (1980). Regression models for ordinal data. *Journal of the Royal Statistical Society Ser. B*, 42, 109-142.
- [14] Backhaus, K., Erichson, B., Plinke, W. & Weiber, R. (2008). *Multivariate Analysemethoden*. Berlin: Springer.
- [15] Rese, M. & Bierend, A. (1999). Logistische Regression. *Wirtschaftswissenschaftliches Studium*, 28 (5), 235-240.

TABLE 1 Description of sample by percentage and number

Variable	Females (N=209)		Males (N=244)		All (N=456)	
	%	N	%	N	%	N
<i>Age</i>						
≤14 years	0.5%	1	0.0%	0	0.2%	1
15-24 years	59.9%	121	43.6%	99	51.2%	220
25-34 years	29.2%	59	38.3%	87	34.2%	147
35-44 years	3.5%	7	9.7%	22	6.7%	29
45-54 years	5.4%	11	7.0%	16	6.3%	27
≥55 years	1.5%	3	1.3%	3	1.4%	6
<i>Children</i>						
yes	12.5 %	26	14.0 %	34	13.2%	60
no	87.5 %	182	86.0 %	208	86.8%	393
<i>Willingness for add. charge (de- pendent variable)</i>						
<i>food</i>						
no add. charge	8.8%	18	16.5%	40	13.1%	59
less than 10%	36.6%	75	36.4%	88	36.4%	164
10% - 30%	45.9%	94	42.1%	102	43.8%	197
31% - 50%	5.9%	12	4.5%	11	5.1%	23
more than 50%	2.9%	6	0.4%	1	1.6%	7
<i>cosmetics</i>						
no add. charge	10.7%	22	38.8%	92	26.0%	116
less than 10%	38.8%	80	37.6%	89	38.1%	170
10% - 30%	38.3%	79	19.8%	47	28.3%	126
31% - 50%	9.7%	20	1.7%	4	5.4%	24
more than 50%	2.4%	5	2.1%	5	2.2%	10
<i>toys</i>						
no add. charge	9.3%	19	25.9%	62	18.3%	82
less than 10%	33.7%	69	35.6%	85	34.7%	155
10% - 30%	43.4%	89	32.2%	77	37.1%	166
31% - 50%	9.8%	20	4.6%	11	6.9%	31
more than 50%	3.9%	8	1.7%	4	2.9%	13
<i>energy</i>						
no add. charge	18.8%	39	28.8%	69	24.0%	108
less than 10%	40.1%	83	44.2%	106	42.4%	191
10% - 30%	34.8%	72	22.9%	55	28.4%	128
31% - 50%	4.3%	9	2.5%	6	3.3%	15
more than 50%	1.9%	4	1.7%	4	1.8%	8
<i>Statements (independent variable)</i>						
<i>food</i>						
bio. statement agree	75.1%	142	65.4%	149	69.5%	292
bio. statement reject	24.9%	47	34.6%	79	30.5%	128
ego. statement agree	70.8%	138	48.4%	109	58.8%	248
ego. statement reject	29.2%	57	51.6%	116	41.2%	174
<i>cosmetics</i>						
bio. statement agree	65.6%	120	50.0%	88	57.9%	209
bio. statement reject	34.4%	63	50.0%	88	42.1%	152
ego. statement agree	76.1%	124	47.3%	71	62.4%	196
ego. statement reject	23.9%	39	52.7%	79	37.6%	118
<i>toys</i>						
bio. statement agree	44.8%	87	43.6%	96	43.9%	183
bio. statement reject	55.2%	107	56.4%	124	56.1%	234
ego. statement agree	71.7%	137	55.4%	118	62.7%	255
ego. statement reject	28.3%	54	44.6%	95	37.3%	152
<i>energy</i>						
bio. statement agree	97.1%	200	93.4%	225	95.1%	428
bio. statement reject	2.9%	6	6.6%	16	4.9%	22
ego. statement agree	75.3%	149	64.5%	149	69.4%	300
ego. statement reject	24.7%	49	35.5%	82	30.6%	132

TABLE 2 Correlations between the self-consideration of "acting sustainable" (buying sustainable products) and the willingness to pay an additional charge for sustainable products

Correlations	add. charge for food	add. charge for cosmetics	add. charge for toys	add. charge for energy
	χ Chi (Tau-c)	χ Chi (Tau-c)	χ Chi (Tau-c)	χ Chi (Tau-c)
<i>Self-consideration of "acting sustainable" (from "always" to "never")</i>	84.368*** (-0.180***)	59.702*** (-0.140***)	43.812*** (-0.148***)	61.003*** (-0.062)

*p < .10; *p < .05; **p < .01; ***p < .001.

TABLE 3 Percentage of willingness to pay more for sustainable products in different sectors

Percentages	Egoistic-value-driven sectors	Biospheric or altruistic-value-driven sectors
<i>Additional charge</i>		
no add. charge	19.55 %	21.17 %
less than 10%	37.25 %	38.56 %
10% - 30%	36.05 %	32.79 %
31% - 50%	5.25 %	5.13 %
more than 50%	1.9 %	2.35 %

TABLE 4 Parameter estimates of ordinal regression coefficients

Variables	Egoistic-value-driven sectors		Biospheric & altruistic-value-driven sectors	
	(1) food	(2) cosmetics	(3) toys	(4) energy
Parameter estimates				
<i>Threshold</i>				
add. charge = 1	-1.108***	0.301	-0.699***	-0.413
add. charge = 2	0.952***	2.381***	1.016***	1.476**
add. charge = 3	3.721***	4.896***	3.286***	3.757***
add. charge = 4	5.474***	6.393***	4.725***	4.940***
add. charge = 5	0 ^a	0 ^a	0 ^a	0 ^a
<i>Main variables</i>				
biospheric	0.691**	0.789**	0.739***	0.549
non-biospheric	0 ^a	0 ^a	0 ^a	0 ^a
egoistic	0.705**	1.494***	0.393 ⁺	0.060
non-egoistic	0 ^a	0 ^a	0 ^a	0 ^a
<i>Control variables</i>				
children	-0.050	-0.508	-0.264	-0.080
no children	0 ^a	0 ^a	0 ^a	0 ^a
female	0.220	1.199***	0.840***	0.548**
male	0 ^a	0 ^a	0 ^a	0 ^a
N	456	288	382	422
Likelihood ratio test	33.45***	104.60***	42.65***	11.96*
Test of parallel lines	14.77	150.15***	16.02	4.40
adj. R ² McFadden	0.036	0.137	0.042	0.011
R ² Nagelkerke	0.090	0.328	0.114	0.030
R ² Cox & Snell	0.082	0.305	0.106	0.028

⁺ p < .10; *p < .05; **p < .01; ***p < .001.

^a This parameter is set to zero because it is redundant.

ICSSAM-888

American Professional Baseball Infielder Starting with Bench Analysis

Kai Way Lee^a, Wen Sheng Chiu^{b,*}, Yun Tien Ma^c, Pei Yu Hsieh^d

^aDepartment of Technology Management Chung Hua University, Hsinchu City, R.O.C.
Email: kai@chu.edu.tw

^{b,*} Ph.D Program of Technology Management, Chung Hua University, Hsinchu City/National Central University PE, R.O.C.
Email: vincent@cc.ncu.edu.tw

^c Ph.D Program of Technology Management, Chung Hua University, Hsinchu City, R.O.C.
Email: d10003016@chu.edu.tw

^d Ph.D Program of Technology Management, Chung Hua University, Hsinchu City, R.O.C.
Email: d10003021@chu.edu.tw

Abstract

In all of professional sports, training athletes or athletes not only need to spend a lot of manpower and financial resources to complete training for a long time and, importantly. In professional baseball player as an example: When a player gradually expose their capabilities, if it can find the starting job altar relevant rules or conditions, and with the talent and the players to focus on training-related assistance, players will be able to effectively enhance the value of helping players seeking a better way and to protect, As a result, the pellets can be obtained not only powerful players in order to get better results, training for becoming a starter inadequacies can also significantly reduce the risk of the player's career, but also can reduce unnecessary training and behind huge training costs, and provide players higher in a short career security, get a win-win situation. In this study, data from the U.S. over the past Hu Jinlong major league players in an example case study, the difference will be the starting second baseman and shortstop and suggestions were discussed between the National League for Hu Jinlong (National League) teams. Starting with the difference between the bench for part of this study will be data mining through the data in the feature selection method to analyze the key differences between the National League second baseman and shortstop for the team and the bench players starting between and key relationships there between, the final results of the analysis will be compared with the case discussed, and the ball than the recommended rating given to the expert or to be assessed against the control methods.

Keyword: Data mining, Feature selection, Sports forecasting, Major League

1. Introduction

American League Baseball or called MLB. Since 1871 the oldest of the National League, American League was founded in 1901 and in 1902 after the merger and what is called the American Professional Baseball League, has long been regarded as the most senior baseball league in North America. Gathered in the brightest talent and its rich farm resources and salaries, making it not only America, but baseball players all around the world aspire to the dream of the land, even the highest temple called baseball player. For different fielding positions, the ability of the players needed requirements will usually vary. Of course, the ideal situation is that all the players can be both all the features (including: hitting, fielding, feet away, slugging percentage, etc.), but the reality is often difficult to reach, so consider fielding players of the characteristics of the various arrangements and scheduling pellets must carefully consider. In general, both sides close fielder (1, baseman and around the outfield) emphasis on combat power, and by the middle infielders (2 baseman, guerrilla and in the outfield) the emphasis on defense and speed. Therefore, when considering starting the required capacity must consider the difference between the focus of the seat of the garrison. This study analyzes the MLB First hair between the bench and the ability required to provide to the players who are trying to further strengthen the numerical point of view to use as the focus, in order to invest in the most reasonable in order to achieve maximum performance meet the needs of first-mover. Therefore, this study will be Hu Jinlong example for analysis and discussion. The use of their National League teams in each of the second baseman and shortstop use feature selection (Feature selection) as a tool to analyze the performance and capabilities starting infielder relationship between the bench and made major league teams starting in place of the decision the ability to focus, and in the final recommendations of the experts or the ball than give Hu Jinlong assessment to assess the reliability of this method if there is an accurate depiction of the characteristics of the starting part.

2. Method

2.1 Baseball-Related Prediction

Most of the first class to the team's point of view to make predictions or judgments winning , early this type of research is mainly carried out by statistical analysis methods, such as proposed use of statistical methods to predict scores (Rubin each bureau for several baseball , 1958) . Thereafter, it is proposed the use of selection model (Choice Models) to predict MLB division title (Barry, 1993). In 1995 there were scholars MLB teams to long-term performance prediction (Kaigh, 1995). Is to use statistical methods to answer questions related to what happened in baseball (James, 2004). Or a two -stage Bayesian model to predict the victory or defeat for major league teams (Tae & Tim, 2004), but also because of widespread use of computers and computing to improve the speed and scholars began to adopt a different approach for the baseball tournament potential to predict that the proposed

method is to use machine learning to predict and analyze for MLB teams, (Donaker, 2005). In addition, the motion prediction for a piece of the whole discussion (Stekler et al., 2010), studies predict the outcome of MLB teams have been continuing with (Miller, 2011). The second category is the emphasis on the players themselves, such as the player's own technology or locates more. Scholars such as Chen's victory against the Chinese Professional Baseball League with defeat vote cast differentiate technical analysis (CS Chin et al, 2009). Such studies, scholars use multidimensional scaling method for starting pitchers pitching techniques to locate (CS Chin, 2009). In addition, some scholars apply benchmarking method for the analysis of professional baseball team and the team concept of military differences (CS Chin et al, 2012).

2.2 Classifier

In this study, two mainstream classifier experiments were support vector machines and artificial neural networks. SVM is proposed in 1995 by AT & T Bell Labs Research staff Vapnik and Coters, the statistical learning theory based on structural risk minimization principle (structural risk minimization principle) developed by the (Cortes, 1995). SVM is the basic concept of a linear binary classifier (linear binary classifier), using a linear separable hyper plane as a classifier. Vapnik for Support Vector Machine is to define two sets of pre-label classification good value (1 or -1) data, a linear function of the input number (linear function) do continuous training, the last train to the two sets of data are best decision letter number (decision function), formed through this the best decision letter number between two sets of data classification hyper plane largest separation intervals (maximum margin), two sets of data points can make the most open, resulting in better performance and higher classification promotion the correct rate.

3. Analysis and Forecast

3.1 Data Source

From the data source can be found in Table 1, Hu Jinlong constantly hovering between major league and AAA, so for such excellent players, but failed to gain a firm starting position, this study aims to provide a complete analysis of the actual data through training direction and focus for the future of Taiwan has the potential to provide players discussions and suggestions on the data performance.

Table 1: 2003-2010 Hu Jinlong performance at the level of the Unions Dodgers

Year	Grade	G	AB	R	H	2B	3B	HR	BB	SO	SB	AVG	OBP	SLG
2003	Adv	53	220	34	67	9	5	3	14	33	5	0.305	0.343	0.432
	Rookie													
2004	A	84	332	58	99	15	4	6	23	50	17	0.3	0.342	0.425
	Adv A	20	75	12	23	4	1	0	5	6	3	0.307	0.35	0.387
2005	Adv A	116	470	80	147	29	1	8	26	40	23	0.313	0.347	0.43
2006	AA	125	488	71	124	20	2	5	49	63	11	0.254	0.326	0.334
	AA	82	325	56	107	30	5	6	26	33	12	0.329	0.38	0.508
2007	AAA	45	192	33	61	10	1	8	6	18	3	0.318	0.337	0.505
	MLB	12	29	5	7	0	1	2	0	8	0	0.241	0.241	0.517
2008	AAA	41	156	21	46	5	3	1	7	19	2	0.295	0.323	0.385
	MLB	65	116	16	21	2	2	0	11	23	2	0.181	0.252	0.233
2009	AAA	130	496	66	146	21	5	6	25	54	14	0.294	0.332	0.393
	MLB	5	5	2	2	1	0	0	0	2	0	0.4	0.333	0.6
2010	AAA	58	208	37	66	11	1	4	8	16	8	0.317	0.339	0.438
	MLB	14	23	2	3	1	0	0	0	5	1	0.13	0.16	0.174

3.2 Data Analysis

In this study, to find motivation from the beginning, according to the study determines the motivation and purpose of the study background. And a variety of data collection based on the object of the garrison desired seat observable. After data collection is complete, using linear regression analysis. This study will gather experts and ball commentary for Hu Jinlong proposal to analyze differences in the results of controlled studies, and to explore whether consistent with the actual situation. Finally, suggestions for observing objects based on the main features of this study.

Experimental data for the 2008 Major League Baseball 's official website (<http://mlb.mlb.com/home>) Chinese Union season at second base and shortstop general data as training data, and test data for the 2009 MLB All guerrilla hand and second baseman general season information to distinguish whether or not the criteria that starting first incidence (starting times / race under the team's number) , the starting rate of greater than 0.5 is marked as a starter, if the team does not any player with a large 0.5 , then take the first mover has the largest rate by starting . For example, if a player starting the actual number was 40 , under the team's race number of 100 games (starting rate of 0.4) , the experiment will view them as bench players, and vice versa. Of course, if the starting rate is less than 0.5 , but it really is the year of the highest starting position fielding percentage who directly treat the players as starters , and the rest of the bench. Actual view state data distribution, the starting rate of 80 to 90 percent of the data starters are mostly beyond 0.65, except for a few transactions which led to the season because too little information is difficult to determine whether or not the starting players, starting with the remaining players No discrimination is very easy. Furthermore, in order to ensure the reasonableness of the real threshold after the season by one of the study's sports news also confirmed in this experiment compared to the threshold as defined with high credibility.

Table 2 shows the general season in 2008 and 2009 starting with the distribution of the number of data tables bench. Table 2 can be found, the gap between data items starting with the little bench, such information can enhance the fairness of the distribution of the experimental and predicted lower biased (for example: the results predicted only a single class can get a better classification results).

Table 2, the 2008 and 2009 season, second baseman and shortstop data distribution

General season	Second baseman		Shortstop	
	Starting	Wooden bench	Starting	Wooden bench
2008 (Training)	20	30	15	20
2009 (Test)	32	32	30	32

In the first experiment in 2008 training data to characterize the selection, fielding positions and concerns of second baseman shortstop and pick through three different methods to identify the key features characteristic. The results are shown in Table 3. Table 3 shows that: on-base ability (H, 3B, HR, BB, 2B, OBP), speed (SB), as well as the ability to choose the ball (SO, BB) is a major factor in the National League second baseman and shortstop, first issued but second baseman in addition to the conditions on the base and the speed is better, times are not too many strikeouts. But for the purposes of the National League shortstop,

fielding rate (FPCT) is a significant and crucial starting key factor, with second baseman this point quite different. If one of the purposes in accordance with the experimental results, which the general public is past experiences vary, because the experimental results show that the second baseman is part of the League of Nations in terms of attacking players, while shortstop will focus lies in defense.

Table 3, the various features of the selected feature selection methods results

Method	Second baseman	Shortstop
Cfs Subset Eval	H, 3B, SO, SB	H, BB, FPCT
Decision Stump	HR, R, SLG	H, 2B, SB
Linear Regression	R, H, HR, SO, SB, CS	H, HR, BB, SB, OBP, FPCT

The second experiment is still using the training data 2008 to experiment to experiment this experiment confirm that the key characteristics of the selected representative capacity. The second experiment using the experimental one to pick out key features classifier training and by the ability to determine the merits of the classification features representative capacity (if on behalf of good ability, you can get a better classification results, and vice versa). Set on the experiment conducted in accordance with the aforementioned five cross-validation method to predict the classification ability, then follow to judge the effectiveness of the classification features representative capacity, relevant results shown in Table 4. The experimental results can be found, on the whole genetic algorithms are singled out characteristics more representative. In terms of classification terms, SVM provides better training methods and predictive models, and therefore the whole SVM classification results than the ANN to get better. However, if one compares the overall conclusion of the experiment, and the experimental results of two genetic algorithms provided, the principles are the same, the second baseman still based attack-oriented, the emphasis on defensive shortstop.

Table 4: Classification results of the various features of the selection method

Data collection	Classification	Second baseman (5-fold)	Shortstop (5-fold)
Dataset-GA	SVM	<u>88%</u>	<u>94%</u>
	ANN	<u>83%</u>	73%
Dataset-DT	SVM	84%	89%
	ANN	77%	<u>80%</u>
Dataset-LR	SVM	86%	<u>94%</u>
	ANN	73%	<u>80%</u>

The third experiment used to emphasize the characteristics of the interpretation capabilities are sufficient to infer other by year, in addition to the experiments used to test whether there is a difference between the second baseman and shortstop. To test the reasoning ability of the method to predict the experimental model using experimental two established to forecast, forecast data is the 2009 second baseman and shortstop, relevant results shown in Table 5. The results show that this method extracted features have the ability to infer other by year, in addition to obvious from the table can also be found by shortstop or second baseman to predict the use of second baseman shortstop to predict the existence of quite remarkable differences.

Table 5: forecast accuracy

Data collection	Classification	2008 Second baseman (Training Information)		2008 Shortstop (Training Information)	
		2009 Second baseman	2009 Shortstop	2009 Shortstop	2009 Second baseman
Dataset- GA	SVM	H, 3B, SO, SB		H, BB, FPCT	
		91%	83%	87%	91%
Dataset- DT	SVM	R, HR, SLG		H, 2B, SB	
		91%	87%	93%	91%
Dataset- LR	SVM	R, H, HR, SO, SB, CS		H, HR, BB, SB, OBP, FPCT	
		91%	83%	87%	91%

4. Conclusion

In this paper, the difference major league baseball players between starters and bench be explored, and with feature selection methods and data mining techniques to target the difference between starting and coming off the bench to analyze experimental results show that the data after screening You can get high prediction accuracy can even extrapolate the results to other data by year's race season in general. The researchers think this is a good start, the method recommended in this paper can not only extract the important differences between starting and bench, and its representative has reached 80 to 90 percent of capacity on behalf of, and in this framework does not require number of samples to worry too much or too little of the phenomenon, through neutral data mining methods, but also provide more objective information is used to measure the difference between the starting and the bench, and in the last case using the methods discussed above, the use of extracted key features contrast with the actual case, once again proved the reliability of the study.

The author believes that the use of the general season, even though the estimated effective general information on the season, but still some restrictions, such as if a player has not been promoted to the rank of major league players, we will not have any data can be predicted for the player, which is a great pity , so for the next part of the study, we observed a soon promoted to the rank of major league players, spring training is a very important indicator, they will be recruiting to carry out major league spring training, but after spring training

season in general these the player does not necessarily have the opportunity to be assigned as a starter, and therefore hope for the future, or a minor league spring training through the data to be selected as a key factor in major league players, take a clear understanding of the important factors of the data between each other.

5. References

- Barry, D. and Hartigan, J.A.. Choice Models for Predicting Divisional Winners in Major League Baseball, *Journal of the American Statistical Association*, 88-423, 1993, pp 766-774.
- Cortes, C. & Vapnik, V., Support vector networks. *Machine Learning*, 20, 1995, pp. 273-297.
- Donaker, G., *Applying Machine Learning to MLB Prediction & Analysis*. CS229 – Stanford University, 2005.
- James, B., Albert, J., and Stern, H. S.. Answering Questions About Baseball Using Statistics, *Chance*, 6-2, 2004, pp. 17-30.
- Kaigh, W. D.. Forecasting Baseball Games, *Chance*, 8-2, Spring 1995, pp 33-37.
- Kohavi, R. & John, G., Wrappers for Feature Subset Selection, *Artificial Intelligence*, 97-12, 1997, pp. 273-324.
- Kohavi, Ron., A study of cross-validation and bootstrap for accuracy estimation and model selection, *IJCAI'95 Proceedings of the 14th International Joint Conference on Artificial Intelligence*, 2, 1995, pp. 1137-1143.
- Miller , K., Predicting Wins for Baseball Games, St. Lawrence University Department of Mathematics, *Computer Science and Statistics*, 2011.
- Rubin, E., An Analysis of Baseball Scores by Innings, *The American Statistician*, 12, 1958, pp. 21-22.
- Stekler, H.O., Sendor, D., Verlander, Richard, Issues in sports forecasting, *International Journal of Forecasting*, 26, 2010, pp. 606–621.
- Tae, Y. Y. & Tim., S., A Two-Stage Bayesian Model for Predicting Winners in Major League Baseball. *Journal of Data Science*, 2, 2004, pp. 61-73.
- Witten, I.H., Frank, E., Trigg, L., Hall, M., Holmes, G. & Cunningham, S.J., Weka: Practical Machine Learning Tools and Techniques with Java Implementations. *Proceedings of the ICONIP/ANZIIS/ANNES'99 Workshop on Emerging Knowledge Engineering and Connectionist-Based Information Systems*, 1996, pp. 192–196.

ICSSAM-717
Consideration of Green Issue for Inbound Supply Chain

Yi-Chun Kuo

Dep. of Intl Business, Chung Yuan Christian University, 200, Chung Pei Rd, Chung-Li,
32023, Taiwan, R.O.C.

E-mail: kuoyichun99@gmail.com

Hui-Hsin Lai

Dep. of Intl Business, Chung Yuan University, 200, Chung Pei Rd, Chung-Li, 32023, Taiwan,
R.O.C.

E-mail: fufu.cat.0w0@gmail.com

Abstract

A supply chain system can be large in scale and complicated. Any of one supplier's failures may affect the flow of goods and services and that will cause a costly loss and delivery delay.

Base on a growing interest and attention in environmental and green issues, many related strict regulations were formulated for environmental product, likes the Environmental Directives of European Union, WEEE, RoHS and EuP. Any product shipped from other countries will be prohibited by European governments if the toxic substances exceeding the standard. Therefore, the manufacturers need not only control and check strictly during the process of manufacture and selling, but also have to concern the inbound risk caused from the upstream supplier. The control and management of supply risks from upper supplier become an important consideration for a company when selecting their partner. Most of the pass studies focus on the risks analysis that may happen along the supply chain. This research aims to reinforce inbound supply chain risk management by incorporating the environmental risks into consideration. An analytical hierarchy processing (AHP) method was proposed to classify, manage and assess inbound supply risks. By ranking the weights of inbound supply risks, it is helpful and important to an organization's success to understand whether the environmental risks became important sources of supply risk and how to best manage them.

Keywords: inbound supply chain risk; green issue; environmental risk; analytical hierarchy processing (AHP)

ICSSAM-851

Examining the Cross-strait Content Collaboration Networks between Taiwan and Mainland China~ The Perspective of the Creative Talent

Hsiao-Ling, Chung*

Institute of Creative Industries Design

National Cheng Kung University, Taiwan, R.O.C.

Email: hlchung@mail.ncku.edu.tw

Abstract

The cross-strait relationship in this study refers to the relations between mainland China and Taiwan, which are separated by the Taiwan Strait in the west Pacific Ocean, and has been characterized by political tensions after the Chinese Civil War in 1949. Yet since the late 1980s, with the lifting of political bans, there has been an increasing exchange between the two sides. The Economic Cooperation Framework Agreement (ECFA) which took effect on January 2011 represents a significant improvement in their economic ties which has positioned Taiwan further into the globalized Chinese market, and in particular, the cross-strait collaborations in the audiovisual sector proves economically and culturally significant as it is regarded as the locomotive driving the creative economy for both sides, and issues of 'brain-drain and brain-gain' has become increasingly visible yet lack of systematic research. Therefore this study explores the *why* and *how* of the TV/film producers in developing the cross-strait collaboration relationships. Empirically, this study draws on 1) the interview materials with six film/TV producers who had involved in such networks, and 2) a case study on an ongoing co-production. Theoretically, three tiers of analytic levels (individual-project-firm) derived from the *complex adaptive system* theories, were designed to follow the emergence of a possible self-organizing network pattern from the bottom up of the creative enterprise. The author aims to draw out implications concerning firstly the culture and creativity exchange issues involved in such network, and secondly, the development issues of the overlooked creative talents in such complicated collaborative networks.

Key words: creative enterprises, complex adaptive system, creative talent, network organization, Taiwan cultural and creative industries, mainland China

Introduction

The 'cross-strait' in this study refers to the relations between mainland China and Taiwan, which are separated by the Taiwan Strait in the west Pacific Ocean, and has been characterized by political tensions after the Chinese Civil War in 1949. Yet since the late

1980s, with the lifting of political bans, there has been an increasing exchange between the two sides. The Economic Cooperation Framework Agreement (ECFA) which entered into effect on January 2011 represents the most significant improvement in their economic ties and has positioned Taiwan further into the globalized greater Chinese market.

In particular, the cross-strait content collaborations (CSCC) in the audiovisual sector proves economically as well as culturally significant for both sides as the sector is regarded as the locomotive driving the creative economy, however the issues of ‘brain-drain and brain-gain’ between the two sides has become increasingly visible yet lacking of systematic research. Against such background, this study reviews the recent literature on networks of the creative and media sector and the Taiwanese policy discourse on the issue of talent development and cross-strait talent exchange, the purpose are firstly to illustrate a backdrop against the cross-strait network dynamics as Taiwan needs to absorb the wider economic-political-cultural complexity; and secondly, the author intends to draw out implications concerning the extent to which the Taiwanese talent has created bridging effect in the area of CCI, which has gone beyond simply facilitating the exchange, and moving toward building a synergy in creative and cultural production.

The government-funded one-year study started from August 2013 and the empirical research will be undertaken during January to May 2014 involving 1) the face-to-face, semi-structured interviews with executive and producers of six recently finished CSC productions (three TV and three Film productions), and the Taiwanese creative talent involved in such collaborations, and 2) a case study on an ongoing film production in Taiwan. Theoretically, three tiers of analytic levels (individual-project-firm) derived from the *complex adaptive system* (CAS) theories, were designed to follow the emergence of a possible self-organizing network pattern from the bottom up of the creative CSC enterprise. This study aims to demonstrate why and how the creative talent are capable of forming themselves out of disorder to grow with the increasing network complexity and trade-offs brought by the rising greater Chinese market opportunities. Secondly the Taiwanese experience illustrates a distinct chaotic order, and management implications concerning how to facilitate the talent development alongside the network evolution will be identified. Finally the qualitative and exploratory approach taken in this study also serves to refine some of the technical concepts of CAS, and to revamp the ‘economy’ and ‘technical’ mindset of the Taiwanese government in developing the creative industries

Also, as the network models of the creative and media sector in the literature have tended to be developed in a Western context, and research in non-western is relatively limited. Therefore the study on the developing scenario of the creative industries in Taiwan also aims

to narrow the gap.

I: Theoretical Background and Research Gaps

From Top-down Industrial Disintegration to Bottom-up Cross-boundary Reconfiguration

In reviewing the network reflections on the creative and media sector, the earlier top-down ‘flexible specialization’ (Piore and Sable 1984) approach has shown that the production sector of the media industry is composed of various networks, as a result of top-down industrial restructuring (Lampel and Jamal 2003; Barnett and Starkey 1994; Storper 1989). Correspondingly, research at the micro-level has shown that paradoxes and dilemmas abound with the contractual, one-off project-based network organizations (Antcliff, et al 2008; Mannings 2005; Windeler and Sydow 2002; Blair 2003). However, those studies are mainly concerned with the examination of ‘project network’, ‘labour networks’, ‘regional networks’ and ‘informal/ social networks’ as the features of the trade.

Further, although it has been highlighted that the production networks of the creative and media sector should be understood within an interconnected and multi-level industrial ecology (Bilton and Cummings, 2010; Sydow 2009; Bilton 2007; Hesmondhalgh 2007; Pratt 2004). However, research has not yet been empirically structured to look closely at the consequences of these top-down structural changes and how the collaboration dynamics of higher level of complexity are generated from the micro level, and with the individual creative talent.

From a Distribution-led to a Production-led Perspective

The issue of cross-sector content collaboration and exploitation has been addressed in the discussion of product variety of entertainment goods (Storper 1989), and the ‘commodification’ of cultural production (Miege and Garnham 1979). These research highlights how the entertainment industries are undergoing waves of horizontal integration, and how the creativity of the ‘symbol creators’ is processed into commodities through the packaging and repackaging of intellectual property rights of cultural content (Hesmondhalgh 2012; Caves 2000).

Similarly, Throsby’s (2008) six extended, interdependent models of cultural production also highlight the interrelatedness in the creative production system across from the directly-related core creative arts into the wider and indirectly-related industrial sectors. From this perspective, the industrial network of the creative productions extends locally into social relationships with organization and individuals, and globally into patterns of ownership, distribution and consumption through the value system among producers, brokers,

intermediaries, markets and consumers, which involves conflicting, indirect and sporadic relationships in the creative production system (Bilton 2007:47-62).

However, ‘one consequence of this reconfiguration of value networks is to shift attention away from content to the ways in which that content is filtered, packaged, delivered and consumed.’(ibid 2007:53). As a result, the intricate production networks seems to be happening outside the production process, and this overlooks the fact that the production sector has developed its own cross-boundary network system, a microcosm of the larger system as a whole. Especially, the screen industries in Eastern Asia have adapted themselves to the globalized ecology by forming Pan-Asian production chains, which repelled the cultural elements and marketing preferences to affect their production strategy to the global market (Lee 2012, Davis and Yeh 2008)

From Managing Creative Projects to Managing Creative/Commercial Ventures

Indeed due to the importance of inter-organization contexts for creative productions, researchers have focused on the formal project-firm relationships (Grabher 2004, 2003), and the trade-offs of informal networks of freelancers and life-style businesses in organizing the creative projects (Eikhof and Haunschild, 2006; Leadbeater and Oakley 1999). However in terms of managing the creative projects, since creativity is more likely to be realized through networks and social systems (Perry-Smith and Shalley 2003), research has highlighted that the deterministic techniques of Project Management which were developed from the manufacturing industries, are suppressing the nature of the creative processes (DeFillippi and Arthur 1998; Hartman et al 1998).

Consequently, research tends to place greater emphasis on intangible assets and people (Napier and Nilsson 2006; Bilton and Leary 2002; Grabher 2002), by highlighting factors such as personal and entrepreneurial motivation, internal workplace culture, and external work-related social structures and economic conditions in ‘making the most of the best’ (Yamada and Yamashita 2006; Staber 2004; Banks et al 2002). Those research tend to treat creative project management as an inward process of organizing the subtle reconfigurations of internal relationships, processes and the wider external networks, etc; as a result, issues concerning the allocation of material resources, and how the internal network dynamics of the creative projects interact with and influence the structure design of the project organization to grow outwardly, and hence *how* the cultural and creativity issues have been dealt with under the broader economic rationale and market concerns still remained to be further examined.

From Network Adaptation to Complex Adaptive System

Research has indicated that the creative talent and enterprises are capable of demonstrating

their intrinsic capabilities to adjust themselves to the constant organizational reconfigurations (Sydow 2009; Sydow and Staber 2002). However, with the social factors coming into play in network relationships, the issues of adaptation of creative producers become simplified and harmonized. It becomes an act of balancing the exchange continuum, with one end of the economic and rational calculation and compromises and the other of the embedded and social coordination.

As research focus has extended to include the complexity of network formation of the creative productions (Windeler and Sydow 2002); however, such study has tended to focus on the macro-industry. Although a micro-level evolutionary and idea-centred approach has been taken to look into the dynamics of cultural productions, yet the need to go beyond the conceptual insight into the practical contexts which influence the ‘organizing process’ of cultural production in a broader context has been suggested (Staber 2008).

Putting the above together, the fundamental issues associated with the inside workings of business process, that is the role of creative producers and managers on the inside, the multi-directional interaction and adaptation between agents within the more complex content-making environment, has been comparatively neglected.

Accordingly, this study adopts a production-led, project-centred perspective of network development to examine empirically how the CSCC practices emerge through the internal adaptation, from the micro-individual level and shape the project networks which radiate outwards and across the strait, to achieve a multilevel analysis, namely from the individual to the project, and then to the firm level. The paper therefore aims to 1) Examine the CSCC practices of audiovisual productions operating across the strait. 2) Explore issues in managing the CSCC, by drawing out lessons from the Taiwanese context of the independent production sector which is framed within an economic approach. 3) Develop a bottom-up management approach to networks in the expanding creative economy.

II: Research Approach

In this regard, the model of the Complex Adaptive Systems (CAS) provides an appropriate way for analyzing the network phenomenon. Such a model demonstrates an adaptive transformation through the interaction between diverse agents from the micro-level (Brown and Eisenhardt 1997; Stacey 1996). Especially as the feature of CAS models lies in its interconnections distributed all over the system, the organizational research approach derived from the models is inherently multilevel, providing a holistic yet level-specific way to examine the interrelationships within the system at all levels (Anderson 1999; Brown and Eisenhardt 1998).

The individual-level analysis was based on the ideas of the physicist Ilya Prigogine (Nicolis and Prigogine 1977) of ‘initial conditions’ of dissipative structures to examine how the attitudes of producers influence their network practices, and shape the ways in which the network develop. With biologist Kauffman’s theory of ‘self-organization’ (1993), **the project-level** analysis continued to examine how the network are formed around the project organization by looking into issues of the ‘internal properties’ of diversity, flexible structures, and specialization. By which I examined how the producer interacts with other network agents/decision-makers and how they modify their behavior to achieve a collective goal. **The firm-level** examination concerned the issues of the project-firm relationship. With complexity scientist Holland’s theory of ‘emergence’(1998), the analysis explains how the macro-level patterns and collective properties arise from the dynamic interaction of agents at the lower level. I will look at whether the networking practices around the productions trigger any organization structure, management action and strategy of the firm, or whether the production company takes any proactive approach to advance the company in a cross-strait way with the opportunities brought by the growing market.

III: The Empirical Context- Taiwan and Mainland China

Some recent efforts and signs of developing CCI in Taiwan based on the cross-strait relationship can be seen from the following: 1) the 2004 Cultural Policy White Paper recognized the significance of *transforming* the cross-strait economic relation into a positive element in developing domestic CCI in the cross-strait market; 2) various subsidy programmes has been introduced to encourage the cross-strait exchange between the cultural and creative producers; 3) The Cultural and Creative Industries Development Law was passed in 2010, and it addressed the importance of establishing a cross-strait mechanism to facilitate copyright certification and protect the copyrights holders in Taiwan; 4) the Chinese Minister of Culture advocated a cultural version of the ECFA in his 2011 visit to Taiwan, and has proposed Cross-strait Cultural Exchange Agreement in January 2014, and the suggestions were so far widely received by the Taiwanese authorities. 5) Despite being regulated by a point system, the TV/film co-production between Taiwan and mainland China has been encouraged by authorities from both sides since the late 90s.

While the cross-strait market becoming increasingly central to the future development of Taiwanese CCI, however, the study aims to reveal that an understanding of how the talent network embedded in the cross-strait collaborations could strengthen and deepen the CCI relations has been overlooked, and a culture-based strategic direction looking at the culture and creativity issues is needed. Such a direction requires the Taiwanese authorities to go beyond simply looking at the cross-strait collaboration as a matter of balancing cultural

tensions between ‘Taiwanese’ and ‘Chinese’, or developing the wider market in the greater Chinese region.

A levels-and-themes-based approach are applied to the empirical data which are being analyzed. It will begin with identifying the keywords which seemed to be used by the interviewees frequently in connection with the level-specific themes and concepts. Those prominent keywords of clusters will then be integrated into thematic entities relating to particular research questions that emerge from the multiple-level analysis. The findings from the individual-level data will guide the analysis of the higher-level data, and consequently, the exploratory approach will help me to comprehend the emergence of the networks in a more holistic way.

IV: Main Findings and Contributions

Apart from the level-specific findings, the distinct types of network relationships characterize the CSCC will be identified, including **1) Networking Driven by Individuals-** The entrepreneurial nature of individual agents encourages their self-driven and self-adapting CSCCN actions which contribute to a disconnected network **2) Networking Dependent on Social Relationship-** The agents are embedded in, and rely upon a wider pool of social networks, which become a double-edged advantage in terms of exploring and maintaining network relationships. , and **3) Networking around the Project-based Enterprise.** The project-based, one-off nature of creative production which derives from the director-centred practices remains apparent in the CSCCN practice; as a result, the content production as a firm has been neglected.

Those finding will be further analyzed to see to what extent it requires management to minimize the potential conflicts and impacts on the creative process which remains essential to the producers. Specifically, it aims to see whether there is any discernible coherent order with the evolution of the network process. To summarize, while the opening up of opportunities, networks and markets with the rising greater Chinese market, with the CAS framework, the study aims to identify its complex networking order with which the developing Taiwanese creative enterprises and talents connected and drifted around across the strait, could capitalize on the ongoing trends in a cultural and creative way. The researcher aims to present the result timely on the conference.

This study enhances our understanding of the organizational tensions involved in the talent network of the CSCC phenomenon in the creative economy in general, and in Taiwan in particular as it needs to absorb the wider economic-political-cultural complexity. It aims to contribute to the conceptual, theoretical and empirical levels of analysis. In terms of network

management, by conceptualizing the network phenomenon as a CAS, the study will provide the managerial and policy implications. In regards to the development of theory and knowledge, and how the paper relates to the overall theme of the conference, the study integrates the micro-level organizational complexity of the creative enterprises into a theoretical reconsideration of the culture, creativity and talent issues and their complex and layered assembling in the growing creative economy in the seemingly promising yet changing 'dark hole' of the Chinese markets; and instead of a predominant China-focused perspective, the study places the marginalized context of CCI in Taiwan, and will focus on the intangible values, struggles, concerns and real practice of creative and cultural entrepreneurs at the centre of the network study.

Reference

- Anderson, P. (1999) Complexity theory and organization science. *Organization Science: A Journal of the Institute of Management Sciences* 10(3):216-232.
- Antcliff, V., Saundry, R. & Stuart, M. (2008). Networks and social capital in the UK television industry: The weakness of weak ties. *Human Relations* 60 (2): 371-393.
- Barnatt, C. and Starkey, K. (1995) The emergence of flexible networks in the UK television industry. *British Journal of Management* 5(4):251-260.
- Bilton, C. and Cummings S. (2010) *Creative Strategy: Reconnecting Business and Innovation*. London: WileyBlackwell
- Bilton, C. (2007) *Management and Creativity: From Creative Industries to Creative Management*. Malden,MA; Oxford, UK: Blackwell.
- Bilton, C., and Leary, R. (2002) What can managers do for creativity? Brokering creativity in the creative industries. *International Journal of Cultural Policy* 8 (1): 49 – 64.
- Blair, H. (2003) Winning and losing in flexible labour markets: the formation and operation of networks of interdependence in the UK Film industry. *Sociology* 37(4): 677-695.
- Brown, S. L., Eisenhardt, K.M. (1998) *Competing on the Edge: Strategy as Structured Chaos*. Boston,Mass.:Harvard Business School Press.
- Brown, S. L., and Eisenhardt, K.M. (1997) The Art of Continuous Change: Linking Complexity Theory and Time-paced Evolution in Relentlessly Shifting Organizations. *Administrative Science Quarterly* 42(1):1-34.
- Caves, R. E. (2000) *Creative Industries: Contracts Between Arts and Commerce*. Cambridge, Mass.; London:Harvard University Press.
- Cunningham, S. and Higgs, P. (2008) *Creative industries mapping : where have we come from and where are we going?* *Creative Industries Journal*, 1(1). pp. 7-30.

- Daft, R. L., Lewin, A. Y. (1993) Where are the theories for the 'New' organization forms? An editorial essay'. *Organizational Science* 4: i-vi.
- Darrell, W. and Yeh Y.U.(2008) *East Asian Screen Industries*. London: British Film Institute
- Dreyer, B., and Grnhaug, K. (2004) Uncertainty, flexibility, and sustained competitive advantage. *Journal of Business Research* 57(5): 484-494.
- DeFillippi, R.J. and Arthur, M. B. (1998) Paradox in project-based enterprise: The case of film making. *California Management Review* 42: 186-191.
- Eikhof, D. R., and Haunschild, A. (2006) Lifestyle meets market: Bohemian entrepreneurs in creative industries. *Creativity and Innovation Management* 15(3): 234-241.
- Grabher, G. (2004) Learning in projects, remembering in networks? Communitarity, sociality, and connectivity in project ecologies. *European Urban and Regional Studies* 11(2):99-119
- Grabher, G. (2003) Cool projects, boring institutions: Temporary collaboration in social context. *Regional Studies* 36(3): 205-214.
- Gravells, J. (2006) The myth of change management: A reflection on personal change and its lessons for leadership development. *Human Resource Development International* 9(2): 283-298.
- Hartman, F., Ashrafi, R., and Jergeas, G. (1998) Project management in the live entertainment industry: What is different? *International Journal of Project Management* 16(5): 269-281
- Hesmondhalgh, D. (2012) *The Cultural Industries*. (2nd ed.) London ; Los Angeles and New Delhi: SAGE.
- Holland, J.H (1998) *Emergence: from Chaos to Order*. Addison-Wesley.
- Kauffman, S. A. (1993) *The Origins of Order: Self-Organization and Selection in Evolution*. New York;Oxford: Oxford University Press.
- Lampel, J., Shamsie J. (2003) Capabilities in motion: New organizational forms and the reshaping of the Hollywood movie industry. *Journal of Management Studies* 40(8): 2189-2211.
- Lee, S. (2012) The genealogy of pan-Asian big pictures and the predicament of the contemporary South Korean film industry. *Transnational Cinemas* 3 (1): 93-106(14)
- Manning, S. and Sydow, J. (2007). Transforming creative potential in project networks: The case of TV production. *Critical Sociology* 33 (1/2): 19-42.
- Manning, S. (2005) "Managing Project Networks as Dynamic Organizational Forms: Learning from the TV Movie Industry", *International Journal of Project Management*, 23 (5), 410-414.
- Marks, M. L.(2007) A framework for facilitating adaptation to organizational transition. *Journal of*

- Organizational Change Management* 20(5): 721-739.
- Miege, B. and Garnham, N. (1979) The Cultural Commodity. *Media Culture and Society* 1: 297-311.
- Napier, N. K., and Nilsson, M. (2006) The development of creative capabilities in and out of creative organizations: Three case studies. *Creativity and Innovation Management* 15(3): 268-278.
- O'Connor, J., and Kung L. (2009) (eds) *Creative Cities, Creative Economy: Asian European Perspectives*, Dordrecht: Springer Publication.
- Perry-Smith, J. E., and Shalley, C. E. (2003) The social side of creativity: A static and dynamic social network perspective. *Academy of Management Review* 28(1): 89-106.
- Piore, M., and Sabel, C. (1984) *The Second Industrial Divide*. New York: Basic Books.
- Pratt, A. C. (2004) Creative clusters: Towards the governance of the creative industries production system? *Media International Australia incorporating Culture and Policy* 112(1):50-66.
- Robins, J. A. (1993) Organization as strategy: restructuring production in the film industry. *Strategic Management Journal* 14 Special Issue: *Corporate Restructuring*: 103-118.
- Scott, A. J. (1996) The craft, fashion, and cultural products industries of Los Angeles: Competitive dynamics and policy dilemmas in a multi-sectoral image-producing complex. *Environment and Planning C* 13:97-124.
- Staber, U. (2008) Network Evolution in Cultural Industries. *Industry and Innovation* 15(5): 569-578
- Staber, U. (2004) Networking beyond organizational boundaries: The case of project organizations. *Creativity and Innovation Management* 13(1): 30-40.
- Storper, M. (1989) The transition to flexible specialization in the U.S. film industry: External economies, the division of labour, and the crossing of industrial divide. *Cambridge Journal of Economics*. Oxford University Press 13(2): 273-305.
- Sydow, J. and Staber, U. (2002) The institutional embeddedness of project networks: the case of content production in German television, *Regional Studies* (36): 215–227.
- Thorsby, D. (2008) Modeling the creative/cultural industries. *International Journal of Cultural Policy* 14(3):217-232.

- Taiwan Ministry of Culture (2011) Survey report of Taiwan Film and Television Industry Trends
- Windeler, A. and Sydow J.(2002) Project networks and changing industry practices – Collaborative content production in the German television industry. *Organization Studies*. 22(6):1035-1060.
- Yamada, J., and Yamashita, M. (2006) Entrepreneurs' intentions and partnership towards innovation: Evidence from the Japanese film industry. *Creativity and Innovation Management* 15(3): 258-267.
- Yi-Kuo Wu & Yi-Hui Jiang(2010) An Exploration on the Development and Dilemma of Co-Production Trendy Drama. *Tamkang Journal of Humanities and Social Sciences* No.44.

ICSSAM-971

Outcomes of Apprenticeship for Employers: an Actor-System Managerial Framework

Stéphanie POUGET

Assistant Professor at Ecole Hôtelière de Lausanne (Visiting Scholar at Hong Kong Polytech University 2013-2014), 18 Route de Cojonnex, 1000 Lausanne 25, Switzerland

stephanie.pouget@ehl.ch

stephanie.pouget@polyu.edu.hk

ABSTRACT (250 words)

Purpose – Extant and current literature on apprenticeship mainly focuses on why and how labor policy planners and educational institutions enable apprentices to qualify and add to a nation's performance. But little research has contributed to a managerial understanding of the host organizations' interest in apprenticeship. The aim of this paper is to examine why and how employers should (not) get involved in Apprenticeship systems, from a managerial viewpoint.

Design/methodology – Across the multiple levels of a host organization, multiple actors can get variously involved in apprenticeship matters. Thus, in order to understand why and how they would do so, we conducted a multiple case study including 8 companies, 95 interviews, 18 days of observation and document analysis.

Findings – Four managerial processes and their related outcomes are defined and articulated to managerial configurations, to depict how and why multiple organizational actors get involved in apprenticeship systems.

Limitations/Perspective – Future research should further study the relationship between the variable dimensions and outcomes of apprenticeship for generalization purpose, in particular from a human resources management perspective.

Value/Implications – Firstly, built and used to investigate apprenticeship outcomes for employers, the actor and system framework depicted in this paper bridges sociological, organisational and managerial theories. Secondly, our multiple case study research strategy enabled us to fruitfully compare the management practices of diversely sized companies from various energy, good and service industries. Finally, there will still be apprentices and apprenticeship only if employers get involved. This paper provides employers with consistent recommendations on why and how to do so.

Keywords: Apprenticeship; Management; Actor and System; Contingent Configuration; Multiple Comparative Cross-Level Case Study.

INTRODUCTION

Shortage of qualified staff on the one hand, and rising unemployment rates on the other hand, both reveal a mismatch between what the employers look for and what the employees can offer in terms of Knowledge, Skills, Aptitudes, Attitudes – KSAAs. To address this issue, some solutions reside in apprenticeship, designed as a paragon of experiential learning fostering school-to-work transition and positive employment outcomes.

Why and how employers get involved into apprenticeship needs to be questioned, based upon a research framework which sees apprenticeship as a multi-level and multi-actor system, and considers configurations of host organizations within their contingent environments (1). A comparative case study reveals why and how eight employers of various configurations in diverse contingent environments get involved in apprenticeship systems, considering interactions between their actors at individual, team, and organizational levels (2).

1.managerial stakes in the multi-level and multi-actor system of Apprenticeship: framework.

1.1 Apprenticeship: from past to present, a multi-level and multi-actor system

A company's sustained competitive advantage stems from its valuable, rare, imperfectly imitable, and uneasily substitutable resources (Barney, 1991). Amongst firm resources, human capital can particularly yield business performance outcomes (e.g., Bowen & Ostroff, 2004; Becker & Huselid, 2006; Le, Oh, Shaffer, & Schmidt, 2007; Subramony, Krause, Norton, & Burns, 2008; Crook *et al.*, 2011). Human capital refers to both the factual and tacit knowledge, skills, abilities and attitudes (KSAAs) embodied in people. While a "war for talent" is spreading in today's knowledge-based economy (Michaels, Handfield-Jones & Axelrod, 2001), the ability to attract, develop, and maintain the right human capital for one's organization is at the core of companies' performance and viability (Boudreau & Ramstad, 1997; O'Reilly & Pfeffer, 2000; Crook *et al.*, 2011).

In Europe however, demographic and economic factors are henceforth combined to predict a terrible shortage of qualified labour force, either due to an ageing workforce about to retire, or due to a mismatch between the supply and demand of skills, or both, actually. The share of jobs employing people with high-level qualifications is expected to increase from 29% in 2010 to about 35% in 2020, while the share of jobs employing those with low qualifications will decrease from 20% to less than 15% (CEDEFOP, 2010). But while there were 2.2 million unfilled job vacancies in 2011, there are still 24 million unemployed people in the European Union (EU), among which 5.5 million young people under 25 years of age (Eurostat, 2013). In this context, apprenticeship plays a critical role in improving school to

work transitions, and young people's employment prospects, by contributing to the acquisition and development of KSAs required by employers.

The origins of apprenticeship can be traced back to the European medieval times. Regulated by trades and crafts guilds and corporations, apprenticeship systems had three major functions which can ultimately and contemporarily be seen as covering managerial interests, especially in France from 11th to 16th centuries (Pougnat, 2010). First, apprenticeship yielded the fusion of school and workplace and of theory and practice, therefore fostering experiential learning of ropes of the trade, which was particularly beneficial to the apprentice in the building of an occupational identity. Second, based upon an article of faith, which set up the responsibility that the apprentice had to take on in the work-process, as well as the mentorship embodied by the master and companions, apprenticeship produced and reinforced organizational socialisation and trade occupational culture. Third, the apprenticeship scheme was a pillar to the institutionalization and competitiveness of the corporations, and even of countries like Germany or France, by nurturing their internal labor market and providing them with valuable, rare, imperfectly imitable, and uneasily substitutable human capital resources. Originally, apprenticeship had therefore multi-level strong implications, and in particular managerial ones for the employers, mainly occurring at the workplace.

However, due to the abolition of trade corporations, and then, to massive industrialization on the one hand, and intense scholarisation on the other, traditional apprenticeship schemes were almost replaced by formal education as a route of work entry in France. Yet, in the 20th century, apprenticeship rose like a phoenix from the ashes with the substantial support of governments in seek of economic recovery after World War I. With regards to the German dual-system and its government sponsored apprenticeship schemes, remains of French informal apprenticeships had to be re-structured and regulated in order to provide industries with a workforce who would have acquired required and certified KSAs by alternating school-based and work-based learning. In other countries, contemporary apprenticeship schemes are also marked by a history of relationships between State, School and Workplace as institutional stakeholders surrounding the apprentice, and whose involvement needs to be highlighted if apprenticeship is to be studied.

A first aspect of the managerial framework that we suggest to better study apprenticeship derives from the multi-level implication of various stakeholders. In this paper, apprenticeship is argued as an embedded social construct which makes sense as a system. System thinking is born from interdisciplinary Macy and MIT conferences held in the 1940s and 1950s by mathematicians (e.g. Von Neumann), cyberneticians (e.g. Wiener, Ashby), anthropologists (e.g. Bateson), economists (e.g. Simon), psychologists (e.g. Lewin), sociologists (e.g. Mead),

and formalized in Von Bertalanffy's (1968) book. In the most usual sense, a system can be defined as a configuration of interrelated parts acting in a way that any change occurring on any part or any relationship of the whole would give way to changes on other parts or relationships, resulting in changes for the whole system (Mendras, 1979). State, School, Workplace and apprentices are all interrelated parts of the apprenticeship system. Any change in those parts, like scholarisation of learning processes and thus formal development of School as an educational institution, or in their relationship, like abolition of the corporation and thus of the apprentice-master binding, means a change for the whole system, like the marginalisation of traditional apprenticeship schemes.

However, a broken contract between an apprentice and a master does not lead to the end of an apprenticeship system whatsoever, because there are different levels of interaction within the system. From cross-national educational programmes (e.g. Erasmus for All) to upper secondary level teachers in apprenticeship schools, from transnational political institutions (e.g. European Council with Copenhagen process) to local public agents in employment agencies, and from international employers' associations (e.g. Business Europe) to mentoring masters in very small enterprises, the variety of actors involved in apprenticeship schemes is huge. A list of these actors would never be exhaustive enough. Its operational utility would anyway be discussable considering that only a stake would define a stakeholder, and only an interaction would define an actor (Crozier & Friedberg, 1980). Stakeholders or actors could only be identified once stakes hold, actions taken or interactions occurred. Thus, any list of actors could only be done *a posteriori*. However, to take action in the most efficient way, any actor would appreciate to reduce any incertitude related to other stakeholders, or more largely, to have an overview of the system of interactions they are embedded in despite their limited rationality (March & Simon, 1958).

In this paper, apprenticeship is seen as a multi-level social system, constructed by its actors at the same time that the system makes the actors. It is postulated that although a modelling of the system could never completely embrace the complexity of the system, it would provide an intelligible and operationalisable representation of it. Actors are multiple, and can be as much individuals as groups of individuals. What substantially defines an actor is the concrete action taken and the stake in taken it. There are three main spheres and five levels of action, and thus, of analysis, that can be considered: School sphere, Work sphere and State sphere; individual level, team level (e.g. apprentice-master-companions), organizational level (e.g. enterprise), sector or industry level (e.g. trade corporation), and institutional level (e.g. country). The actor-system framework suggested for understanding apprenticeship is schematized in Figure 1.

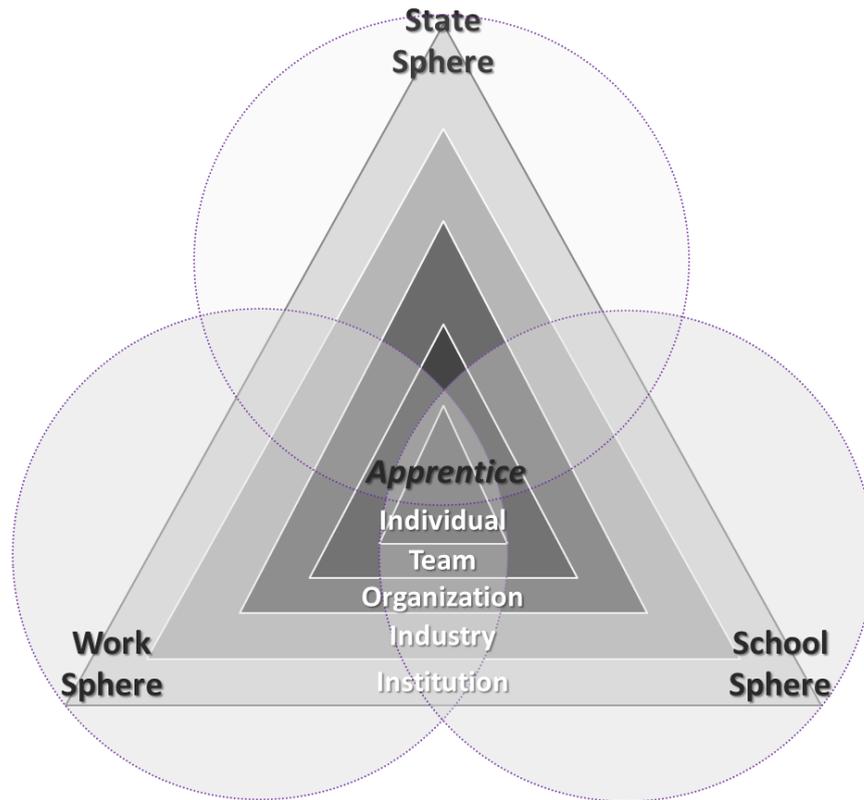


Figure 1: Apprenticeship as a multi-level and multi-actor social system

1.2 Apprenticeship: employers' managerial stakes and configurations reconsidered

Stemming from a socio-historical approach, the modelling of apprenticeship as a multi-level and multi-actor system must be completed through the study of the many ways in which it is manifested nowadays. Worldwide, there are many forms of internships, traineeships, cooperative education and cooperative extension (especially in the USA), work-place learning or continuous training, as well as informal apprenticeship, like the *ustad-shagird* system in South-Asia (ILO, 2012), which are sometimes indistinctively referred to because they all focus on workplace-based arrangements. Modern formal apprenticeship must however be differentiated from those many various informal and informal schemes.

Existing institutional definitions of formal apprenticeship share key distinctive features (ILO, 2012), which can conveniently be classified into four dimensions putting the emphasis on the four main stakeholders involved in apprenticeship like four parts of the system. First, there is a Work dimension, with all aspects of apprenticeship explicitly defined in a specific

fixed-term employment contract concluded between the apprentice and the employer. This legally-binding document includes formally set mentoring and wage-amount arrangements. Second, there is a School dimension, because apprenticeship is a component of upper secondary level education programme in which there is an alternance of school-based and work-based learning and which lead to the certification and qualification covering a full set of KSAs required for a specific occupation or industry. Third, there is a State dimension because apprenticeship is more tightly regulated than other forms of alternance-based schemes, with government provisions and subsidies negotiated and then legally set with social partners at national level. The fourth dimension relates to the generally 16-25 year old Apprentices, who use to be considered as the main recipient of apprenticeship.

Across 27 EU countries, apprenticeship has consistently yielded positive employment outcomes, with a majority of apprentices securing employment upon completion immediately (about 65%) or within six months to a year (over 80%) (European Commission, 2013). In those European countries where the apprenticeship system is most developed, young people have better employment prospects and outcomes than in other countries. The thirteen key factors of apprenticeships success then pinpointed ultimately highlight the crucial role of employers (European Commission, 2013, p.13). In the same vein, by examining apprenticeships and their advantages for the employment prospects of young people, the ILO (2012) also identified key success factors. Along with the role of governments in regulating apprenticeship schemes, and the role of educational institution in promoting apprenticeship certification, the role of employers' associations and companies is particularly emphasized. Indeed, for BusinessEurope (2012), an employer organization representing 41 Employer Federations from 35 European countries, along with both political and educational institutions, employers' organisations and companies have a shared responsibility toward the success of apprenticeship. There had to be employers across the EU27 in 2011 to employ the average of 3.7% of the youth population in apprenticeship (European Commission, 2013).

Despite their role in the success of apprenticeship, little research has examined why and how employers would get involved in the system. Extant and current literature generally address issues related to State, School and Apprentice interests, while the Work dimension, when studied, is mainly considered at a macro level. Researchers largely studied apprenticeship as a paragon for efficient experiential learning and school-to-work transition, leading to building the required KSAs which would set up apprentices' career paths or employability (e.g. Bertschy, Cattaneo, & Wolter, 2009; Quintini & Martin, 2006; Bougheas & Georgellis, 2004; Euwals & Winkelmann, 2004; Büchel, 2002; Van der Velden, Welter, & Wolbers, 2001; Ryan, 1998). Extensive analyses investigated apprenticeship outcomes from an institutional,

macro-politic and economic viewpoint in order to support policy planners' agendas, especially regarding public subsidies (e.g. Quintini & Manfredi, 2009; Hofer & Lietz, 2004; Westergaard-Nielsen & Rasmussen, 2000). From the Workplace perspective, some researchers examined apprenticeship in terms of labor cost (Dionisius et al., 2009; Fersterer et al. 2008; McIntosh, 2007; Mühlemann, et al., 2007). Statistical evidence was found that while for some firms apprenticeship represents a long-term investment toward their workforce development needs, for others it may constitute a short-term substitute for regular employment (Lochet, Podevin & Saunier, 1995; Mohrenweiser & Zwick, 2009; Mohrenweiser & Backes-Gellner, 2010; Cappellari, Dell'Aringa & Leonardi, 2012). Such research is of huge value to define why host organizations would economically get involved into apprenticeship. In the context of the German dual-system, whether a host organization will have a substitution or an investment behavior depends on the competitiveness and labor related stability of its environment and its main sector, on its size and its ownership, and on its technological resources and its proportion of highly skilled workers (Mohrenweiser & Backes-Gellner, 2010).

A second aspect of the managerial framework that we suggest to specifically study employers' involvement is to take into account the environment in which an apprenticeship system is deployed, and thus to consider contingent determinants. To this end, a contingency configuration approach by Mintzberg (1979) can be combined to the previous actor-system model mobilized, be it in a dialectical way (Astley & Van de Ven, 1983). According to this approach, organizations are open systems whose configuration is influenced by their business and socio-cultural environment, including industry competitiveness, demand and supply and labor market conditions, bargaining arrangements with social partners and availability of skilled workforce for instance; as well as their size, age, technical process and business strategy. Finally, organizations can be classified into seven configurations.

Integrating the contingent configuration approach to the actor-system model of apprenticeship is thus aimed at keeping up with prior research by taking the environment of the host organizations into account as well as some overall distinctive features which may also influence their involvement behavior. Focusing on macro-economic phenomena, previous research did not aim at exploring and understanding the many reasons for and many ways in which local micro groups or individuals, henceforth actors, would get involved into apprenticeship and thus contribute to a more general organizational behaviour (Oultram, 2012). Within host organizations, there are subordinates, colleagues and supervisors who are all employees in contact with apprentices at different hierarchical levels and with various employment status from temporary outsourced labour to long-life full-time contracts, and more specifically mentors who have the formal responsibility to train and assess apprentices,

as well as owners or managers and executives who lead the business. Whatever the reason, the nature and the level of their involvement, these actors' various micro behaviors toward apprenticeship matters could ultimately end up in either long-term investment or short-term substitution organizational behaviors, as found in prior research (Mohrenweiser & Backes-Gellner, 2010).

But what kind of actions that these actors take, of interactions that those actors have and of stakes that those actors hold would result in such employers' behaviors? The aim of this paper is thus to dig deeper into the understanding of the employers' involvement in supplying apprenticeship positions, by examining why and how actors from the Work Sphere and at the five levels of action and interaction defined in our system framework would get involved in apprenticeship, considering their organizational environment and configuration.

2.investigation and discussion: an operational framework, four acting processes and managerial outcomes.

2.1A comparative case study of eight employers of apprentices

For Yin (2003a, p.2) *“the distinctive need for case studies arises out of the desire to understand complex social phenomena”* because *“the case study method allows investigators to retain the holistic and meaningful characteristics of real-life events”*, such as organizational and managerial processes, for instance. In fact, case studies seem to be the preferred research strategy to answer *“how”* or *“why”* questions, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context (Yin, 1981; 1994; 2003a, pp. 5-10). Case study research also contributes *“to provide an analysis of the context and processes which illuminate the theoretical issues being studied”* (Hartley, 2004, p.323). Based upon a theoretical framework stemming from a literature review, apprenticeship can be seen as a multi-level and multi-actor system embedded in a complex context which the investigator could hardly control while seeking to understand why and how employers would get involved. Many criteria are thus met for the choice of a case study research strategy.

Following an exploratory study conducted in order to identify employers from a French region known for its long history and recent growth regarding apprenticeship, as well as subsequent contacts taken with owners or executives, ten companies accepted the terms of our investigation, and finally only research material and data resulting of the study of eight of them were retained, for consistency reasons. Implemented in France, these companies, their configuration and their environments are briefly depicted in Table 1.

Enterprises	Aelec Energy Sector	Belec Energy Sector	Ypero Mass retailing	Pressind Dry cleaning service	Hiperca Mass retailing	Pani Food producer	Pressint Dry cleaning service	Panum Food producer
Environments and configuration features								
Socio-cultural environment								
Labor force shortage issues			X	X			X	
Non constraining labor laws					X	X	X	X
Constraining labor laws	X	X	X	X				
Culture of individualism			X					
Culture of hierarchical distance	X	X						
Incertitude avoidance	X	X						
Business environment								
Stability of trade market	X	X			X	X		
Hostility of business market	X	X					X	X
Centralized information system	X	X					X	X
Business strategy								
Differentiation / innovation			X	X				
Product/process quality			X	X				
Cost leadership	X	X		X		X		
Group focus	X	X					X	X
Structure & dimensions								
Multinational (> 200)	X (2100)	X (880)	X (400)					
Small and medium sized (200)				X (30)	X (190)		X (40)	
Micro sized (< 20)						X (7)		X (5)
Internal ownership				X	X	X	X	X
External ownership (holding)	X	X	X		X	X		
Strong vertical division	X	X					X	X
Strong horizontal division					X	X		
Direct supervision							X	X
Standardization of process	X	X						
Standardization of skills					X	X		
Mutual adjustment			X	X				
High Qualification			X	X	X	X		
Low Qualification	X	X					X	X
Power at strategic apex	X	X					X	X
Power at operational core			X	X	X	X		
Power to technostructure	X	X						
Configuration	Machine Bureaucracy		Adhocracy		Professional bureaucracy		Entrepreneurial structure	

Table 2: Environments and configurations of the eight employer cases studied

In France, ‘apprenticeship’ six-month to three-year specific employment contracts involve an apprentice generally aged 16-25 years who will both acquire a qualification – degree, diploma, certificate, at any level from college to master degrees – and a work experience; and a public or private employer ; a ; and. The contract actually states volumes of School and Work hours as well as legal monetary compensation, as the apprentice will alternate Work experience in the company, and reflection and conceptualization in a public or private education and training institution. Both employer and school having apprentices benefit from

legal subsidies, while being also required to organize the training and mentoring of concerned apprentices. An apprentice booklet is also considered as mandatory.

Half of SMEs in France employs apprentices, while increasing proportions of apprentices are employed by multinationals (Ifop, 2013). In twenty years, the number of apprentices employed by big firms has multiplied by six. The number of apprentices preparing a business school or university management qualification has tripled in the last decade. There were more than 420,000 apprentices in 2013, showing that the headcount has almost doubled in twenty years, while the population concerned has demographically decreased (Dares, 2013). Apprenticeship in France has been proven efficient in facilitating school-to-work transition. Former apprentices effectively find better jobs more quickly after their apprenticeship contract ended and after graduation than other young people (Simonnet, Ulrich, 2000). 90% of a quota representative sample of 401 CEOs continuously judged that ex-apprentices employees are much more efficient at work than other employees (Ifop, 2013). The reason is that apprenticeship implies a close relationship between schools, companies and apprentices. Apprenticeship is deemed essential to raise employees who would fit employers' needs, because it fosters experiential learning that academic programs cannot yield (Vignon, 2008; Clenet, 2003; Malglaive, 1996). Apprentices constitute a pool of potential hires having the KSAs that both the company and school molded together, while apprenticeships serves as (pre-)selection instruments, like work samples and try out periods (Pouget, 2010). French apprenticeship's features are thus consistent with the research framework.

Because "*researchers should not rely on any single source of data, interview, observation, or instrument*" (Mills, 2003, p. 52), and because a case study inquiry "*relies on multiple sources of evidence, with data needing to converge in a triangulating fashion*" (Yin, 2003b, pp.13-14), several methods of data collection and sources of information were used to ensure triangulation (Jick, 1979; Miles & Huberman, 1994; Mills, 2003): eighteen days of direct and participant overt observation; collection of secondary data from companies' brochures and monthly / annual reports, internal journals, departmental notes, recruitment guides, planning and work schedules, meetings minutes, as well as apprentices' booklets; and ninety-five interviews with an average length of 110 minutes (SD 20 minutes), with industry representatives, chief executive officers, business unit directors, human resources managers at industry and organizational level, and with apprenticeship masters/mentors, employees informally acting as mentors and apprentices, at team and individual levels, as well as with school tutors / teachers from the School Sphere. Carried out in a semi-directive way, and built upon the dimensions stemming from the literature review and the conceptual framework, the interviews were recorded with permission from the actors and on condition of confidentiality, and then transcribed in full.

In order to reconstruct the ‘reality’ of the system actors interact in, the research protocol followed an inductive (Glaser & Strauss, 1968) and comprehensive (Weber, 1978) approach based on the understanding of actors’ experiences and of the sense they give to their actions. In fact, *“the ultimate goal of the case study is to uncover patterns, determine meanings, construct conclusions and build theory”* (Patton & Appelbaum, 2003, p.67). Data collected from different methods and sources were thus submitted to a thematic qualitative content analysis which allows the understanding of complex organizational processes, from the perspective of “modest sociology” (Law, 1994).

2.2 Why and how employers get involved in apprenticeship system

Pressint, a dry cleaning small, traditional and family business whose apprentices represent about 15% of full-time equivalent, and Panum, a traditional and family food producer specialized in baked products whose apprentices represent about 25% of full-time equivalent, both have centralized and informal human resources management practices. For their general owners and directors, employing apprentices means economies and short-term flexibility in terms of manpower. They wish their employees cared less of the apprentices. But informal and formal mentors actually share an occupational commitment and culture which foster their involvement into apprenticeship matters. These masters and companions having been apprentices themselves, and now possessing both high qualification in their trade and long fruitful work experiences, tend to resist to their directors’ strategies, by finding out informal work arrangements by which they could recruit and select apprentices themselves, and subsequently mentor them more efficiently. They also form coalition, by gathering information they can get from the educational institutions, for instance regarding dry cleaning new techniques on which apprentices should be assessed, and then by arguing against their bosses’ will.

*Owner Pressint: *“the objective, clearly, is an economic one. Apprentices are cheap labor, there is no tax, they cost less than a half of a normal employee”*.

*Mentor Pressint: *“the boss wanted me to show how to iron to the young lady he intended to hire for an apprenticeship. I simply said “no”, straight away, because I knew she would not be a good hire, and I also knew that I wanted him to keep the apprentice who just finished her apprenticeship a week ago, and to sign a normal employment contract with her. Another mentor did the same in another shop, so, I took advantage of that. I want him to keep our apprentices!”*.

Hiperca and Pani have very decentralized and yet formal management practices, due to their high skilled employees who are considered as full empowered professionals capable of

managing their own business unit, whatever its size. Hiperca is a big supermarket having apprentices of all levels of education and who represent about 5% of the headcount. Pani is a very small yet very modern food producer specialized in baked products and whose apprentices represent 25% of the headcount. Both Pani's and Hiperca's managers would like to exclusively rely on apprentices to nurture their pool of valuable employees. However, at Hiperca, where apprentices at Bachelor and Master levels are recruited, selected, integrated and finally employed and trained in a very centralized way, mentors and supervisors tend to consider apprenticeship as a mean to get additional, seasonal and flexible substitutable workforce at low cost. At Pani, and for apprentices at secondary levels of education at Hiperca, mentors' and supervisors' strategies are more consistent with the ones of their directors: they want their apprentices to live a valuable and memorable work experience so that they would remain within the company.

*Mentor Hiperca for secondary level apprentice: *"I met the young guy, I conducted the job interview and all the assessment with the work trial, and I took the final decision. Of course, I am the boss in that matter and in my unit. For me, the goal is that he gets qualified, he learns the ropes of the trade and our company's mold, and that he likes it, and that he stays with us. That is clear, and my director would tell you the same"*.

*Apprentice Master level: *"According to the campus manager at the headquarters, at university level apprentices had to go to managerial and executive meetings... Well, my supervisor, who actually does not mentor me, well, he always finds a reason so that I cannot go to these meetings but instead I can always go for handy work"*.

Ypero and Pressind, respectively in the mass retailing and dry cleaning industries, and having their apprentices representing 5% and 15% of their workforce, have very individualizing human resources management practices. Detailed person planning and forecast are used as a trigger of a complete and formalized staffing process. Performance appraisal systems directly linked to advancement and career path programmes and to compensation and benefits schemes are formally conducted. Management decisions are tailor-made in accordance to each and every individual's performance. In this context, the companies' directors maintain strong relationships with educational institutions to ensure that school-based learning will consistently be in line with work-based training and finally industry and organizations' requirements. They contribute to create booklets, evaluation-grids, and take part in meetings and forums related to the learning programme definition. They consider that the occupations within their organizations are unlike any other. That is the reason why they need employees to be tightly fitted to their needs: it is a matter of person-environment fit. They also consider that informal and formal mentors can enrich their job as well as boost their career by mentoring apprentices. Empowering them, supporting them and rewarding them through

apprenticeship are also a way for bosses to enhance their employees' organizational commitment and culture, as well as their managerial skills.

**Mentor Pressind: "we do have a specific process and even a qualified employee need time and experience before he can really handle it. Our goal is to create our qualified workforce, we create them because we educate and train them to our values and processes. We work closely with their training and education centre".*

**Ypero HR manager: "when I tell somebody that their goal is to make somebody else succeed, I really mean it, because performance appraisal will consider mentorship, supervisor support, employee support, citizenship, ability to make other succeed. I give them an apprentice to check their managerial and leadership abilities, as well as their engagement to the company".*

Aelec and Belec have highly centralized and formalized human resources practices that must be applied homogeneously on the basis of procedures and tools hugely spread out. Aelec and Belec are both huge multinationals in the energy industry which are hosts to apprentices at all levels, representing 5% of their employees. They are French local subsidiaries with a foreign ownership. At Aelec and Belec, full-time positions are devoted to the specific management of apprentices and interns who work in close relationship with educational institutions, in particular for university level ones who are often future engineers. Mentors receive specific mentorship training so that they can better train and mentor their engineering apprentices, and their managerial abilities seem to be assessed all along apprenticeship. Such follow-up procedures are however less formalized or sometimes non-existent for secondary level apprentices whose mentors are often assigned to mentorship even when they do not want to. However, an occupational culture seems to pave the way for apprenticeship.

**Mentor Belec: "we need to maintain the industry identity and competitiveness. They could leave us for another industry whenever they want. There are so many opportunities elsewhere. We need qualified workforce. That is why we have apprentices. Even though we do not keep them, another company within our industry will."*

**Apprentice Aelec: "their workforce is ageing. Maybe they will not keep me, but I know they will still train me. I am not counted in the headcount. I mean, my productivity, it is all bonus for them. They do not count on my productivity, and the mentors are allowed to less productivity to assume their mentoring role. So, it is clear they prepare next generation of workers for the industry. Not only for themselves."*

The way that apprentices are managed can clearly differ from the way other personnel are managed: recruited, selected, evaluated, trained, controlled, rewarded. A segmentation of the internal labor market can thus be inferred from the discrepancies identified. Among the determinants of this segmentation, a focus shall be put on the relationships with educational

institution and the extent to which they closely share information, tools and procedures with employers, either at organizational level or at team and individual level. What is at stake and might explain why actors from the Work Sphere get involved in apprenticeship systems can be classified in four processes. First, a “position related process”: apprentices are hired to fill in whatever positions at low cost. Second, an “occupation or trade related process”: apprentices are raised to serve an occupation and its trade community. Third, a “qualification related process”: apprentices are hired to rise the skill level of all actors involved. Fourth, a “competence related process”: apprentices are raised to rise the organizational performance.

For an involvement process to finally result in a tangible behaviors, there are many interactions between actors who may embody different logics. Identifying a dominant involvement process within an organization implies the study of the set of actors involved, as suggested in Table 2.

	a) Sphere and level of action	b) Objectives / Interests and stakes	c) Sources of power and assets	d) Handicaps and weaknesses	e) Strategies / and coalitionss
Actor A	School	Qualification	Expertise		
Actor B	State		Information		
Actor C	Work	Position	Regulation		
Actor D	School	Occupation	Network		
Actor E	Work	Comptence	Resources		
Etc.	...	...	...	...	...

Table 2: Dominant involvement process defined by studying the actors of the system

Considering a general human resources management issue raised by employers, among outcomes revealed through the case study, an emphasis can be put on organizational commitment. As proposed by Meyer and Allen (1984 ; 1991 ; 1997) and Allen and Meyer (1990), and then generally studied by scholars, there are three forms of organizational commitment (OC). Firstly, affective commitment reflects emotional attachment to, identification with, and involvement in the organization. Secondly, normative commitment is experienced as a sense of obligation to remain within the organization. Thirdly, continuance commitment reflects the perceived costs associated with leaving the organization.

Deriving from Meyer and Allen’s (1991) Three-Component Model, meta-analyses and reviews were conducted to assess relations between organizational commitment and variables defined as their antecedents and consequences (Meyer, Jackson & Maltin, 2008 ;

Cooper-Hakim & Viswesvaran, 2005 ; Meyer *et al.*, 2002 ; Riketta, 2002 ; Mathieu and Zajac, 1990). Thus, OC is positively associated with an employee's desire and intent to remain with an organization. In the context of labor force scarcity, employers should therefore foster OC. Turning to antecedents of OC, Morrow (2011) recently confirmed upon a review of longitudinal research that organizational socialization and organizational support show strong causal relations with OC.

Organizational socialization is originally and generally defined as the process by which an individual acquires the social knowledge and skills necessary to assume a role in an organization (Van Maanen & Schein, 1979; Fisher, 1986). Example set by key models or mentors in the organization, instructions and advice given by supervisors and peers behaving like big brothers, as well as rewarding procedures, which might be sources for organizational socialization, can be found in apprenticeship which entails, for instance, mentoring, apprentice booklets, expected rewards like qualification and work experience. Perceived organizational support refers to employees' beliefs about the extent to which the organization values their contribution and cares about their well-being (Eisenberger, Huntington, Hutchison & Sowa, 1986). Thus, carefully managing employees' work experiences and providing them with support from a group and mentoring activities is crucial (Morrow, 2011, Meyer *et al.*, 2002 ; Irving & Meyer, 1994 ; Meyer, Bobocel & Allen, 1991). Indeed, apprenticeship entails mentoring and support from both the school and the company involved. Actually, not only does apprenticeship foster the apprentices' and their mentors' organizational commitment, but it also yield managerial KSAs and occupational culture.

CONCLUSION

In the context of a war for talent, employers strive to find and retain a human capital which would fit their requirements and reveal its high potential on a durable term. Based upon education periods at School and production periods in the Workplace, apprenticeship is seen as yielding efficient experiential learning and school-to-work transition to the benefit of the apprentice. Extant and current literature on apprenticeship stem from socio-economic studies intended for educational policy making at an institutional level, and from extended psychological research aimed to improve apprentices' learning process at an individual level. Thus, little research has contributed to a managerial understanding of the host organizations' interest in Apprenticeship. In this paper, prior research is complemented by examining why and how actors within host organizations get involved in apprenticeship systems, in particular from a managerial perspective.

Eight in-depth comparative case studies are conducted including ninety-five semi-structured interviews, eighteen days of direct and participant observation and document analysis.

Despite the non-generalizability of the results found, contradictions between different actors of host organizations of various levels of analysis highlight the complexity of employers' involvement behaviors which are not as homogeneous as they may appear. Apprenticeship is a system of actors who can have divergent interests in apprenticeship matters. Understanding how one dominant involvement process, among the four identified, may prevail can be facilitated through the study of the set of actors concerned, along with their sources of power. Future research can be done to systematically test the outcomes of apprenticeship found, for instance regarding person-environment fit, organizational socialization, organizational support, empowerment, organizational commitment, managerial orientation, organizational culture and occupational culture.

REfErences

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Astley, W.G., & Van de Ven, A.H (1983). Central perspectives and debates in organizational theory. *Administrative Science Quarterly*, 28, 245-273.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Becker, B. E., & Huselid, M. A. (2006). Strategic human resource management: Where do we go from here? *Journal of Management*, 32, 898–925.
- Bertschy, K., Cattaneo, M.A., Wolter, S.C., (2009). 'PISA and the Transition into the Labour Market', *Labour: Review of Labour Economics and Industrial Relations*, 23, 111–137.
- Bougheas, S. and Georgellis, Y. (2004). 'Early Career Mobility and Earnings Profiles of German Apprentices: Theory and Empirical Evidence.', *Labour*, Vol. 18, 233- 263.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of “strength” of the HRM system. *Academy of Management Review*, 29, 203–221. doi:10.2307/20159029.
- Büchel, F., (2002). 'Successful Apprenticeship-to-Work Transitions: On the Long-Term Change in Significance of the German School-Leaving Certificate', *International Journal of Manpower*, 23 (5), 394–410.
- Cappellari, L., Dell’Arlinga, C., Leonardi, M., (2012). 'Temporary Employment, Job Flows and Productivity: A Tale of two Reforms', *The Economic Journal*, 122 (August), 188-215.
- CEDEFOP, 2010. Skills Needs and Supply, European Centre for the Development of Vocational Training.
- Clénet, J. (2003). *L'ingénierie des formations en alternance*. Paris : L'Harmattan.

- Cooper-Hakim, A., & Viswesvaran, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, 131(2), 241–256.
- Crook, T. R., Combs, J. G., Todd, S. Y., Woehr, D. J. & Ketchen, Jr., D.J. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96 (3), 443-456.
- Crozier, M. & Friedberg, E. (1980). *Actors and systems. The politics of collective action*. University of Chicago Press: Chicago.
- DARES, Direction de l'Animation de la Recherche, des Etudes et des Statistiques (2013). Politique d'Emploi, France entière, tableau de bord. Paris: Ministère de l'économie, de l'industrie et de l'emploi. Updates available at <http://travail-emploi.gouv.fr/etudes-recherches-statistiques-de,76/statistiques,78/politique-de-l-emploi-et-formation,84/tableau-de-bord-mensuel-des,261/france-metropolitaine-et-france,1982.html>
- Dionisius, R., Mühlemann, S., Pfeifer, H., Walden, G., Wenzelmann, F., Wolter, S.C., (2009). 'Costs and Benefits of Apprenticeship Training. A Comparison of Germany and Switzerland', *Applied Economics Quarterly*, 55 (1), 5–38.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500–507.
- European Commission, (2013). Apprenticeship and Traineeship Schemes in EU27 : key success factors. A guidebook for policy planners and practitioners. Employment, social affairs and inclusion. Ecorys, IES and IRS.
- Eurostat, (2013). March 2013 - Euro Area Unemployment Rate at 12.1%, Eurostat News Release, 30.4.2013, http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/3-30042013-BP/EN/3-30042013-BP-EN.PDF
- Euwals, R. and Winkelmann, R., (2004). 'Training Intensity and First Labour Market Outcomes of Apprenticeship Graduates', *International Journal of Manpower*, 25, 447–462.
- Fersterer, J., Pischke, J.S., Winter-Ebmer, R., (2008). 'Returns to Apprenticeship Training in Austria: Evidence from failed Firms', *Scandinavian Journal of Economics*, 110 (4), 733–753.
- Fisher, C. D., (1986). Organizational socialisation: An integrative review. In Rowland, K.M. & Ferris, G.R.. *Research in Personnel and Human Resources Management* (pp. 101-145). Greenwich: CT: JAI Press.
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Chicago: Aldine publishing company.

- Hartley, J (2004). Case study research. In Catherine Cassell & Gillian Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp.323-333). London: Sage.
- Hofer, H. & Lietz, C., (2004). 'Labour Market Effects of Apprenticeship Training in Austria', *International Journal of Manpower*, Vol.25, 104-122.
- Ifop, Institut Français d'Opinion Publique (2013). L'image de l'enseignement professionnel et de l'apprentissage auprès des PME et des enseignants. Paris : Ifop / AGEFA-PME. Available at http://www.ifop.com/?option=com_publication&type=poll&id=2282
- ILO, (2012). Overview of Apprenticeship Systems and Issues, ILO Contribution to the G20 Task Force on Employment, November.
- Irving, P. G., & Meyer, J. P. (1994). Reexamination of the met expectations hypothesis: A longitudinal analysis. *Journal of Applied Psychology*, 79(6), 937-949.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24 (December), 602-611.
- Law, 1994.
- Le, H., Oh, I. S., Shaffer, J., & Schmidt, F. (2007). Implications of methodological advances for the practice of personnel selection: How practitioners benefit from meta-analysis. *Academy of Management Perspectives*, 21, 6-15.
- Lochet, J-F., Podevin, G., & Saunier, J-M. (1995, Juillet). Produire des compétences pour gérer les recrutements. Bref, CEREQ, 111.
- March, J G., & Simon, H A. (1958). *Organizations*. New York: Wiley.
- Malglaive, G. (1996), Apprentissage: une autre formation pour d'autres ingénieurs, *Formation emploi*, 53, 85-99.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.
- McIntosh, S., (2007). A Cost-Benefit Analysis of Apprenticeships and Other Vocational Qualifications, Department of Economics, University of Sheffield, Sheffield University Management School, Research Report.
- Mendras, H. (1979). *Eléments de sociologie*. Paris : Armand Colin.
- Meyer, J. P., Bobocel, D. R., & Allen, N. J. (1991). Development of organizational commitment during the first year of employment: A longitudinal study of pre- and post-entry influences. *Journal of Management*, 17, 717-733.
- Meyer, J. P., Jackson, T. A., & Maltin, E. R. (2008). Commitment in the workplace: Past, present and future. In J. Barling, & C. Cooper (Eds.), *The Sage handbook of organizational behavior* (pp. 35-53). Los Angeles: Sage.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance and normative commitment to the organization: A meta-analysis of

- antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20–52.
- Meyer, J. P., & Allen, N. J. (1984). Testing the “side bet theory” of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69, 372–378.-
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61–89.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.
- Michaels, E., Handfield-Jone, H., & Axelrod, B. (2001). *The War for Talent*. Boston: Harvard Business School Press.
- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed., Sage, Thousand Oaks, CA.
- Mills, G. E. (2003). *Action research: A Guide for the teacher researcher*, 2nd Edition, Merrill/Prentice-Hall: Upper saddle River, NJ.
- Mintzberg, H. (1979). *The structuring of organizations: a synthesis of the research*. Prentice Hall.
- Mohrenweiser, J. & Backes-Gellner, U., (2010). ‘Apprenticeship Training, what for: Investment or Substitution?’, *International Journal of Manpower*, 31(5), 545-562.
- Mohrenweiser J. & Zwick, T., (2009) “Why do firms train apprentices? The net cost puzzle reconsidered”, *Labor Economics*, 16 (5), 631–637.
- Morrow, P.-C., (2011). Managing organizational commitment: Insights from longitudinal research. *Journal of Vocational Behavior*, 79, 18–35.
- Mühlemann, S., Schweri, J., Winkelmann, R., & Wolter, S.C., (2007). ‘An Empirical Analysis of the Decision to Train Apprentices’, *Labour: Review of Labour Economics and Industrial Relations*, 21 (3), 419–441.
- Oultram, T. (2012). Fresh insights into British apprenticeship schemes. A multi-perspective, multi-method approach. *International Journal of Organizational Analysis*, 20 (1), 51-67.
- Patton, E. & Appelbaum, S. H. (2003). The case for case studies in management research. *Management Research News*, 26(5), 60-71.
- Pfeffer, J. & O’Reilly, C - A. (2000). *Hidden value, how great companies achieve extraordinary results with ordinary people*. Boston: Harvard Business School Press.
- Pougnnet, S. (2010). *La gestion des apprentis en entreprise, levier de développement de la GRH ? Une approche contingente et politique*. Thèse de doctorat en Sciences de Gestion, Grenoble Université et IAE de Grenoble, Grenoble - France.
- Quintini, G. and Martin, S., (2006). ‘Starting Well or Losing their Way? The Position of Youth in the Labour Market in OECD Countries’, OECD Social, Employment and Migration Working Papers, No. 39, OECD, Paris.

- Quintini, G. and Manfredi, T., (2009). 'Going Separate Ways? School-To-Work Transition in the United States and Europe', OECD Social, Employment and Migration Working Papers, No. 90, OECD, Paris.
- Ricketta, M. (2002). Attitudinal organizational commitment and job performance; a meta-analysis. *Journal of Organizational Behavior*, 23(3), 257–266.
- Ryan, P., (1998). 'Is Apprenticeship better? A Review of the Economic Evidence', *Journal of Vocational Education & Training*, 50(2), 289-329
- Simonnet, V., & Ulrich, V. (2000). La formation professionnelle et l'insertion sur le marché du travail: l'efficacité du contrat d'apprentissage. *Économie et statistique*, 337, 81-95.
- Subramony, M., Krause, N., Norton, J., & Burns, G. N. (2008). The relationship between human resource investments and organizational performance: A firm-level examination of equilibrium theory. *Journal of Applied Psychology*, 93, 778–788.
- Van der Velden, R., Welter, R., Wolbers, M. (2001). 'The Integration of Young People into the Labour Market within the European Union: the Role of Institutional Settings', Research Centre for Education and the Labour Market Working Paper, No. 7E.
- Van Maanen, J., & Schein, E. (1979). Toward a theory of organizational socialization, *Research in organizational behaviour*, 1, 209-264.
- Vignon, C. (2008). *Former les managers par l'alternance*. Paris : Vuibert.
- Von Bertalanffy, L. (1968). *General system theory*. George Brazilley Inc.
- Weber, M. (1978). *Economy and society, an outline of interpretive sociology*. University of California Press.
- Westergaard-Nielsen, N. & Rasmussen, A.R., (2000). The Impact of Subsidies on the Number of new Apprentices', *Research in Labor Economics*, 18, 359–375 .
- Yin, R. K. (2003a). *Case study research, design and methods* (3rd ed., vol. 5). Thousand Oaks: Sage.
- Yin, R. K. (2003b). *Applications of case study research* (2nd ed., vol. 34). Thousand Oaks: Sage.
- Yin, R-K. (2003). *Case study research - Design and methods*. Newbury Park, CA: Sage.

ICSSAM-904
**How Can We Build Social Capital and Self-esteem by Controlling
Motivation for SNS Usage?**

Bae Hye Yoon

Korea Advanced Institute of Science and Technology(KAIST)

Nicola7@naver.com

1. INTRODUCTION

Refer to research result by KISDI, we spend 73.2 minutes a day for using social network service. There are various types of SNS, for example, Facebook, Kakao story, Twitter etc. So these days, not only young generation but also older people are used to live with SNS. What I want to say here is that social network service becomes the daily life of modern people.

The reason why I look into SNS theme is from this question. ‘If the social network service is not the instant trend but continuous culture of human being, what can we do to utilize it wisely?’ SNS is already become an important tool for discussing public opinion and marketing products. So it’s time to study this phenomenon deeply into the psychological understanding of SNS users. If we know the bottom’s of users’ heart, it is also possible to utilize SNS as a tool of improving happiness, satisfaction of life of human.

2. THEORETICAL BACKGROUND

For this study, I start my research model building from the motivation level. Because I thought every behavior is initiated from motivation and it is possible to control human’s behavior by understanding their motivation.

There are lots of supporting theories explaining human’s behavior using motivation. The most popular approach has been Fishbein and Ajzen’s Theory of Reasoned Action (TRA). (Fishbein & Ajzen, 1975) According to this theory, the person's intention to engage in the behavior captures the motivational factors and transforms them into a behavioral disposition (Ajzen, 1988). The motivational factors determining intention are the attitude towards and the social norms regarding the behavior.

User acceptance is determined by two fundamental types of motivation: extrinsic and intrinsic. (Davis et al. 1992) Extrinsic motivation pertains to the behaviors that are engaged in response to something apart from its own sake, such as rewards or recognition or the dictates of other people. On the other hand, intrinsic motivation refers to the fact of doing an activity for its own sake: the activity itself is interesting, engaging, or in some way satisfying. (Lee et al. 2005)

For the backgrounds of relationship between motivation and social capital, I use the theory of Portes(1998). Examining the foundation of social capital, Portes(1998) notes that it is obvious why the "recipients" in transactions mediated by social capital should desire its benefits; the key question, he points out, is what motivates "donors" to help recipients in the absence of immediate or certain returns.

There are two kinds of social capital, bridging social capital and bonding social capital. A focus on external relations foregrounds what has been called "bridging" forms of social capital, whereas a focus on internal ties within collectivities foregrounds "bonding" forms of social capital (Gittell & Vidal, 1998)

To find the supporting idea linking between social capital and competence on subjective well-being, I refer to the literature of Pinqart & Soerensen's theory(Pinqart and Soerensen 2000). Although this study is focused on older people but generally people showed higher correlations between social network and subjective well-being.

The competence on subjective well-being and self esteem is positively associated. Subjective well-being can be defined as positive evaluation of one's life associated with good feelings. There are several ways to assess subjective well-being, for example, by measuring self-esteem. (Pinqart and Soerensen 2000)

3. RESEARCH MODEL AND HYPOTHESIS

3.1. MOTIVATION – SOCIAL CAPITAL

Extrinsic motivation of using SNS is networking and collecting information in this research. Intrinsic motivation of SNS use is relieving stress and recording one's history. Related to motivation and social capital I hypothesized that:

H1: Extrinsic motivation of SNS use is positively associated with bridging social capital.

H2: Extrinsic motivation of SNS use is positively associated with bonding social capital.

H3: Intrinsic motivation of SNS use is positively associated with bridging social capital.

H4: Intrinsic motivation of SNS use is positively associated with bonding social capital.

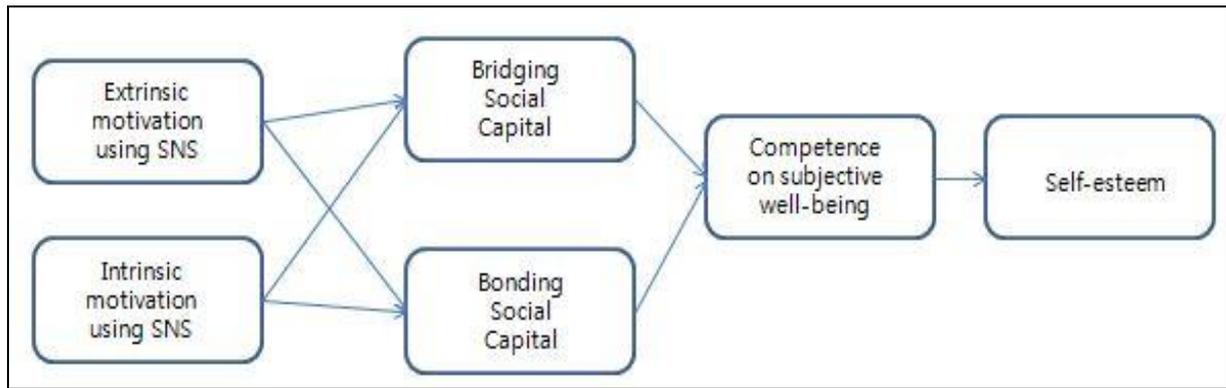


Figure1. Research Model

3.2. SOCIAL CAPITAL – COMPETENCE ON SUBJECTIVE WELL-BEING

Putnam (2000) distinguishes between bridging and bonding social capital. The former is linked to what network researchers refer to as “weak ties,” which are loose connections between individuals who may provide useful information or new perspectives for one another but typically not emotional support (Granovetter, 1982).

Alternatively, bonding social capital is found between individuals in tightly-knit, emotionally close relationships, such as family and close friends.

Social capital researchers have found that various forms of social capital, including ties with friends and neighbors, are related to psychological well-being, such as self esteem. (Bargh & McKenna, 2004; Helliwell & Putnam, 2004).

So, I state below hypothesis,

H5: Bridging social capital is correlated strongly with competence on subjective well-being.

H6: Bonding social capital is correlated strongly with competence on subjective well-being.

3.3. COMPETENCE ON SUBJECTIVE WELL-BEING – SELF-ESTEEM

Subjective well-being can be defined as positive evaluation of one's life associated with good feelings. In gerontology, there are several ways to assess subjective well-being, for example, by measuring self-esteem, life satisfaction, and happiness. There is some evidence that self-esteem tend to reflect relatively stable, long-term judgments of well-being (George, 1981). In a meta analysis, Pinqart (1998) reported a mean observed correlation coefficient of

0.45 between life satisfaction and self-esteem. Based on these former researches, I hypothesized that:

H7: Competence on Subjective well-being effects the improvement of self-esteem.

4. METHODOLOGY

4.1. FACE VALIDITY

Before survey, I did the pre test to 40 students in KAIST. During this process I got many questions from respondents related to the face validity of some measurements. The most common question of the respondents was overlapped similar survey questions. Considering these opinions, I changed and delete the survey questions in bridging social capital and self-esteem constructs. At last the 9 bridging social capital became 4 items and 7 self-esteem items extracted to 4 items.

Bridging Social capital	Interacting with people at SNS makes me interested in things that happen outside.	Person	PBR1
	Interacting with people at SNS makes me want to try new things.	New Thing	PBR2
	Interacting with people at SNS makes me interested in what people unlike me are thinking.	Person	Delete
	Talking with people at SNS makes me curious about other places in the world.	New Thing	Delete
	Interacting with people at SNS makes me feel like a part of a large community.	Community	Delete
	Interacting with people at SNS makes me feel connected to the bigger picture.	Community	Delete
	Interacting with people at SNS reminds me that everyone in the world is connected.	Community	PBR3
	Interacting with people at SNS gives me new people all the time.	New connection	Delete
	At the service, I come into contact with new people all the time.	New connection	PBR4

Self-esteem	I feel that I'm a person of worth, at least on an equal plane with others	SE1
	I feel that I have a number of good qualities	SE2
	All in all, I am inclined to feel that I am a failure	Delete
	I am able to do things as well as most other people	Delete
	I feel I do have much to be proud of	SE3
	I take a positive attitude toward myself	Delete
	On the whole, I am satisfied with myself	SE4

Table1. Factor Purification

4.2. DATA COLLECTION

The main survey was conducted from November 1, 2013, to November 20, 2013. Questionnaires were distributed randomly to KAIST Students who is in twenties. Some of the questionnaires distributed to students in class with help of school authorities. 202 valid ones were collected. Demographic of gender was 141 males and 61 females. 144 persons (71.28%) answered that they visit SNS more than 6 times a day and 113 persons (55.94%) replied that they stay in SNS less than 10 minutes for one visit.

4.3. EXPLORATORY FACTOR ANALYSIS

With all the collected data, I do the exploratory factor analysis using SPSS program. This would help me to uncover the underlying structure of relatively large set of variables.

Item	EMU	IMU	PBR	PBD	CSW	SE
I use SNS to make new friends.	.778	.142	.097	.073	.092	.062
I use SNS to get the latest news on the lives of friends	-.281	.108	.200	.085	.605	.173
I use SNS to share information with friends	.163	.439	.430	.142	.318	.035
I use SNS to collect interesting information	.040	.544	.049	.050	.338	.079
I use SNS to relieve stress	-.011	.444	.108	.090	.643	-.055
I use SNS to spend leisure time.	-.135	.260	.190	.058	.545	-.120
I use SNS to record my history by photo and diary	.094	.808	.065	.097	.042	.070
SNS makes me interested in things that happen outside.	-.069	.296	.653	.195	.313	-.005
SNS makes me want to try new things.	.308	.339	.580	.366	.062	.049
SNS reminds me that everyone in the world is connected.	-.160	-.035	.787	.157	.150	.037
At the service, I come into contact with new people all the time.	.335	-.024	.754	.136	.035	.096
There are several people at SNS I trust to solve my problems.	-.037	.083	.180	.844	.148	.125
I know someone at SNS I can rent \$100 in emergency.	-.068	.051	-.016	.835	.030	.060
I have a person for advice about making important decision in SNS.	.016	.097	.176	.715	.166	.118
I have a person who would be good job references for me in SNS.	.120	.188	.233	.774	-.013	.095
I know a person at SNS to get them to do anything important.	.203	-.087	.113	.711	.218	.040
I think generally SNS makes my life-satisfaction increased.	.321	.075	.104	.216	.757	.134
I think generally SNS makes my self-esteem improved.	.323	.329	.333	.076	.421	-.038
I think generally SNS makes me more happy.	.252	-.066	.012	.145	.833	.034
I feel that I'm a person of worth, at least on an equal with others	-.112	.011	.051	.065	.005	.836
I feel that I have a number of good qualities	.147	.106	.001	.144	.040	.835
I feel I do not have much to be proud of	-.027	.046	.067	.000	-.017	.892
On the whole, I am satisfied with myself	.101	-.019	.014	.173	.083	.810

Table2. Exploratory analysis

Because my research model has 6 constructs, I expected to have 6 components. The exploratory results were 6 components but it was not easy to categorize extrinsic motivation and intrinsic motivation. The factor loading of the EMU2 is rather higher in competence on subjective well being construct. And the EMU3 and EMU4 factor loading indicated that they are more close to intrinsic motivation construct. The other construct, bridging social capital, bonding social capital, competence on subjective well-being and self-esteem were clearly combined on their group.

This result is really severe to progress the next step of investigating research model. It was highly need to correct the basic research model by deleting unrelated items or grouping new construct. Because the EMU1, the networking motivation of using SNS was comparatively too strong than other motivation factor, I tried to separate networking motivation, collecting information motivation, relieving stress motivation and recording history motivation. That is, I made the former 2 construct (Extrinsic motivation, intrinsic motivation) to 4 constructs. (Networking motivation, collecting information motivation, relieving stress motivation, recording history motivation) However, as you can see in the above exploratory factor analysis result, the construct didn't divide to 4 constructs and furthermore, in confirmatory factor analysis, the program could not analyze the model. I suppose the reason is the networking motivation and recording history motivation had only one item each. So I decided

to continue to analyze this data and model by confirmatory factor analyses without modification.

4.4. RELIABILITY ANALYSIS

Reliability means that a scale should consistently reflect the construct it is measuring. The result of reliability analysis by using SPSS program is as below.

	Extrinsic motivation	Intrinsic motivation	Bridging Social Capital	Bonding Social Capital	Competence on Subjective well-being	Self-esteem
Cronbach's Alpha	0.527	0.589	0.773	0.844	0.757	0.872

The constructs' cronbach's alpha is over 0.7 except extrinsic, intrinsic motivation constructs. As in the exploratory analysis, motivation construct has a little problem.

4.5. CONFIRMATORY FACTOR ANALYSIS

To verify the underlying factor structure in the proposed scale from the previous analysis, the confirmatory factor analysis was conducted to assess the measurement model by using LISREL program. All measured items were modeled as reflective indicators of their corresponding latent constructs. The result structure model shows the relationship among the extrinsic motivation, intrinsic motivation, bridging social capital, bonding social capita, competence on subjective well-being and self-esteem as hypothesized in the research model.

	Estimates	T statistics	
H1: Extrinsic motivation to use SNS -> Bridging social capital benefit	1.99	1.71	Chi-square= 241.50 df= 222 P-value= 0.17589 RMSEA= 0.021 GFI= 0.79 AGFI= 0.74 PGFI= 0.64
H2: Extrinsic motivation to use SNS -> Bonding social capital benefit	1.14	1.62	
H3: Intrinsic motivation to use SNS -> Bridging social capital benefit	-1.19	-1.19	
H4: Intrinsic motivation to use SNS -> Bonding social capital benefit	-0.7	-1.71	
H5: Bridging social capital benefit -> Competence on subjective well-being	0.56	2.54	
H6: Bonding social capital benefit -> Competence on subjective well-being	0.07	0.66	
H7: Competence on subjective well-being -> Self-esteem	0.18	0.39	

Table3. Hypotheses and Results

First, to evaluate the overall fitness of this model, we have to see the absolute fit index. The chi-square is 241.50 and the p-value is about 0.17. If chi-square is smaller than degree of freedom comparatively and the p-value is bigger than 0.10, the model is evaluated as suitable model. This model's chi-square is bigger than degree of freedom and the p-value is bigger than 0.10. So it is not sure to say that this model is fitted one for the research. The GFI(goodness- of- fit-index) is 0.79, which is not enough to the general standard of acceptance. However, the RMSEA(root mean square error of approximation) is 0.021. Steiger(1990) said model having under 0.05 RMSEA has very appropriate fitness.

After verifying the absolute fit index, we have got to investigate the detail index of fitness. The strong effects of extrinsic motivation and bridging social capital(1.99) and bonding social capital(1.14) is noticeable. And the close relationship between bridging social capital

and competence on subjective well-being (0.56) is worth to focus. The intrinsic motivation has negatively correlated with bridging social capital and bonding social capital (-1.19, -0.7).

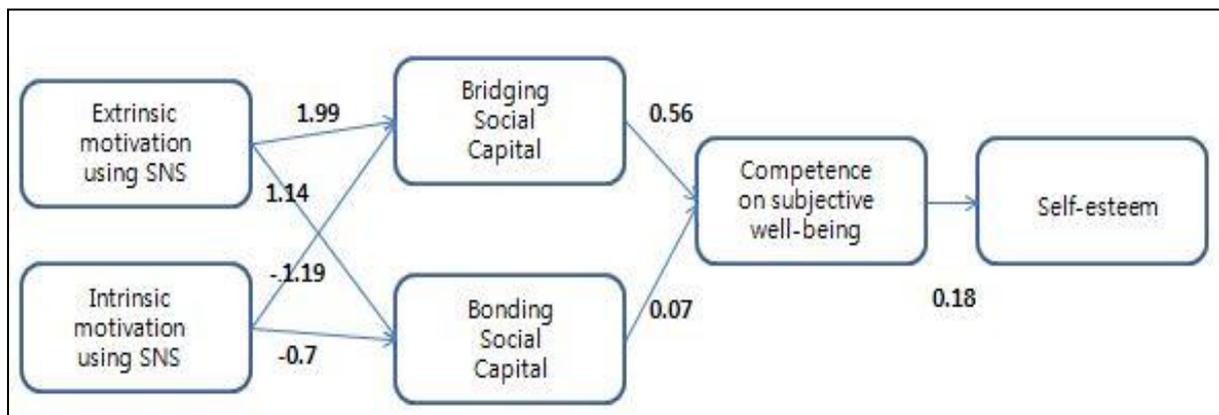


Figure2. The result of Research model

H1 (1.99): Extrinsic motivation of SNS use is positively associated with bridging social capital.

H2 (1.14): Extrinsic motivation of SNS use is positively associated with bonding social capital.

H3 (-1.19): Intrinsic motivation of SNS use is positively associated with bridging social capital.

H4 (-0.7): Intrinsic motivation of SNS use is positively associated with bonding social capital.

H5 (0.56): Bridging social capital is correlated strongly with competence on subjective well-being.

H6 (0.07): Bonding social capital is correlated strongly with competence on subjective well-being.

H7 (0.18): Competence on Subjective well-being effects the improvement of self-esteem.

Among the hypotheses I set up, the H3 and H4 are rejected. H1, H2 and H5 can be accepted.

H6 and H7 can be partly accepted.

	EMU	IMU	PBR	PBD	CSW	SE
EMU	1					
IMU	0.91	1				
PBR	0.91	0.61	1			
PBD	0.50	0.33	0.61	1		
CSW	0.55	0.37	0.60	0.41	1	
SE	0.10	0.06	0.11	0.07	0.18	1

Tabel4. Correlation Matrix of the Constructs

5. CONCLUSION

This study was designed to explore the motivational factors of the SNS users through survey and applying these factors to the intrinsic-extrinsic motivation framework. Findings from this result begin to offer a better understanding about the relation among motivation, social capital, subjective well being and self-esteem.

Through analysis of above constructs, I found that bridging social capital and bonding social capital were significantly impacted by extrinsic motivation. However, the intrinsic motivation negatively impacted the bridging social capital and bonding social capital. Bridging social capital effects competence on subjective well being stronger than bonding social capital. And the relationship between subjective well being and self-esteem was positive as I expected.

If we watch these relationships indirectly, the extrinsic motivation is closely related to the competence on subjective well being and self esteem. Extrinsic motivation pertains to the behaviors that are engaged in response to something apart from its own sake. Thinking about the reason of the result, I suppose that the person who has strong extrinsic motivation of using SNS, that is, the person who use SNS to network people and collecting information of outside world tends to have outgoing character. Naturally the extroverted person feels more sensitive and aggressive for the bridging social capital and bonding social capital. Thus the fulfillment from the social capital benefit makes the person to recognize the subjective well being and improve the self esteem. On the other hand, the SNS user who has intrinsic motivation such as relieving stress and recording one's history, the activity itself is interesting,

engaging, or in some way satisfying, is introverted person comparatively. So this person doesn't feel that much social capital benefit from SNS. They try to find the competence on subjective well being and self esteem not from the social capital benefit but the other sources, like self- contentment.

The relation between subjective well being and self esteem is weaker than I have expected. I think the causality was the problem from the beginning. The self esteem is one of the causes of deciding one's subjective well being. If I change the model order, I expect the result would be better than this.

6. LIMITATION AND FUTURE RESEARCH

This study on SNS was limited to two motivation factors, extrinsic and intrinsic motivation. I can explore more detailed motivational factors, networking, collecting information, relieving stress, and recording one's history, and hence, extended the approach of intrinsic-extrinsic motivation.

Secondly, in the next research, I can survey for the elderly people respondents. If I apply developed model for the elderly people, it would be also fruitful research. Because the study about the relationship between motivation for SNS usage and social capital will give older people to find the way having competence on subjective well being and self-esteem in their later life.

[REFERENCES]

- Bargh, J., & McKenna, K. (2004). The Internet and social life. *Annual Review of Psychology*, 55(1), 573–590.
- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society*, 359(1449), 1435–1446.
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. (2007) "The benefits of Facebook "friends:" Social capital and college students' use of online social network sites." *Journal of Computer-Mediated Communication* 12.4, 1143-1168.
- Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. "Extrinsic and Intrinsic Motivation to Use Computers in the Workplace," *Journal of Applied Social Psychology* (22:14), 1992, 1111-1132
- Fishbein, Martin, and Icek Ajzen. (1975) *Belief, attitude, intention and behavior: An introduction to theory and research.*

- George, L. K. (1981). Subjective well-being: Conceptual and methodological issues. In C. Eisdorfer (Ed.), *Annual review of gerontology and geriatrics* (pp. 345-382). New York: Springer.
- Granovetter, M. S. (1982). The strength of weak ties: A network theory revisited. In P. V. Marsden & N. Lin (Eds.), *Social Structure and Network Analysis* (pp. 105–130). Thousand Oaks, CA: Sage Publications.
- Gittell, R., & Vidal, A. (1998) *Community organizing: Building social capital as a development strategy*. Thousand Oaks, CA: Sage.
- Lee, M. K. O., Cheung, C. M. K., and Chen, Z. (2005) "Acceptance of Internet-based learning medium: the role of extrinsic and intrinsic motivation," *Information & Management* (42), 1095-1104.
- Portes, A. (1998) Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24: 1-24.
- Pinquart, Martin, and Silvia Sörensen. (2000) "Influences of socioeconomic status, social network, and competence on subjective well-being in later life: a meta-analysis." *Psychology and aging* 15.2, 187.

ICSSAM-935

Knowledge Sharing Behaviour and Group Innovation

Rajiv Khosla^{*}, Mei-Tai Chu

La Trobe Business School, Department of Management La Trobe University, Australia

^{*}Email: r.khosla@latorbe.edu.au

Abstract

In knowledge based era knowledge sharing helps to facilitate group innovation in organisations for group innovation. There is a need to establish a comprehensive behavioural model to build up knowledge sharing mechanism which can improve the effectiveness of group innovation and collective expertise. This paper has constructed a knowledge sharing behaviour (4A) model. The 4A model is based on three dimensions, namely, Assertive-Accepting, Argumentative-Amiable, Trust-Lack of Trust. An iterative design framework with domain experts in Japanese R & D organisation has been used to define 13 areas and 60 for measuring 4 interpersonal knowledge sharing behaviour categories for group innovation. The questionnaire has been translated into two languages, namely, English and Japanese.

Future research will consolidate on this work by linking interpersonal motives (based on human motivation theory) with each of the 60 questions, studying and modelling the impact and influence of human emotions, organizational culture and business strategy on group innovation.

Keyword: Knowledge Sharing Behaviour, Group Innovation, Knowledge Worker, Management Innovation, Psychology

1. Introduction

Knowledge sharing has been identified in several studies in terms of the knowledge carrier, knowledge receiver in a knowledge flow which makes knowledge available to be useful (Davenport & Prusak, 1998; Ipe, 2003; Wiig, 2004; Saenz, Aramburu, & Rivera, 2009). Most of the existing research on knowledge sharing stress on knowledge sharing between individuals rather than the viewpoint of interactive and interpersonal manner (Wiggins, 2003). Group Innovation is one of the goals desired by the majority of organizations to survive and excel in their area (Davila et al, 2007). It can be seen in the context of a group, the innovation contains the process from acquiring, sharing to integration of knowledge in order to generate new product or service (Herkema, 2003; Plessis, 2007). However, a comprehensive mechanism to connect knowledge sharing and group innovation has little

explored. The paper aims to address this research gap by providing an integrated mechanism to understand knowledge sharing activities especially among knowledge workers in the context of a group. A 4A model thus is established to build up the knowledge sharing profile for each knowledge worker to boost the group innovation.

The structure of this paper is followed by the literature review of knowledge sharing and group innovation. Section 3 establishes the 4A model for measuring the dynamics of knowledge sharing. Section 4 demonstrates the research outcome, and the final section concludes this paper.

2. Literature Review

This section outlines the theoretical underpinnings in the areas of knowledge sharing. It is undertaken with an attempt to figure out the important variables in this area to be addressed in order to build up a useful knowledge sharing model.

Lots of academic literatures have revealed interesting and different viewpoints in relation to knowledge sharing. For example, the study stressed trust and motivation are important components in knowledge sharing leadership (LexisNexis, 2004). One scholar mentioned competencies, learning and reflection has documented a new change to generate knowledge (Bodrow, 2007). It's commonly acknowledge the most important knowledge source for knowledge workers is the learning by doing process and the internal relationships obtained from team work via knowledge sharing (ME, 2003; Christiaanse & Venkatraman, 2002; Al-Mutawah et al, 2009; Yoon et al, 2011). Although significant effort has been made in the past to design tools or approaches that can support to capture organizational knowledge, much of the expertise/knowledge that knowledge workers possess remains elusive (Dadzie et al, 2009). Knowledge sharing is affected by several factors and researchers have studied these measuring factors. It can be summarized the factors identified by various researchers can be grouped into five categories: extrinsic, intrinsic, personality traits, relationship factors and organization culture/climate. (Cabrera & Cabrera 2002; Zmud & Lee, 2005; Bartol & Srivastava, 2002; Kankanhalli et al, 2005; Lu et al, 2006; Namjae et al, 2007). The above research literature showed that much work has been done on situational factors but very little have been done in terms of relationship factors and emotional characteristics for modeling knowledge sharing behavior as experienced by knowledge workers and their managers in a team environment for group innovation. These relationship factors and personality have been directly derived from work environment from domain experts (R & D Managers with 15 to 20 years experience) in an R & D organization.

are accountable for interpreting the interpersonal behavior of individuals (McClelland, 1985). Each of these needs is representing a dimension of this interpersonal circular model which is called “circumplex” (Leary, 1957). This model incorporates 16 basic interpersonal themes in its innermost ring and introduces four (coupled in two dimensions) traits in outer layer. On the sides of agency dimension one can place the “dominant” traits versus the “submissive” and on the sides of communion axis we may name one pole as the “affective” and the other side as “hostile”. Therefore, the outermost quarters could be called “dominant-hostile”, “dominant-affective”, “submissive-affective” and “submissive-hostile”. Apart from incorporating the interpersonal personality traits, this model has a good capability of integrating the affective and emotional responses of an individual with her interpersonal traits in different situations. We will discuss about this aspect of this model later.

Knowledge sharing behavior is an interactive and interdependent relation among individuals.

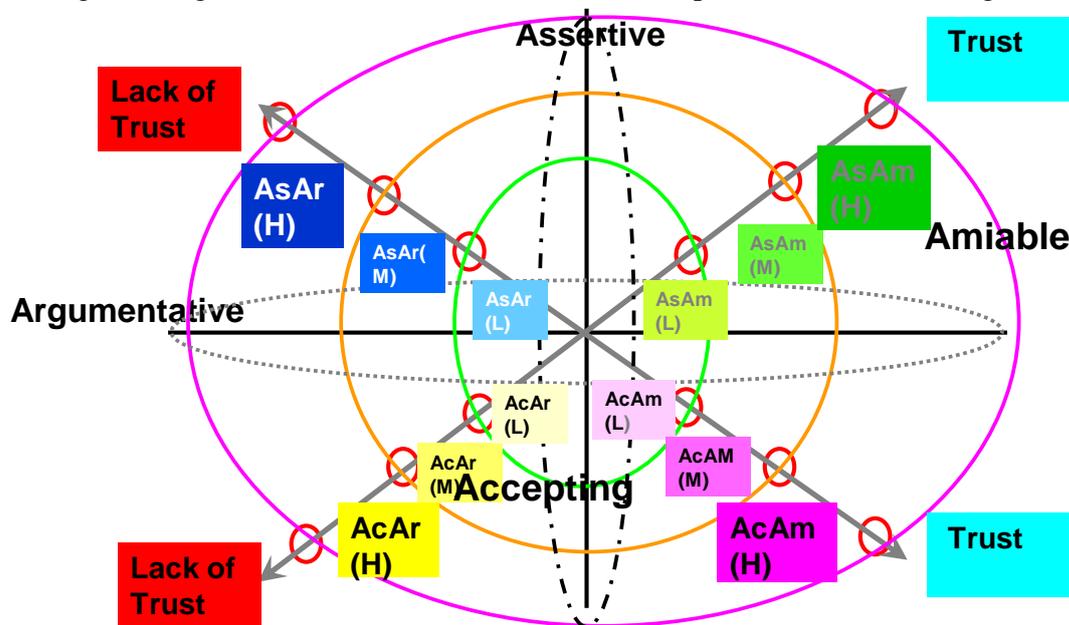


Figure 2: Knowledge Sharing Behaviour Model (4-A Model)

Therefore, in order to study such behavior, the most relevant approach could be the interpersonal theory of personality which is discussed above. A psychology based knowledge sharing behaviour model for group innovation as applied in a R & D organisation is shown in Figure 2. The two dimensions in 4-A model are: Assertive, Accepting, Argumentative and Amiable. The behaviour categories in 4-A model are:

Assertive - Argumentative: AsAr

Assertive – Amiable: AsAm

Accepting – Argumentative: AcAr

Accepting – Amiable: AcAm

Accepting – Amiable (AcAm):

A knowledge worker in this category comes across as sociable, warm and altruistic person. They have an altruistic and giving nature. They have a keen desire to socialise and easily trust others. They are optimistic and may go out of their way to accommodate others. They are generally indecisive and let others lead them. avoid conflict at any cost by being agreeable. They may not be purposeful (thus may not be good leaders) but like to be very helpful, avoid conflict and like to gain acceptance of others.

Accepting and Argumentative (or non-receptive) - AcAr

A knowledge worker who comes across as quiet (non-receptive) and accepting but with some internal hostility (which is rarely overtly demonstrated). They believe that people are selfish and out to get what they can so they need to be cautious. They do not trust people and are sometimes anxiety driven. They may also like to be left alone as a result. They have a sceptical view of the world which makes them somewhat withdrawn and introvert. They need lot of reassurance to engage with others as they find it difficult to trust others.

Assertive – Argumentative (AsAr)

A knowledge worker in this behaviour category are vocal and demanding. They are assertive as they like things done their way and can be uncooperative. They are fiercely independent and seek money and power. They like to lead by hook at all costs and believe people are selfish, untrustworthy and out to get what they can but instead of being cautious they believe one has to be tough in order to deal with them.

Assertive-Amiable (AsAm)

A knowledge worker in this category are independent but engaging and warm. They meaningfully interact with others with an open mind, carry the team with them and are diligent in what they do. They are generally self-assured, confident, assertive but not controlling. They lead by example and do not go out of their way to please others. They have an optimistic view of the world and are purposeful in their daily activities.

AsAr(High), AsAr (Medium) and AsAr (Low) represent intensity of behaviour in each category. The dotted ellipses in Figure 2 represent transitory behaviour. That is, the knowledge workers whose knowledge sharing behaviour lies in between two behaviour categories (e.g. AcAr and AcAm). In order to measure knowledge sharing behaviour 13 areas of evaluation have been identified

- Attitude towards Peers (Weight - 10)
- Trust (9)
- Job satisfaction (9)

- Success orientation (8)
- Innovation (7)
- Attitude towards leaders (7)
- Decisiveness (6)
- Paperwork (6)
- Assertiveness (5)
- Rules & Regulations (4)
- Training (4)
- Social Interaction (3)
- Competition (1)

These 13 areas of evaluation were used as constructs to design 60 questions for measuring and categorising the behaviour in four categories. The questions were designed in a manner to contradict each other in order to get a pattern of commitment of answers from the respondent. After discussions with domain experts and iterative design of questionnaire it was considered appropriate to use four answer options

Yes (numeric value 1)

To a large extent yes (0.75)

To a large extent no (0.25)

No (0)

A sample of four questions related to paperwork construct is shown below

Attitude towards Paperwork (Report Writing)

- I spend minimum time on documenting knowledge. This time could be more effectively used in creating new knowledge. – AsAr
- I spend a good deal of my time and energy on writing reports as I feel they are important. My reports provide detailed knowledge and know-how and go beyond routine information. – AsAm
- I believe sharing knowledge with team members by conversation is more important than documenting knowledge. – AcAm
- My documentation is always complete and up to date. – AcAr

The questionnaire was distributed to 25 knowledge workers in CCIL. 14 knowledge workers responded. Their responses are tabulated in attached spreadsheet. Raw category scores (highlighted in red) have been computed by multiplying the numeric value of the answer option chosen with corresponding weight of the question (based on the area of evaluation it belongs to). After preliminary analysis the knowledge sharing behaviour category of 14 respondents was plotted (approximately) on the knowledge sharing behaviour model shown in Figure 3.

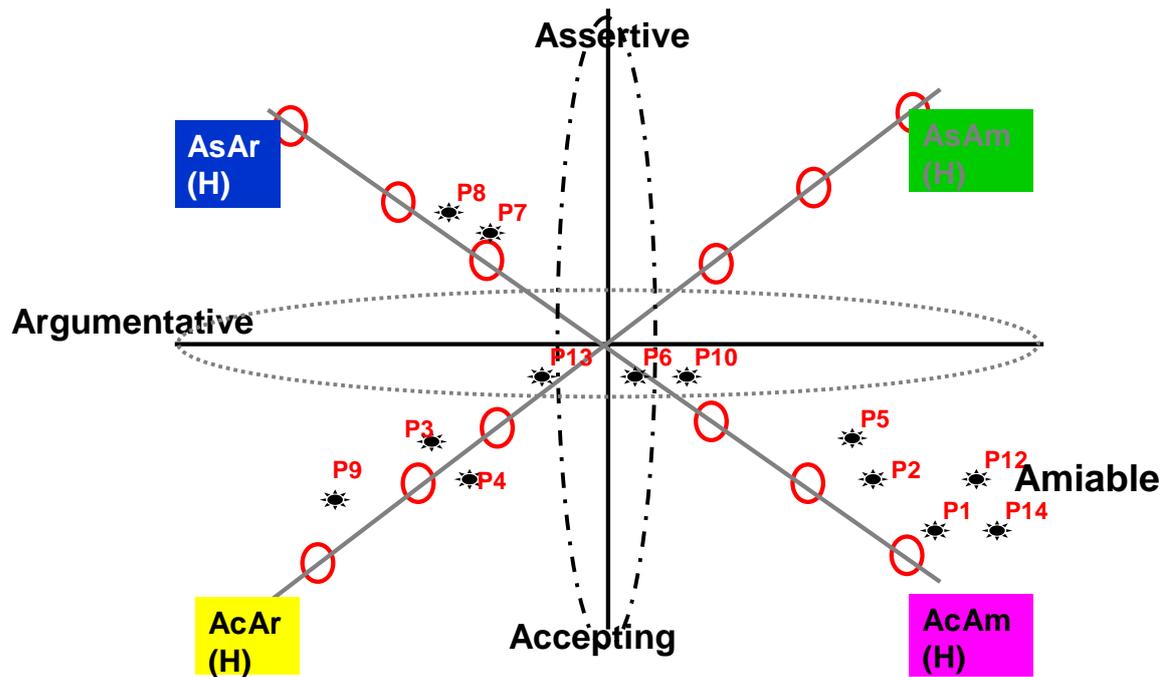


Figure 3: Preliminary Analysis of Knowledge workers KS Behaviour in Japanese R & D organization

As can be seen from Figure 3, 5 respondents' majority behaviour lies in the AcAm behaviour quadrant, 3 lie in the AcAr behaviour quadrant, 2 lie in AsAr behaviour quadrant and 3 lie in transitory behaviour quadrant. The behaviour categories were validated through discussions with supervisors of the respondents. The preliminary analysis and results established that the knowledge sharing behaviour model can be used as a useful for matching team members and reduce conflict to facilitate knowledge sharing leading to group innovation.

Managers and executives reported in the debriefing sessions that they had experienced similar situations at work, be it in a project group, a foreign assignment, a joint venture or an acquisition. They were generally astounded how fast these dynamics developed with their reported impacts even though they might have known better at a cognitive level. In addition, empirical research in the area of small groups supports some of the findings. The insights gained from the simulation suggest that it is important for project management to inform and prepare members of a project group about new coming members, their knowledge sharing behaviour categories. This may help the team to develop an open mindset rather than feel threatened and block well intended contributions. A cultural briefing in advance of the actual project helps to dissolve tendencies of negative stereotyping and of distrust.

4. Conclusion

In this paper we have constructed a 4A knowledge sharing behavior model and applied it successfully for discriminating and measuring differing knowledge sharing behavior of knowledge workers in a Japanese R and D organization. The purpose is to help improve group innovation in R and D organizations. An iterative design methodology was employed to define 4 knowledge sharing behavior categories, 13 areas or constructs with different weightages for measuring knowledge sharing behavior and 60 knowledge sharing behavior questions related to the constructs for determining the behavior of knowledge workers in one of the four knowledge sharing behavior categories. Future research will consolidate on this work by linking interpersonal motives (based on human motivation theory) with each of the 60 questions, studying and modelling the impact and influence of human emotions, .

References

- Al-Mutawah, K., Lee, V., & Cheung, Y. (2009). A new multi-agent system framework for tacit knowledge management in manufacturing supply chains. *Journal of Intelligent Manufacturing*, 20, 593–610.
- Barrick, M., Parks, L., & Mount, M. (2005). Self-monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology*, 58(3), 745–767.
- Bartol, K., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64.
- Bodrow, W., (2007), “Toward European Knowledge Enterprises,” in *Journal Of Intelligent Manufacturing*, Vol18, pages 459-66.
- Bock, G.-W., Lee, J.-N., Zmud, R. W., & Kim, Y.-G. (2005). Behavioral intention formation in Knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly* , 29 (1), 87-111.
- Cabrera, A., & Cabrera, E. (2002). Knowledge-sharing dilemmas. *Organization Studies*, 23(5), 687–710.
- Cabrera, A., Collins, W., & Salgado, J. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management*, 17(2), 245–264.
- Christiaanse, E., & Venkatraman, N. (2002). Beyond sabre: An empirical test of expertise exploitation in electronic channel. *MIS Quarterly*, 26(1), 15–38.
- Davenport, T. H., & Prusak, L. (1998). *Working Knowledge: How Organizations Manage What They Know*. Boston, Massachusetts, USA: Harvard Business School Press.
- Davila, T., Epstein, M. J., & Shelton, R. D. (2007). *The creative enterprise: managing innovative organizations and people*. CT: Praeger Publishers.

- Herkema, S. (2003). A complex adaptive perspective on learning within innovation projects. *The Learning Organization* , 10 (6), 340-346.
- Hsu, B.-F., Wu, W.-L., & Yeh, R.-S. (5-9 August 2007). Personality Composition, Affective Tie and Knowledge Sharing: A Team Level Analysis. PICMET 2007 Proceedings. Portland, Oregon, USA.
- Ipe, M. (2003). Knowledge sharing in organizations: A conceptual framework. *Human resource development review* , 2 (4), 337-359.
- Kankanhalli, A., Tan, B., & Wei, K. (2005). Contributing knowledge to electronic repositories: An empirical investigation. *Mis Quarterly*, 29(1), 113–143.
- Leary, T. F. (1957). *Interpersonal diagnosis of personality: A functional theory and methodology for personality evaluation*. NY: Ronald Press.
- Lu, L., Leung, K., Koch, P., & Tong, K. (2006). Managerial knowledge sharing: The role of individual, interpersonal, and organizational factors. *Management and Organization Review*, 2(1), 15–41.
- Matzler, K., Renzl, B., Muller, J., Herting, S., & Mooradian, T. A. (2008). Personality traits and knowledge sharing. *Journal of Economic Psychology* , 29, 301–313.
- McClelland, D. C. (1985). *Human motivation*. IL: Scott, Foresman.
- McClelland, D. C. (1984). *Motives, personality, and society: Selected papers*. NY: Greenwood Publishing.
- McClelland, D. C. (1951). *Personality*. NY: Sloane.
- Mooradian, T., Renzl, B., & Matzler, K. (2005). Who Trusts? Personality, Trust and Knowledge Sharing. *Management Learning* , 37 (4), 523–540.
- Namjae, C., Guo zheng, L., & Che-Jen, S. (2007). An empirical study on the effect of individual factors on knowledge sharing by knowledge type. *Journal of Global Business and Technology*, 3, 1.
- Plessis, M. D. (2007). The role of knowledge management in Innovation. *Journal of knowledge management* , 11 (4), 20-29.
- Saenz, J., Aramburu, N., & Rivera, O. (2009). Knowledge sharing and innovation performance: A comparison between high-tech and low-tech Companies. *Journal of Intellectual Capital* , 10 (1), 22-36.
- Wang, C.-C., & Yang, Y.-J. (2007). Personality and Intention to Share Knowledge: An Empirical study of Scientists In an R&D Laboratory. *Social Behavior and Personality* , 35 (10), 1427-1436.
- Wang, J.-K., Ashleigh, M., & Meyer, E. (2006). Knowledge sharing and team trustworthiness: it's all about social ties! *Knowledge Management Research & Practice* , 4, 175–186.
- Wiggins, J. S. (1995). *Interpersonal adjective scales: Professional manual*. FL: Psychological Assessment Resources.
- Wiggins, J. S. (2003). *Paradigms of personality assessment*. NY: Guilford Publications, Inc.

- Wiig, K. (2004). *People-focused knowledge management: How effective decision making leads to corporate success*. MA: Elsevier Butterworth–Heinemann
- Yoon, S. W., Matsui, M., Yamada, T., & Nof, S. Y. (2011). Analysis of effectiveness and benefits of collaboration modes with information- and knowledge-sharing. *Journal of Intelligent Manufacturing*, 22, 101–112
- Zmud, R., & Lee, J. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *Mis Quarterly*, 29(1), 87–111.

Society & Social Science III

Room C

09:00-10:30

Friday, May 9

Session Chair: *Prof. Chi-Yo Huang*

ISEPSS-1751

Intergenerational Religious Transmission in Taiwan: Influence of Parents, Religious Tradition, Ethnic Community, and Socioeconomic Status

Zixi Liu

The Chinese University of Hong Kong

ISEPSS-2048

Music Therapy Research in Thailand: A Content Analysis

Natee Chiengchanaa

Mahidol University

Somchai Trakarnrung

Mahidol University

ISEPSS-1798

The Development and Challenge of a Community-based Nonprofit Organization After Nature Disaster in Taiwan

Lu-Yi Hsieh

Chang Jung Christian University

ISEPSS-1757

Innovative Research of Traditional Cultural Industries- Using Mazu International Festival of Taiwan as Case Study

Lin Chin-Min

MingDao University

ISEPSS-1868

Several Issues Related to The Co Proprietorship of Land in Malaysia

Jasni Sulong

Universiti Sains Malaysia

Mohd Marbawi Taha

Universiti Teknologi MARA

ICSSAM-808

Legalism and Prohibition in Muslim Theology A Study on Business Ethic from The Quran and Sunnah Perspective

Sohirin Mohammad Solihin

International Islamic University Malaysia

ISEPSS-1751

Intergenerational Religious Transmission in Taiwan: Influence of Parents, Religious Tradition, Ethnic Community, and Socioeconomic Status

Zixi Liu

The Chinese University of Hong Kong

liuzx06@gmail.com

Abstract

Theories about intergenerational religious transmission have confirmed religious transmission from parents to their offspring in general, while this transmission within an oriental society in particular has not been discussed widely. Based on representative survey data of Taiwan, this study contributed to the discussion by examining the separate role of father and mother in offspring's religious switching and in non-switchers' religiosity. In addition, since religious transmission is both domestic and social in nature, influences of religious tradition, ethnic community, and socioeconomic status are also explored. The author observed the following: (1) father's religiosity determined if offspring switched, while mother's had more influence on non-switchers' involvement; (2) religious involvement during teenage did not deter switching, but strongly predicted non-switchers' religiosity; (3) compared with folk religion, Taoism was less likely to be retained but more likely to attract non-switchers' attendance; (4) in reference with Taiwan Fukienese, Mainlander offspring had higher switching rate; (5) offspring with better socioeconomic status had lower retention rate, but once they retained, this status did not significantly reduce their subjective religiosity.

ISEPSS-2048
Music Therapy Research in Thailand: A Content Analysis

Natee Chiengchana^a

^aRatchasuda College, Mahidol University, Thailand

E-mail: Chiengchana@yahoo.com

Somchai Trakarnrung^b

^bCollege of Music, Mahidol University, Thailand

E-mail: tsonchai@gmail.com

Abstract

The purposes of this study were: 1) to analyze the research reports in the field of music therapy in Thailand and 2) to propose policy suggestions about directions and development of music therapy research in Thailand. There were 65 research reports in the field of music therapy published during 1985 – 2010 from five universities in Thailand, including Chulalongkorn University, Mahidol University, Rrinakarinwirot University, Chiang Mai University, and Khon Kaen University. The research instrument used in recording the data from research reports was a coding form that consisted of three items: 1) characteristics of publication and research authors, 2) characteristics of research contents, and 3) characteristics of research methodology. Content analysis with descriptive statistics was used to analyze and describe the research results and then the policy suggestions were proposed based on the results of content analysis.

The results of content analysis revealed that most of the research reports were master's thesis (81.5%) published during 2006 – 2010 (43.1%). Most research reports were from Mahidol University (32.3%) and were from the Faculty of Nursing (53.8%). In terms of research contents, music therapy for pain relief was the most research content (20%). Most of the research reports conducted independent variable in relaxing music listening (18.5%) and conducted dependent variable in pain (20%). For the research methodology, quasi-experimental research (81.5%) and t-test independent (24.6%) were used most in the research reports.

In terms of the policy suggestions, there were three policy suggestions for this study. First, the policy about the characteristics of publication and research authors suggested that there should be launched music therapy program both undergraduate and graduate program to develop music therapy careers, researchers, and quality of music therapy research in Thailand.

Second, policy about the characteristics of research contents suggested that there should be more studied on music therapy for children who have disabilities in the school settings. Finally, policy about characteristics of research methodology suggested that there should be more conducted the qualitative research in the field of music therapy to discover in-depth knowledge of each client by using various types of qualitative research methodologies, such as narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research.

Keywords: Music therapy, Research, Content Analysis

ISEPSS-1798

The Development and Challenge of a Community-based Nonprofit Organization After Nature Disaster in Taiwan

Lu-Yi Hsieh

Current position: Assistant Professor, Chang Jung Christian University, Taiwan

E-mail: luyi@mail.cjcu.edu.tw

Abstract

Typhoon Morakot hit Taiwan on August, 2009. Within three days, extremely torrential rain swept all over the island-caused a total of 681 people were killed, 18 missing, 1,766 houses damaged, 140,000 flooded more than half a meter, economic loss reached NT \$ 199.83 billion yuan, accounting for 1.6% of gross domestic product (GDP).

After the disaster, a small group of people, mainly women, from the Takanua tribe in Kaohsiung were teamed up to run Takanua Work Station and hope that will help them to gain back their life.

Supported by Red Cross Taiwan and Zhi-Shan Foundation Taiwan, the Station works on agricultural land rehabilitation, planting of non-toxic/organic vegetables and millet, and to promote the idea of "tribal women cooperative farming and marketing team" in order to care for each other and to stabilise their family life. However, the geological and environment instability has made the road repairment impossible (at least not for the coming decade). Once heavy rain fall, Takanua village would be isolated again.

Therefore, how the Station work with local residents to cope with the environmental challenge and, at the same time, to be able to support whoever involved in the process would have a relative stable life will be the main concern of this paper.

The paper was part of a year-long research project, sponsored by Red Cross Taiwan. In-depth interview and secondary data analysis are two main data collection methods. The preliminary findings as following:(1) in order to face the challenge from the nature, the operating strategies of Takanua Work Station are divided, one for dry season (September to next April), one for raining season (from April to August). In dry season, the market would focus on external society, but in raining season, all farming products would be shared by people whoever needed to maintain their basic livinghood. (2) in terms of how to run business, organizing and empowering local residents are as important as just making financial gain.

Working partners must share the same mission and value with the Station, otherwise, nothing would be done, especially in raining season. (3) having a stabilised future, economic activities have to be embedded in its tribal original culture inheritance and environment situation.

Traditional capitalist economic system would not work for the village because there might be no way to sale any products to outside world during raining season. But, 'sharing and exchange' is the traditional tribal value, which would help local residents support each other overcome economic difficulties. (4) long-term commitments of having partnership from external resources/sponsors are vital for non-profit organization to stand firm at the beginning. People have to face loads of difficulties to rebuilt their life after natural disaster. Knowing they were not alone and have somewhere/someone to turn-to would give them enough strength to move on. (5) External sponsors have to understand and respect the culture and autonomy of the non-profit organization in order to create a stable partnership, which would really empower local residents to be independent in the future.

Key words: non-profit organization, empowerment, social enterprise

ISEPSS-1757

Innovative Research of Traditional Cultural Industries- Using Mazu International Festival of Taiwan as Case Study

Lin Chin-Min

Assistant Professor of Fashion Imaging Department and Head Librarian of Ming Dao University
chin@mdu.edu.tw

Abstract

As part of folk belief in Taiwan, Mazu is the most representative deity. Each year the “March Mazu Madness” procession worship event celebrates Mazu’s birth on the 23rd of the third month on the lunar calendar; Taichung Da-Jia Jenn Lann Temple’s Mazu procession path is the longest, has the longest history, leads the largest Mazu International Festival, and has the best conditions for developing business opportunities for this cultural and creative industry in terms of value addition. In 1999, Taichung County Government gave it the name of “Da-Jia Mazu Cultural Festival,” making it one of the main events for international tourism in Taiwan. On July 4, 2008, it was further designated “important national intangible cultural event asset.”

In 2009, the United Nations formally incorporated the cult of Mazu into the list of “Intangible Cultural Heritage of Humanity,” and there are already two hundred million believers. In 26 countries in the world, Taiwan has 1001 out of the more than 5000 Mazu temples; this shows that the belief has become deeply rooted in people’s hearts. By now, the three major religious events in the world are Da-Jia Mazu processions, Christmas Catholic Mass at the Vatican, and pilgrimages to Mecca. Mazu not only has many believers in Taiwan, in the folk beliefs, the procession ritual and related events have evolved into modern cultural festivals; this is a symbol of advancement in Taiwan. Many foreigners are surprised that Taiwan is able to incorporate age-old Mazu into modern culture, play with creativity, and create business opportunities. For instance, Mazu Marathon, Mazu “hip-hop dance” competition, and related creative products have been developed. Many international media even report on the Da-Jia Mazu procession event as the most important focus for Taiwan travel during the year.

Thus, for five consecutive years from 2009 to 2013, this research team has participated in “Da-Jia Mazu Procession – International Tourism and Cultural Festival,” focusing on the two cores of “holding various innovative events” and “develop various creative products,” for observation, recording, analysis, and research, in order to construct “methods for creative and cultural events” and “models for developing innovative products,” hoping to convert “folk

religious and cultural events” into “business opportunities for cultural and creative industries,” and achieve the purpose of sustainable development in the “incorporation of folk culture and arts into life” and “green energy and environmental protection through cultural and creative industries.”

Keywords : traditional cultural industries , Mazu International Festival, innovative events,creative products, cultural and creative industries

ISEPSS-1868

Several Issues Related to The Co Proprietorship of Land in Malaysia

Dr Jasni Sulong^{a,*}

^a Pusat Pengajian Ilmu Kemanusiaan, Universiti Sains Malaysia, Pulau Pinang, Malaysia
E-mail address: jasni@usm.my

Mohd Marbawi Taha^b

^b Pusat Pemikiran dan Kefahaman Islam, Universiti Teknologi MARA, Kampus Bukit Mertajam, Pulau Pinang, Malaysia
E-mail address : mohdmarbawi620@ppinang.uitm.edu.my

Abstract

In Malaysia, it is apparently that the concept of joint ownership of land is distinguished with the individual holding in common. In term of joint ownership, the exercise of existing legal system had resulted multiple issues and implication, especially in terms of social, economic areas. Therefore, the purpose of this article is to analyze those issues based on Islamic perspective. It is hoped that we can contribute in improving the system of co proprietorship in the country. The main method used in this study is library research. To fulfill that, the data collected was based on information obtained from various sources, especially some libraries in universities and the Library of National Institute of Land and Survey (INSTUN) in Malaysia. Apart from that kind of research, we as well conducted some interviews. Among them were legal experts and practitioners who was directly conducted some cases of co-ownership especially officials in Land Office. The outcome of the study showed that cultural practices among Malaysian folk and legal system are very contradicts which had consequently created problems in some major aspects. Upon completion of the study we suggested that co-proprietorship systems are reviewed by taking into account some justice principles which are appropriates in order to ease up the situation.

Keywords : Land, Joint Ownership, Co Proprietorship, Land Law

1. Introduction

Co proprietorship "has been defined in section 342 (1) of the National Land Code (NLC) to mean "the holding of alienated land by two or more persons or bodies in undivided shares" (The National Land Code, 2011, p.325).

Generally, there are some differences between land held individually and land belonged to co proprietors. Unlike land held by only a proprietor, the land co proprietorship often bring some implications which can affect the value of the land in various aspects; development, economic , social and so on. Hence, the author suggests that the study of the issues relating to such land is a quite significant.

2. Several Issues Related to Co Proprietorship of Land In Malaysia

2.1 Every co proprietor has the right to possession and enjoyment of the whole land

In the context of undivided land enjoyment, every owner is entitled to any part of the land because they are considered to share every inch of land that they own (Salleh Buang, 2000, p 24). Nik A. Rashid (1971) explains "Land is said to be held under "undivided shares" or "common ownership" when more persons than one are concurrently owners of the land, and no is entitled to a specific part as sole owner to the exclusion of the other or others" (Nik A. Rashid, 1971, p.75). This concept reflects the boundaries erected by the co-owners to describe the division between them are not legally recognised. Thus, as long as the partition under section 343 (1) (b) of the Code is not done, then any owner can not claim a particular part of the land is owned exclusively by him (Salleh Buang, 2000, p.24).

The practice of co ownership as required by the law is ideal for owners who are interested in developing their land together. They not only have to have a passion to share but must show mutual trust, tolerate and understand each other.

But the culture of co ownership in Malaysia is different. The concept of co proprietorship in law commonly is not applied. The co proprietors do not tend to develop the land together but prefer to subdivide the land to several plots according to the number of them based on consensus agreement. That has not been done under the provision s140(1)(b) of the Code which enable all co proprietors to obtain their respective titles of ownership. To show their exclusive right, they commonly erect fences, boundaries, trees, wells and etc to show their ownership over the part of the land that subdivided to them (U.A. Aziz, p. 22). In summary, they assume that they just share the title but not the land physically.

Such partition is intended to enable every owner enjoys their division exclusively without disputed or harassed by other co proprietors. With this practice, all registered co proprietors think that they can enjoy the share as stated in the title practically. Through this practice as well, they think their right is not be violated by other co owners with impunity.

Legal practices that allow all owners to enjoy the entire land is not generally practiced by the co proprietors because it not only makes it difficult to determine exclusive plots for each, but also confuse them how enjoyment by every co owner in tally with the share of their respective ownership.

What is worried that the concept of every co owner has the possession of whole part of the adjoining land as set by law will bring some negative implications. The more strategic parts of the land which have high marketable value would go to the more powerful and rich. What is left for others just the less valuable as a lowland, far lagging behind the main road and etc (INSTUN, 2013). If this happens, then such co proprietorship is not fair, especially for those poors and who prefer to give in.

2.2 Mutual consent

Under this principle, when a co-owner intends to develop the land, he is obliged to obtain the consent of all co-owners first before proceeding the application to the authority (Azmi Khalid, 2008). Among the forms of development are partition, subdivision, conversion the category of land use etc (s.124(1)(c) of the Code).

But in respect of application for partition, there is some leniency. Since March 25, 1985 the rigidity of the law that requires all co proprietors must consent in application has been modified. So that at present, as a result of the new provisions of section 14A, any co proprietor or co proprietors who hold a majority share in the land may apply for approval to partition to the land, without any fear or being vetoed by co proprietor holding the smaller share (Salleh Buang, 1992, p.260).

Approval of an application under section 141A is not absolute, but subjects to judgement by Land Administrator, especially the decision after an inquiry was conducted . The procedure of inquiry, in brief, is the Land Administrator will give the other co-owners to submit any objection within 28 days if there is an application for land partition by majority share holder or holders. If there is an objection, then an inquiry will be held (INSTUN, 2012). If the objection is reasonable then the Administrator shall dismiss or recommend to the Director of Lands and Mines so that the application is rejected (INSTUN, 2012).

In addition to section 141A, the majority owner can also rely on section 145 of the Code. The provision empowers the court to terminate the co-proprietorship. It can be seen in case of *Ku Yan Yan Bte Abdullah vs Ku Ku Ku Idris Bin Ahmad & Ors* , Alor Setar [1991] 3 MLJ 439. In the case, the plaintiff and the respondent is co proprietors of a piece of land in Mukim Tajar, Alor Setar.

Plaintiff is the owner of a majority of 5/7 parts while the defendant hold the remainder. Plaintiff applied for a partition without the participation or consent of the respondent under section 141A of the Code. The application was rejected by the Director of Lands and Mines.

No reason is stated in the rejection letter, but advising the plaintiff to bring the case to court . The plaintiff made an application to the High Court under section 145 of the Code which provided the court with the statutory power to terminate the co proprietorship. Defendants have objected arguing that the court did not have power to terminate the co-proprietorship.

This is because as a majority holder, the plaintiff should make an application to the Administrator under section 141A. The argument dismissed because the court found that, landlords who hold the majority are not denied from applying for partition in the High Court under section 145 of the Code (Teo Keang Sood & Khaw Lake Tee, 1995, p.706).

In summary, co proprietor who hold the majority share in land can invoke the provisions of section 141A and 145 to assist him to be a sole owner in a separate title. While the minority holder may apply to the court to use the only section 145 of the Code to end the co proprietorship (Salleh Buang, 1993, p. 217).

Back to the issue of consent, it appears the voice of every owner can not be ignored, no matter how large share is owned . The most common problem encountered is that the owner refuse to give consent and then can thwart various matters related to the land development. These issues often result in a deadlock among co proprietors, as even some of the cases had been brought to court to be resolved as it did in case Yan Yan Bte Abdullah vs Ku Ku Ku Idris Bin Ahmad & Ors.

2.3 Right to partition

The main purpose of the partition is to terminate the co proprietorship . Therefore, the discussion hereby on the partition process is significant because it will help the reader to understand some issues relating to co proprietorship.

Right to apply for partition by co proprietors is permitted under section 141 (1) of the National Land Code. The aim is to terminate the co proprietorship among them. But it is not the easy process as the application must meet all requirements and procedures. Otherwise, the application will be rejected by the State Authority.

One of the requirements is that any portion resulting from the partition must be not less than size set out by the State Authority. In respect of land subjects to the category of 'agriculture', the area must be not less than 2/5 acres (143A of the Code). As for the other categories, the portion area resulting from the partition must be appropriate to purpose of the partition to be done. For instance, the partition for 'residential', must result in portions appropriate to the area of a house. The same goes for other categories (Nazirah Abdullah, 2013).

In respect of agricultural land, the problem is that most of the undivided lands are smalls and the partition for such lands is prohibited under the Code. This situation created tension among co proprietors especially who is seeking for an exclusive right of enjoyment by having a separate title to evidence his ownership over the undivided share (Land Ownership and Agricultural Laws Handbook, p.64-65).

Realizing the problem must be dealt with, subsection 140 (3) of the Code had been reviewed by the authority. Then section 143A was inserted in National Land Code 1965 conferring power to the State Authority to consider approval for the partition of land which the land subjects to the category "agriculture" (Land Ownership and Agricultural Laws Handbook, p.64-65). Of course, this amendment is very much welcomed especially by who are often plagued by various crises in their co proprietorship.

Even so, there are still many agricultural lands all over the country can not be partitioned because have not reached the minimum designated area. In this situation, co owners still have other alternative to enable the partition to be done. They should apply to the State Authority for the conversion of land category from 'agriculture' to 'building' (INSTUN, 2012). Upon completion of the conversion, only then they can move to the next stage, application for the partition.

In fact, the application for conversion is not as simple as imaginable. There are various obstacles ahead; financial, attitude or legislation aspects that can hinder all the efforts.

Financially, the premium rate for conversion of the category of land use from 'agriculture' to 'building' is high and it varies from one state to another as set by respective State Authorities accordingly. For example, in Terengganu the rate is 5%, in Selangor 15% (Official Website of Selangor State Legislative Assembly, 2013) and in Malacca is 20% (Official Website of Jasin District and Land Office, 2013). Assumed if the market value of a land is RM300,000, the premium paid in the Terengganu is RM15,000, in Selangor is RM45,000, while in Malacca is RM60,000. For co owners who apply for the conversion of the land category and partition simultaneously, then have to pay a higher rate. Is that not a burden especially for

low-income co owners who wants to end co proprietorship which is in crises for so many years ? The biggest challenges in in this context is refusal by some co proprietors to share the expense in conversion and partition process. In fact, for land in urban areas, most landlords are not keen to apply for conversion. Even some of them prefer to keep their land in agriculture category to avoid high tax door (Azmi Khalid, 2008).

Apart from premium rate, zoning area set up by the State Authority may become another obstacle. Under the Code, there are three different of land use, which are “agriculture”, “building” and “industry” (Salleh Buang, 1993, p.48). Accordingly, the State Authority will create specific zones such as agriculture, housing, industry. The aim is to ensure that development can be done in a planned and orderly manner (Salleh Buang, 1993, p.48). Upon zoning system, the State Authority will decide whether an application for conversion the category of land use could be approved or not (INSTUN, 2012).

In short, some of the above problems is a part of the constraints in early stage, which is in category conversion process. Yet, it has not come to the stage of application for partition. Imagine, how many obstacles that the applicants need to go through to have a separate title over their exclusive ownership.

Among the major problems in conversion and partition of the undivided land is due to reluctance of some co owners to join or even to give consent. In *Aisyah binti Mohd Saman & 3 Ors. v. Kalsom binti Mohamad Nor* [2001] 1 AMR 607, both the plaintiffs and the defendant were co proprietors a piece of undivided land in Penang. Plaintiffs owned 5/6 share, while the remainder owned by the respondent. In March 1993 , plaintiffs entered into a joint venture agreement with a housing developer to develop the land into a mixed housing project . However, the defendant refused to sign the JV agreement. The plaintiffs had instructed their solicitor to file an application in court to have the land subdivided but again the defendant refused to sign the necessary forms . the plaintiffs then applied the court order to have the defendant choose one of the two corner lot shown in the proposed survey plan of the land. If the respondent refused, the plaintiffs wanted the court to order the Senior Assistant Registrar to choose one or the other for the defendant. The defendant opposed the application.

There are two issues before the trial judge Datuk Abdul Hamid Mohamad, were whether the court had jurisdiction to hear plaintiffs application? The second is whether the court should allow it. The learned judge said the court had the jurisdiction to hear the application. The judge also said the co-owners who hold the majority may apply to the court under section 145 of the National Land Code 1965 to terminate the co proprietorship and the land to be subdivided on the grounds that one of the co proprietors refuse to agree to the application.

However, he said, in this case, the plaintiffs did not sell the land but merely offered it to be developed. Without the defendant's consent, the plaintiffs were not empowered to offer or allow the developer to develop the land. The judge added, plaintiffs 's giving of an ultimatum to the defendant to choose either one of the two designated lots was high-handed. The plaintiffs could sell the land if they wanted but they did not do so otherwise submitted to be developed through a joint venture (Salleh Buang, 2000, p. 13).

The lessons learned in this case is that, firstly no co owner even holding the majority share of the land is authorised to dictate which portion the other co owner should take. secondly, only upon mutual agreement by every co owner, the land can be partitioned or apportioned in any specific manner (Salleh Buang, 2000, p. 13).

In conclusion, based on the above discussion, it is not surprising there are still a lot of undivided lands all over the country. Attitudes, the financial and legal constraints are significant factors to prevent co proprietorship to be terminated.

2.4 Land acquisition by the State Authority

This topic is discussed later than others because the author views the prior discussions will establish a better understanding about this issue. Essentially in the case of compulsory land acquisition, an adequate compensation shall be paid to the parties involved. Article 13 (b) of the Federal Constitution provides ; *“no law shall provide for the compulsory acquisition or use of property without adequate compensation”*.

What is adequate in a given set of circumstances is not an easy matter (Salleh Buang, 1992, p.273). But the most important element shall be taken into the account is market value (Department of Director General of Lands and Mines, p.20)

The dispute among co proprietors can easily arise when only a portion of the undivided land is acquired and not the whole of the land as described in a title. It become more difficult if the land has been subdivided to all co proprietors based on consensus agreement and there are houses and orchards on it.

In this case, the State Authority will reward the compensation to each co owner in accordance with the share stated in the title respectively without taking into account the partition that has been done through consensus among the co owners. As an example, a piece of land which is jointly owned by A, B, C and D. Each co proprietor owns a $\frac{1}{4}$ share. When the compulsory acquisition only affects the area occupied by the owner of A, co owners B, C and D also are compensated based on their ownership of share in the title.

All registered co owners (A, B, C and D) with their shares will remain unchanged in new title issued later as it was, before the acquisition taking place.

To the State Authority, disregarding some co proprietors in rewarding the compensation is improper, unlawful and even contradict with legal provisions. Paragraph 143 (1) (b) of the Code provides that so long as their co proprietorship continues, each co owner is entitled to the possession and enjoyment of the whole land.

The issue may not arise if the land has partitioned under s140(1)(b) of the Code which all co proprietors enjoy a separate title for the exclusive ownership. However, when such partition has been done through the consensus agreement and the compulsory acquisition only affect a part of the land, it can result in a dispute among the co proprietors. And the worst scenario there are residential houses, plants, business stalls on the land.

What is normally happen that the affected co proprietor feels aggrieved by the acquisition because the compensation, on his part of view, that should specifically awarded to him, was distributed to other co owners as well. Even the others possibly can get greater amount of compensation if they hold *hold greater* share of the undivided land as stated in the title.

Normally, co-owner who is affected by the acquisition hardly to accept the concept of co proprietorship in the land law. And It is not difficult to understand his dissatisfaction.

He knows that he is not so benefited from his share which is still remaining in a new title. He may be benefited if the second acquisition for the whole remaining land occurs. Unfortunately it is a rare possibility and may happen after a long period of time. To whom which his part is not affected from the acquisition, he will enjoy much benefits. Beside being compensated, he still enjoy the remaining land as well.

If we assess carefully from the financial aspect, we will find that the co owner whose portion compulsorily acquired suffers losses so great. He needs to spend much expenses to begin a new life in a new place such as buying a piece of land and building a house. In contrast, other co owner who are not affected by the acquisition continues to occupy and enjoy the land, and even has the opportunity to earn revenues by doing businesses on it. This calculation is based on the value of the land today. What about the case in few coming decades when land prices up is not affordable by most of the citizens? Of course, the losses is much bigger .

By law, the affected co owner is still having share of ownership in the land . The question is, how it can be implemented in a land that was apportioned among them by consensus? In fact, it is difficult for other co owner to move to make a room for the co owner who are affected by the acquisition. Moreover if there are houses, fences ect to show their exclusive portion. Of course, there is no co owner who is willing to destroy what he has built in a very costly.

Legally, the affected co owner have a right to claim his rights through the court. But it is not that easy because normally the co owners are connected in a circle of family members and relatives. Bringing the matter to the court means that their relationship is at risk. This can be a deadlock situation and normally the affected co owner prefers to take a stand not to prolong the issue.

According to the Minister of Natural Resources and Environment Datuk Seri Azmi Khalid, problems resulting from such acquisition were widespread across the country. Assistant Director of Estates Distribution Unit of the Central Kedah , Azharudin bin Abu Bakar said that the acquisition for a portion of the whole land is a complex problem to solve. The same idea was shared by Mat Ariffin bin Sidek who has been involved in solving the crisis that had broken the family ties resulting from such land acquisition by the State Authority.

3. Conclusion

In conclusion, an undivided land is always plagued with various issues. In order to safeguard the interest of all co owners, it requires an ongoing study by scholars. So that constraints in co proprietorship can be reduced and no one becomes a victim of an ineffective justice system. Hence, the author views that the study of undivided land is very significant today.

4. References

Ab Rahim bin Ma'in (2004), "Penyelesaian Kepada Isu Dan Masalah Dalam Mengurangkan Tunggakan Cukai Tanah" dalam laman web Institut Tanah Dan Ukur Negara, www.instun.gov.my, 15 Januari 2012.

An Interview with the Minister of Natural Resources and Environment, Datuk Seri Azmi Khalid (24th Januari 2008). Utusan Malaysia : To facilitate the management of land.

INSTUN (National Institute of Land and Survey (2013). Pusaka Kecil : Penyelesaian Berkesan Ke Arah Kesejahteraan Keluarga Dan Masyarakat. Retrieved on 21 Julai 2013 from www.instun.gov.my

INSTUN (National Institute of Land and Survey) (2012). Partition Under the National Land Code 1965. Retrieved on 12 Jun 2012 from www.instun.gov.my

- Jabatan Ketua Pengarah Tanah dan Galian (t.t). Manual Pengambilan Tanah.
Land Ownership and Agricultural Laws Handbook. Volume 1. Washington DC : International Business Publications.
- National Land Code (Act56/1965). (Translated in Malay) (2011). Petaling Jaya: International Law Book Services.
- Nik A. Rashid (1971). Land Law and Land Administration. K.L.: Universiti Malaya.
- Pecah Sempadan Tanah, Pecah Bahagian Tanah, Penyatuan Tanah, Serah Balik Kurnia Semula Dan Pecah Bahagian Bangunan. Retrieved on 16 April 2013 from nazirahabdullah.files.wordpress.com
- Salleh Buang (1992). *Malaysian Torrens System*. K.L.: Dewan Bahasa Dan Pustaka. Pg 260.
- Salleh Buang (1993). Undang-undang Tanah di Malaysia. K.L.: Dewan Bahasa dan Pustaka.
- Salleh Buang (19 Febuari 2000). News Straits Times : Perils And Problems Of Land Co Ownership.
- Teo Keang Sood & Khaw Lake Tee (1995). Land Law in Malaysia : Cases and Commentaries. Ed 2. Kelana Jaya : Malayan Law Journal Sdn Bhd.
- U.A. Aziz (t.t). Land Disintegration ang Land Policy in Malaya. K.L. : Universiti Malaya.

ICSSAM-808

Legalism and Prohibition in Muslim Theology A Study on Business Ethic From The Quran and Sunnah Perspective

Sohirin Mohammad Solihin

International Islamic University Malaysia

nirihos58@yahoo.com

Abstract

The paper attempts to explore the conceptual framework related to business activities which include, among other things, legal concept (*al-halal*) and prohibition (*al-haram*). Muslims believe in comprehensiveness of teaching of the Qur'an which covers the whole gamut of human activities. Prophet Muhammad (pbuh) involved in business activities by observing the manners in communication with others (customers). He went out from Makkah to Syria to deal with people promoting merchandise entrusted by the richest lady of Arabia what so-called Khadijah. His uniqueness in consulting people by observing the truth and sincerity generated unprecedented profit ever experienced by his patron, Khadijah. The way of convincing people with the use of psychological approach attracted sympathy from all customers. Such kind of this thing need to be taken as a model in today's business transaction in which most people simply aims at maximizing the profit ignoring the right of others. Most Arabs by that time fascinated with his sincerity in dealing with others.

The ethical business conduct demonstrated by the Prophet (pbuh) should be taken as model to attract people's sympathy. There are ample evidences in the Qur'an and the *Sunnah* related to ethical conduct to maintain peace and justice in the community. Hence, the paper attempts to reveal the concept of commercial transaction to avoid exploitation between the two parties (sellers and buyers). Quality of product, presence of witnesses during the time of the transaction and system of taking loan are going to be discussed. Moreover, the way the Prophet (pbuh) communicated with different groups which could be claimed as 'marketing system' is also going to be dealt extensively. More importantly the practice of business should reflect the value of ritual service to maintain the awareness on surveillance of God. At the overall level, the ethic of business must simultaneously reflect the mission of actualizing the concept of promoting goodness (*al-amr bi al-ma'ruf*) and eradicating evils (*al-nahyu an al-munkar*) in the community.

Psychology II

AV Room

09:00-10:30

Friday, May 9

Session Chair: *Prof. Mardiana binti Mohamad*

ICSSAM-594

Absorbing Envy: The Influence of Relationship

Jing-Yu, Hsieh *Yuan Ze University*

Yueh-Ysen, Lin *Yuan Ze University*

ICSSAM-695

Person Centred Approach to Counselling: Impractical in the Malaysian Context ?

Mardiana binti Mohamad *International Islamic University Malaysia*

ICSSAM-624

How Adaptive Behavior Influences Academic Achievement Among Elementary School Students

Tiara Carina *Udayana University*

Komang Try Damayanti *Udayana University*

Putu Ayu Novia Viorica *Udayana University*

ICSSAM-743

Self-autonomy Difference between Middle Childhood Who Nurtured by Parents and Grandparents

Putu Wirmayani *Udayana University*

Dewa Gede Ari Dhanendra *Udayana University*

Putu Noni Shintyadita *Udayana University*

Nicholas Simarmata *Udayana University*

ICSSAM-954

Analysis of The Effects of Facial Attractiveness on Interpersonal Attraction in Women With Square Faces

Nurul Aini *Airlangga University*

Hilman Luqmanul Hakim *Airlangga University*

Elliyannur Ruri Juwitasari *Airlangga University*

Puji Lestari *Airlangga University*

Agung Prasetyo *Airlangga University*

ISEPSS-2101

The relationship between ‘Authentic Parental Competence’ and Parental Anxiety of Preschoolers' mothers in South Korea

Kai-Sook Chung

Pusan National University

Ju-Youn Kyun

Pusan National University

Ji-Yeon Kim

Pusan National University

ICSSAM-594

Exploring the Positive Value of Envy: The Moderating Effect of Guanxi

Jing-Yu, Hsieh

Yuan Ze University, 135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.
hasmile1029@gmail.com

Yueh-Ysen, Lin

Yuan Ze University, 135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.
claudia.ylin@saturn.yzu.edu.tw

Abstract

Envy is a common emotional state occurred when individuals feel that someone is better than self or has something which the person is eager for. (Parrott, 1991; Parrott & Smith, 1993). A number of researchers had studied envy in the workplace for some time (Heikkinen, Nikkonen & Aavarinne, 1998) and found that when employees experience envy, they are likely to show behaviors that might hinder personal and colleagues' productivity.

The issue of envy, however, receives much less attention in the Chinese Society. Because of the impact of social desirability and traditional values, envy is almost considered an unspoken issue, even ignored. As a result, research in related fields was hardly seen. This research attempts to understand individuals' experience of envy in the workplace and how this emotional state would affect their work behavior (i.e. helping behavior vs. self-improvement). The major argument is that the guanxi between envied target and manager will moderate the envy state and the behavioral outcome. Moreover, the guanxi between enviers and envied target will influence their outcome. This study plans to collect 400 sets of data from working individuals in Taiwan and will provide a new research stream for scholars who are interested in this field. More importantly, it is expected to provide some insights for managers and enterprises to understand and manage workers for better organization efficiency and harmony.

Key word: envy, helping behavior, self-improvement, guanxi.

ICSSAM-695

Person Centred Approach to Counselling: Impractical in the Malaysian Context ?

Mardiana Mohamad

Kulliyah of Islamic Revealed Knowledge and Human Sciences (KIRKHS)
International Islamic University Malaysia, P.O. Box 10, 50728 Kuala Lumpur, Malaysia.
mardiana@iium.edu.my

Abstract

Non-directivity is one of the main features of person-centred counselling (Carl Roger-1902-1987). It is believed that an individual client is trustworthy and capable of finding the answers to his problems. Besides, Rogers postulates the counsellor's personal qualities of genuineness, unconditional positive regard and empathy as significant ingredients in the counselling relationship which facilitate client's experiences of the process of personal growth. Although the person-centred counselling has been well-recognised and established in the counselling arena, the issue of its suitability with non-Western clients or in contexts different from the United States or Europe has been brought up. It is argued that it is difficult to apply the person-centred counselling, i.e., a traditional Western approach with clients from the eastern, third world nations due to some inherent values or cultural differences. In the Malaysian context, the main concerns in using the person-centred approach are its lack of direction in its egalitarian counsellor-client relationship style and reliance on counsellor's qualities. Thus, several studies were conducted looking into the process or outcome of person centred counselling in the context of Malaysia and with different groups of client. Based on these studies, recommendations pertaining to the practice of person centred counselling in the context of Malaysian clients are made.

Keyword: Person centred counselling, counsellor-client egalitarian relationship style, cultural differences, Malaysian clients, recommendations

Introduction

Implementing counselling models or principles which come from the West causes uncertainties and dilemmas among psychologists, counsellor educators and practitioners in Malaysia (Abdul Halim Othman and Sharifah Bee Abu Bakar, 1993). Religious and racial diversity in Malaysia have made the development of an indigenous "Malaysian" counselling approach a great challenge (Suradi Salim & Rafidah Aga Mohd Jaladin, 2004). Hence, some counselling authorities have attempted to make cultural adjustment on the Western psychotherapy and counselling models, whereas, others have chosen to adopt a traditional

counselling approach in their practice. These efforts are manifested in writings and research, for instance, on family therapy (Ng, 2003), religious psychotherapy (Azhar Md Zain, Varma & Dharap, 1994; Azhar Md Zain & Varma, 1995a; Azhar Md Zain & Varma, 1995b), cognitive therapy (Azhar Md Zain & Varma, 1996) treatment on mental illness (Azhar Md Zain & Varma, 2000), rehabilitation system (Scorzelli, 1986) and person-centred approach to counselling (Wan Abdul Kader Wan Ahmad, 1986).

With regard to the person-centred approach to counselling (Rogers, 1942) the approach was established in the West, yet, there were lack of empirical evidence reporting its practicality and effectiveness in the Malaysian context. Most available writings on the person-centred approach are theoretical in nature (Abdul Rahman Haji Salleh, 1983; Yunus Majid, 1985; Nor Anisah Abdul Malek, 1985; Abdul Ayah @ Abdul Aziz Mahmood, 1984; Khairuddin Mohamed, 1985; Wan Abdul Kader Wan Ahmad, 1986). Several authors have come up with viewpoints regarding the suitability of practising the person-centred counselling in the Malaysian context. For instance, Hamzah S Mohamed (1984) viewed that the theory is not suitable. On the contrary, Wan Abdul Kader (1986) wrote a more positive view about practising the approach with Malay clients, suggesting that there are similarities between the humanistic approach and the cultural values of the society (Wan Abdul Kadir Wan Ahmad, 1986).

Person-centred approach to counselling was developed by Carl Rogers (1902-1987) in the United States. As the proponent of the humanistic tradition, the approach stresses on the unique capacities of each individual to self-realisation and personal growth. Its main characteristics are non-directive nature in its counsellor and client relationship as well as counsellor's personal qualities of genuineness, unconditional positive regard and empathy as the ingredients facilitating client's personal growth. These unique features differentiate it from another counselling approach for example, cognitive behavioural therapy which is more educative and directive in nature. These characteristics raised some concerns among the Malaysian counsellors particularly from the cross cultural perspective. If the approach is effective among the Western clients, to what extent it is applicable and effective among the Malaysian clients? What are the guidelines to adopt or adapt the approach to make it useful in the Malaysian context? Hence, this writing attempts to highlight the core findings of the research done on the process and outcome of person-centred counselling in Malaysia and to make recommendations on the practice of the counselling approach in this context.

Research on the person centred counselling in Malaysia

Within less than a decade ago, a number of studies were carried out to investigate the process and outcome of the person-centred counselling in the Malaysian context. This writing mentions only a few of the studies. In a case study of four Malay clients receiving person centred counselling, the author explored the characteristics of personal growth and inner experiences of the Malay clients in the non-directive, egalitarian counselling relationship.

Twelve counselling sessions with each client were audio visually recorded and transcribed as verbatim, Interpersonal Process Recall were carried out and clients' journal entries were obtained from each counselling session. The findings indicated that although the clients were apprehensive towards counselling in the beginning due to lack of experience and understanding about counselling, however, at the final stage of counselling, they reported mixed feelings regarding termination of counselling, sense of gratitude towards the counsellor and description of counselling as a beneficial experience. Clients also disclosed the person centred counselling sessions as *less stressful, freedom of expression, self-evaluation* and *increase in their understanding of self and experience* in the non-judgmental atmosphere of the counselling relationship. With regard to their experience of personal growth, themes including flow of emotion, awareness of self, others and experience, personal changes, self-directed behaviour and spirituality were discovered from the analysis of the counselling verbatim (Mardiana & Asnarulkahti, 2012).

Pamalia in her master's research employing a qualitative study to explore the outcome of person-centred counselling underwent by women with HIV who were facing interpersonal crises (2013). Several major themes were identified as the indicators of personal growth i.e. religiosity, personal changes, emotional changes, cognitive changes, plan of action, behavioural changes and selflessness. In the abovementioned studies, the counsellors underwent person-centred counselling training, evaluated and certified by expert judges before they were appointed as the person-centred counsellors for the research.

Recommendations

Based on the above studies, several recommendations can be made with regard to person-centred counselling training and practice in Malaysia. The perception that the person-centred counselling is difficult to apply with non-Western clients who are basically group oriented, soft spoken and shy, traditional and respecting older individual (Yeo, 1993) has been challenged by the present research. The findings showed that if the counsellor is trained properly and possesses the personal qualities of genuineness, unconditional positive regard and empathy, the counselling approach could be practised with the Malay clients.

The study also lends support to the previous findings that in the non-judgemental, empathic and genuine climate of person-centred counselling, clients would experience constructive changes or personal growth. However, there are certain aspects of the therapeutic process that need special attention when the person-centred counselling is to be applied in the context of Malay clients.

Understanding of the person-centred theory and practice

One of the findings of the above research is that the counsellor's qualities of genuineness, unconditional positive regard and empathy as well as the non-directive nature of person-centred counselling relationship could be received favourably and beneficial to the Malay clients, at least in these studies. It shows that, if the theory and practice of person-centred counselling are understood in comprehensive manner, it is possible to practise the approach with Malaysia clients. For instance, one needs to understand the concept of unconditional positive regard or acceptance in the theory. It involves the counsellor's deep and genuine caring for the client as a person with human potentialities which is uncontaminated by evaluations of the client's thoughts, feelings and behaviour. It means making no judgments or evaluations for the client's expression of painful, hostile, defensive feelings as well as expression of good, positive, mature feelings. The aim is to provide a non-threatening context in which the client can explore and experience the most deeply shrouded elements of his inner self (Kirschenbaum & Henderson, 1990). However, one should understand also that possessing the personal qualities does not imply that a counsellor has to play a non-active role. Literature on Rogers' clinical responses manifested that he used various techniques or methods to implement the therapeutic values of congruence, caring and empathy (Farber, Brink & Raskin, 1996). He often checked whether he understood the client's meaning correctly, a technique that Rogers (1986) preferred calling 'testing understandings' or 'checking perceptions' to 'reflection of feeling'. He also used to acknowledge clients' unspoken feelings, provide reassurance, self-disclosure and interpretation to further his understanding of the client's world.

Personal qualities of the counsellor

The counsellors in the study was trained and evaluated in the practice of person-centred counselling but earlier they had already felt comfortable with the theory. Most importantly, they were aware that their personality as an individual is closely matched with the personal qualities of genuineness, acceptance and empathy of person-centred counsellor. For example, they value the non-judgmental attitude towards people. By having the counsellor's 'personality-approach' in context, the process of learning about 'how' to practise became much faster and easier.

The findings of the study indicated that despite the non-directive nature of the approach, the personal qualities of the counsellor was a significant factor that brought about affirmative reactions of the Malay clients in the study towards the approach. Therefore, before an individual counsellor trainee considers the person-centred counselling, he or she should be aware whether his or her personality possesses the qualities of genuineness, unconditional acceptance and empathy. For instance, the individual should have a non-judgmental attitude towards people and believed in the constructive, positive, trustworthiness nature of human beings. Individuals whose personality is more inclined towards directing and trying to change the client by using intervention might be suitable to use a more directive counselling approach.

Spirituality and moral virtues

Despite the criticisms that the person-centred therapist or counsellor did not deal or confront the evil or destructive tendencies in their clients (May, 1982) and its' philosophy is against the teaching of Original Sin in Christianity, Rogers was consistent in his view that every individual has the capacity for evil behaviour but the client's open expression of feelings and the empathic, acceptant attitude of the counsellor would be followed by insight, cognitive clarification and the client's capacity to act upon his insight (Thorne, 1992). The findings of the above studies seemed to be in line with Rogers' viewpoint. As the clients were attended to with care and empathically by the counsellor in both their negative and positive feelings and experiences, they tended to achieve spiritual insights by returning to their religious values and constructive self-tendencies. Meaning that, if someone would like to apply the person-centred approach to counselling, he or she does not have to think about trying to change or improve the client's attitude. If the counselling relationship is based on the counsellor's personal qualities, there is a high possibility that client would get his feet back on the ground and become a more sensible and responsible individual.

Verbal and non-verbal expressions

Clients vary in their style and level of verbal and non-verbal behaviour expressions due to individual circumstances or cultural context. Hence, several strategies could be considered by the person-centred counsellor when dealing with this type of client. Firstly, the counsellor should accept the client as he or she is. If the client is able to express his experiences but only at the intellectual level, the counsellor should not force him or her to move to a deeper level. This is due to the fact that some clients are not accustomed to talk about their feelings with someone, or some might need a longer time to reach out to their feelings. These clients may feel uncomfortable if the counsellor seems to drag them to discuss emotional issues, especially when they are not ready. In this situation, the counsellor should always view the situation from the client's perspective.

Secondly, if the client is able to express her feelings but rather indirectly, the counsellor should be attentive to her non-verbal behaviour such as through the tone of voice and facial expressions which might reveal the client's emotional state at that moment. Dealing with this type of client, the counsellor may acknowledge the subtle or non-verbal expressions of feelings. Still, this should be done with the aim to check the counsellor's perception and understanding of the client's experience at that moment.

Conclusion

The writing aims to describe the recent studies conducted on the process and outcome of the person-centred counselling in the context of Malay clients. Based on the studies, some recommendations are made. In conclusion, person-centred counselling can be useful in the context of Malay clients if counsellors are well trained in the approach. Counsellor's personality should match with the personal qualities and non-judgmental feature of the approach. Client's spiritual needs should not be overlooked. Finally, counsellor should be aware that the Malay client's level of verbal expression may be more on the thoughts rather than emotions, which is normal in the Malay context.

References

1. Abdul Halim Othman & Sharifah Bee Aboo Bakar. (1993). Guidance, counseling and counselor education in Malaysia. In Abdul Halim, O. & Amir, A. (Eds.). *Counseling in the Asia-Pacific Region*. Connecticut: Greenwood Press
2. Salim, S. & Jaladin, R.A.M. (2005). Development of counseling services in Malaysia. In Z.A. Ansari, N.M. Noor, A. Haque (Eds.), *Contemporary Issues in Malaysian Psychology*. Kuala Lumpur: Thomson Learning.
3. Ng, K.S. (2003). Family therapy in Malaysia: An update. In Kit S. Ng (Eds.). *Global Perspectives in Family Therapy: Development, practice, trends*. New York: Brunner-Routledge.
4. Azhar, M.Z., & Varma, S.L. (1994). Religious psychotherapy in anxiety disorder. *Acta Psychiatrica Scandinavica*, 90,1-3.
5. Azhar, M.Z., & Varma, S.L. (1995a). Religious psychotherapy in depressive patients. *Psychotherapy and Psychosomatics*, 63, 165-168.
6. Azhar, M.Z., & Varma, S.L. (1995b). Religious psychotherapy as management of bereavement. *Acta Psychiatrica Scandinavica*, 91, 233-235.
7. Azhar, M.Z., & Varma, S.L. (1996). Religious psychotherapy: A proposed model based on the Malaysian experience. *Journal of Fed. Islam Medical Association*, 1, 64-70.
8. Azhar, M.Z., & Varma, S.L. (2000). Mental illness and its treatment in Malaysia. In Ihsan Al-Issa (Ed.). *Al-Junun: Mental Illness in the Islamic World*. Madison Connecticut: International University Press.

9. Scorzelli, J.F. (1986). Malaysia rehabilitation system: a challenge to the drug problem. *Journal of Applied Rehabilitation Counseling*, 17, 21-24.
10. Wan Abdul Kader Wan Ahmad (1986). Ulasan terhadap syarat-syarat kaunseling pemusatan insan Rogers dan kesesuaian penggunaannya di Malaysia. *Jurnal Perkama*, 2, 1-9.
11. Rogers, C.R. (1942). *Counseling and Psychotherapy*. Boston: Houghton Mifflin.
12. Abdul Rahman Salleh (1983). Konsep manusia dan personaliti dalam teori kaunseling: satu analisa perbandingan dan perspektif Islam. *Latihan Ilmiah*. Jabatan Psikologi, Universiti Kebangsaan Malaysia, Bangi, Selangor.
13. Yunus Majid (1985). Pembaikan personaliti mengikut falsafah Al-Ghazali. *Latihan Ilmiah*. Jabatan Psikologi, Universiti Kebangsaan Malaysia, Bangi, Selangor.
14. Nor Anisah Malek (1985). Konsep manusia menurut pandangan Islam. Satu sumbangan pemikiran ke arah pembentukan teori kaunseling Islam. *Latihan Ilmiah*. Jabatan Psikologi, Universiti Kebangsaan Malaysia, Bangi, Selangor.
15. Abdul Ayah@ Abdul Aziz Mahmood (1984). Konsep manusia dan personaliti mengikut al-Ghazali. *Projek Penyelidikan*. Jabatan Psikologi, Universiti Kebangsaan Malaysia, Bangi, Selangor.
16. Khairuddin Mohamed (1985). Konsep manusia dan personality dalam teori kaunseling: Satu perbandingan dari pandangan Islam. *Projek Penyelidikan*. Jabatan Psikologi, Universiti Kebangsaan Malaysia, Bangi, Selangor.
17. Hamzah S Mohamed (1984). Bimbingan dan kaunseling dari sudut pandangan Islam. *Jurnal Perkama*, 1, 78-93.
18. Mardiana Mohamad & Asnarulkhadi Abu Samah. (2012). Person-centred approach to counselling: Indicators of personal growth experienced by Malay clients. In N. M. Noor, & M. A. Dzulkifli, *Psychology in Malaysia: Current research and future directions* (pp. 127-151). Kuala Lumpur: Pearson Malaysia Sdn Bhd.
19. Pamilia Lourdunathan (Unpublished Master Thesis, 2013). Person-centred Counselling of Women with Human Immunodeficiency Virus (HIV) & Interpersonal Crises. International Islamic University Malaysia, Kuala Lumpur.
20. Yeo, A. (1993). Counseling in Singapore: development and trends. In Abdul Halim, O. & Amir, A. (Eds.). *Counseling in the Asia-Pacific Region*. Connecticut: Greenwood Press.
21. Kirschenbaum, H. & Henderson, V.L. (1990). *Carl Rogers Dialogues. Conversations with Martin Buber, Paul Tillich, B.F. Skinner, Gregory Bateson, Michael Polanyi, Rollo May, and others*. London: Constable and Company Limited.
22. Farber, Barry, A., Brink, Debora, C., & Raskin, Patricia. M. (1996). *The Psychotherapy of Carl Rogers*. New York: The Guilford Press
23. Rogers, C. R. (1986). A client-centred/ person-centred approach to therapy. In I.L. Kutash & A. Wolf (Eds.), *Psychotherapist's Casebook*. San Francisco: Jossey-Bass.

24. May, R. (1982). The problem of evil: an open letter to Carl Rogers. *Journal of Humanistic Psychology*, 22(3), 10-21.
25. Thorne, B. (1992). *Carl Rogers*. London: Sage Publications.

ICSSAM-624

How Adaptive Behavior Influences Academic Achievement Among Elementary School Students

Tiara Carina, Putu Ayu Novia Viorica, Komang Try Damayanti, Supriyadi

Psychology Study Program, Faculty of Medicine, Udayana University

tiaracarina@yahoo.com

Abstract

Adaptive behavior is the performance of an individual in daily activities pertaining to personal and social functioning (Markusic, 2012). Adaptable individuals are capable of integrating new information, able to understand risks and opportunities, and also able to choose actions and behaviors that serve not merely their own interests but those of others. If the whole criterias are completed, an individual will be knowledgeable and responsible. Preparing children to be knowledgeable and responsible adults in the future is the goal of education. Education itself is a structured and prepared effort to change and develop wanted behaviors (Wahyuningsih, 2004). How students achieve educational goal reflects on their academic achievement. Academic achievement is ability and knowledge of an individual in one or more study area (Webster's New International Dictionary in Liana, 2013). Therefore, the researchers assume that there is a correlation between adaptive behavior and academic achievement among elementary school students.

This research is a correlational quantitative study. The criterias of the subject are the elementary school students in Bali both boys and girls who their age are between 6 to 12 years old. The sampling method is stratified random sampling. The data collection method uses Vineland Adaptive Behavior Scale and study report of the students in odd semester. The data analysis method is Regression Analysis by using the computer program SPSS version 17.0.

The results of this study is expected to provide an overview of adaptive behavior contribution to academic achievement among elementary school students, so that school could pay attention of increasing adaptive behavior to increase student's academic achievement.

Keywords : Adaptive Behavior, Academic Achievement, Elementary School Students

1. Introduction

Adaptive behavior is the performance of an individual in daily activities pertaining to personal and social functioning (Markusic, 2012). Adaptable individuals are capable of integrating new information, able to understand risks and opportunities, and also able to choose actions and behaviors that serve not merely their own interests but those of others. If the whole criterias are completed, an individual will be knowledgeable and responsible.

Preparing children to be knowledgeable and responsible adults in the future is the goal of education. Education itself is a structured and prepared effort to change and develop wanted behaviors (Wahyuningsih, 2004). How students achieve educational goal reflects on their academic achievement. Academic achievement is ability and knowledge of an individual in one or more study area (Webster's New International Dictionary in Liana, 2013). It can be concluded that education is individual's ability in studying. The goal of education is reached if students have high academic achievement. Students with high academic achievement has indication of well knowledgeable (Hamdu & Agustina, 2011).

Therefore, the researchers assume that there is a correlation between adaptive behavior and academic achievement among elementary school students.

Adaptive Behavior

Adaptive Behavior is a person typical performance in their daily activity that pertaining social and personal skills (Markusic, 2012). In Vineland Adaptive Behavior Scale, adaptive behavior can be measured by social and personal skills. This test is classified into 4 main adaptive indicators, such as:

- a. Communication, divided into: receptive (a person's ability to understand, listen, and follow the instruction), expressive (a person's ability to talk, start a conversation, interactively talk, express the complex idea), and written (a person's ability to read and write).
- b. Skills in daily life, divided into: personal (a person's ability to eat, dress, and health care), domestic (a person's ability to do the house hold task) and community (a person's ability to use their time, money, telephone).
- c. Socialization, divided into: interpersonal relationship (a person's ability to interact with other people), playing and leisure time (a person's ability to use time effectively), and coping skill (a person's ability to control drive, respon and follow the task).
- d. Motion, divided into: gross motor skills (a person's ability to sit, walk, run) and fine motor skills (a person's ability to manipulate objects, draw and use scissors).

Academic Achievement

Assessment of student learning outcomes to determine how far the student has reached the goal of learning is called as a learning achievement or academic achievement. According to Winkle (1997), learning process experienced by students produces changes in the field of knowledge and understanding, in the field of value, attitude and skill. The change is appear in the learning or academic achievement of students toward the questions, issues or tasks assigned by the teacher. Student's academic achievement determines the progress that has been achieved in studying.

To achieve high learning achievement, there is some factors that must be considered. According to Suryabrata (1998) dan Shertzer & Stone (dalam Winkle, 1997), the outline of the factors that influence studying, learning and student academic can be classified into two parts, internal factors and external factors.

- a. Internal factors
 - 1) Physiological factors, the factors related to health and sensory, consist of the body health and the sensory.
 - 2) Psychological factors, consist of intelligence, attitude, adaptive behavior and motivation.
- b. External factors, is everything out of the self, that influences learning achievement. Such as:
 - 1) Family factors, consist of social and economic status, parents education, parents caring and situation on relationship with family.
 - 2) School environment factors, consist of school facility, teacher and student competence, curriculum and learning method.
- c. Environment factors
 - 1) Social culture
 - 2) Participant in education

2. Main Body

2.1 Method

Independent variable of this research is adaptive behavior and the dependent variable is academic achievement. Adaptive behavior is defined as the performance of an individual in daily activities pertaining to personal and social functioning. Academic achievement is defined as ability and knowledge of an individual in one or more study area.

The target population of this research is elementary school students. The method of sampling used is stratified random sampling. The criterias of the subject are the elementary school students in Bali both boys and girls who their age are between 6 to 12 years old.

This research uses 54 samples in Bali. Samples are asked some questions from Vineland Adaptive Behavior Scale that has been standardized and collect their study report in odd semester.

Data is collected by measuring adaptive behavior from Vineland Adaptive Behavior Scale and study report of the students in odd semester. The Vineland Adaptive behavior Scale (Vineland, Sparrow, Balla & Cicchetti in Anastasi & Urbina, 1997) are well-known and widely used internationally, as an instrument to measure the level of adaptive functioning in children and adolescents. The aspects of adaptive behavior are divided into four which are communication, skills in daily life, socialization and motion. The questions are asked to the students by the researchers in an interview.

Validity and reliability are two very important things to the quality of research instruments. Therefore, prior to conducting the real research, the instruments of the research must be proven valid and reliable first. Validity is perceived as how far a test can measure the measurable attributes (Azwar, 2010). Valid instruments are thus defined as the measurement tools used to measure the desired ones. This research uses content validity. Content validity is a type of validity estimated by a test to the content of the test by the means of rational analysis or professional judgement (Azwar, 2003). Reliability according to has some aspects such as consistency, predictability, and accuracy. also stated that reliability is a mean to measure the same objects repeatedly, with similar instruments, in order to obtain similar results. Thus it can be concluded that reliability is patched down into three words; stability, dependability, predictability (Santoso, 2003).

The data obtained from the interview and study report will be analyzed using the mean of SPSS 17.0, with regression test as the main operation. The result of this research we assume will point out that adaptive behavior influences academic achievement among elementary school students.

2.2 Results

Normality test is processed with SPSS program version 17.0 for windows by using One Sample Kolmogorov-Smirnov Test. The result is as follows: for the Vineland Social Maturity score, $p = 0.200$ so the $p > 0.05$ thus the distribution of the data is normal. And for the study report score, $p = 0.200$ so the $p > 0.05$ thus the distribution of the data is also normal.

Linearity test is processed with program SPSS version 17.0 for windows by using Means Test. The result is as follows: $p = 0.032$ so $p < 0.05$ thus the variables of this research have linear correlation.

Due to the normality of the data, the appropriate method is using parametric statistic, Linear Regression Analysis. The result is as follows: $p = 0.000$ thus $p < 0.05$. It means there is significant correlation between adaptive behavior and academic achievement. Effective contribution = 0.472. It means that adaptive behavior influences academic achievement as 47,2%. Beta coefficient = 0.687. It means correlation level between adaptive behavior and academic achievement is 0.687. The conclusion is there is correlation between adaptive behavior and academic achievement among elementary students in Bali.

2.3 Discussion

According to Poerwodarminto (in Ratnawati, 1996) achievement is result of individual's achievement. However academic achievement is achievement of an individual that is recorded in a study report. Academic achievement is influenced by some factors which consist of physiological and psychological factor. Adaptive behavior is one of the important psychological factor. Adaptive behavior is ability to adapt with environment's norms and standards (Rahayu, 2010). Individuals who adapt well in environment will also adapt well in study process, hence they will show high academic achievement in school.

The previous research supports this finding. The result of Browing & Herbert research in 1974 (in Rochyadi, 2005) shows that there is positive correlation between adaptive behavior and intelligence. Student with higher adaptive behavior will also has higher intellectual function. A study from Chicago-based group CASEL, the Collaborative for Academic, Social, and Emotional Learning (in Thomas, 2007) shows that when emotional and social skill is taught at school, the social climate and academic achievement is increased. Another research shows that schools reach success in academic when they have clear system in promoting the importance of emotional and social skills (Elias, 1997).

From the effective contribution = 0.472, means that adaptive behavior contribution to academic achievement is 43,3%. Students with higher adaptive behavior will reach higher academic achievement and vice versa.

The conclusion is there is correlation between adaptive behavior and academic achievement. Researchers hope that this research result can give information to students, teachers, and parents about how adaptive behavior influences academic achievement. Researchers suggest to teachers and parents to give more attention in teaching social and personal skills to children, so that their academic achievement can be increased.

For next researchers that will do the similar research, it is better to notice other variables that influence adaptive behavior and academic achievement therefore this topic can be deepened by adding different point of view to make the research richer. It is also suggested that other researchers use different research place, sampling method, and more subject number and criterias.

3. References

- Anastasi, A., & Urbina, S. (1997). *Tes Psikologi*. New Jersey: Prentice Hall, Inc.
- Azwar. (2003). *Sikap Manusia: Teori dan Pengukurannya*. Yogyakarta: Pustaka Pelajar.
- Azwar. (2010). *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Pelajar.
- Elias, M. J., & dkk. (1997). *Promoting Social and Emotional Learning*. Washington: ASCD.
- Hamdu, G., & Agustina, L. (2011). Pengaruh Motivasi Belajar Siswa Terhadap Prestasi Belajar IPA di Sekolah Dasar. *Jurnal Penelitian Pendidikan*, 81-86.
- Liana, L. (2013). Pengukuran Korelasi Achievement Motive, Affiliation Motive, dan Power Motive dengan Kinerja Mahasiswa Menggunakan SPSS. *Dinamika Teknik*.
- Makusic, M. (2012, Februari 14). *The Vineland Adaptive Behavior Scale and Special Needs Students*. Dipetik Desember 1, 2013, dari <http://www.brighthubeducation.com/special-ed-law/13506-the-vineland-adaptive-behavior-scale/>
- Rahayu, E. (2006). Hubungan Antara Nilai Mata Pelajaran Kemampuan Merawat Diri dengan Perilaku Adaptif pada Siswa Sekolah Luar Biasa Bagian C. *Psikodimensia*, 127-138.
- Rahayu, E. (2010). Perilaku Adaptif Tunagrahita Dewasa Ditinjau dari Klasifikasi Tunagrahita. *Penelitian, Semarang : Universitas Katolik Soegijapranata*. (unpublished)
- Ratnawati, M., & Sinambela, F. (1996). Hubungan antara Persepsi Anak terhadap Suasana Keluarga, Citra Diri, dan Motif Berprestasi dengan Prestasi Belajar pada Siswa Kelas V SD Ta'Miriyah Surabaya. *Jurnal Anima*.
- Santoso, S. (2003). *Masalah Statistik dengan SPSS versi 11.5*. Jakarta: PT Elex Media Komputindo.
- Suryabrata, S. (1998). *Psikologi Pendidikan*. Jakarta: PT Raja Grafindo Persada.
- Thomas. (2007). *To Increase Student Achievement Should We Focus on Social Skills?* Dipetik 12 7, 2013, dari Open Education: <http://www.openeducation.net/2007/12/26/to-increase-student-achievement-should-we-focus-on-social-skills/>
- Wahyuningsih, A. S. (2004). *Hubungan Antara Kecerdasan Emosional dengan Prestasi Belajar pada Siswa Kelas II SMU Lab School Jakarta Timur*. Skripsi. Jakarta: Universitas Persada Indonesia Y.A.I. (unpublished)
- Winkle, W. (1997). *Psikologi Pendidikan dan Evaluasi Belajar*. Jakarta: Gramedia.

ICSSAM-743

Self-autonomy Difference between Middle Childhood Who Nurtured by Parents and Grandparents

**Putu Wirmayani, Dewa Gede Ari Dhanendra, Putu Noni Shintyadita,
Nicholas Simarmata**

Department of Psychology, Faculty of Medicine, Udayana University, Bali – Indonesia
wirma.yani@yahoo.com

Abstract

The role of parenting varies according to the psychosocial phase of the children. As the children move into school (middle childhood), peers, and community, parent-child relationships change (Berk, 2012). Middle childhood who have parents who work outside the city or work in entire day will usually leave their children to their parents (kid's grandparents). In the midst of the development of middle childhood (aged 6-12 years) who need self-autonomy to carry out tasks, parenting becomes important in supporting their self-autonomy.

This study use quantitative comparative design, which is trying to find the self-autonomy difference between children who nurtured by parents and grandparents. The samples in this study were children in school age (6-12 years old) in Denpasar, Bali, where they have been nurtured by their parents or their grandparents. Random sampling were used in this research. Number of samples in this study were not fully determined because its population is infinite. Measurements were performed by administering a rating scale related to the self-autonomy based on aspect by Wendy and Richard (in Solahuddin, 2010) that have been modified. Analysis of data using Mann-Whitney Non-paramateric test because the data is not normal.

After calculating all the data with statistic, researcher found that there is no differences between children self-autonomy who nurtured by parents and grandparents. So, the conclusion is that the differences in the children's self-autonomy does not depend on who they're living with (if nurtured by parents or grandparents), but how the caregiver apply one of the three parenting ways (autoritative, autoritharian, and permissive).

Keywords: Self-Autonomy, Middle Childhood, Parenting

1. Introduction

In general, the role of parents is crucial for children's development. Since the child was born, the new-born phase, then infancy, early childhood, and middle childhood, children need love and a role model of parent. The role of parenting varies according to the psychosocial phase of the children. When the child was a new-born baby until early childhood, the role of parents is to guide and provide a role model to children. However, when the children move in the context of school (middle childhood), peers, and community, parent-child relationships change (Berk, 2012). At this age, children are more focused on activities outside home because it had a basic education. Therefore, the role of parental support and monitoring is just what is desired and performed by their children.

When children has entered middle childhood, children's social context becomes wider. According to Erik Erikson, middle childhood is a time when children develop persistence (industry) in performing a variety of tasks both in the school environment, as well as at home. In undergoing the activity and develop persistence, children need self-autonomy. Autonomy regains importance in middle childhood, when the majority of preadolescents' leisure time is spent with peers, engaging in social activities with reduced parental supervision (Collins, 1984a; Crockenberg&Litman, 1990; Dix et al., 2007; Grunzeweig, 2011).

The role of parents is considered very important in shaping a child's personality, but in today's world, there are various situations that make children unable to live with his parents. At this time, a mother not only take care of the household but also helped her husband make a living (Suryadi, 2003). Several factors such as economic, social, and mother's level of education are the reason for the work (Jojo, 1987 in Suryadi, 2003). This situation makes the parents do not have time for their children. Parents who leave their children to work (especially work outside the city) tend to leave their children at home with their parents (grandparents house). This causes the child will be nurtured for solely by their grandparents.

Another factor that causes children raised by their grandparents are the death of one of their parent (father or mother), or parental divorce that makes children must be nurtured for by their grandparents. In Indonesia, the increase in nuclear family (extended family) has not been evenly distributed, this is because the level of diversity of Indonesian society made up of hundreds of tribes, each of which has a specific culture and is based on the withdrawal of certain breeds (Perayani , 2003). This makes the level of child who nurtured by grandparents are high in Indonesia. School-age childrens who have parents who work outside the city or work most in entire day will usually leave their children to their parents (kid's grandparents). In the midst of the development of children aged 6-12 years who need independence to carry out tasks, parenting becomes important role in supporting their self-autonomy.

Therefore, this study aimed to examine whether there are differences between the self-autonomy of children aged 6-12 years old who was nurtured by parents and grandparents, with H_0 =there is no self-autonomy difference between middle childhood who nurtured by parents and grandparents, and H_a =there is self-autonomy difference between middle childhood who nurtured by parents and grandparents.

2. Literature Review

Self-Autonomy

In general terms, autonomy refers to cognitive, behavioural, and emotional processes involving choice, personal control, and independent decision-making (Rothbaum & Trommsdorff, 2007; Zimmer-Gembeck & Collins, 2003; Grunzeweig, 2011). Based on the concept of autonomy, Steinberg (1989) explains that children who have reached autonomy was able to run or do their own life activities regardless of the influence of others, especially the control of their parents or caregivers (in this case grandparents). This is consistent with the definition of self-autonomy by Ryan and Lynch (in Newman & Newman, 1991, in Suryadi 2003), that is an ability to regulate behavior, select and guide the actions and decisions, without undue control of parents or reliance on parents.

In contrast to adolescents, self-autonomy in school-age children (6-12 years old) related with regard to the child's ability to carry everything alone without the help of others. Independent child tends to be more creative, competent, and cooperative in school environment. Early autonomy-supportive parenting (at age 10-12) is related to adolescent delinquency; however, the nature of this relationship depends upon whether the type of autonomy-supportive parenting is behavioral, communicative, or psychological, and depends upon the stage of adolescence examined (Brauer, 2011).

Middle Childhood

According to Erikson, general the task of development during middle childhood is to get a sense of initiative and sense of industry. Both of these are the demands of the general population of children aged 6 -12 years. According to Papalia (2004), middle children (middle childhood) are children aged 6 to 11 years, which is also known as school age. Santrock (2007, in Joseph 2000) states that the age of 6 years until puberty is childhood middle and end of the period in which the growth is slow and consistent. This age also conclude as a quiet period before the rapid growth prior to adolescence.

Based on the definition above, it can be concluded that middle childhood are children aged 6 to 11 years. Childhood school also called latency period, both on dental care treatment given in the past will be beneficial for the future. This period lasts between ages 6-12 years. Characteristics of children at that age are:

- Age 6-7 years : Children do not like condemned, blamed or punished, like cranky, unruly and started, because the child believes that others should be able to follow his opinion, and not vice versa. Children need to be coaxed and praised is usually he is a member of the group members that are not active, more listening and viewing.
- Age 8-9 years : Children begin to love their parents argue, wants to be recognized that began its autonomy properties. Children become active within the group. Pastimes and activities children begin to differ according to gender. Boys love to play outdoors, for example playing war and others, girls like to play at home, for example playing doll, pretending, sewing etc.
- Age 10 -12 years : Children are more easily managed, curiosity arose to compete in both the physical and the activity or demonstrate the courage to do something. Boys are more independent, but girls are more mature attitude.

Parenting

Based on the dictionary of psychological terms as stated in The Cambridge Dictionary of Psychology, parenting is any action taken by adults to children in order to protect, care for, teach, discipline and provide guidance. Parenting is a concept that describes the care of children in terms of discipline, warmth, attention to the needs of children, as well as the attitudes and beliefs of parents who consistently forming patterns in treating children.

Parenting also be interpreted as how much work is done by adults in thinking, planning, feel, observe, monitor, evaluate, worrying and praying for her children (Palkovits, 2002 in Hidayati, 2011). According to Brooks (1991) parenting is a process in which there are elements of nurturing, protecting, and directing the child during the period of its development. Almost the same understanding, Martin and Colbert (1997) defines parenting as a process that is usually associated with adults who give birth, maintaining, nurturing.

Macobby & Lewin (in Fauzia, 1993) suggests that what is meant by parenting is all the interaction that occurs between parents and their children. This interaction includes the attitudes, values, interests, and their teachings in the family. Parenting is a complex activity that includes some specific behaviors that worked both individual or together to influence the outcome or result of the child (Susanto, 2013).

1. Research Design

Children self-autonomy according to Steinberg (1989) children who was able to run or do their own life activities regardless of the influence of others, especially the control of their parents or caregivers (in this case grandparent). Nurturing or parenting is any action taken by adults to children in order to protect, care for, teach, discipline and provide guidance. In the calculation using statistic, researcher using non-parametric 2 sample independent technique, Mann-Whitney Test to compare parents caring and grandparents caring.

2. Measures

Self-autonomy

This research is using rating scale questionnaires base on the children independence phase (middle childhood) from Wendy and Richard. There are 5 phases that made by Wendy and Richard:

- Able to set their own game
- Able to complete activities without waiting for praise and guidance
- Able to sit quietly and last a long time and slow without parents
- Able to be fully clothed themselves, feed themselves, and flossing/brushing teeth
- Ready to spend most of the day without a parent/caregiver

Based on such phases, researcher makes 10 point rating scale that to gives score to respondent answer. Respondent were questioned would they be able to pass through that phase, if they passed respondent will be score 1 for number 1, score 2 for number 2 and soon. Should they failed they will be score 0. This scale distributed to 6-12 years old children in Denpasar with total 141 children. In measuring the validity and reliability, researcher using try-out technique.

A total of 141 questionnaires that distributed, subject answer (able or not) was written in dichotomy with score 1 for able and 0 for unable. The realibility calculation using Alpha Cronbach using boundary 0.2 for coefficient reliability. Based on ten of rating scale, resulted from corrected- item total as follow.

Reliability Statistics

Cronbach's Alpha	N of Items
.671	10

From 10 items tested through reliabilities, there are three items that has total correlation below 0,25, there are item 1 ($\alpha=0.061$) and item 9 ($\alpha=0.152$). therefore, researcher delete both items so they capture more reliable measurement tool. Deletion of 57 randomized data subjects is to avoid refraction, removing the odd data only. Then measuring the same number from each factor then using Mann-Whitney Test as non-parametric data measurement.

Parenting/Nurturing

In the rating scale that has been disseminated, demographic data are also included to find out more characteristics of the sample. The demographic data here are; age, school, gender and caring. Caring here means children who lives with parents of grandparents. The criteria can be used as sample subjects in this research were (1) Children 6-12 years of age, (2) taken care of by parents or grandparents; (3) Located in Denpasar

3. Procedure

Rating scale was randomly distributed to all children between 6-12 years old in Bali. The number of samples use in this research were 141 children, with 99 children living with their parents and 42 are with grandparents. The scale was administered to all children with the right instruction. Researches accompany and supervise the children in filling the scale rating and guiding the children when they encounter difficulties. They were given instructions to fill out demographic information, and then mark it on each stage if they pass the stages.

Result

A reliability again measured after deleting both items, so that gaining higher reliability coefficient than before. Prior the deletion item 1 and 8 coefficient reliability was 0671 and after such item issued resulted coefficient 0.692 this means reliability increased 0.021 or 2.1%. A non-parametric measurements performed after the data obtained by 84 children, 42 children under parents caring and 42 under grandparents caring, with abnormal data. Score 1 means capable which will be multiplied by number of stages item so when the children able to meet the whole rating scale they will get score 55. The calculations using Mann-Whitney Test.

Ranks

nurtured	N	Mean Rank	Sum of Ranks
Totvalid parents	42	47.01	1974.50
d grandparents	42	37.99	1595.50
Total	84		

Test Statistics^a

	totvalid
Mann-Whitney U	692.500
Wilcoxon W	1.596E3
Z	-1.833
Asymp. Sig. (2-tailed)	.067

a. Grouping Variable: nurtured

Mean rank on the above table showing different figures. The independence of children who lives with their parents at 47.01 while who lives with grandparents at 37.99. from these figures discovered that children who lives with parents will be more independence comparing with (middle childhood) who lives with grandparents. Table in the statistical was also analyzed. If the significance ≥ 0.05 , H_0 is accepted however when significance ≤ 0.05 , H_0 rejected and H_a accepted. Based on above table it's discovered that the significance ≥ 0.05 , is 0.067. this means H_0 is accepted. There are no significant difference between (middle childhood) that is taken care by their parents and grandparents.

Discussion

Self-autonomy in middle childhood affected by many factors. Theories of the factors that may affect the children's autonomy has been initiated both abroad and within the country. According to Solahudin (2010), there are internal factors and external factors that affect the level of self-autonomy of middle childhood. Internal factors consist of emotional and intellectual, while external factors consist of environmental, economic status, stimulation, parenting, and employment status of the mother. From some of the factors above, the researchers tried to see the difference in the children's autonomy when seen from the parenting of parents or grandparents. Based on the results of the table above, known that H_0 is accepted, there is no significant difference between children nurtured by parents and grandparents. Figures significance on Mann -Whitney table above shows the number 0.067, where H_0 is rejected because it is ≤ 0.05 significance level of 5 %. While the results can be said to be significant to the conclusion H_0 rejected only if the significance level was changed

to 6 %. Mean rank on the rating scale results of children nurtured by parents is 47.01, and child nurtured by grandparents is 37.99. When viewed as a non-statistically, there is a difference in the children's self-autonomy based on whose they're living with, and of the table of children who live with a parent gets a higher score, which means, in a non-statistical measures, children who lives with parents will be more independent.

In addition to the overall factors above, the researcher wants to find differences in upbringing the children's self-autonomy with parents or grandparents. Communities in the eastern part of the collective or society in general still has extended family living in their homes. So, some children in Denpasar nurtured by their grandparents and not parents. Many factors make children not live with their families, but researchers don't explore it in this study. Rating scale has been distributed to all children aged 6-12 years evenly. If H_0 is accepted, then the difference in the self-autonomy of children aged 6-12 years are not located on who nurture them, but by many other factors.

Parenting by Solahuddin also was instrumental in influencing the children's self-autonomy. Parenting by Santrock (2003) can be divided in three; authoritative, authoritarian, and permissive. Authoritative is parenting in which the parents/grandparents give the freedom to the children to be creative and try to make their own decision, but still within the scope of supervision of caregivers (parents/grandparents). Authoritarian is parenting where children are guided in doing everything, caregivers will make its own rules to train children to become discipline. While permissive parenting is the child isn't given strong guidelines about what is right and what is not, how a thing can happen, how to make decisions, and others. Caregivers are letting children get along so that children often take the wrong path. The third application of the above widely researched parenting has been able to transform all aspects of the children's personality, one of those is self-autonomy.

Based on the results obtained and the literature review conducted, researchers make conclusion that the differences in the children's self-autonomy does not depend on who they're living with (if nurtured by parents or grandparents), but how the caregiver apply one of the above three parenting ways. In other words, it is true there are no difference children's self autonomy nurtured by parents and grandparents. Researchers suggest to the next study to gather deeper information about why the children's self-autonomy can't be determined with whom they live. Further studies can be conducted with a qualitative method to obtain in-depth information. Limitation in this study only focused on children in Denpasar, but the next studies may be replicated by other subjects with a collective culture.

3. References

- Perayani. (2013). Pergeseran Tanggung Jawab Pengasuhan Anak dari Orangtua ke Nenek, *Bachelor thesis*, Dept. of Social and Political Science, Sriwijaya University.
- Steinberg, L. (1989). *Adolescence*. New York: Alfred A. Knof.
- Grunzeweig, Naomi. (2011). Developing Autonomy and Social Competence from Preschool to Middle Childhood in a High-Risk Sample of Children: Links to Mutuality and Maternal Childhood Histories of Risk, *PhD thesis*, Dept. of Psychology, Concordia University.
- Aulia, Starlina. (2012). Kemandirian Remaja yang Memiliki Orangtua yang Bercerai, *Bachelor thesis*, University of Guna Dharma.
- Suryadi, D., Damayanti, C. (2003). Perbedaan Tingkat Kemandirian Remaja Puteri Yang Ibunya Bekerja Dan Yang Tidak Bekerja. *Psychology Journal of Tarumanegara University*, no. 1, pp. 1-28.
- Steinberg, L. 1989. *Adolescence*. New York: Alfred A. Knof
- Brauer, J. R. (2011). Autonomy-supportive Parenting and Adolescent Delinquency. *PhD Dissertation*. Graduate Faculty of North Caroline State University.
- Malau, Ervinawati. (2012). Faktor Eksternal yang Mempengaruhi Kemandirian Anak Kelas Satu Sekolah Dasar Negeri 1 Pondok Cina Depok. *Bachelor theses*. Dept. of Nursing, University of Indonesia.
- Leiliana, Ito. (2008). Faktor-faktor yang Berhubungan dengan Konsumsi Uplemen Makanan pada Anak Sekolah Kelas IV dan V di SD Islam Al-Husna Bekasi Selatan Tahun 2008. *Bachelor theses*. Dept. of Public Health Nutrition, University of Indonesia.
- Papalia, D. E., Olds, S. W., & Feldman, R.D. (2004). *Human development (9th ed.)*. Boston: McGraw-Hill, Inc.
- Yusuf, L .N. (2000). *Psikologi Perkembangan Anak dan Remaja*. Bandung: Remaja Rosdakarya.
- Hurlock, E. B. (1978). *Child Development, Sixth Edition*. New York: Mc. Graw Hill, Inc.
- Damon, W. & Eisenberg, N. (Ed.), 1998. *Handbook of child psychology (5th edition, Vol. 3)*. New York: John Wiley & Sons, Inc.
- Baumrind D. (1966). Effects of authoritative parental control on child behavior. *Child Development Journal*, 37, 887-907.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs* 4 (I, part 2).
- Hidayati, F. et al. (2011). Peran Ayah dalam Pengasuhan Anak. *Psychology Journal of Diponegoro University*, Vol. 9, No. 1.
- Brooks,J. B. (1991). *The Process of Parenting*. California:Mayfield Publishing Company.
- Balswick, J.O. and Balswick, J. K. (1990). *The Family (2nd edition)*. Grand Rapids, Michigan: Boker Book House.

Susanto, D. (2013). Keterlibatan Ayah Dalam Pengasuhan, Kemampuan Coping, dan Resiliensi Remaja. *Science and Practical Psychology Journal*. Vol I (2), pp. 101 – 113.

Analysis of The Effects of Facial Attractiveness on Interpersonal Attraction in Women with Square Faces

Nurul Aini^a, Hilman L. Hakim, Agung Prasetyo, Puji Lestari, Elli R. Juwitasari

Airlangga University

^abisikanku@gmail.com

Abstract

An individual is demanded in his or her early adulthood to form a close relationship and secure commitment to others. Failure at this stage would subject the individual to loneliness, depression and isolation by his or her milieu (Erickson, 1968). Women with facial attractiveness can also form more positive social interactions (Patzner, 1986; Sprecher & Hatfield, 1986). Faces perceived as less attractive and reducing attractiveness are those typical of male traits, such as square jaws or square-shaped face (Perrett, 1998).

All sorts of cues are observed in the first encounter to form initial stereotypes (Baron & Byrne, 2002), for example, the clothes worn (Cheverton & Byrne, 1998; Jarell, 1998 in Baron & Byrne, 2002) and the glasses worn (Lundberg & Sheehan, 1994 in Baron & Byrne, 2002). Glasses also have a significant effect on the formation of impressions (Terry & Macy, 1991). Moreover, glasses can also improve facial symmetry, which is one indicator of an attractive facial shape (Lo, et al., 2012).

The purpose of the present study was to explore the effects of facial attractiveness, in this case the use of glasses, on interpersonal attraction. This experimental study used a basic between-subject design (2x1) with participants aged 20–30 years. Results indicated that faces manipulated with glasses had effects on interpersonal attraction ($t(62) = 2.136; p = 0.037$). The better model was that wearing a square-shaped frame.

Key words: Facial attractiveness, interpersonal attraction, experiment, women with square faces

Early adulthood stage represents an important stage for an individual. At this stage they are demanded to form a close relationship and to be committed securely to others (Erickson, 1968). This stage is crucial since a failure would subject the individual to loneliness and isolation by his or her milieu (Erickson, 1968). Another consequence is depression (Erickson, 1968). This stage will certainly occur in women as well.

One thing that will help a woman to succeed at this stage is attractiveness she possesses. A woman with an increasing attractiveness will gain many advantages. One of the advantages is an increased possibility of others forming a relationship with her. This is due to the fact that humans have a tendency to start a relationship with someone more attractive than them (Berscheid, 1971, Study 2; Curran & Lippold, 1975; Walster, 1970, in Taylor, 2011). Even in the virtual world people with a more attractive profile picture will receive more emails (Hitsch, Hortacsu, & Ariely, 2010, in Taylor, 2011).

One aspect of attractiveness most affecting an individual's overall attractiveness is facial attractiveness (Aliche & Smith, 1987). Women with facial attractiveness can also form more positive social interactions (Patzer, 1986; Sprecher & Hatfield, 1986) and also a perceived higher socioeconomic status (Jaeger, 2011). Facial characteristics play an important role in determining an individual's attractiveness and the next attribution as well as personality. Attractive faces activate reward centers in the brain (Aharon, 2001; O'Doherty, 2003). Furthermore, society also uses subconscious rules of encoding that define the face as a first impression that determines whether an individual is attractive or not (Penington & Hill, 1999). Thus, it can be concluded that facial attractiveness plays an important role in women's life.

Another important aspect of facial attractiveness possessed by women is feminine facial characteristics. The two images above show feminized faces. Faces perceived as less attractive and reducing attractiveness are those typical of male traits, such as square jaws or square-shaped face (Perett, 1998). Women with masculine or square-shaped face are described below:



Indeed, an individual's attractiveness is not always supposed to be influenced by physical appearance and facial beauty, but cognition (Perlini & Hansen, 2001, in Baron & Byrne 2002). In fact, however, physical appearance influences an individual's interpersonal evaluation (Baron & Byrne, 2002). All sorts of cues are observed in the first encounter to form initial stereotypes (Baron & Byrne, 2002), for example, the clothes worn (Cheverton & Byrne, 1998; Jarell, 1998 in Baron & Byrne, 2002) and the glasses worn (Lundberg & Sheehan, 1994 in Baron & Byrne, 2002).

Nowadays, glasses are increasingly worn. Several studies showed an increase in myopic patients. In the period of 1974–1984 there was only 26.3% of population in Singapore who were myopic, but in the period of 1987–1991 the figure increased to 43.3% (Lim *et al.*, 1992). In an article entitled “*Changes in Ocular Refraction and its Components among Medical Students - A 5-Year Longitudinal Study*” Lin *et al.* (1996) provided additional evidence that the

percentage of glasses wearers in Taiwan increased between 92.8 to 95.8% every five years. They concluded that there was an increase in glasses wearers. Of course, this figure could not be taken too lightly. Visual aids have surely become important items for humans.

Glasses and contact lenses are among the examples of visual aids. Contact lenses pose some risk factor or keep certain people from wearing it. According to the University of Michigan Kellogg Eye Center, among the conditions that might keep people from wearing contact lenses are frequent eye infections, severe allergies, dry eye (improper tear film), and a work environment that is very dusty or dirty. Another shortcoming of contact lenses is that careless wear will cause corneal scratches (2012). Given that Indonesia is known for its tropical climate and changing weather as well as and flying dusts, environmental factors are surely not always conducive to contact lens wearers. Another environmental factor that is not conducive to contact lens wearers in Indonesia is the trend of an increasing number of motor vehicles (Datacon, 2011; Subham in Vivanews, 2012), creating emissions mixed with dusts that are surely dangerous for contact lens wearers.

Initially, glasses function only as visual aids but they have now become a trend or fashion, leading to various shapes of glasses. As a result, the originally monotonous shape of glasses as visual aids has become more varied to follow the trend. Glasses consist of lenses and frame. Based on a survey conducted by the Director General of Industry, the market share for glasses has reached 40% of Indonesia's total population, while according to the BPS the market share for imports of glasses increased by 6.5% per year. Glasses also provide a significant effect on the formation of impressions (Terry & Macy, 1991). Moreover glasses can also improve facial symmetry, which is one indicator of an attractive facial shape (Lo *et al.*, 2012).

Thus, there is a need for conducting an experiment to determine the effects of facial attractiveness, in this case glasses, on interpersonal attractiveness, especially in women with square faces. The purposes of the present study were to determine (1) the shape of glasses that improve facial attractiveness of women with square faces; (2) the significance of the shape of glasses with regard to facial attractiveness in women with square faces; (3) the effects of facial attractiveness manipulated by using glasses on interpersonal attraction.

Interpersonal Attraction According to Byrne

One of the most powerful markers of interpersonal attraction is when an individual is being liked (Kaur & Sharma, 1996). Interpersonal attraction refers to an attitude to others (Byrne & Baron, 2002). Interpersonal evaluation is on a dimension of liking up to disliking.

In a paper entitled "*Beyond Physical Attraction as a Function of Similarities in Personal Characteristic*" Byrne measured attractiveness by providing participants with human stimulus

and summing the responses for two items that measured the extent to which the participants liked the stimulus and had willing to work with the person.

Interpersonal Judgment Scale (IJS)

Interpersonal Judgment Scale (IJS) is a scale created by Don Byrne in 1971. This scale measures one's liking to another specific person. The scale consists of 6 Thurstone items. Two of them are used to calculate the attractiveness and the other four are used to obscure the purpose of the instrument. One of the items of attractiveness measures liking in general, while the rest measures the desire to participate in the experiment with a professor (in this case, it could be concluded within the realm of the work). The scale has been tested and the results showed unquestionable validity and reliability.

Facial Attractiveness

Attractiveness (Webster & Driskel, 1983) is considered as a diffuse status (similar to sex or race), resulting in an expectation for another person's quality that will shape one's behavior towards that person. Several empirical studies have shown a positive correlation between physical attractiveness and many psychological, socio-economic types and the results of social processes (Jaeger, 2011). One element of physical attractiveness lies on the face.

a. Parts of the face

Women considered as attractive are those with the characteristics of children, such as large and open eyes and small nose and chin. Those characteristics are called 'cute' ones (Johnston & Oliver-Rodriguez, 1997; McKelvie, 1993). This observation is supported by May and Yoshikawa (1994), stating that attractive faces are those with higher cheekbones, thinner jaws, and larger eyes, which are dependent on the facial size.

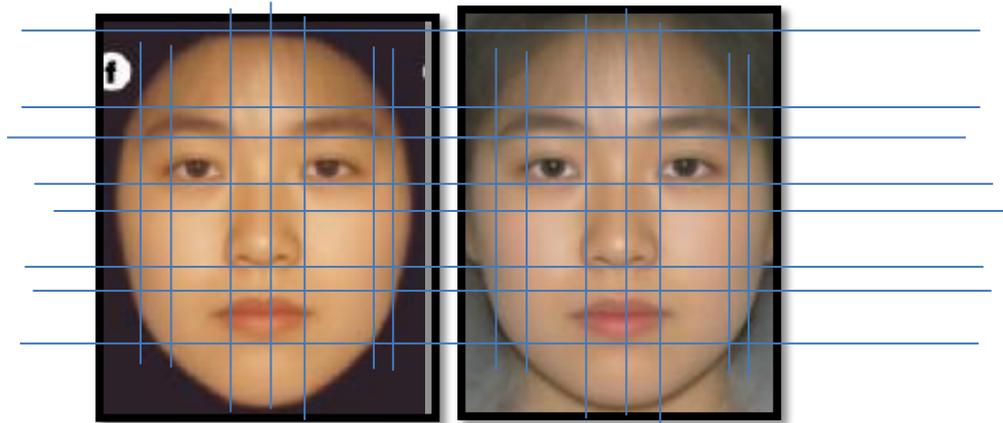
b. Averageness

The more the face is averaged, the more attractive it will be. One example was attractive faces produced by computerizing and combining some faces judged as more attractive and comparing the individual faces used to manufacture the composite face (Langois, Roggman, & Musselman, 1994; Rhodes & Tremewan, 1996, in Baron & Byrne, 2002). Average faces were closer to each person's scheme of female and male faces. Images of face with feminine characteristics were among those selected by male and female participants from the results of averaging and computerization (Angier, 1998, in Baron & Byrne, 2002).

c. Symmetry

Humans are born with a preference for symmetrical faces. Research also indicated that people perceived symmetrical faces as more attractive than the asymmetrical ones (Cowley, 1996 in Baron & Byrne, 2002). Symmetry is one of the indicators of health and the ability to reproduce (Mealey, Bridgstock & Townsend, 1999, in Baron & Byrne, 2002).

Women with Square Faces



The above images show characteristics of square jaws and a quite wide distance between the lower lip and chin. In addition, the cheekbones are also quite high.

Vulnerability of Interpersonal Attraction to Affect Manipulation

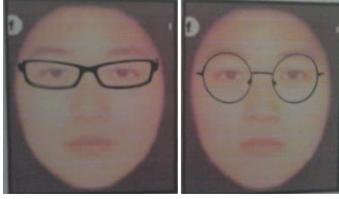
Our interpersonal evaluation is very vulnerable to direct or indirect manipulation of affect, including indirect subliminal manipulation (Baron & Byrne, 2002). One example is an ad designed to elicit our positive feelings to be more interested (Baron & Byrne, 2002). This is assumed to have the same effects as manipulation of facial attractiveness by inserting affective information that ultimately will affect interpersonal attraction. Positive affect will lead to positive results of evaluation while negative affect will produce negative results of evaluation (Baron & Byrne, 2002). Cooperative persons looks warm (Aaker, Garbinsky & Vohs, 2011); warm persons are perceived as happy and unthreatening (Aronoff, 2006). Manipulation of positive affect to be used in the experiment of the present study was an unthreatening and happy affect.

Forms Perceived as Giving Rise Specific Types of Impression

Geometric forms used describe facial motion of whether an individual is recognized as angry or happy (Bassili, 1978). Each form has the ability to control affective reactions without the use of signs we usually exhibit to express our feelings. Those forms depict many objects such as cars, buildings and glasses. Line stimuli giving rise to the impression of happiness and intimacy are curved forms with reduced levels of diagonal angle and shape (Aronoff, 2006). Other criterion used is an unthreatening character (Aronoff, Barclay & Stevenson, 1988) as described below.



Shapes of glasses



Shapes of glasses used for manipulation have several criteria adapted to manipulate parts of the face to giving rise the impression of an attractive face. Those criteria are shapes that generate a look of bigger eyes, more pointed chin, smooth sides of the jaw, symmetrical face, small nose, and high cheekbones.

Other criterion used and adapted from the theory of line stimuli that create an impression of happiness (Aronoff, 2006) is a curved shape with reduced levels of diagonal angle and shape. Another important aspect is an unthreatening impression (Aronoff, Barclay & Stevenson, 1988) as shown below:



Physical attractiveness (in this case, facial attractiveness) as the initial determinant of an interpersonal liking and disliking

In this case we need to underline that there are individual differences. Physical attractiveness, consisting of facial attractiveness, is a combination of characteristics evaluated as beautiful or handsome that will eventually lead to a decision of whether a person is attractive or not. Physical appearance affects interpersonal evaluation (Baron & Byrne, 2002).

METHOD

This study used a quasi-experimental basic between-subject design (2x1).

Participant

Population of the study was men and women aged 20–30 years old with a variety of occupation. A total of 64 people comprised the sample of this study, which was divided into 2 groups. Each group had 32 persons consisting of 16 women and 16 men.

Measures

Byrne’s Interpersonal Judgment Scale was used to measure the variable of interpersonal attraction. The IJS was rated on a 9-point scale from 1 (not at all) to 9 (very much). The two key items of the scale were “How much do you think you would like this person?” and “How much do you think you would like to work together in an experiment with this person?”

Procedures

The study was conducted in three places: the Library of the Campus B of Airlangga University, Rungkut Asri Tengah H-18, and the Student Center Building of Airlangga University. Subjects were given an invitation to come to the designated places. During the course of the experiment

participants in group 1 were given a photograph of a woman with square face wearing square-shaped glasses. Participants in group 2 were given a photograph of a woman with square face wearing round-shaped glasses. Then, subjects were given the IJS's measurement questions and asked to assign a value ranging from 1 to 9.

RESULTS

Test of Normality

Test of normality in this study used the method of Kolmogorov-Smirnov given that the number of subjects was only 36, or did not reach 100.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
totalp1	.138	32	.129	.939	32	.072

a. Lilliefors Significance Correction

Based on the above calculation, the result of the normality test was 0.129 on the posttest 1. The value of 0.129 > 0.05 meant that the data is not significant and normal.

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
totalp2	.131	32	.175	.909	32	.010

a. Lilliefors Significance Correction

Based on the above calculation, the result of the normality test was 0.175 on the posttest 1. The value of 0.175 > 0.05 meant that the data is not significant and normal.

Test for Homogeneity

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
data	Equal variances assumed	1.585	.213	-2.136	62	.037	-.92188	.43155	-1.78452	-.05923
	Equal variances not assumed			-2.136	60.406	.037	-.92188	.43155	-1.78498	-.05877

Based on the above calculation, a result of 0.213 was obtained. The value of 0.213 was greater than 0.05, or the data was homogeneous.

Test of Difference

This study used two different groups based on the fact that the data used was normal and homogeneous. Inferentially, the data was parametric. Thus, the subsequent test of difference was performed using an independent sample t-test.

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
data Equal variances assumed	1.585	.213	-2.136	62	.037	-.92188	.43155	-1.78452	-.05923
Equal variances not assumed			-2.136	60.406	.037	-.92188	.43155	-1.78498	-.05877

Based on the above data, a significance of 0.037 was obtained. The value of 0.037 was smaller than 0.05, meaning that the data was significant and contained differences.

Group Statistics

grup	N	Mean	Std. Deviation	Std. Error Mean
data post1	32	5.1875	1.86110	.32900
post2	32	6.1094	1.57978	.27927

In the next step, *t* was calculated manually using the above formula, with a result of 0.988. It could be concluded that the data had a substantial effect.

$$Etasquared = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$

In conclusion, this study found that the glasses frame 1 ($M = 5.1875$; $SD = 1.86110$) had a lower interpersonal attraction than the glasses frame 2 ($M = 6.1094$, $SD = 1.57978$), ($T(62) = 2.136$, $P = 0.037$).

Validity and Reliability Tests of Measures

Validity of measures

Validity refers to the extent to which a measure is accurate and precise in performing a measuring function. A measure can be said as having a high validity when it performs its function properly, or provide a precise and accurate outcome in accordance with the purpose of the measure. In the present study, the researchers used a measure adapted from the previous research to measure interpersonal attraction.

Reliability of the Experiment

Reliability refers to the consistency or stability of the test scores. It consists of accuracy. A low reliability shows that the difference in scores for an individual is determined more by errors than the actual factors (Anwar, 2004). Reliability in the present study was calculated using the method of Cronbach's alpha with the software SPSS 16.0 for Windows. The calculation is as follows:

Case Processing Summary

		N	%
Cases	Valid	32	94.1
	Excluded ^a	2	5.9
	Total	34	100.0

a. Listwise deletion based on all variables in the procedure.

Inter-Item Correlation Matrix

	item1p1	item2p1
item1p1	1.000	.792
item2p1	.792	1.000

Item Statistics

	Mean	Std. Deviation	N
item1p1	5.1875	1.99091	32
item2p1	5.1875	1.94169	32

Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	Alpha on N of Items
Cronbach's Alpha	.884	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
item1p1	5.1875	3.770	.792	.627	. ^a
item2p1	5.1875	3.964	.792	.627	. ^a

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Scale Statistics

an	Variance	Std. Deviation	N of Items
10.3750	13.855	3.72221	2

The minimum standard of reliability of Cronbach's Alpha is 0.7. The result of the above calculation is 0.884. This indicates that the measure is reliable.

DISCUSSION

This study found that the shapes of glasses generated interpersonal attraction. It turned out that the attraction was diverse depending on the shapes of the glasses. In comparing the two frames used in the present study, a conclusion could be made that the glasses suitable for women with square face was the glasses with frame 2.

This study also substantiated the theory of Byrne and Baron stating that affective manipulation influences interpersonal attraction. We manipulated affect by using glasses. These glasses were certainly not haphazardly chosen and made. The selection of glasses frames was in accordance with Aronoff's theory.

A difference in mean between frame 1 ($M = 5.1875$) and frame 2 ($M = 6.1094$) could be due to several things. In frame 1, the shape the affect manipulation of which was based on the theory of Aronoff could be fulfilled but, according to the theory of Byrne and Baron, it did not meet the standard. The eyes on the frame 1 or the group 1 were located inside the circles and did not look fully occupying the circles, leading to eyes that looked smaller. This was not true for frame 2. The eyes looked fuller, leading to an impression of bigger eyes. In the end, this was what might be causing the difference in the mean of frame 1 and frame 2, even though both frames were constructed based on Aronoff's criteria.

This study had some shortcomings. There were many details that were not found, such as how much the improvement in interpersonal attraction of women with square faces was before and after wearing glasses.

Based on the above calculation, a difference was found. Data showed a significance of 0.037. Thus, H_0 was rejected. It could be stated that attractiveness of women with square faces had an effect on the interpersonal attraction when the objects were given glasses.

CONCLUSION

Facial attractiveness manipulated with glasses had an effect on interpersonal attraction ($t(62) = 2.136$; $P = 0.037$). Different glasses gave rise to different interpersonal attractiveness for women with square-shaped glasses. In this study, the frame most suitable and appropriate for women with square face was frame 2.

REFERENCES

- Aaker., L., J. Garbinsku., N., E., Vohs., D., K.. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the “golden quadrant”. *Journal of Consumer Psychology* 22. Pg. 191–194.
- Aharon I, Etcoff NL, Ariely D, Chabris CF, O’Connor E, Breiter HC. (2001). Beautiful faces have variable reward value: fMRI and behavioral evidence. *Neuron* 32. Pg. 537–51
- Aron, A., Steele, L., J., Kashdan, B., T.. (2006). When similars do not attract: Tests of a prediction from the self-expansion model. *Personal relationship* (3). United states of america. Pg. 387-396.
- Aronoff, J., (2005). *The use of geometric configurations to convey emotional meaning in 17th century Dutch Art*. Manuscript in preparation.
- Aronoff, J., Barclay, A. M., & Steveson, L. A. (1988). The recognition of threatening facial stimuli. *Journal of Personality and Social Psychology*, 54. Pg. 647-655.
- Aronoff, J., Woike, B. A., & Hyman, L. M. (1992). Which are the stimuli in facial displays of anger and happiness? Configurational Bases of emotion recognition. *Journal of Experimental Psychology: Human Perception and Performance*, 4. Pg. 373-379.
- Aronoff, J.. (2006). How we Recognize Angry and Happy Emotion in People, Places, and Things. *Cross-Cultural Research*, Vol. 40. Pg. 83-105.
- Azwar, S.. (2000). *Dasar-Dasar Psikometri*. Yogyakarta:Pustaka Pelajar.
- Azwar, S.. (2000). *Tes Prestasi: Fungsi dan Pengembangan Pengukuran Prestasi Belajar*. Yogyakarta:Pustaka Pelajar.
- Azwar, S.. (2004). *Penyusunan Skala Psikologi*. Yogyakarta: Pustaka Pelajar.
- Baron., A., R., & Byrne., D.. (2002). *Psikologi sosial*. Jakarta: Penerbit Erlangga.
- Bassili, J. N. (1978). Facial Motion in the Perception of faces and Emotional Expression. *Journal of Experimental Psychology: Human Perception and Performance*, 4. Pg. 373-379.
- Berscheid, E., Dion, K., Walster, E., & Walster, G. W. (1971). Physical attractiveness and dating choice: A test of the matching hypothesis. *Journal of Experimental Social Psychology*, 7. Pg. 173-189.
- Darlow, S.. Lobel, M.. (2010). Who is Beholding My Beauty? Thinnes Ideals, weight, and Woman Respons to Appearance evaluation. *Springer Science+Bussiness media*.

- Datacon. (2011). *Indonesian Commercial Newsletter April 2011: Industri Otomotif di Inonesia Semakin Berkembang*. Diakses pada tanggal 1 Juli 2012 dari : <http://www.datacon.co.id/Otomotif-2011Industri.html>
- Erikson, E.H. (1963). *Childhood and Society*. (2nd ed.). New York: Norton.
- Erikson, E.H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Franzae, L., S.. 2001. Is Female Body Esteem Shaped by Benevolent Sexism?. *New York Vol. 44*. Pg. 177
- Frederickson, B. L. And Roberts, T.A. 1997. "Objectification Theory: Towards Understanding Women's Lived Experiences and Mental Health Risk". *Psychology of Woman Quarterly*, Vol. 21, Pp. 13-206.
- Goh, W.S. and Lam, C.S.. (1994). "Changes in refractive trends and optical components of Hong Kong Chinese aged 19-39 years," *Ophthalm. Physiol. Opt.*, 14. Pg. 378-382.
- Hitsch, G. J., Hortacsu, A., & Ariely, D. (2010). Matching and sorting in online dating. *American Economic Review*, 100. Pg. 130-163.
- Honekop, Y., Bartholome, T., Jansen., G.. 2004. Facial Attractiveness, Symmetry, and Physical Fitness in Young Women. *Human Nature*. Vol. 15. No. 2.
- Jaeger, M., M.. (2011). "A Thing of Beauty is a Joy Forever"? Returns to Physical Attractiveness over the Life Course. *Social Forces*. Pg. 983.
- Kalof, L.. (1999). Stereotyped and evaluative judgements and female attractiveness. *Gender issues*. Pg.68
- Kellog. (2012). *Contact Lenses. Lenses*. Diakses pada tanggal 25 Juni 2012 dari : <http://www.kellogg.umich.edu/patientcare/conditions/contact.lenses.html>
- Lam, C.S. and Goh, W.S.. (1991). "The incidence of refractive errors among schoolchildren in Hong Kong in relationship with the optical components", *Clin. Exp. Optom.*, 74. Pg. 97-103.
- Lam, C.S. and Yap, M. (1990). "Ocular dimensions and refraction in Chinese Orientals", *Proc. Int. Soc. Eye Res.*. 6. Pg. 121.
- Lin, L.-K, Chen, C.J., Hung, P.T., and Ko, L.S.. (1988). "National- wide survey of myopia among schoolchildren in Taiwan, *Acta Ophthalmol.*" 185. Pg. 29-33.
- Lin, L.K., Shih, Y.F., Lee, Y.C., Hung, P.T., and Hou, P.K.. (1996). Changes in ocular refraction and its components among medical students - a 5-year longitudinal study. *Optom. Vis. Sci.* 73. Pg. 495-498.
- M.T. Tay, K.G. Au Eong, C.Y. Ng and M.K. Lim. (1992). "Myopia and Educational Attainment in 421,116 Young Singaporean Males," *Ann Acad Med Singapore*. Pg. 785-91.
- Milyavskaya, M., Reoch, J., Koestner, F., R.. (2010). Seeking Social Connectedness: Interdependent Self-Construal and Impression Formation Using Photographic Cues of Social Connectedness . *The Journal of Social Psychology*, 2010, 150(6). Pg. 689–702.

- O'Doherty J, Winston J, Critchley H, Perrett D, Burt DM, Dolan RJ. (2003). Beauty in a smile: the role of medial orbitofrontal cortex in facial attractiveness. *Neuropsychologia* 41:147–55
- Pennington, D.C., Gillen, K. and Hill, P. (1999). *Social Psychology*. Arnold: London.
- Perrett, P., I. May, K., A. Yoshikawa, S.. (1994). Facial Shape and Judgements of Female Attraction. *Proquest Biology Journals*. Pg. 239.
- Perrett, D., I., Lee, J., K., Penton-Voak, I., dkk. (1998). Effect of Sexual Dimorphism on Facial Attractiveness. *Nature*. Vol 394.
- Rubham. (2012). *RI Jadi Korban Pertumbuhan Ekonomi Sendiri*. Diakses pada tanggal 1 Juli 2012
dari :<http://bisnis.news.viva.co.id/news/read/301966-ri-jadi--korban--pertumbuhan-ekonomi-sendiri>
- Sharma, V., Kaur, I.(1996). Interpersonal Attraction in Relation to Loss-Gain Hypotesis. *The journal of social psychology*. 136(5). Pg.635-638.
- Suhariadi, F., dkk. (2008). *Psikologi Eksperimen*. Surabaya: UPP Fakultas Psikologi Universitas Airlangga
- Taylor, S., L., Fiore, TT., A., Mandelsohn, G., A., Cheshire, C.. (2011). "Out of My League": A Real-World Test of the Matching Hypothesis. *Pers Soc Psychol Bull* 2011 37. Pg. 942
- Thardy, H., C. (1988). *A handbook for the study human Communication. Method and instrument for measuring and assescing comunication process*. United states of America: Ablex Publishing Corporation.
- Thompson, J., K., Heinberg, L.J., Altabe, M. And Tontleff-Dunn, S.. (1999). *Exacting Beauty: Theory, Assesment and Treatment of Body Image Disturbance*. American Psychological Association. Washington DC.
- Voak, I., P.. Perett, I., D.. (2000). *Consistency and Individual Differences in Facial Attractiveness Judgement. Social Research*. Spring vol. 67 Pg. 219
- Yang, Chao-Yang. Lin, Po-Tsang. Lo, Cheng-Hung. Chiou, Wen-Ko. Hsiech, Kuo-Jung. Liu, Ying-Chieh Liu. (2012). Affective Glasses Frame Design to Enhance Facial Symmetry and Attractiveness.

ISEPSS-2101

The relationship between ‘Authentic Parental Competence’ and Parental Anxiety of Preschoolers' mothers in South Korea

Kai-Sook, Chung

Pusan National University

kschung@pusan.ac.kr

Ju-youn, Kyun

Pusan National University

juyoun1209@hanmail.net

Ji-Yeon, Kim

Pusan National University

kenyasarang@gmail.com

Abstract

As a society becomes more achievement-oriented and competitive, many parents feel a lot of responsibility and stress on rearing their children. It leads to their parental anxiety about being a good parent that has negative influence on both parents and child. One of the reasons why the parents feel anxiety about their parental role might not be to develop parental competence appropriately. So, we expect ‘authentic parental competence’ which includes many different types of abilities required for parents in the highly competitive society like Korean society that are related to not only general parenting, but also personal and social matters may have a positive impact on parental anxiety.

The purpose of this study was to investigate the relationship between ‘authentic parental competence’ and parental anxiety of preschoolers' mothers in South Korea. The subjects were 329 mothers who have children between the ages of zero to six years old. The questionnaires were given to them. The collected data were analyzed based on Pearson's correlation and multiple regression using SPSS 18.0 program.

The main results of this study were as follows. First, ‘authentic parental competence’ and its sub-variables which are ‘developmental positive parenting’, ‘understanding one’s own self and interpersonal relations’, ‘autonomous behavioral regulation’, ‘participation in one’s community’, ‘develop and manage one’s own self’ are negatively correlated with mother’s parental anxiety. It means the higher ‘authentic parental competence’, the less mother’s

anxiety on parental role. Second, 'authentic parental competence', especially 'autonomous behavioral regulation' had a significantly influence on parental anxiety.

That is, when a mother has an ability to make her decision independently and regulate her emotion or behavior herself, mother's anxiety on parental role would be reduced.

To conclude, multidimensional efforts are needed to promote mother's 'authentic parental competence', including development and application of related programs and studies on the effect of any personal or group program to raise mother's competence. Those efforts will bring some positive influences to relieve mother's parental anxiety and, by extension, to do the desirable parenting role on children's development.

The sample of this study was only mothers who have the young children, so we suggest examining a more representative sample, including the mothers and fathers with school age children in future studies.

key words: mothers of young children, authentic parental competence, parental anxiety

Finance & Economics II

Room B

10:40-12:10

Friday, May 9

Session Chair: *Prof. Marwa A. Elsherif*

ICSSAM-417

An Empirical Investigation of the Impact of Foreign Remittances on Poverty in Developing Countries

Mohammad Imran Hossain *Ritsumeikan Asia Pacific University*

ICSSAM-736

Optimization Of "Otak-Otak" Production Made From Catfish Surimi, Costing Per-Unit And Its Profil Product

Saadah *Hasanuddin University*
Abu Bakar Tawali *Hasanuddin University*
Meta Mahendradatta *Hasanuddin University*
Budimawan *Hasanuddin University*

ICSSAM-845

The Impact of Gender Inequality in Education on Growth and Development: An Applied Study on MENA

Marwa A. Elsherif *Helwan University*

ICSSAM-418

Development Strategy In The Northern State Of Jalisco From The Institutional Perspective

José G. Vargas-hernández *University of Guasalajara*
LEC. Mónica Isabel García *University of Guasalajara*
Mora

ISEPSS-2089

Individual Values and Economic Development

Judit Kapas *University of Debrecen*

ICSSAM-417

An Empirical Investigation of the Impact of Foreign Remittances on Poverty in Developing Countries

Mohammad Imran Hossain

PhD student at Graduate School of Asia Pacific Studies Ritsumeikan Asia Pacific University,
Japan, 1-1, Jumonjibaru, Beppu City, Oita Prefecture
Japan E-mail: mohaho13@apu.ac.jp

Abstract

Remittances sent to home countries by migrant workers became significant in amount. Such funds can have profound implications for economic development, human welfare and poverty reduction in a developing country context. This paper examines the impact of foreign remittances on poverty in selected developing countries. A set of time series data has been utilized to empirically check the relationship between remittances and poverty for a list of 44 developing countries worldwide. For the purpose of the study, the 'Three Stage Least Squares' (TSLS) regression technique has been applied. A separate analysis for a group of countries among the list which recorded a remittances to GDP ratio of 2% or more has been performed.

The study finds that remittances have a significant negative impact on poverty in a developing country.

Keywords: Foreign Remittances, Poverty, Developing Countries, TSLS

ICSSAM-736

Optimization Of "Otak-Otak" Production Made From Catfish Surimi, Costing Per-Unit And Its Profil Product

Saadah^{1,2}, Meta Mahendradatta¹, Budimawan,²

¹Faculty of Agriculture, Hasanuddin University

² Faculty of Marine Sciences and Fisheries, Hasanuddin University

¹saadah2010@gmail.com

Abstract

This research aimed to 1. Compile Standard Operating Procedure of otak-otak production made from catfish surimi, 2. Analyze the costing per unit of otak-otak production made from catfish surimi, 3. Determine the profile product of otak-otak made from catfish surimi. This research was carried out in Product Development Laboratory Hasanuddin University for laboratory scale and by partnership with KUB Aroma Laut in Makassar for business scale.

This study was conducted from May to October 2013. The results obtained were the Standard Operating Procedure (SOP) of otak-otak made from catfish surimi consisted of thawing of surimi (frozen surimi stored at room temperature until soft), grinding, mixing, forming, steaming, packaging and storage (at freeze temperatures (less than -18°C). Costing per unit product of otak-otak production is Rp. 1,625.-. The profile product of otak-otak made from catfish surimi consist 60.75% of water, 9.94% of proteins, 9.21% of fats, 2.22% of mineral and 6.25% of carbohydrate.

Keyword : otak-otak, SOP, costing, catfish, profile.

Introduction

A. Background

South Sulawesi has a large enough water as it is surrounded by the sea. This geographic conditions provide an advantage in the form of abundant fish catch. Fish production in the region reached an average of 306 115 tonnes/year. This potential should be fully utilized in addition to providing food for community such as low price protein source, as well as to drive the economy of community, especially businesses related to the processing of the results of these fisheries [1-2]. However, efforts are still not up to the fish processing employment, because generally, the fish catch is consumed directly by an average of 210,305 tons/year. Only a small portion is further processed using local technologies such as salting/drying (8,383 tons/year), steaming (3,230 tons/year), smoking (2,722 tons/year) and fermented, shrimp paste (36 tons /year).

To overcome these problems, it is important to conduct the research and provide the evidence on the ground in form of fish processing business models that can drive the local economy, especially fishermen and communities involved in fisheries.

B. Objective of the Research

1. To compile Standard Operating Procedure of otak-otak production made from catfish surimi,
2. To analyze the costing per unit of otak-otak production made from catfish surimi,
3. To determine the profile product of otak-otak made from catfish surimi.

Research Method

This activity was conducted in product Development Laboratory, Hasanuddin University and built partnership with KUB Aroma Laut and fisherman groups in Makassar, and surrounding district such as Maros and Pangkep. The mechanism of this research was to design the production otak-otak made from catfish surimi. The process was based on the results of laboratory-scale research that has been done before, then it was conducted by scaling-up to production scale with the adjustment process technology.

Result and Discussion

The results obtained in this study, reaching 100% of the targets to be achieved include:

A. Standar Operating Procedure (SOP) for Production of otak-otak from catfish surimi.

1. The first step is thawing of frozen surimi. Thawing process is done by keeping the surimi at room temperature for 3 hours.
2. Three kg of surimi that has been thawed are put in the mixer for mashed.
3. Surimi that has been refined was added by 1 kg of starch, 4 cloves of garlic that has been crushed, 7 teaspoons salt, 6 teaspoons sugar, enough pepper, green onion that has been cut into small pieces enough, and flavor enough. During mixing in the mixer, 1 liter of coconut milk is added gradually.
4. The dough is kept in a mixer until well blended for about 40 minutes.
5. Blended dough is then wrapped in a banana leaf with each weighing of 20 g / piece.
6. Dough that has been wrapped in a banana leaf put into the pot, then steamed for 35 minutes.
7. Otak-otak that has been cooked is lifted, cooled and packed in plastic containers. Each variant packing 10 pieces / pack, 25 pieces / pack, and 50 pieces / pack
8. For ready to eat otak-otak, otak-otak is backed, grilled or fried first, then vacuum packed. Variant packs are 10 pieces / pack, 25 pieces / pack, and 50 pieces/ pack.
9. Packed Otak-otak put into the freezer with temperature below -18°C.

Table 1. Standard Operating Procedure (SOP) of Raw Materials, Equipment, Room and Labor to Produce Otak-otak from Catfish Surimi

No.	Standardization	Criteria
1.	Raw Material (Fish used)	<ul style="list-style-type: none"> a. The fish used is catfish which weight more than 500 grams b. The fish used is still in a fresh state (physical, scent). Gills are still fresh, slimy and if the body is pressed with a finger then if the pressure is released will return to previous forms c. The fish used do not contain mold or other hazardous chemicals (insecticides, pesticides and others) d. The fish used is free from foreign substance (mud, plant remains, fragments of metal, pieces of wood and other foreign substances) e. The fish used has normal color and appearance
2.	Standard Water for Processing	<ul style="list-style-type: none"> a. The water used is clear (not cloudy) and does not foamy b. The water used has no moss (not colored) c. The water used is odorless d. The water used does not contain dangerous chemical compounds (chlorine, detergents and so on) e. The water used is free from pathogenic bacteria
3.	Used Equipment	<ul style="list-style-type: none"> a. The equipment used should be ensured its cleanliness and free of dust and other debris b. The equipment used should be arranged neatly when not in use and stored in a type of storage device (eg spoons and stirrers) c. Each complete production equipment must be cleaned (not allowed to spend the night in dirty conditions) d. At the time of washing should use a detergent that is safe for food processing e. Before the equipment used should be checked / inspected the functional tools (eg, temperature control and other)
4.	Labor sanitation	<ul style="list-style-type: none"> a. Workers who come into direct contact with the product must be in good health and if recovering from infectious diseases that are also to be laid to rest. b. The clothes that workers used must be cleaned c. Clothes and footwear used in the workspace are not allowed to be used outside the workspace d. During working, the workers are not allowed to use jewelry, watches or similar e. During working in the production room, the workers must wear

		<p>masks, gloves and headgear</p> <p>f. Workers before and after working have to clean hands and use soap / detergent</p> <p>g. During working in the production area, the workers are not allowed to smoke or eat</p>
5.	Production Room Sanitation	<p>a. The production room should always be cleaned and free from dust and spiderwebs.</p> <p>b. There is no unused equipment scattered on the production floor</p> <p>c. The production room has to be cleaned after completing each production process</p>

Table 2. Standard Operating Procedure for Otak-otak production process

No	Process	Indicator/Result
1	Thawing	<ul style="list-style-type: none"> - Frozen surimi is put at room temperature - Liquid or mushy surimi
2	Grinding	<ul style="list-style-type: none"> - Smooth surimi, no lumps - Homogenous
3	Mixing	<ul style="list-style-type: none"> - All ingredients have been added - The batter has been well blended
4	Forming	<ul style="list-style-type: none"> - Otak-otak has long and round shape, and is wrapped with banana leaf
5	Steaming	<ul style="list-style-type: none"> - Cooked otak-otak
6	Packaging	<ul style="list-style-type: none"> - Product in plastic packaging contains 10pieces/pack, 25 pieces/pack and 50pieces/pack
7	Further Processing	<ul style="list-style-type: none"> - Ready to eat product - Baked or fried otak-otak is put in vacuum packaging - Product in various packaging with 10 pieces/pack, 25 pieces/pack and 50 pieces/pack
8	Storage	<ul style="list-style-type: none"> - Product is stored at lower temperature than -18 °C

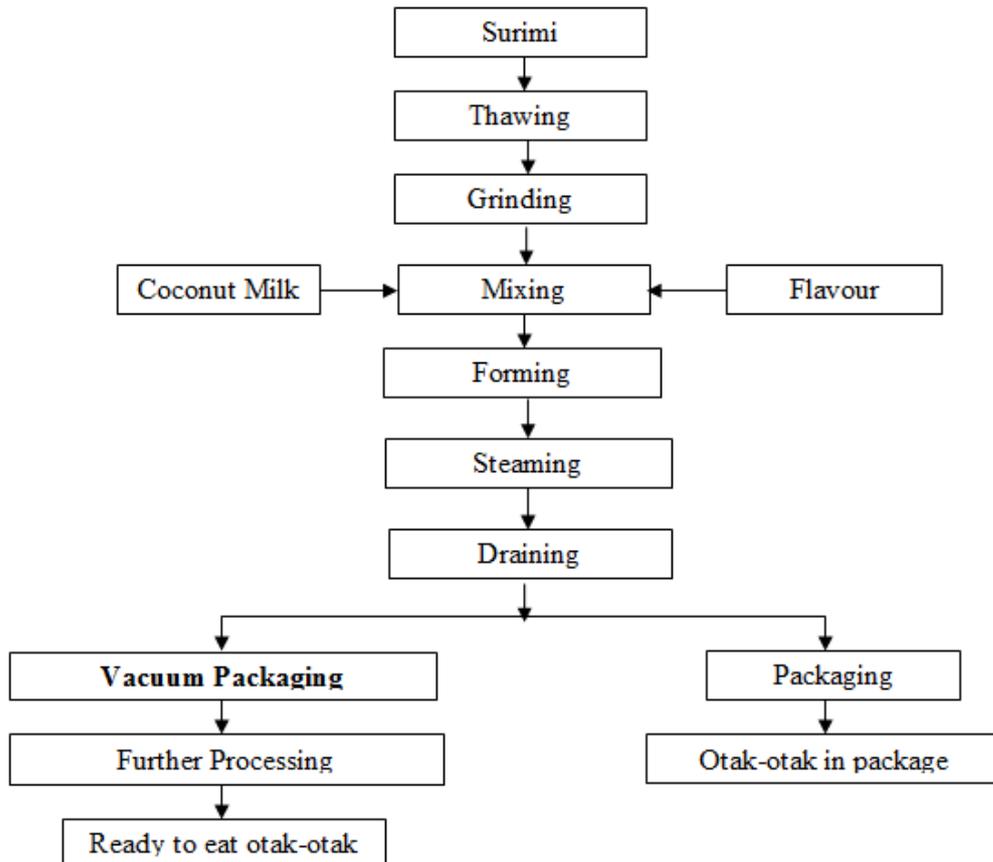


Figure 1. Flow Chart of Otak-otak production process

B. Costing per Unit of Otak-otak Production Made from Catfish Surimi

Manufacturing cost is all cost associated with the production process. Manufacturing cost is classified into three cost components, that are a). Direct material cost which includes three kilograms of catfish surimi, one kilograms of starch, one liter of coconut milk, and assorted condiment, b). Direct labor cost, c). Manufacturing overhead cost that charges are not included in direct material cost and direct labor cost.

The way to calculate costing per unit is the total of manufacturing cost divided by total of production unit. Calculation of costing per unit is shown at Table 3:

Table 3. Calculation of costing per unit of otak-otak made from catfish surimi

No	Description	Amount	Unit	Price/unit (Rp.)	Cost/day (Rp.)
A.	Direct Material Cost				
	1. Catfish Surimi	3	Kg	50,000.-	150,000.-
	2. Starch	1	Kg	10,000.-	10,000.-
	3. Coconut Milk	1	Liter	10,000.-	10,000.-
	4. Assorted Condiment				
	- White pepper	2	Sachet	1,000.-	2,000.-
	- Mashed garlic	1	Ounce	1,500.-	1,500.-
	- Flavor enhancer	3	Sachet	500.-	1,500.-
	- Onion leaf	2	Ounce	500.-	1,000.-
	- Salt	2.5	Spoon	200.-	500.-
	- Chili	3	Ounce	3,000.-	9,000.-
	- Palm Sugar	5	Ounce	1,500.-	7,500.-
	- Peanut	3	Ounce	2,000.-	6,000.-
B.	Direct Labor Cost	1	Person	100,000.-	100,000.-
C.	Manufacturing Overhead Cost				
	1. Banana leaf	5	Bunch	1,000.-	5,000.-
	2. Water	20	Liter	250.-	5,000.-
	3. Electric				5,000.-
	4. Gas				5,000.-
	5. Package cost	20	Pieces	250.-	5,000.-
	6. Depreciation				2,000.-
	7. Tax				1,000.-
	TOTAL				326,000.-

Note : Total products are 200 unit

$$\begin{aligned} \text{Costing per unit} &= \frac{\sum \text{Manufacturing cost}}{\sum \text{Unit Production}} \\ &= \frac{\text{Rp. 326,000.-}}{200 \text{ Unit}} = \text{Rp. 1,630.- per unit} \end{aligned}$$

C. The Profile Product of Otak-otak Made from Catfish Surimi.

Table 4. Nutrient content of Otak-otak made from catfish surimi.

No.	Nutrient content	Amount (%)
1	Water	60.75
2	Protein	9.94
3	Fat	9.21
4	Minerals	2.22
5	Carbohydrate	6.25

Conclusion and Suggestion

A. Conclusion

The results achieved in this study were:

- Standard operating procedures (SOP) of otak-otak production,
- Costing per unit of otak-otak production is Rp. 1,630.- per unit
- Profile product of otak-otak made from catfish surimi is 60.75% of water, 9.94% of proteins, 9.21% of fats, 2.22% of mineral and 6.25% of carbohydrate.

B. Suggestion

The result of this study should be disseminated to the general public or the bussiness partner.

References

- Anthonymsamy, SM., Nazamid Bin Saari, Kharidah M, and Fatimah A.B. 2004. Browning of Sago Pith Slurry as Influenced by Holding Time, PH and Temperature. *Journal of food. Biochemistry* 28:91- 99.
- Irianto, H. B., 1990. Surimi Technology, A Way to Obtain Added Value of Underutilized fish. *Journal of Research and Development*. Jakarta.
- Mahendradatta, M. dan A.B. Tawali, 2007. Otak-otak; From Traditional to Industry. *Food Review Indonesia*, Vol II No.7, July 2007: 58 -62.
- Muthohar dan I. Setyanova, 2002. Various Creation of processed fish products. Penebar Swadaya, Jakarta.
- Rampengan, V., J. Pontoh, D.T. Sembel, 1985. *Fundamentals of Food Quality Control*. Badan Kerja Sama Perguruan Tinggi Negeri Indonesia Bagian Timur, Ujung Pandang.
- Simamora, Henry. 1999. *Accounting Management*. Salemba Empat, Jakarta.
- SNI 01-2891-1992. *How to Test Food and Beverage*. Center for Standardization, Ministry of Industry.

ICSSAM-845

The Impact of Gender Inequality in Education on Growth and Development: An Applied Study on MENA

Marwa A. Elsherif*

Helwan University, Cairo, Egypt

Email: marwassen@yahoo.com

May 2014

Abstract

Women account for 2/3 of the 880 million illiterate adults in the world. The world in general and in Middle East and North Africa (MENA Nations)¹ in particular, women are inadequately served in terms of education, health, social status, opportunities and legal rights. Women in MENA nations face severe challenges that block their progress and negatively impact the economies of this region. Within this scope, this paper is concerned with the impact of gender inequality of education, using cross-country regression, it determines to what extent gender bias in education has negative impact on economic growth. To this end, the paper will be organized as follows: Following the introduction in Section – I. Section – II discusses the various social and cultural preferences responsible for the gender inequality in education in MENA. Section – III reviews the recent literatures explaining the linkages between development and gender inequality. Section – IV lays down the empirical methodology utilized in the analysis. Empirical results are presented and interpreted in Section – V. Finally, the paper is concluded with policy implications in Section – VI.

Keyword: Gender Inequality, Education, Economic Growth

1. Introduction

"No society treats its women as well as its men^[1]."

That's the conclusion from the United Nations Development Program (UNDP), as written in its 1997 Human Development Report (HDR). Almost 50 years earlier, in 1948, the United Nations General Assembly had adopted the Universal Declaration of Human Rights, which specified that everyone, regardless of sex, was entitled to the same rights and freedoms. The 1997 Human Development Report, as well as every Human Development Report that followed, has highlighted that each country falls short of achieving that goal.

* Marwa Assem Elsherif, *MSc & PhD Economics*, Lecturer of Economics, Helwan University, Cairo, Egypt.

¹ The following countries are typically included in MENA: Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen. Ethiopia and Sudan are sometimes included. The MENA region accounts for approximately 6% of the world's population, 60% of the world's oil reserves and 45% of the world's natural gas reserves.

Around the world, in parts of India and South Asia, there is a strong preference for having sons. Girls can be perceived as a financial burden for the family, due to small income contributions and costly dowry demands^[2]. In the Republic of Korea, 30 percent of pregnancies identified as female fetuses were terminated. Contrastingly, over 90 percent of pregnancies identified as male fetuses resulted in normal birth^[3]. For the last ten years, the high murder and disappearance rate of young women in Ciudad Juarez has received international attention in Mexico, with an alarming recent resurgence^[4]. The number of femicides in Guatemala has risen steadily from 303 in 2001 to 722 in 2007, with the majority of the victims between ages 16 and 30^[5]. Throughout Latin America, inadequate record-keeping around domestic violence and the victim's relationship to the murderer results in a problem of underreporting of gender based deaths^[6]. Another form of violence against women, acid attacks, reported in 2002, 315 women and girls in Bangladesh endured, even after the introduction of more serious punishments for the crime, over 200 women were attacked^[7]. More than 30 percent of young women between 15 and 19 are married in Sub-Saharan Africa and South Asia^[6]. In Ethiopia, 3,700 local public schools have created girls' advisory groups to prevent early marriage and encourage all girls to attend schools. Through conversations with parents, instructors, and religious leaders regarding the risks of child marriage and the benefits of education, this program is responsible for preventing over 4,000 child marriages and increasing the number of Ethiopian girls in schools^[8]. The Young Empowered and Healthy Initiative was established in Uganda in 2004 by a group of local organizations, under the Uganda AIDS Commission HIV/AIDS Partnership, to reduce the incidence of HIV and early pregnancy^[9]. Worldwide, approximately 14 million women and girls between the ages of 15 and 19 give birth each year^[10].

Across MENA region, family matters as diverse as Iran, Egypt and Lebanon are governed by cultural and religion-based codes. Many of these laws treat women essentially as legal minors under the eternal guardianship of their male family members. Family decision-making is thought to be the exclusive domain of men power^[11]. In many countries in this region, no specific laws or provisions exist to penalize domestic violence, even though; domestic violence is a widespread problem. Domestic violence is generally considered to be a private matter outside the state's jurisdiction^[12]. Although women in Egypt can now legally initiate a divorce without cause, they must agree not only to renounce all rights to the couple's finances, but must also repay their dowries. Essentially, they have to buy their freedom^[13]. In many countries, while husbands can divorce their spouses easily², wives' access to divorce is often extremely limited, and they frequently confront near insurmountable legal and financial obstacles. A medical certificate from a doctor documenting physical abuse is not enough^[11].

² Often instantaneously through oral repudiation

Egyptian women's economic participation is low, the labor force participation rate³ among women aged 15 and above is only 22 percent, while the corresponding percentage for men is 75 percent^[14]. Djibouti, Iraq, Morocco and Yemen still show a lower enrolment rate for females. Data from some countries reveal much higher literacy rates for young men as compared to young women (15-24) in particular Algeria, Egypt, Iraq, Morocco, Syria and Yemen^[15]. Countries like Oman, Qatar and Saudi Arabia have no female members of parliament. Only two countries in the region have over 15 percent female parliament members; Iraq 25 percent and UAE 23 percent^[16]. In Iraq, Libya, Jordan, Morocco, Oman and Yemen, married women must have their husband's written permission to travel abroad, and they may be prevented from doing so for any reason^[17]. Most countries in the region-with the exception of Iran, Tunisia, Israel, and to a limited extent Egypt-have permitted only fathers to pass citizenship on to their children. Women married to non-nationals are denied this fundamental right^[18].

According to the Human Development Index (HDI)⁴, only Canada held the top position with an HDI of 0.960 whereas Sierra Leone ranked last (174) with a value of only 0.165. Regionally, only Latin America and the Caribbean were classified as having high HDI with the other region as medium, except for South Asia and Sub-Sahara Africa ranking as low. Although MENA region has experienced the highest increase in HDI (179%), compared to East Asia (164%), its female illiteracy rate in 1995 (55.8%) was higher than that of Sub-Sahara Africa (52.1%). Such lower female achievement of MENA negatively impacts the region's socio-economic development and perpetuates the gender gap^{[19][20]}.

Out of the 135 countries ultimately covered in Global Gender Gap Index⁵ 2012 Report, Iceland ranked the first with a score of (0.8640) followed by Scandinavian countries, while Yemen ranked (135) with a score of (0.5054). Six⁶ out of the last 10 ranks were occupied by

³ The proportion of the working-age population that actively engages in the labor market either by working or looking for work

⁴ Human Development Index was introduced by UNDP in 1990 to measure human development for 174 developed and developing countries. It focuses on three critical dimensions to human development: longevity, knowledge, and a decent standard of living. Three equally weighted variables are used: life expectancy, educational attainment, and per capita income in purchasing power parity. HDI values range from zero (worst) to one (best). This index, updated annually, is now widely used in the analysis of socio-economic development.

⁵ The Global Gender Gap Index, introduced by the World Economic Forum in 2006, is a framework for capturing the magnitude and scope of gender-based disparities and tracking their progress. It examines the gap between men and women in four fundamental categories (sub-indexes): economic participation and opportunity, educational attainment, health and survival and political empowerment.

⁶ Egypt, Iran, Morocco, Saudi Arabia, Syria and Yemen.

countries from MENA region. According to the regional trends, MENA region occupies the last place, having closed almost 59% of its gender gap^[21].

The educational Gender inequality remains quite pronounced in certain regions of the developing world and it continues to hinder development prospects. In turkey, the illiteracy gap⁷ is calculated at 19.3% that reflects that education extended to girls is significantly lower than of boys. Findings from Morocco indicate that more women (70%) than men (55%) experience inadequate schooling^[22].

2. Causes of Gender Inequality in Education in MENA

There are many reasons why the existing gender inequality in education in MENA is problematic. Cooray and Potrafke, 2011^[23], Gertler and Alderman, 1989^[24] and Dollar and Gatti, 1999^[25], pointed out that the major causes for low investment in girls' education due firstly to religion, cultural and social preferences, they argued that discrimination against girls is especially pronounced in Muslim dominated countries. Cultural and social beliefs, attitudes, stereotypes and regional traditions discriminate girls from getting equal educational opportunities. A chronic absenteeism from school among girls is worse in rural areas than in the urban areas. A major portion of rural society is not welcoming for girls who want to attend schools. Even those who are enrolled in schools cannot attend them on a regular basis. Secondly; as argued by Seitz and Adato, poverty is one of the key factors that limit female education^[26]. Economics plays a central role when it comes to coping with direct costs such as tuition fees, cost of textbooks, uniforms and transportation. Wherever, especially in families with many children, these costs exceed the income of the family, girls are the first to be denied schooling^[27]. Another major reason for the low investment in girls' education highlighted by Psacharopoulos, 1994^[28], as the return from girls' schooling is considered to be lower than that for boys. Sons typically manage to afford their parents in their old age, while daughters tend to leave and become part of a different household economic unit (after their marriage). In this case, the decision to invest in girls' schooling is likely to be inefficient^[29]. Finally; it is reported that, a rash of teacher-on-student violence has ruined schools over the past years, claiming that preventing school teachers from beating students as a form of punishment would leave teachers in a weak position. Girls are often discriminated against within school, this leads to lower enrolment in school, poor retention and under-achievement^[6].

In general, there is tendency in many MENA countries to invest in sons' education, rather than daughters', such discrimination against girls result in restricting girls' life choices,

⁷ Difference between female and male illiteracy rates.

contributing to a continuing cycle of early marriage, early pregnancy, poor health and poor self-esteem among girls, who are the expected future wives and mothers.

3. Does Gender Inequality in Education Hinder Economic Growth and Development?

A large number of the studies including Klasen, 1999^[30], Dollar and Datti, 1999^[25], and King and Mason, 2001^[31] confirmed that the gender inequality impedes the economic growth. Gender inequality in education has a direct impact on economic growth through lowering the average quality of human capital. In addition, economic growth is indirectly affected through the impact of gender inequality on investment and population growth. Gender inequality in education has a significant negative impact on economic growth and appears to be an important factor contributing to Africa's and South Asia's poor growth performance over the past 30 years. In addition to increasing growth, greater gender equality in education promotes other important development goals, including lower fertility and lower child mortality.

Based on neo-classical production function as explained by Solow (with diminishing returns to each input) and exogenous savings and population growth, suggested convergence of per capita incomes, conditional on exogenous savings and population growth rates^[32].

Roemer, 1986^[33], Lucas, 1988^[34], and Barro and Sala-i- Martin, 1995^[35], have emphasized the possibility of endogenous growth where economic growth is not constrained by diminishing returns to capital. These models have also emphasized the importance of human capital accumulation for economic growth.

Klasen, 1999^[30], argued that causality runs from gender inequality in education to economic growth and not vice versa or simultaneous, based on panel regressions between 1960 and 1990. He suggested that gender inequality in education has a direct impact on economic growth through lowering the average level of human capital, as well as growth indirectly affected through the impact of gender inequality in investment and population growth.

The impact of gender inequality in education on fertility and economic growth examined by Lagerlöf, 1999, using an overlapping generation framework, the paper argued that initial gender inequality in education could lead to a self-perpetuating equilibrium of continued gender inequality in education, with the consequences of high fertility and low economic growth. In this model, gender inequality in education may generate a poverty trap which would justify public action to escape this low-level equilibrium with self-perpetuating gender gaps in education^[36].

Gender inequality in education was found as an endogenous variable and showed that it can be explained to a considerable extent by religious preference, regional factors, and civil freedom by Moheyuddin, 2006. For some of these variables, the direction of the effect depends on the particular measure of inequality^[37].

Political institutions or culture and religion underlie gender inequality in education? This question empirically investigated by Cooray and Potrafke at 2011, in 157 countries over the 1991-2006. Their results indicated that the primary influences on gender inequality in education are culture and religion. Discrimination against girls is especially pronounced in Muslim dominated countries^[23].

Kucuk, 2013^[38], used a cross-sectional data set for 209 countries in order to examine the relationship between gender inequality and its determinants, by taking into account the impact of economic development, ICT, education, and institutions. Empirical results found that the impact of gender inequality differs for the MENA, Arab and Muslim majority countries only when control variables are excluded from the regressions.

4. Data and Empirical Methodology

The birth of endogenous growth theory in 1980s and the formalization of human capital augmented Solow's growth model by Mankiw, Romer and Weil, 1992^[39], opened the venue for incorporating education-centered human capital in cross-country and country specific growth study.

The present study represents cross-country estimation for 20 MENA nations throughout the period from 1990 to 2012. To investigate the empirical model, data were collected from the World Development Indicators published by the World Bank. Due to unfortunate lack of complete data availability, West Bank and Gaza is excluded from this study.

The basic regression model used to test for the impact of educational gender inequality on economic growth in MENA takes the following form:

$$\text{Growth} = \alpha + \beta (\text{Education Gender Inequality}) + \Upsilon (\text{Control Set}) + \varepsilon$$

Where,

- **Growth**, the dependent variable, equals real GDP growth;
- **Educational Gender Inequality** measured by female to male primary enrollment rate (% of primary school age children);
- **Control Variables Set** represents variables that control for other factors associated with economic growth. These variables are: Investment rate which is defined by gross capital

formation, labor force is measured by employment, government consumption expenditure, inflation measured by the consumer price index (CPI) and openness rate which is measured by exports plus imports;

- ϵ is the error term.

A series of estimated forms of equations have been run. The results of estimating an endogenous growth model provided poor results. This is attributed to the fact that variables such as school enrolment, investment and employment are highly correlated; therefore, a severe problem of multicollinearity has been encountered. Also, many countries at MENA region, one would expect traditional factors of production to exert more significant impact on economic growth than technological factors.

Therefore, the following form of the growth equation is estimated in order to explain the impact of the gender inequality in education on economic growth in MENA:

$$G = \alpha + \beta_1 LF_{it} + \beta_2 GCF_{it} + cFME_{it} + u$$

Where, G is the growth rate measured by real GDP (RGDP), LF is labor force, GCF is gross capital formation and FME is female to male enrollment in primary and secondary schools as a proxy of gender inequality of education, for country i at time t , β_1 and β_2 are the coefficients of LF and GCF respectively, u is the error term.

Three regression models are established in which the dependent variable is real GDP. Model 1 estimates the relation of MENA countries' level of real GDP with inequality of education. Then model 2 and 3 estimate the effect of gender inequality in education along with religion impact and income level respectively. Dummies are used for Islamic countries that proxies the extent of Islamic impact on country's culture, laws, and standards (model 2), and oil exporter countries to reflect the income level (model 3), and hence, economic growth and development.

5. Empirical Results

The empirical result reveals that gender inequality in education (FME) in MENA has obvious negative effect on the real GDP of the region. Of the three models that have been mentioned earlier in paper methodology, the negative coefficient of the (FME) variable is highly significant in all cases. The negative coefficient in all cases exceeds one which indicates more than one percentage point decrease in the level of real GDP due to one percentage point increase in educational inequality. The result corresponding to Model 2, (REL) variable is positive but insignificant, which indicates that real GDP is not related or even inversely related to Muslim population ratio, or religion norms and values. Spotting on model 3, (OIL) has positive and significant coefficients that reveals the significant contribution of oil, as those countries do indeed better than the other countries in the growth and development

process, as oil has absorbed the significance of the negative effect of educational gender inequality variable. The statistical significance of each model is satisfactory as indicated by the significant adjusted R^2 . The empirical results are shown with the aid of table 1.

Table (1): Regression results of the impact of educational gender inequality on growth in MENA over

the period 1990-2012:

Dependent Variable: LOG(RGDP)

Variable	Model 1	Model 2	Model 3
Constant	6.390 (10.529)	6.631 (7.687)	6.717 (7.814)
LF	0.478 (9.504)	0.637 (3.068)	0.682 (3.262)
GCF	0.478 (13.439)	0.630 (20.589)	0.627 (20.489)
FME	-0.321 (-3.336)	-0.437 (-4.867)	-0.295 (-3.155)
REL*		0.013 (0.121)	
OIL**			0.467 (2.699)
Adjusted R²	0.839	0.735	0.739
D.W	1.483	1.322	1.325

*dummy to measure to what extend a country is Muslim; it is defined as 1 if Muslim ratio is more than 75% of

total population, 0 otherwise.

**dummy to measure income level, 1 if the country is a major oil exporter, 0 otherwise.

Note: t-statistics are given in parentheses.

Source: Author's estimation (statistical work is performed in Eviews Software version 6).

5. Conclusion

Despite the continuous effort to close the gender gap between female and male, many countries at MENA region, have not achieved gender equality in educational attainment, employment, economic opportunities and outcomes. This study empirically estimates the impact of educational gender inequality on the level of real GDP in MENA region. The result indicates that female to male disparity has significant negative impact on real GDP and economic well being of the region. Religion and oil are singled out as factors affecting growth process along with gender bias, evidence obtained in this study shows that religion

has no significant effect while oil has strong impact on growth. In this regard the role of female education is rather crucial. Hence this study recommends that; MENA should enhance the education level of female and reduces the educational gender inequality between male and female; females are to be more encouraged to attain education, equality and overall development.

References

- [1] UNDP. Human Development Report 1997. Oxford University Press, Oxford and New York, 1997, PP.39.

- [2] UNFPA. A State Of World Population. Chapter 7, 2005.
<http://www.unfpa.org/swp/2005/english/ch7/index.htm>

- [3] UN General Assembly. Secretary General's Study on Violence Against Women. 61st Session, 2010.
<http://www.un.org/womenwatch/daw/vaw/violenceagainstwomenstudydoc.pdf>

- [4] NPR. Juarez: A City on the Edge. June 21, 2004.
<http://www.npr.org/templates/story/story.php?storyId=1966988>

- [5] UN General Assembly. Follow-Up to Country Recommendations: Guatemala. 2010.
<http://www2.ohchr.org/english/bodies/hrcouncil/docs/11session/A.HRC.11.2.Add.7.pdf>

- [6] United Nations Development Fund for Women. Fact Sheet: Violence Against Women Worldwide. New York, 2010.
http://www.unifem.org/campaigns/sayno/docs/SayNOunite_FactSheet_VAWworldwide.pdf

- [7] United Nations Development fund for Women. Violence against women: Facts and Figures. New York, 2010.
http://www.unifem.org/attachments/gender_issues/violence_against_women/facts_figures_violence_against_women_2007.pdf

- [8] USAID. Issue Brief: Preventing Child Marriage: Protecting Girls Health. 2009.
http://www.usaid.gov/our_work/global_health/pop/news/issue_briefs/prev_child_marriage.pdf

- [9] Population Reference Bureau. Combating Cross-Generational Sex in Uganda. 2009.
<http://prb.org/Articles/2009/crossgenerationalsex.aspx?p=1>

- [10] UNFPA. Gender Equality: Giving Special Attention to Girls and Adolescents. 2010.<http://www.unfpa.org/gender/girls.htm>
- [11] Human Rights Watch. Perpetual minors, Human rights abuses stemming from male guardianship and sex segregation in Saudi Arabia. 2008.<http://www.hrw.org/reports/2008/04/19/perpetual-minors>.
- [12] King E M. and Hill M A. Women's Education in Developing Countries: Barriers, Benefits and Policies. World Bank, Baltimore: The Johns Hopkins University Press, 1993, pp: 136-174.
- [13] Mensch B S, Ibrahim B L, Lee S M, and El-Gibaly M. Socialization to gender roles and marriage among Egyptian adolescents. Research Division Working Paper no. 140, New York: Population Council, 2000.
- [14] Millennium Development Goals Report. New York, 2012.
www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf
- [15] UNICEF. Regional Overview of the Status of Girls and Women in the Middle East and North Africa. MENA Gender Equality Profile, 2011.
[ww.unicef.org/gender/.../REGIONAL-Gender-Eqaulity-Profile-2011.pdf](http://www.unicef.org/gender/.../REGIONAL-Gender-Eqaulity-Profile-2011.pdf)
- [16] Global Women's Leadership Initiative. Women in Democratic Transitions in the MENA Region. Final Report, Rabat, Morocco, March 2013.
- [17] Freedom House. Women's Rights in the Middle East and North Africa Report, 2010.www.freedomhouse.org
- [18] Handoussa and Tzannatos Z. Employment Creation and Social Protection in the Middle East and North Africa. Cairo: The American University in Cairo Press, 2002.
- [19] UNDP. Human Development Report 1998. New York: Oxford University Press, 1998.
- [20] World Bank. World Development Report 1998. New York: Oxford University Press, 1998.

- [21] World Economic Forum. The Global Gender Gap report 2012. Geneva, Switzerland: World Economic Forum, 2012.
- [22] Hosni D, Sandberg M and Chanmala A. Inequality Among Woman and Its Impact on Economic Growth: The Case of MENA, Sustainable Human Development in the Twenty-First Century – Vol. II –2002.
- [23] Cooray A and Potrafke N. Gender inequality in education: Political institutions or culture and religion? Konstanz Working Paper, University of Konstanz, D-78457 Konstanz, Germany, 2011.
- [24] Gertler P and Alderman H. Family resources and Gender Differences in Human Capital Investments. Economic Growth Center, Yale University, 1989.
- [25] Dollar D, Gatti R. Gender inequality, income and growth: Are good times good for women? Policy Research Report on Gender and Development Working Paper Series No. 1, World Bank, Washington DC, 1999.
- [26] Seitz V, and Adato M. Gender Equality and Poverty Reduction through Growth, MCC: Millennium Challenge Corporation Gender Integration Guidelines, 2011.
- [27] Grown C, Gupta GR, and Kes A. Taking Action: Achieving Gender Equality and Empowering Women. New York: United Nations Millennium Project; Earthscan, 2005.
- [28] Psacharopoulos G. Returns to Investment in Education: A Global Update. World Development, Vol. 22, No. 9, 1994, pp. 1325-1343
- [29] Michaelowa K. Returns to Education in Low Income Countries: Evidence for Africa. German Economic Association, June 2000.
- [30] Klasen, S. Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. Policy Research Report On Gender and Development, Working Paper Series, No. 7. Development Research Group/PREMNI, The World Bank, 1999.
- [31] King E M and Mason A D. Engendering Development through Gender Equality in Rights, Resources and Voices. A World Bank Policy Research Report. Washington DC: The World Bank Group, 2001.

- [32] Solow R. A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics*, 1956, 70: PP, 65-94.
- [33] Roemer P. Increasing Returns and Long-Run Growth. *Journal of Political Economy*, 1986, 94: PP, 1002-1037.
- [34] Lucas R. On the Mechanics of Development Planning. *Journal of Monetary Economics*, 1988, 22: PP, 3-42.
- [35] Barro R and Sala-i-Martin X. *Economic Growth*. New York: McGraw-Hill, 1995.
- [36] Lagerlöf N. Gender Inequality, Fertility, and Growth. Mimeographed. Department of Economics, University of Sydney, 1999.
- [37] Moheyuddin G. Gender Inequality in Education: Impact on Income, Growth and Development. Munich Personal RePEc Archive, MPRA Paper No. 685, 2006.
<http://mpa.ub.uni-muenchen.de/685/> posted 7. November 2006
- [38] Kucuk N. Gender Inequality in the MENA: Myths versus Facts. *Topics in Middle Eastern and African Economies* Vol. 15, No. 2, September 2013.
- [39] Mankiw N G, Romer & Weil D N. A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 1992, 107, 407–437.

ICSSAM-418
**Development Strategy In The Northern State Of Jalisco From The
Institutional Perspective**

José G. Vargas-Hernández, LEC. Mónica Isabel García Mora

University of Guasalajara

Jvargas2006@gmail.com, jgvh0811@yahoo.com, josevargas@cucea.udg.mx

Abstract

The regionalization process in Jalisco occurred in the nineties leading to the decentralization of regions and formulating a regional development plan for each of them. Currently, despite the measures taken to establish regional plans, it appears that there are disparities in regional development, being the most affected, the North Zone of the State. The aim of this paper is to analyze a key factor, the ratio of the institutions with the development of the Northern region of the State of Jalisco, with a brief analysis of the role of institutions from economic, political and social perspectives. The method used is a review of the existing literature on institutional theory and the development of the Northern Zone of Estado. It concludes by stating as a strategy to promote the development, evaluation and strengthening of the institutions involved in this process.

Keywords: Development, regional development institutions, region, northern state of Jalisco.
JEL: D02, O43, R11, R58

Resumen

El proceso de regionalización en Jalisco ocurrido en la década de los noventa, dio lugar a la descentralización de las regiones y a la formulación un plan regional de desarrollo para cada una de ellas. Actualmente y a pesar de las medidas tomadas al establecer los planes regionales, se observa que existen disparidades en el desarrollo de las regiones, siendo la más afectada, la Zona Norte del Estado. El objetivo de este trabajo, es analizar como factor clave, la relación de las instituciones con el desarrollo de la Zona Norte del Estado de Jalisco, haciendo un breve análisis del papel de las instituciones desde la perspectiva económica, política y social. El método empleado será la revisión de la literatura existente sobre la teoría institucional y el desarrollo de la Zona Norte del Estado. Se concluye señalando como estrategia para impulsar el desarrollo, la evaluación y el fortalecimiento de las instituciones que intervienen en este proceso.

Palabras clave: Desarrollo, desarrollo regional, instituciones, región, zona norte del Estado de Jalisco.

1. Introduction

The development of the regions has become a very important topic in recent years. It is that to talk about development, involves thinking about improvements in the quality of life and greater social welfare of a country or region. Formally, regional development is defined as a process of growth and structural change, using existing development potential in the area, leading to improve the welfare of the population in a locality or region (Diez, 2004).

It is well known that for historical background, development in Mexico has not been given in accordance with the expectations and needs of the country. Coupled with this, there are disparities in development between regions. For example, data released by the National Institute of Statistics and Geography (INEGI, 2010), Jalisco is the fourth state with more participation in the Gross Domestic Product (GDP), i.e., the fourth most productive in Mexico, only after the Federal District (DF), Estado de Mexico and Nuevo Leon. However if this is good economic indicator, in contrast is the Human Development Index (IDH, 2009), which places Jalisco in 14th place in relation to income ratio compared to other states of the country.

The HDI Jalisco also evaluated the 12 regions that make up the State of Jalisco. This is where it is noted that development occurs in a very heterogeneous form in Jalisco and where it can be seen the disparities in development, especially in the Northern region of Jalisco which the Jalisco HDI assessment puts this region in the last. For this reason, interest has raised an interest in this work to analyze disparities in the development of the Northern Zone of Jalisco, viewed from the influence of institutions on the development of the region.

2. Regionalization in Jalisco

In the mid 90s, political changes in the State of Jalisco brought a new way of organizing economic development plans, starting with the segmentation of neighboring regions with similar characteristics called regions.

In 1997 it began a process of regionalization in the State of Jalisco. This process of regionalization was a result of the opening of the country to look to take advantage of globalization and addressing regional inequalities. The regionalization strategy in Jalisco, led to the concentration of the 124 municipalities that make up the State into twelve administrative regions in order to promote decentralization and devolution to the regions, and promote the social planning process, comprehensive, participatory and strategic to develop regions within a framework of State Development Plan (PED, 2030, 16-17).

However, even though since 1995 it has implemented the State Development Plans in Jalisco to reduce disparities in development between regions, there are still regions with visible signs of backwardness. While national inequality could be reduced to 15% between 2000 and 2005, in Jalisco increased 62% in the same period (IDH, 2009). A clear example, when talking about regional disparities, is the case of the Northern Region of the State of Jalisco.

3. Overview of the Northern Region of Jalisco

The Northern Region of the State of Jalisco, is located on the northern tip of the state of Jalisco (ZNEJ). Its territory is equivalent to 10305.46 km², which corresponds to 12.86% of the total area of the State of Jalisco. Jalisco is bordered on the North by the states of Nayarit and Zacatecas, to the East by the State of Zacatecas, on the West by the State of Nayarit and South, the state of Zacatecas and Municipalities of Jalisco Tequila and Hostotipaquillo. The region includes 10 municipalities: Bolaños, Chimaltitán, Colotlán, Huejúcar, Huejuquilla high, Mezquitic, San Martin de Bolaños, Santa Maria de los Ángeles, Totatiche and Villa Guerrero.

The Northern Region of Jalisco, is one of the regions of Jalisco with more potential and yet the most backward (Romero, 2009). On a very general overview, it is mentioned that the population of the region represents only 1.04% of the state population. The 60% of municipalities in Jalisco are classified as rural and semi-urban 40%. The Northern Region of the State of Jalisco (ZNEJ) has a strong presence of indigenous cultures. According to INEGI (2010) 4 of the 10 municipalities of the ZNEJ, have the highest percentage of indigenous-speaking population of the state, Mezquitic with 75.9% and Bolaños with 64.4%. It follows them the municipalities of Huejuquilla el Alto with 6.5% and Villa Guerrero with 5.5, prevailing culture of the Huichol people in Mezquitic and Bolaños mainly.

As indices of marginalization, the North Zone of Jalisco (ZNEJ) is the most marginalized of the entity, and has a very high degree of marginalization. The marginalization index allows differentiating the shortcomings faced by the people, considering the lack of access to education, residence in inadequate housing, the perception of insufficient monetary income and residence in small towns (CONAPO, 2010). Although these figures are not very encouraging, the North Zone of Jalisco has large potential resources, mainly natural resources, which can be considered as a strategy to promote endogenous development of the Zone.

This area has water resources, provided by the rivers Bolaños, passing from North to South and West of the center, the river Camotlán, which plays the same direction west of the municipal area. There are also small springs. Among the main hills and mountains are La Palma, Violeta, El Caimán, El Aguacate, Pitacho of Patoles, The Sabines, The Link, Tapaiste, La Campana and Guajolotes.

Among the main tourist and cultural attractions in the Northern Zone of Jalisco are shown in table 1.

Table 1. Tourist and cultural attractions in the Northern Zone of Jalisco

Municipality	Touristic attraction	Description
Bolaños	La Casa de la Condesa	Baroque Mansion of late eighteenth century, located on 16th Street, #39. Facade of two levels with engravings with scenes of daily life in their borders and fitomorfas figures in their cenefas and graffito decoration in their original enjarres.
Chimaltitán	Archeological zone "Los Cerritos"	On this site are found quarry stones embossed with some signs and drawings.
	Piedras Largas Long Stones	Mountainous pine and oak with whimsical figures formed by nature in different sizes, in an area of approximately 2 hectares
Colotlán	Cueva de la Novia Cave Colotlán Bride	It is a cave that is 8 meters high and 12 meters wide, from this site you can admire the Colotlán Township, St. Mary of the Angels, Huejúcar, Tlaltenango Momax and also: the road, Colotlán, San Nicolas, El Carrizal and the nozzle dam Perez.
Huejuquilla el alto	Archeological zone "Cerrito de Hiztle"	In the place are the remains of pre-Columbian cultures.
Mezquitic	Mirador Mezquitic	It is located approximately 5 miles away from the county seat of Mezquitic, intended as a lookout site, overlooks a large canyon and valley Mezquitic part, just as is also seen Bolaños River. Ideal to develop landscaping and meditation.
San Martín de Bolaños	Minning plant "El Pílon"	It's a silver processing plant, which could be found through guided tours showing the process is subjected to this beautiful metal, with hours from 8:00 to 17:00 pm Tuesday through Friday.
Santa María de los Angeles	Presa "Boquilla de Zaragoza" Dam "Nozzle Zaragoza"	It is located north of the center; it can be fished for bass, carp and catfish throughout the year. On this site can be watched silly duck, Papello. Also the landscape of rolling hills is covered with tropical forest. It features some camping areas in the North and West of the reservoir.
Totatiche	La Cueva de las Patas Totatiche The Cave of the legs	It is a mysterious and ancient place nestled in the canyon of the community of El Canjilon, still preserved petroglyphs dating 8,000 years old.
Villa Guerrero	Waterfalls "La Pila del Diablo"	It is located in the town of Patahua at 8 km dirt. They are natural pools formed by the rocks that they surround your sabino vegetation, and in the rainy seas on there are small waterfalls.

Source: Based on data from SEIJAL (2012).

These are just some of the many tourist attractions, cultural sites that can be found. This area is rich in natural resources, privileged for its scenery, is an ideal area to promote ecotourism.

4. Importance of institutions in development

The big problem that plagues the current orthodox literature on institutions and development is their inability to distinguish clearly between the forms and functions of institutions (Chang, 2006). However, for this work, it is taken the definition of North (1990) who defines institutions as humanly planned restrictions that structure the interaction of people, and are known informally as "rules". Institutions are key to ensuring that development efforts are sustainable. The institutions regulate and manage the way of carrying out the actions that contribute to the development of a region.

Acemoglu (2003, p.27) found that the major factor that explains the root causes of the differences in the prosperity of the country are the institutions. The three key features of good institutions are the application of property rights to a broad segment of society, so that several people have incentives to invest and engage in economic activity, limits on the actions of elites, politicians and other powerful groups, to avoid expropriation of income and investment of others or create conditions that favor them, and some degree of equal opportunities for broad segments of society so that people can invest, especially in human capital, and engage in productive economic activities.

In respect of property rights, North and Thomas (1973, p. 8) indicate that the creation, specification and implementation of property rights are costly, and these costs depend on the state of technology and organization, the governments take the protection and enforcement of property rights because they can do so at lower costs than private groups could organize voluntarily.

As noted Bandeira (2009), after the appearance of the famous book of North on institutions and economic development in 1990, the failure of structural adjustment policies of the eighties and nineties, and contrasting the North thesis with empirical evidence, the new paradigm is that institutions are the key to the economic development of nations. Although the State is who is at the front of institutions is important that the actors within it do not abuse the power they have. In this sense, the institutions involved in the development, mainly the government, should be able to establish and implement the actions aimed at developing the sole purpose of promoting social welfare, without deviating from it.

Equal opportunities between members of society generate a proactive attitude towards the development of their community. This support is important as a basis for development policies in which it is essential to involve members of society.

Finally, it must be emphasized that the strategic importance of institutions in development processes is that it allows reducing transaction and production costs, increase trust between economic actors, encourages entrepreneurship, promotes the strengthening of networks and cooperation between actors and stimulates learning mechanisms and interaction (Rodríguez-Pose, 1998).

5. The relationship of institutions in the development of the Northern Region of Jalisco

From the theoretical framework proposed earlier, it seems appropriate to make a brief analysis of the institutions of the Northern Region of Jalisco. To perform this analysis, it is classified the institutions from the standpoint of economic, political, and social.

6. Economic institutions

According to Jose Antonio Ramirez (quoted in Spiller, 2010) in the North of Jalisco, there is a very negative perception of institutions. Programs to improve the economic status are not supported by the population, and are not driven by the government. A dynamic economic growth must be accompanied by satisfactory margins of equity, equal opportunities and social protection. For this is important citizen participation in decisions through public consultations by the institutions. Not only must prepare a development plan based on figures and numbers but must include the assessed needs from the point of view of society to engage in the process and get better results.

To mention one case, one of the main problems of the North Zone (80% of municipalities) is excessive logging and second loss of vegetation by wildfires. Knowing that natural resources of the North Zone are potential resources to promote development, the loss of these is a major challenge for the authorities who lack more strongly authority to regulate this situation. The figures do not lie. The municipalities of Colotlán, Bolaños, Huejúcar, Huejuquilla, Mezquitic, San Martin de Bolaños, Totatiche and Villa Guerrero mainly are most affected (PED, 2030, p.95). It is important that the competent authorities consider the use of natural resources, as they may give rise to an endogenous development. That is, if the local community is able to lead the process of structural change, it is possible a local endogenous development process (Vázquez Barquero, 2000).

A proposal to promote economic growth from the perspective of endogenous development would be to promote ecotourism as a strategy for the promotion of natural and cultural tourism resources of the region. However, if the authorities are not strong to ensure the preservation of natural resources and vegetation will continue logging the forest, the eco tourist option would not be viable.

In addition to natural resources, another alternative is to look after the cultural attractions such as the activities of the Huichol, mainly handmade crafts which are distinctive to their culture and customs.

The authorities should support the Huichol culture to harness the development and marketing of handicrafts from the perspective of the frame (VRIO) which is a resource-based view that focuses on aspects of value, rarity, imitation and organization resources and capabilities (Peng 2010). In this sense, the crafts have a competitive advantage because they are handmade products and rare by the fact that it is becoming less everyday in cities the presence of indigenous cultures. Here the authorities must act to ensure that these products have a decent payment because it is an activity that creates jobs and is the livelihood of many Huichol families.

8. Political institutions

For many years the academic field of economic theory that studies political systems is the social choice theory, argues that in democracies politicians tend to choose those policies that will bring greater electoral benefits and those that are pressured to take by interest groups with political power (Bandeira, 2009).

The literature indicates that there could be two reasons for inefficiency in meeting development objectives. The first is that the holding of elections every few years leads politicians to give priority to short-term results to the detriment of policy and institutional reforms necessary for economic development, which only produce results in the long term. The second is that stakeholders and interest groups have longer-term goals. They seek to ensure their future income, but also they seek very specific objectives, i.e. that do not benefit the whole society, to reduce costs and increase the benefits of their political action (Olson, 1965).

The governance of a region depends on the actors involved in this process, political parties, government (at all three levels, local, state and federal). So it is important to constantly evaluate the role played by these institutions in the development based on the political system's ability to negotiate stable coalitions, strong policies or the strength of public institutions, the ability of government and social sectors to combine development policies adequately.

According to Jacoby (cited in Chang 2006) underlines the role of legitimacy in the process of institutional change. A new institution cannot function unless it gets some degree of political legitimacy among members of society.

Hence the importance of creating a link between state and society is a matter to work together and strive to develop in the Northern zone of the State of Jalisco. In this regard, it must be recognized that some actions have been taken in order to integrate the inhabitants of the ZNEJ the political process.

For example, in this past political election is an important policy to encourage indigenous people living in the Northern Zone to join the political process. In an article in the Daily Reporter (Author Anonymous, 2012) announced that 2012 is an election year and Jalisco North Zone also would vote because the people do not vote in the traditional way, but with an electronic ballot box, or at least that's what was intended to do the Electoral Institute and Citizen Participation (IEPC).

A community benefited was the San Andreas Cohamiata, or Tateikie, in Wixarica language, which is in the North of the State and the municipality of Mezquitic. To access the community it is invested about 10 hours leaving from Guadalajara. However the IEPC will enable residents of this community and some other North Zone were trained in the use of electronic devices they intended to use on July 1. This is a major effort of the IEPC to help the people of the North, which has a high percentage of indigenous population that could elect their rulers and would be feeling that they are taken into account and also actively involved in the development process.

Finally, note that in the Northern Zone of Jalisco, 9 of the 10 municipalities that make up this area are governed by the National Action Party (PAN). This would imply homogeneity in the ideology of political thought, which should be a reason for the promotion of development within a new efficient administrative framework. It would also be important that the political institutions of the Northern Zone take advantage of shared political ideology and make intergovernmental relations between the municipalities of the region to ensure the joint development of the area.

9. Social institutions

Institutions and society behave dynamically, but at the same time must work harmonized to achieve development goals. As already mentioned, it is important that society is actively involved in development issues. An important form of participation is the evaluation of public policies and programs that are implemented in the Northern Zone with the aim of promoting the development of the region.

However, in the Northern Region there are low levels of education among the population of 15 years. It is known that the population of the Northern Region is one that has less competition for not having completed primary school. 28% of the population aged 15 and older, double the proportion in the state (which is 14.7%), did not complete primary.

Furthermore, four of the municipalities are above the proportion of the region: Santa María de Los Angeles, with 39.9%; Chimaltitán with 35.1%; Totatiche and Huejúcar with 32.5% and 31.3%, respectively (PED, 2030, p.53). These data give a slight overview of the situation in the Northern Zone of Jalisco. It is a high percentage of the population that did not complete primary even so it is unlikely that this proportion of the population with low education can engage actively in development issues in their communities.

However, the development of the Northern region of Jalisco is not of isolated interest. There are already organizations and academics who are constantly concerned about the development of this region. In fact, there is already a social movement that seeks and procures development in this area: On the 9 of June, it was created the Citizens Movement North of Jalisco, with the signing of a constitutive document that was signed by 54 people from different social, economic, cultural and political backgrounds created before the difficulties and with the further concern in the area, and concerned for candidates to local and federal deputies and municipalities mayors generate commitment to the region (Romero, 2009).

The creation of this movement is of vital importance for the development of the region and that NGOs can access the state program development and, in some cases, interact with the public in the development and implementation of policy (Arroyo, 2010).

10. Conclusion

It is important that in the Northern State of Jalisco takes place an institutional change, i.e., an interaction between institutions and organizations to meet the challenges of development in the region. Institutions understood as the rules of the game, are an essential factor in the development process. However, it must be complemented by the organizations. These organizations are political parties, businesses, families, universities, nongovernmental organizations (NGOs), civil organizations, among other actors that can contribute to the development of the region.

The institutions are not created for the sole purpose of promoting the development of society. Organizations also serve the purpose of distributing or consolidate political and economic power.

However, the key for development is that institutions and economic policies promote the welfare of the citizens and not the satisfaction of particular political and economic interests (Bandeira, 2009).

It is important to strengthen the institutions and it must be procured the main objective that seeks the interests and welfare. To achieve this, it must be evaluated the effectiveness of institutions, programs and policies proposed by the government.

Society must be part of this process by actively participating in the evaluation and proposed development plans in the Northern Zone of the State, as it is the same society that meets the basic needs of their own region.

Political organizations such as political parties and governments in the region should strive to develop seeing for the interests of the region and not just issuing proposals in the short term that will guarantee votes and gaining power.

References

- Acemoglu, D. (junio de 2003). Raíz histórica: un enfoque histórico de la función de las instituciones en el desarrollo económico. Finanzas y desarrollo: publicación trimestral del Fondo Monetario Internacional y del Banco Mundial, 40(2). Recuperado de <http://www.imf.org/external/pubs/ft/fandd/spa/2003/06/pdf/acemoglu.pdf>
- Arroyo, D. (2010). La Participación de la Sociedad Civil en el nivel local: experiencias regionales en Argentina. Gestión Cultural Lujan. Recuperado de <http://es.scribd.com/doc/26713466/Participacion-de-La-Sociedad-Civil-en-Desarrollo-Local>
- Bandeira, P. (2009). Instituciones y Desarrollo Económico. Un Marco conceptual. Revista de Economía Institucional, 11 (20). Recuperado de <http://www.economiainstitutional.com/pdf/No20/pbandeira20.pdf>
- Chang, Ha (2006). La relación entre las Instituciones y el desarrollo económico. Problemas Teóricos claves. Revista de Economía Institucional, 8 (14). Recuperado de <http://redalyc.uaemex.mx/pdf/419/41901406.pdf>
- CONAPO (2010). Estimaciones de CONAPO con base en el INEGI, Censo de Población y Vivienda 2010, Principales resultados por localidad.
- Autor anónimo (18 de mayo 2012).. Llevan la urna electrónica a la zona wixárica. Diario el informador. Recuperado de <http://www.informador.com.mx/jalisco/2012/377020/6/llevan-la-urna-electronica-a-la-zona-wixarica.htm>

- Diez J. (Mayo, 2004). Transformaciones en la gestión municipal: el caso latinoamericano. Ciencia para el desarrollo, grupo economía y región, (6). Recuperado de <http://www.economiayregion.com.ar/pdf/documento%20de%20trabajo-JDIEZ.pdf>
- IDH (2009). Informe sobre Desarrollo Humano Jalisco que refiere a estadísticas del periodo 2000-2005.
- INEGI (2012). Perspectiva estadística Jalisco. Marzo 2012.
- INEGI (2010). Principales resultados del Censo de Población y Vivienda 2010. Jalisco
- Martínez, J. (2007). Las instituciones y el desarrollo económico un análisis breve. Observatorio de la Economía Latinoamericana, (Vol 73). Recuperado de <http://www.eumed.net/cursecon/ecolat/mx/>
- North, D.C. (1990). Institutions, Institutional Change and Economic Performance, Cambridge University Press, Cambridge.
- North, D. C. & Thomas, R. (1973). The Rise of the Western World. A New Economic History. Cambridge University Press.
- Olson, M. (1965). The Logic of Collective Action, Cambridge, Harvard University Press.
- PED (2030). Plan Regional de Desarrollo del Estado de Jalisco, Región Norte, 2030.
- Peng, M. (2010). Estrategia Global. Ed. CENGAGE Learning. Apalancando los recursos y las capacidades (pp. 71).
- Rodríguez P. (1998). Dynamics of regional growth in Europe. Clarendon Press, Oxford.
- Romero, L. (Julio 2009). Dan rumbo al Norte de Jalisco. La Gaceta. UDG. Recuperado de http://www.gaceta.udg.mx/Hemeroteca/paginas/577/G577_COT%209.pdf
- SEIJAL (2012). Sistema Estatal de Información Jalisco.
- Spiller. A (marzo, 2010). El Norte de Jalisco, de los más pobres. La Gaceta. UDG. Recuperado de http://www.gaceta.udg.mx/Hemeroteca/paginas/605/G605_COT%204.pdf
- Vázquez Barquero, A. (2000), Desarrollo económico local y descentralización: Aproximación a un marco conceptual, Santiago de Chile, Comisión Económica para América Latina y el Caribe (CEPAL).

ISEPSS-2089
Individual Values and Economic Development

Judit Kapás

Department of Economics, University of Debrecen, 4028 Debrecen, Kassai street 26.

Hungary

judit.kapas@econ.unideb.hu

Abstract

Recently, the view that culture matters for economic development has gained much ground within institutional economics; scholars have provided us with empirical evidence on the positive effect of culture on economic performance. This evidence shows, in some cases, the overwhelming effect of culture vis-à-vis that of formal institutions (e.g., Williamson 2009). In these investigations, culture is generally measured by the subjective evaluation of those answering the question “Do you think that most people can be trusted?” in the World Values Survey. However, whether an answer to this question really refers to culture has recently been doubted by a growing number of scholars, a problem which goes back to a somewhat ambiguous definition of culture. Another problematic issue here is that these empirical investigations do not rely on an economic theory concerning the effects of culture on economic performance, at least when it comes to the mechanisms through which culture may effect development.

One way to overcome these shortcomings – more importantly the “black box” view of culture as Tabellini (2010) also argued – is to move from general statements about culture (which is the predominant approach in the literature) to a narrower, and consequently more reliable dimension of culture. My argument is that Schwartz’s (2006) theory of cultural value orientations developed in cross-cultural psychology can be fruitfully used for two reasons.

First, this theory relies on *a priori* theorizing about three basic issues that all societies confront, rather than *post hoc* examination of data. Secondly, it captures only one, but an unambiguous, aspect of culture: individual values.

So, in this paper I argue that an analysis of individual values on economic development contributes to a clarification of the effects of culture by “unbundling” culture itself. Using individual values allows me to rely on theories of institutional economics – namely Williamson’s (2000) theory about the levels of institutions and of Boettke et al’s (2008) theory on institutional stickiness – to make hypotheses about their effects on development, and then empirically investigate them.

The main hypothesis is that since individual values belong to the *metis* that acts as the glue, and are the stickiest informal institution, they are *fully* crystallized in the most basic formal institutions of a society, such as the rule of law or the security of property rights. Put differently, formal institutions *are* in harmony with individual values (at the level of embeddedness). The cross-country empirical investigation using the Schwartz Values Survey data on individual values provides evidence for this claim: individual values have no effect on development after controlling for formal institutions, and this result is different from the effect of Hofstede's "individualism", and is very robust.

References

- Boettke, P. J. – Coyne, C. J. – Leeson, P. T. (2008) Institutional Stickiness and the New Development Economics. *American Journal of Economics and Sociology* 67. 2:331-358.
- Schwartz, S. H. (2006) A Theory of Cultural Value Orientations: Explication and Applications. *Comparative Sociology* 5. 2-3:137-182.
- Tabellini, G. (2010) Culture and Institutions. *Economic Development in the Regions of Europe*. *Journal of the European Economic Association* 8. 4:677-716.
- Williamson, C. R. (2009) Informal Institutions Rule: Institutional Arrangements and Economic Performance. *Public Choice* 139. 3.4:371-387.
- Williamson, O. E. (2000) The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economic Literature* XXXVIII. Sep:595-613.

Education IV

Room C

10:40-12:10

Friday, May 9

Session Chair: *Prof. Tetiana Kuchai*

ISEPSS-1904

Peculiarities of Training Future Teachers in Japanese and Ukrainian Universities

Tetiana Kuchai

Bohdan Khmelnytskyi National University

ISEPSS-1748

The Implementation of the Assessment Reform Policy: Issues and Challenges

Jacqueline K S Chan

Hong Kong Institute of Education

ISEPSS-1791

Learner Autonomy and the Nature of Out-of-class English Learning of Highly Proficient Tertiary Students in Hong Kong

Hoi Wing Chan

The Hong Kong Polytechnic University

ISEPSS-1922

The Management of Disabilities Support Services in University in Thailand

Piyarat Nuchpongsai

Mahidol University

Teerasak Srisurakul

Mahidol University

Silvia Correa-Torres

University of Northern Colorado

ISEPSS-2001

A Study of Satisfactions and Needs of Disabilities Support Services in University in Thailand

Teerasak Srisurakul

Mahidol University

Piyarat Nuchpongsai

Mahidol University

Silvia Correa-Torres

University of Northern Colorado

ISEPSS-1725

The Learning Process of Program Planners in Taiwan: the Perspective of Experiential Learning

Chun-Ting Yeh

National Chung-Cheng University

Ya-Hui Lee

National Chung-Cheng University

ISEPSS-1904
Peculiarities of Training Future Teachers in Japanese and Ukrainian Universities

Tetiana Kuchai

Department of pre-primary and elementary education, Bohdan Khmelnytskyi national university at Cherkasy, Cherkasy, Ukraine
E-mail address: tetyanna@ukr.net

Abstract

The article presents a comparative analysis, found similarities and differences in the development of student learning and teacher training at universities in Japan and Ukraine.

The origins of Japanese economic miracle are particularly suited to the training and education of the younger generation, combining western trends with the traditional humanistic educational principles. The Japanese education system, like Ukrainian, has undergone transformation towards humanistic many difficulties due to historical conditions and characteristics of the national mentality. Comparative analysis of the education system in Japan and Ukraine showed similar approaches in the educational process in schools: the structure of schools (primary, basic, senior), the operation of private schools, although there is a difference in the period of training; the use of credit- modular technology that promotes democratization of education; organizational forms of the educational process for the preparation of teachers (lectures, seminars, practical and so on).

Keywords: students, school, teacher, Japan, Ukraine.

1. Introduction

Japanese education is a unique and very peculiar phenomenon. With its unique historical and geographical conditions (insular position of the state, alternating periods of political openness and isolation, alternating influences of Eastern and Western culture), Japan gained special ability to accumulate the best achievements of other countries, adapting them to their own conditions and applying them in a modified "Japan-like" form, i.e. in combination with their own cultural traditions.

The high efficiency of the education system in Japan is primarily the result of its relationship with the national tradition. The Japanese believe that the success of their modern education is the result of the development of the education system, which was created over a hundred years ago and brings up folk traditions, meanwhile, knowledge, wisdom and morality determine the wealth of the nation.

2. The aim of the article

The aim of the article is to provide comparative analysis and to identify similarities and differences in the development of student learning and teacher training at universities in Japan and Ukraine.

3. Analysis of research on the problem

The problem of upbringing and education of children and youth in Ukraine and Japan appeared as the subject of the study by many educators and psychologists in different historical periods: I. Gryschenko, V. Yelmanova, O. Zheleznyak, S. Koretska, G. Kochkina, G. Mykaberydze, A. Ozerska, T. Pavlova, N. Pazyura, T. Sverdlova and others.

4. Comparative analysis of the education system in Japan and Ukraine

The origins of the Japanese economic miracle lie in the particular approach to training and upbringing of younger generation, combining Western humanistic tendencies with traditional educational principles (Свердлова Т.Г., 2004, p. 5).

Despite a thorough study, some aspects of this issue, such as identifying similar and different features in the development of student learning in schools and teacher training needs further reflection.

We find it positive that they extensively study the experience of other countries in Japan. Particular attention is drawn to the fact that innovations, borrowed from other countries, are tried at experimental schools (practical research into the increased activity and motivation of students is carried out).

On the basis of the American experience they use and adapt to the conditions of their education system new forms and methods of learning aimed at detailed observation of the individual achievements of each student to meet his individual needs (Свердлова Т.Г., 2004, p. 188).

Studying the problem of developing Ukrainian education, Ukrainian scientists S. Goncharenko, Yu. Malovanyi consider it necessary to introduce individualization of learning process (Гончаренко С.У., Мальований Ю.І., 1998).

Following the opinion of these scientists, we point out that the trend of individualization is the strong side of the learning process.

Present day task in Ukraine is to modernize the education system, because the future of the state depends largely on it. The education system of Ukraine requires global changes to form a creative, free person with a high level of knowledge and spirituality. Only such a person can make a major contribution to the positive developments in the political, economic and social life in the country. Today education can promote positive change in the fundamental psychological and moral qualities of the people and raising the level of their general culture, it is the foundation of the progressive development of humanity as a whole.

Nature of professional work of teachers in the new environment requires new pedagogical thinking, the values of which are the priority individual creativity over algorithmic one, transition from technical to humanistic approach, learner -oriented paradigm of teacher education.

The Japanese education system, like the Ukrainian one, underwent many difficulties on its way towards humanistic transformation due to historical conditions and peculiarities of national mentality. In order to overcome the difficulties the Japanese teachers have implemented many reforms in elementary school. The latter is worth investigating which will in its turn facilitate the resolution of problems that arise. An important part of training primary school teacher is taking into account the tasks of training and education of students. As N. Davydov stated, in 1992 the Ministry of Education of Japan has introduced an improved curriculum in all grades of primary school (Давыдов Н.И. 1996, p.39). In legislative materials, Ministry of Education formulated the main improvements for the teachers to follow and it also developed guidelines for them, in particular:

- the education of children should be directed towards the formation of such qualities as: the skills of behavior and thoughts introspection, ability for self –made decisions, etc.;
- providing children with the necessary knowledge, facilitating the manifestation of their individuality and differentiation of programs, developing their artistic inclinations and desire for self-education;
- the main form of training - organization of group activities with each student being aware of his role;
- teaching children - to perceive group problems as their own ones;
- increasing the interest of children into the culture and traditions of their country as well as the culture of other countries (Слманова В.К., 1989, p.30).

We believe that the introduction of an integrated course which, according to T. Sverdlova (Свердлова Т.Г., 2004, p. 173), promotes the use of original ideas of each school for the implementation of teaching methods which will in its turn promote the development of students' thinking and ability to solve problem situations. The introduction of integrated course also plays an important role in the future, because at the integrated course classes different skills are formed that will be useful in job search.

Through moral education, the school takes into account random factors which children face every day, for example the Internet. In this case, the teacher has to predict the nature of their actions to neutralize or enhance its educational purposes. This problem bothers teachers in Japan, and Ukraine, as the content of information sites, apart from their value as an important source of information, is often aggressive and translates culture links and moral values which are far from those instilled in Japanese and Ukrainian schools, thus the efficiency of upbringing process gradually decreases. It should be added that in the modern space of Japanese culture and in the information space of the Internet there is a clash of cultural values, which leads to loosening and erosion of national culture, and as a consequence leads to distortions in moral education (Кочкина А.Е., 2005, p.139-140).

The social transformation of modern Ukrainian society is fundamentally linked to the dynamics of the system. A teacher is the main figure, who determines the positive changes in it. There are high requirements to the person and the level of professionalism of the teacher, who works in the XXI century. Primary school teachers should be prepared to flexibly and creatively respond to the social and economic conditions which change rapidly and influence the character of educational activities. A teacher should also strive for continuous education and self-education and be primarily focused on personal development of the growing child.

Only the teacher ready for psychological and educational interactions can teach and educate young generation, raise people to transform the existing hopeless sociocultural situation. That teacher will be able to find new strategies to upgrade the country, ways of building humanistic-oriented educational process at school.

In Ukraine there are changes and transformations in economy, politics, culture, international relations, which necessitate a rethinking of the educational and training process. To solve this problem it may be useful to study the social and educational experience of different peoples, their analysis and comparison, because, as you know, through the knowledge of the single, the private, the special the cognition of the general, finding the similarities between the representatives of different nationalities are held.

Japan is a special "western" type of culture, which is characterized by the maintenance and preservation of cultural norms, values, customs, traditions, techniques and methods of development. This distinguishes the eastern culture from "western" type, the latter is characterized by a change of paradigms of thought alongside with denying the value of the previous era and bringing forth their values and cultural norms that are oriented towards the younger generation (Кочкина А.Е., 2005, p.9).

As noted by G. Kochkina, Japan takes into account that moral culture is a part of culture and is based on the reproduction traditions:

- paternalistic - moral education as a compulsory respect for the elderly;
- religious - moral education as maintaining the authority of faith;
- educational - moral education as a result of the development of scientific knowledge;
- communitarian - moral education as a process of forming a sense of teamwork.

In practice of the reproduction of culture, each of these traditions are organically connected with others. But in the countries of western culture (including Ukraine) the dominant type of culture reproduction is the educational tradition. In countries of eastern culture the paternalistic and communitarian traditions take the first places. Such societies (China, Japan, Vietnam, Korea and others) belong to the "traditional" ones because the main activities there are those of renewal of activity, social structures, life contributions and traditions. The change process occurs so slowly that it seems static.

Western culture, in contrast, is characterized by the dominance of dynamic trends. An example of "dynamic society" may be the countries of Euro-American culture. In the value system of the dynamic society a special place is occupied by rational knowledge and technological progress. However, in this case the educational system is in some way built on the dogmatic type and training the person and his preparation for the future is carried out in accordance with the understanding of the past, that is based on the traditional patterns of culture (Кочкина А.Е., 2005, p.32-34).

So one of the features of teaching children in Ukraine and Japan is that the preference in elementary school in Japan is given to moral education and the organization of extra-curricular activities; moral culture of Japan is based on reproduction tradition and the dominant types of culture reproduction are the paternalistic and communitarian ones.

We see the differences lie in the fact that in Ukraine is focal point in the learning process is the development of logical thinking, analysis, synthesis, making conclusions; the characteristic features of studying in Japan are primarily to imitate or to copy (Кочкина А.Е., 2005, p.138).

All life of the Japanese is determined by their choice of elitarian school and even kindergarten. All children learn to work on the limits of their capabilities, to learn by heart a large amount of educational material, being constantly under the pressure of competition. For the Japanese their educational system remains authoritarian, focused not on the individual personality and social order, which is a significant problem in education in Japan. Uniformity, unification, unity of educational content and educational training direction, until recently, remained the defining characteristics of modern elementary and junior high schools in Japan. Today, scientists and practitioners vigorously discussed the problem of individuality and abilities.

Until recently, in the Japanese language and pedagogy erudition and abilities have been treated equally. And this is clear, because the education system has been focused on the formation and education of performers, obedient functionaries. Today, the Japanese educational media highlight the existence of "an urgent need for a creative person" and having to deal with the identification of gifted children at an early age.

For a Japanese teacher all the children are equal, none of them are strong and weak, but lazy and hardworking, which explains the lack of special programs for both gifted, and lagging behind children (Свердлова Т.Г., 2004, p.155).

It should be noted that the differentiation of schools in Japan is carried out very slowly, due to the fact that the transition to the individualization of learning leads to the rejection of traditional forms and methods of teaching that have evolved over centuries.

The differences are also observed in the education system, particularly in terms of education. Ukraine has an education system that includes the following types of educational institutions where there are teachers:

- Kindergartens – up to 6 years;
- Elementary School - 4 years (grades 1-4);
- Primary school - 4 years (Grades 5-8);
- High school - 3 years (9-11 grades);
- Pedagogic colleges, institutes, universities.
- Also there are gymnasiums, lyceums, colleges, collegiums and private schools.

The education system in Japan is as follows: Primary School - 6 years, secondary education - 6 year, higher education - 4 years (bachelor) + 2 years (master) + 3years (doctor). Six-year education in elementary school is explained by the importance of the Japanese language in the process of education and upbringing of younger generation (Павлова Т.).

Higher education in Japan is received in state, municipal and private institutions, and the private nature of higher education dominates. Here is a brief description of some of the best universities in Japan.

University of Tokyo is a leading research university in Japan and one of the most prestigious universities in the Asian region. In the ranking of the best universities in the world in 2009 according to Times Higher Education it ranks 22nd, and in the Global universities ranking - 3rd place. University of Tokyo offers courses in virtually all disciplines and conducts research across the spectrum of learning activities. For the years of Tokai Daigaku 6 graduates have won the Nobel Prize. The university consists of 10 departments, 11 research institutes, 11 postgraduate schools, 12 graduate schools. All university departments cover an area of 40 hectares. Tokyo University has cooperation agreements with over 200 institutions in 47 countries. Tokyo University is a member of several international organizations, including AEARU (Association of Research Universities of East Asia), APRU (Association of Pacific Universities) and IARU (International Alliance of Research Universities) (University of Tokyo).

Kyoto University is the second largest university in Japan, leading in research. In the Academic Ranking of leading universities «Global universities ranking» Kyoto University ranks 11th and the rating «Times Higher Education-GS Work! University Rankings » - 25th. The National University of Japan consists of 16 high schools, 10 departments, 21 research and educational centres, and 13 research institutes. Academic Exchange Programmes are held with 23 countries. Kyoto University is a member of international associations, including AEARU (Association of Research Universities of East Asia), APRU (Association of Pacific Universities). Today 5 Kyoto University graduates have become Nobel Prize winners (Kyoto University).

The structure of the best private universities in Japan includes primary, junior and senior high schools and even kindergartens. If an applicant has successfully passed all the way from kindergarten to high school in a particular university system, he is admitted to the university without examination. Only when applying to the best private universities the best students in schools, under the relevant quota, take part in the competition "the best from the best" to get a recommendation for admission to the university without examination but through an interview (Грищенко I.M.).

5. Conclusions.

Comparative analysis of teacher training in Ukraine and Japan made it possible to identify similar approaches in the educational process (accumulation of the best achievements of other countries and putting them into practice in conjunction with their own cultural traditions, the structure of schools and universities (to some extent), the use of credit- modular technology, certain organizational forms of the educational process in the preparation of teachers (lectures, seminars, practical classes), the presence of different levels of training) and specific features of teacher training at universities in Japan, which are as follows: priority is given to primary school moral education and organizing extracurricular activities, maintaining and preserving cultural norms, values, customs, traditions and methods of development; imitation and copying are characteristic features of teaching in Japan. We believe that summarizing the experience of Japan, revealing its modern progressive ideas and creative use of the latter in Ukraine under the circumstances of the integration of Ukraine into the international educational space will improve the training of primary school teachers in Ukraine.

References

1. Свєрдлова Т.Г. Теоретичні засади процесу гуманізації освіти в Японії. Дис.... канд. пед. наук. – Київ, 2004. - 216 с.
2. Гончаренко С.У., Мальований Ю.І. Соціально-педагогічні проблеми розбудови української школи // Рідна школа, 1998. – С. 12-19.
3. Давыдов Н.И. Зарубежные системы образования (США, Япония, Великобритания, ФРГ, Франция) под ред. Круглова Ю.Г. – М.: Изд-во МГОПУ, 1996. – С. 37-60.
4. Єлманова В.К. Высшее образование за рубежом (США, Великобритания, Франция, ФРГ, Япония, Китайская народная республика). – Л., 1989. – 50 с.
5. Кочкина А.Е. Формирование нравственных качеств личности в традиционной системе воспитания (на примере Японии). Дис.... канд. пед. наук – Карачаевск, 2005. – 155 с.
6. Павлова Т. Традиції та реформи сучасної Японської школи. URL : <http://osvita.ua/school/theory/1021/>
7. University of Tokyo URL : <http://infostudy.com.ua./universities/university-tokyo/>
8. Kyoto University URL : <http://infostudy.com.ua./universities/kyoto-university/>
9. Грищенко І.М. Стани та особливості управління вищою освітою в Японії. URL : <http://www.yourdatabase.org.ua/obshhestvo/stan-ta-osoblivosti-upravlinnya-vishho-yu-osvityu-v-yaponi%D1%97.html>

ISEPSS-1748

The Implementation of the Assessment Reform Policy: Issues and Challenges

Jacqueline K S Chan

Hong Kong Institute of Education

jaclo@ied.edu.hk

Abstract

A new assessment policy which draws on the framework of assessment for learning (AfL) was implemented in Hong Kong to promote a new assessment system and change the prevailing examination-focused culture in schools. The implemented policy was intended to be a mutually-adapted process whereby school policy makers and teachers adapted the central government policy and enacted the new assessment system in their local contexts. It is against such a background that this paper has been developed in exploration of the policy implementation in Hong Kong. Six primary schools were chosen as cases for investigation of their adoption of the new framework of AfL in the local contexts. The results showed how the central government policy has been interpreted and mediated by contextual and individual factors in light of the implemented policy. Implications are drawn from this study for ongoing policy implementation issues.

ISEPSS-1791

Learner Autonomy and the Nature of Out-of-class English Learning of Highly Proficient Tertiary Students in Hong Kong

Hoi Wing Chan

Division of Communication and Social Sciences, Hong Kong Community College,
The Hong Kong Polytechnic University, Hong Kong
Email: cchwchan@hkcc-polyu.edu.hk

Abstract

Learner autonomy can be fostered and developed through out-of-class learning (Oxford, 2003). Out-of-class learning is important for language learning but opportunities for using English in Hong Kong, which is Cantonese-dominated, are perceived to be limited (Chik, 2008; Hyland, 2004). By way of a survey, language learning journals, semi-structured interviews, six highly proficient Hong Kong tertiary students of English provided a retrospective account of their English learning experiences, revealing the nature of control of their out-of-class activities and the obstacles when taking part in them. This paper reports on the qualitative phase of the study, focusing on the autonomous interactions with international students on university campus. Based on the study results, suggestions on how to help students overcome constraints and make better use of out-of-class speaking opportunities will be given.

Keywords: learner autonomy, self-directed learning, lifelong learning, out-of-class learning, second language acquisition

1. Introduction: Literature Review

1.1 Learner Autonomy and Out-of-class Learning

Learner autonomy has become a popular area of inquiry in the field of second language teaching and learning (Little, 2007, 2008). According to Holec (1981), autonomous learners should have the ability and responsibility to decide the aims of learning, define the learning content and their progress, choose the appropriate methods to learn, monitor their learning process, and finally, evaluate their learning outcome. Early approaches to learner autonomy focus on learners' independent learning behaviour (e.g. Dickinson, 1987) but it does not necessarily exercise learners' ability and responsibility (Gardner & Miller, 2011; Smith, 2008). Little (1991) then drew researchers' attention to learners' ability to reflect and act independently. For students who are immersed in a teacher-directed learning environment, psychological reconditioning is necessary (Benson, 2010).

Conceptualizing learner autonomy as a multidimensional construct, Benson (2011b) referred it as students' control of learning context, learning behaviour, and psychology of learning. Yet, it is stringent to demand students to exercise control of all learning aspects. To address the influence of other parties, Benson (2010) further proposed a multi-control model to study the nature of control (e.g. attentional process, degree of participation) from three dimensions, i.e. student control, other control, and no control.

Out-of-class learning can help learners' develop learner autonomy (Benson, 2011b; Oxford, 2003) and improve their language proficiency (Norton & Toohey, 2001; Reinders & Loewen, 2013). Benson (2001, 2011b) categorized out-of-class learning into three types: "self-instruction" (with a sole purpose of language learning), "naturalistic learning" (with minimal attention to language learning), and "self-directed naturalistic learning" (creation of communication opportunities with the intention of language learning). Self-directed naturalistic learning is the common form, in which learners enjoy interest-based activities and learn the language simultaneously (Benson, 2001, 2011b). English-medium entertainment, social networking in globalized online space (e.g. video/picture sharing sites), and social learning (e.g. communicating with friends and family in the target language) have attracted researchers' attention (Benson & Chan, 2010; Chik, 2011). In particular, Gan (2009) and Palfreyman (2011) studied how language learners sought out speaking opportunities in their social circle (e.g. Internet-mediated communities, family and friends).

1.2 Autonomy and Out-of-class Learning in Hong Kong

To promote learner autonomy, Hong Kong secondary schools and universities have adopted student-centered, communicative pedagogical practices, self-learning language centres, and self-directed learning programmes (Curriculum Development Council and Hong Kong Examinations and Assessment Authority, 2007; Morrison, 2008). Studies on self-directed programmes showed that most participants were positive towards learner autonomy (e.g. Hafner & Miller, 2011; Toogood & Pemberton, 2007). However, in a study of 508 tertiary students, Chan, Spratt, and Humphreys (2002) argued that most local learners performed little actual autonomous practice and assumed weak responsibility for their own learning. In a study comparing Chinese and Hong Kong tertiary students' learning behaviour, Gan (2009) also agreed that local students had a lower sense of responsibility and failed to carry out autonomous practices as they wished. Mainly instrumentally motivated, most local learners face learning constraints like lack of motivation, heavy reliance on teachers, school workload and few autonomous learning experiences (Chan et al., 2002). They seldom carry out non-required English learning tasks (Gan, 2009; Humphreys & Spratt, 2008; Hyland, 2004).

In the qualitative phase of Hyland (2004)'s study on out-of-class learning, eight participants who were English Education majors, further revealed that the personal context and identity (e.g. afraid of making mistakes, reticence and anxiety, work and study environments, being an English teacher and ethnic Chinese) and socio-political dimension (e.g. higher status of English, being regarded as arrogant) prevented them from using the language in out-of-class situations, particularly, speaking English among Cantonese speakers. Most local learners of English are not eager to take up readily available English learning opportunities (e.g. English TV programmes, movies, international students), especially speaking, in the non-required, out-of-class context; some even deny themselves the opportunities to speak English (Chik, 2008; Flowerdew & Miller, 2008; Hyland, 2004; Pill, 2001).

Investigating their limited out-of-class activities, several studies revealed that local students engaged more in receptive (e.g. listening, reading) than productive activities (e.g. speaking, writing) (Hyland, 2004; Littlewood & Liu, 1996; Pill, 2001; Yap, 1998); more in private work than public use of the language (Hyland, 2004). However, in Flowerdew and Miller's (2008) study, by exercising agency, the learner's ability to act and make changes to the environment (Ahearn, 2001), three local learners were able to overcome the constraints arising from social structures, family, and school and open up previously neglected opportunities to learn English (e.g. reading sports news, talking to foreign clients at work, emailing friends and family members in English). This study contended that learning opportunities, including speaking, were available in the local context but the role of learner autonomy in governing out-of-class practices and overcoming constraints need to be further explored. The paper will report on how a group of highly proficient learners of English struggled to take up learning opportunities in the out-of-class setting at university, with a focus on speaking affordances offered by international students. While most tertiary students use English most often and spend most of their private time on campus, the paper hopes to shed light on ways to make better use of the out-of-class speaking opportunities in their immediate learning environment and strengthen learner autonomy.

2. METHODOLOGY

2.1 Data Collection and Analysis

The paper focuses on part of the findings of the qualitative phase of a mixed-method, qualitative multiple-case design study (see Chan 2012 for the full report of the author's study). In the first phase, a survey helped select six highly proficient case participants from 78 proficient tertiary English learners who majored in English or English education (see Chan 2011 for the results of this phase). Good language learners tend to engage more in out-of-class learning (Oxford & Lee, 2008; Rubin, 1975, 2008). In the qualitative phase, the six case participants took part in two semi-structured interviews in Cantonese, which was

their first language. They were asked to reflect on their autonomous English learning experience during secondary and tertiary levels and attitudes towards autonomous, out-of-class practices. They were also asked to record the types, focused language skills, and reflection of their autonomous practices in two language learning journals in English. The two interviews were transcribed and word-processed. The data in the survey, interview transcripts, and the language learning journal were coded and analysed by thematic approach to identify categories and themes (Hood, 2009; Pavlenko, 2007).

2.2 Profiles of the Case Participants

Through purposeful sampling, locally educated, Hong Kong born, native Cantonese-speaking participants who were highly proficient in English were invited to join the study. Six participants, Ada, Carl, Elsa, Jo, Mandy, and Terry (pseudonyms) (four females and two males) were aged 20-21. They all obtained Grade B (or, Level 5) or above in the English language examination in the Hong Kong Certificate of Education Examination (HKCEE) and in the Use of English (UE) examination in Hong Kong Advanced Level Examination (HKALE). In the survey, they rated themselves as “very fluent” to “fluent as a native speaker,” reported a high level of perceived responsibility and ability to learn English, and reported a high degree of participation in out-of-class English activities. At the time of the study, they were English or English language education majors, in their second year of attendance. In the following sections how the case participants sought out chances to practise English with international students will first be discussed, followed by pedagogical implications for ways to maximize out-of-class learning and strengthen learner autonomy.

3. Results and Discussion

3.1 The Case Participants’ English Learning Environment at University

Six case participants studied in the same university while three of them, Ada, Elsa, and Terry, enrolled to an inter-institutional programme. In this Cantonese-dominant society, speaking English, which was an elite language, with Cantonese speakers is odd (Hyland, 2004). Although the medium of instructions of their major courses were English, it was used only when they conducted course-based assessments and discussions. They usually code-mixed in daily activities. International students on campus are then perceived as a more legitimate chance for local learners to engage in authentic conversations in English (Evans & Morrison, 2011). The two universities that the case participants attended encouraged inter-cultural exchanges through informal activities and at hall of residence. However, most tertiary students chose not to take up these learning opportunities. Not surprisingly, only four case participants took up the chances during their two years of university education. The following section will discuss how the case participants struggled to make use of the speaking opportunities with international students in the university, in relation to learner autonomy.

3.2 Interactions with International Students

3.2.1 Jo and Mandy: Informal Occasions

Only Jo and Mandy socialized with international students in a non-required, informal situation. Both of them saw their intercultural experiences as autonomous practices. Previously a passive secondary school student who was afraid of initiating chats with her Native English-speaking Teacher (NET) and her classmates in English, Jo actively made friends with an American-born Chinese international student whom she met in a tutorial class. They sometimes had lunch together at the school canteen and chatted about their daily lives. Jo disclosed that her intercultural experience with her NET at secondary school helped her understand that people from different cultures were all equal. This prepared her to seek out speaking opportunities with the international student with lower anxiety. At university, she saw the social interactions as “[her] method to learn” (Jo, interview 2) and developed a sense of ownership of her English learning based on her initiation of chats. Such a drastic change in learning behaviour was sustained by her “grown-up” identity (van Lier, 2010), which entailed a pressing need to face the world and motivated her to take steps to improve English:

I think now I am studying in the university and I am a grown-up. I have to seize the chance actively to interact with others, especially people living abroad. When I leave the university, I may not have chances to meet foreigners. So now, I have the chance and there are people living abroad around me. And, I have to seize the chance. (Jo, interview 2)

Mandy, another case participant, was a more active learner who had opened up speaking chances with English-speaking foreigners in the local community (e.g. initiating a chat when she was waiting for a bus) when she was a high school student. At university, Mandy met a group of local friends who loved interacting with international students too. With a lower psychological burden (e.g. being found arrogant), she initiated chats with international students in the campus canteen:

I tried talking with exchange students whom we didn't know. We, three of us (Mandy and her friends), joined the same table and we initiated talk with an international student eating alone. In fact, the international student had occupied a seat first and we spotted the student sitting there. So, we sat opposite to the student. (Mandy, interview 2)

As part of her autonomous learning plan, interacting with foreigners brought her both language enhancement and intercultural experiences. However, residing in a hostel with few English-speaking non-local hall-mates, she chose not to approach them actively. She explained:

In the hostel, our lives are group-based. We, local students always play among ourselves and non-local students seldom join us. Thus, the non-local students will not appear in our group. If they joined our activities, I must have made friends with them ... (Mandy, interview 2)

In the hostel, not all of the people welcome “speaking English.” They may not speak English well; they may not like communicating with foreigners. There was a funny incident. We maintained a practice of having a dinner with all hall-mates at the beginning of each academic year. There were international students. After they had occupied a table, no one joined that table afterwards. (Mandy, interview 2)

The out-of-class context was not always encouraging. She disclosed that the social sanctions against using English in the Cantonese-dominant hostel frustrated her desire to make friends with the international students. Her avoidance behaviour resulted from social sanctions was in contrast with her active exploration of speaking chances with international students eating in the canteen. Mandy met a local friend who was residing in a hostel which accommodated local, mainland Chinese, and overseas students in equal proportion. To respond to the constraint, Mandy shifted her effort to this international hostel and gained the chance to speak English in a pressure-free environment where English is the lingua franca:

I have the feeling that once I step into the I-house (international hostel), I will speak English to everyone, including Chinese students. There are a lot of students who look like a Chinese, for example, Malaysian, or some American-born Chinese. It is very natural for me to switch to English. (Mandy, interview 2)

The context-based hall culture and communal interest might affect individual choice and action (Yang & Chau, 2011; Watkins & Biggs, 2001). Being flexible, Mandy chose to invest in the international hostel where the social sanctions were absent.

3.2.2 Carl and Terry: Formal Encounters

Two other case participants met international students in some more formal or institution-organized occasions. By contrast, Carl and Terry saw the interactions as speaking opportunities more than autonomous practices.

As a sports team member, Carl helped an international student with translation when they were having sports training sessions conducted in Cantonese. He offered help when the instructor asked for assistance in translation because he wanted to “maximize the chances of using English.” Also, he found speaking English with classmates “pressure-free” (Carl, interview 2).

Carl, a highly proficient learner but self-perceived weak at speaking, always wanted to improve his speaking skills. Sometimes, he encountered difficulties in using the spoken language in daily activities. As he wanted to be an all-round English user who was good at both writing and speaking, he reflected on his own learning and drew on the positive experience of his sister who studied abroad to empower himself:

Then I also refer this experience to my sister's case. My sister's English is not good but she can live abroad for such a long time. It is because she has a greater exposure to English. It is very valuable to have such chances for me to speak in English. Also, my sister knows that her grammar is poor. She just simply ignores it as long as others can understand. She has the courage to do so. I hope that I can have the courage. If I have the courage, in addition to my accuracy, then it will be good. (Carl, interview 2)

Carl viewed the interactions as additional chances for him to practise and a way to achieve his goal of being an all-round English user. He divulged that as he did not actively create the chance to communicate, he did not see his practice autonomous.

However, Terry had rather frustrating experiences with international students whom he met in a course and in his hostel. He worked with an international student from Holland, Natasha (a pseudonym) in a group project. Before working with Natasha, Terry valued social learning and hoped to maximize authentic interactions with international students:

I did expect something as I had not worked with international students before. I did value socializing chances with different people. I wanted to experience more and see what would have happened. (Terry, interview 2)

In reality, the difficulty in working with international students in a coursework was beyond language barriers. To Terry, "it was not the problem of language but cultural difference." Terry and his group mate, another local classmate, were bothered by Natasha's style of work:

We didn't have any consensus among Natasha and the two of us. She is a strong girl who insists on her own way. It took us time to explain to her in a language we are not familiar with so it cost us a lot of time. Then she didn't find the grouping (of findings) appropriate and suggested grouping them again. I found that it was very funny. (Terry, interview 2)

His "we" (Terry and the group mate) and "she" (Natasha) mindset showed his perceived cultural differences (Kramsch, 2002). Terry simply ignored the effectiveness of suggestion given by Natasha. His perception towards cultural difference, perhaps, was built on his

unpleasant experience with his hall-mate, an American-born Chinese English tutor. Although he wished to seek out speaking opportunities with his hall-mate, the tutor was busy with teaching and hall functions. Most important, the hall-mate sometimes made their flat dirty. The daily chaos pushed Terry to invest in private tutoring with lower-form students to gain speaking chances instead of joining intercultural activities on campus.

3.3 Discussion and Analysis

According to the notion of “taking control” (Benson, 2010, 2011a; Holec, 1981), Carl and Terry carried out an autonomous task. They assumed a certain degree of control of their own learning by taking up speaking opportunities offered by international students. However, they divulged that did not see the interactions autonomous because they only took up the learning opportunities available in the formal settings organized by their institutions. In these voluntary participation in other-initiated activities, they did not create opportunities to talk with international students in non-required social situations; thus they did not assume a high degree control of the speaking activities. Instead, Jo and Mandy actively initiated chats with international students and they saw the speaking activities as “self-initiated”. Thus, Carl and Terry, Jo and Mandy, developed a different sense of ownership of English activities, leading to differences in their perceived level of autonomy. The self-initiated out-of-class use of English for non-required, social purposes afforded a stronger sense of autonomy. Perceived personal choice of initiation plays an important role in understanding learner autonomy. While institutional intervention is common in terms of providing learning resources, social learning with minimal institutional intervention can be an autonomy-strengthening type of learning in which learners can feel that they assume a higher level of control and thus ownership of self-initiated activities (Benson & Reinders, 2011; Palfreyman, 2011).

International students on campus are regarded as an immediately available and less social image threatening (e.g. free from being regarded as arrogant) learning resource (Evans & Morrison, 2011). Nonetheless, the issue of taking up intercultural affordances was more than language proficiency. As seen in the cases of Mandy and Terry, cultural/context-bond barriers like social sanctions (Li, 2011; Lin & Man, 2009), hall culture, and different living habits interacted with personal choices (e.g. autonomous plan, language learning), resulting in different patterns of participation. Mandy’s opinion on the availability of international students illustrated the role of agency:

(At university,) there are international students whose first language is not English, for example, Taiwanese. We can also use English with them. It depends on whether you want to communicate with others in English. Surely, I am an English major (and I want to do so). For students who are not English majors, they can avoid using English except working on assignment. However, for a business student, there are a lot of exchange students in their

programme. You attend the same classes and work with them on different projects. There must be more chances to use English. It depends on whether you are willing to take advantage of them. Opportunities are there; if you pay attention and if you act on them. (Mandy, interview 2)

To Mandy, affordances were available for all students. Agency, the active role to act, manipulate, and respond to the environment (Cervatiuc, 2009; van Lier, 2007), is key to taking up learning resources. Thus, facing the same constraints as other local learners, some case participants could manage to take up the intercultural affordances.

However, all case participants did not maintain such intercultural contacts or friendship as a long-term practice. In most cases, they were occasional or semester-based. At secondary school, most case participants practised the spoken language (e.g. private tutorial, talking to classmates) mainly for achieving a good grade in examinations. At university, the influence of parents and examination subsided, the case participants thus needed to find a new goal to sustain their language learning. The case participants struggled to reformulate their learning plans and goals, undergoing psychological reconditioning (Benson, 2010). Jo and Carl attached a personal meaning to their taking up of intercultural, speaking affordances (being a grown-up, being an all-round English user) and strengthened their sense of responsibility, which is essential to learner autonomy (Holec, 1981). On the other hand, Carl, Ada, and Elsa found initiating conversations with international students for social purpose pretentious and they needed a more instrumental, formal reason to start and maintain the interaction:

There are no problems at all even if I don't find any foreign friends. I don't have the motivation. I won't just meet a friend by random. I must meet friends in some occasions. I will not join some activities for meeting new friends [...] It is meaningless to do so. I think it is too pretentious. (Carl, interview 2)

First, I find it strange to meet foreigners with no particular purposes. I don't find any situations where I can meet them. Also, temporarily I don't see the need for meeting any. (Ada, interview 2)

It is very strange for me to approach them suddenly. (Elsa, interview 2)

At secondary school, Carl, Ada, and Elsa lacked intercultural experiences in the social setting. As seen in the cases of Jo and Mandy, acting on speaking, cultural affordances at secondary school (e.g. interacting with NETs or English-speaking tourists) helped them develop the skills necessary for opening up learning opportunities in informal contexts.

At the tertiary level, the case participants were aware of the availability of international students on campus. In accord with the findings in Flowerdew and Miller's (2008) study, at university, their investment decision was determined by their agency to satisfy their personal preference and learning agenda. This may help explain why some case participants rejected to take up speaking affordances with international students in some events but invested in other occasions where they felt more comfortable (e.g. private tutoring, joining activities in an international hostel). They all understood that the avoidance of taking up learning opportunities was a huge barrier to greater learner autonomy. As highly proficient learners, they also realized that they were not very autonomous and still struggled to maximize learning affordances in the environment.

4. Implications and Conclusion

At the tertiary level, as institutional and parental forces subsided, some case participants strived to improve their English ability in order to achieve their personal goals (e.g. to become an all-round English user, to become a grown-up). Facing constraints, they struggled to invest in autonomous practice in the form of self-initiated speaking activities and voluntary participation in other-initiated activities. They started to understand more about target language interactions in relation to learner autonomy (Little, 2007, 2008). However, autonomous English medium social interactions did not take up a considerable part of their learning. Their learner autonomy just started to grow. The following section will provide suggestions on ways to strengthen learner autonomy. They will also shed light on the pedagogical practices for learners in other Asian contexts who are also instrumentally motivated.

Students immersed in teacher-directed/examination-oriented learning must explore their own personal or career goals to fill the gap of lack of motivation and responsibility. When students complete their higher education, English learning is then a lifelong investment, which needs to be sustained with strong reflectivity and ability to act (Benson, 2010). At university, they should understand the importance of English in their future workplace and use the language as a means of communication (Flowerdew & Miller, 2008). Tertiary institutions should strengthen career and life education to help students, especially freshmen, review their learning path and set future goals.

Local tertiary students should gain more intercultural communicative experiences through intercultural activities in which the interactions are more legitimate and comfortable (free from the anxiety of being regarded as pretentious). Tertiary students can then experience using English as a means of communication and strengthen learner autonomy.

To strengthen students' learner autonomy, tertiary institutions can mix international and local students in informal, student-led organizations and gatherings so as to increase local students' exposure to student-initiated cross-cultural activities.

The present study found that the learner autonomy of the highly proficient case participants only started to build up halfway through their university education. Future studies should focus on how to help local learners understand learner autonomy at the secondary level so as to prepare them for more self-directed learning environment at university.

References

- Ahearn, L. M. (2001). Language and agency. *Annual Review of Anthropology*, 30, 109-137.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. Harlow, England: Longman.
- Benson, P. (2010). Measuring autonomy: Should we put our ability to the test? In A. Paran & L. Sercu (Eds.), *Testing the untestable in language education* (pp. 77-97). Bristol: Multilingual Matters.
- Benson, P. (2011a). Language learning and teaching beyond the classroom. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom* (pp.7-16). Basingstoke, Palgrave Macmillan.
- Benson, P. (2011b). *Teaching and researching autonomy in language learning* (2nd ed.). Harlow, England: Longman.
- Benson, P., & Chan, N. (2010). TESOL after YouTube: Fansbbing and informal language learning. *Taiwan Journal of TESOL*, 7(2), 1-23.
- Benson, P., & Reinders, H. (2011). Introduction. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom* (pp.1-6). Basingstoke, Palgrave Macmillan.
- Cervatiuc, A. (2009). Identity, good language learning, and adult immigrants in Canada. *Journal of Language, Identity, and Education*, 8, 254-271.
- Chan, H. W. (2012). *Learner autonomy, agency, and affordances: Multiple case studies of the out-of-class English learning of highly proficient university students in Hong Kong* (Doctoral dissertation). The Chinese University of Hong Kong, Hong Kong.
- Chan, W. H. W. (2011). Learner autonomy and the out-of-class English learning of proficient students in Hong Kong. *The International Journal of Learning*, 17(11), 45-62.
- Chan, V., Spratt, M., & Humphreys, G. (2002). Autonomous language learning: Hong Kong tertiary students' attitudes and behaviours. *Evaluation and Research Education*, 16(1), 1-18.
- Chik, H. A. (2008). *How experience shapes individual differences among second language learners: A biographical study of Hong Kong learners in five age groups* (Doctoral dissertation). Retrieved from <http://sunzi.lib.hku.hk/hkuto/record/B39848784>

- Chik, A. (2011). Digital gaming and social networking: English teachers' perceptions, attitudes and experiences. *Pedagogies: An International Journal*, 6(2), 154-166.
- Curriculum Development Council and Hong Kong Examinations and Assessment Authority. (2007). *English language curriculum and assessment guide (Secondary 4-6)*. Hong Kong: Government Logistics Department.
- Dickinson, L. (1987). *Self-instruction in language learning*. Cambridge: Cambridge University Press.
- Evans, S., & Morrison, B. (2011). The student experience of English-medium higher education in Hong Kong. *Language and Education*, 25(2), 147- 162.
- Flowerdew, J., & Miller, L. (2008). Social structure and individual agency in second language learning: Evidence from three life histories. *Critical Inquiry in Language Studies*, 5(4), 201-224.
- Gan, Z. (2009). 'Asian learners' re-examined: An empirical study of language learning attitudes, strategies and motivation among mainland Chinese and Hong Kong students. *Journal of Multilingual and Multicultural Development*, 30(1), 41-58.
- Gardner, D., & Miller, L. (2011). Managing self-access language learning: Principles and practice. *System*, 39, 78-89.
- Hafner, C. A., & Miller, L. (2011). Fostering learner autonomy in English for Science: A collaborative digital video project in a technological learning environment. *Language Learning & Technology*, 15(3), 68-86.
- Holec, H. (1981). *Autonomy and foreign language learning*. Oxford: Pergamon.
- Hood, M. (2009). Case study. In J. Heigham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 66-90). Hampshire: Palgrave Macmillan.
- Humphreys, G., & Spratt, M. (2008). Many languages, many motivations: A study of Hong Kong students' motivation to learn different target languages. *System*, 36, 13-335.
- Hyland, F. (2004). Learning autonomously: Contextualising out-of-class English language learning. *Language Awareness*, 13(3), 180-202.
- Kramsch, C. (2002). Introduction: "How can we tell the dancer from the dance?". In C. Kramsch (Ed.), *Language acquisition and language socialization: Ecological perspectives* (pp. 1-30). New York: Continuum.
- Li, D. C. S. (2011). Improving the standards and promoting the use of English in Hong Kong: Issues, problems and prospects. In A. Feng (Ed.), *English language use and education across Greater China* (pp. 95-113). Clevedon: Multilingual Matters.
- Lin, A. M. Y., & Man, E. Y. F. (2009). *Bilingual education: Southeast Asian perspectives*. Hong Kong: Hong Kong University Press.
- Little, D. (1991). *Learner Autonomy I: Definitions, issues and problems*. Dublin: Authentik.
- Little, D. (2007). Language learner autonomy: Some fundamental considerations revisited. *Innovation in Language Learning and Teaching*, 1(1), 14-29.

- Little, D. (2008). Knowledge about language and learner autonomy. In J. Cenoz & N. H. Hornberger (Eds.), *Encyclopedia of language and education* (2nd ed., Vol. 6, pp. 247-258). New York: Springer.
- Littlewood, W., & Liu, N. F. (1996). *Hong Kong students and their English*. Hong Kong: Macmillan.
- Morrison, B. (2008). The role of the self-access centre in the tertiary language learning process. *System*, 36, 123-140.
- Norton, B., & Toohey, K. (2001). Changing perspectives on good language learners. *TESOL Quarterly*, 35(2), 307-322.
- Oxford, R. L. (2003). Toward a more systematic model of L2 learner autonomy. In D. Palfreyman & R. C. Smith (Eds.), *Learner autonomy across cultures: Language education perspectives* (pp. 75-91). New York: Palgrave Macmillan.
- Oxford, R. L., & Lee, K. R. (2008). The learners' landscape and journey: A summary. In C. Griffiths (Ed.), *Lessons from good language learners* (pp. 306-317). Cambridge: Cambridge University Press.
- Palfreyman, D. M. (2011). Family, friends, and learning beyond the classroom: Social networks and social capital in language learning. In P. Benson & H. Reinders (Eds.), *Beyond the language classroom* (pp.17-34). Basingstoke, Palgrave Macmillan.
- Pavlenko, A. (2007). Autobiographic narratives as data in applied linguistics. *Applied Linguistics*, 28(2), 163-188.
- Pill, T. J. H. (2001). *Adult learners' perceptions of out-of-class access to English* (MA thesis). Retrieved from <http://sunzi.lib.hku.hk/hkuto/record/B3194517X>
- Reinders, H. & Loewen, S. (2013). Autonomy and language learning behavior: The role of student initiation and participation in L2 Classrooms. *Study in English Language Teaching*, 1(1), 1-7.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9(1), 41-51.
- Rubin, J. (2008). Reflection. In C. Griffiths (Ed.), *Lessons from good language learners* (pp. 10-15). Cambridge: Cambridge University Press.
- Smith, R. (2008). Learner autonomy. *ELT Journal*, 62(4), 395-397.
- Toogood, S., & Pemberton, R. (2007). Support structures for self-access learning. In A. Barfield & S. H. Brown (Eds.), *Reconstructing autonomy in language education: inquiry and innovation* (pp. 180-195). New York: Palgrave Macmillan.
- van Lier, L. (2007). Action-based teaching, autonomy and identity. *Innovation in Language Learning and Teaching*, 1(1), 46-65.
- van Lier, L. (2010). Foreword: Agency, self and identity in language learning. In B. O' Rourke & L. Carson (Eds.), *Language learner autonomy: Policy, curriculum, classroom* (pp. ix-xviii). Switzerland: Peter Lang.

- Watkins, D. & Biggs, J. B. (2001). The paradox of the Chinese learner and beyond. In D. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 3-23). Hong Kong: Comparative Education Research Centre: The University of Hong Kong and the Australian Council for Educational Research Ltd.
- Yang, M., & Chau, A. W. L. (2011). Social involvement and development as a response to the campus student culture. *Asia Pacific Education Review*, 12(3), 393-402.
- Yap, S. S. L. (1998). *Out-of-class use of English by secondary school students in a Hong Kong Anglo-Chinese school* (MA thesis). Retrieved from <http://sunzi.lib.hku.hk/hkuto/record/B31944954>

ISEPSS-1922

The Management of Disabilities Support Services in University in Thailand

Piyarat Nuchpongsai^{a,*}, Teerasak Srisurakul^b, Silvia Correa-Torres^c

^aMahidol University, Ratchasuda College, Salaya, Nakornpathom, Thailand

E-mail: npiyarat@yahoo.com, piyarat.nuc@mahidol.ac.th

^bMahidol University, Ratchasuda College, Salaya, Nakornpathom, Thailand

E-mail: tum_nfe@live.com

^cUniversity of Northern Colorado, School of Special Education, USA

E-mail: silvia.correa-torres@unco.edu

Abstract

Since Thailand has declared the Education Acts for persons with disabilities in 2008 which describes the right of persons with disabilities to study in school from kindergarten until university supporting the tuition fees from government, the Office of Higher Education Commission began to encourage universities to arrange the Disabilities Support Services (DSS) by providing training program for universities faculties and staffs and also support some budget for the universities which there are at least 10 students with disabilities to set up the DSS center. In 2013, there are 31 universities provide the services for students with disabilities in Thailand and those services have face with the trouble about services management. As the result of an interviewing the universities administrators and DSS staffs, each universities have different ways to manage the services including organization structure, universities policy, accepted persons with disabilities to study, the types of disabilities, the abilities of DSS staff which have made an impact on the disabilities support services. Most of staffs would like to develop their services but they need more support from universities administrators and also the Office of Higher Education Commission. The guideline for Disabilities Support Services Management should be provided for the universities and DSS staffs.

Key words: Disabilities Support Services (DSS), Persons with Disabilities, Higher Education

ISEPSS-2001
**A Study of Satisfactions and Needs of Disabilities Support Services in
University in Thailand**

Teerasak Srisurakul^a, Piyarat Nuchongsai^{b,*}, Silvia Correa-Torres^c

^aMahidol University, Ratchasuda College, Salaya, Nakornpathom, Thailand

E-mail: tum_nfe@live.com

^bMahidol University, Ratchasuda College, Salaya, Nakornpathom, Thailand

E-mail: npiyarat@yahoo.com, piyarat.nuc@mahidol.ac.th

^cUniversity of Northern Colorado, School of Special Education, USA

E-mail: silvia.correa-torres@unco.edu

Abstract

The purposes of this study were: 1) to study the satisfactions of support services for students with disabilities who were studying in the university in Thailand; 2) to study the satisfactions of university staffs to the services for students with disabilities; and 3) to assess the needs of support services for student with disabilities and the needs to services students with disabilities of university staffs. The participants used in this study were the students with disabilities and university staffs from 31 universities in Thailand. The questionnaires with 5-point scales were used to collect the data about satisfactions and the needs for support services of students with disabilities and university staffs. Descriptive statistics and PNI_{Modified} (Modified Priority Needs Index) were employed to analyze the data and rank the needs of students with disabilities and university staffs.

The results will show the current satisfactions and the needs for disabilities support services of students with disabilities and the satisfactions and the needs to services students with disabilities of university staffs in disabilities support services center in higher education in Thailand. Additionally, the results will reveal ranking of the needs of students with disabilities and universities staffs that could apply to propose the policy and strategy for improving the disabilities support services in higher education in Thailand.

Key words: Disabilities Support Services, Needs Assessment, Higher Education

ISEPSS-1725

The Learning Process of Program Planners in Taiwan: the Perspective of Experiential Learning

Chun-Ting Yeh^a, Ya-Hui Lee^{b,*}

^aNational Chung-Cheng University, No.168, Sec. 1, Daxue Rd., Minxiong Township, Chiayi County, Taiwan, 621

E-mail address: miss5138@yahoo.com.tw

^bNational Chung-Cheng University, No.168, Sec. 1, Daxue Rd., Minxiong Township, Chiayi County, Taiwan, 621

E-mail address: yahuilee@ccu.edu.tw

Abstract

In 2009, the Ministry of Education of Taiwan began to establish Active Aging Learning Center (AALC), which reached the total of 225 centers in the end of 2012. The purpose of this study was to investigate the experiential learning process, which related to the program planning. Semi-structured interviews were conducted in this study with 7 program planners of AALC that aged from 58-80 years old. The results of this study indicated that the dimensions of experiential learning of the planners included: family cultivation, life experience, educational experience, working experience, career training, and interpersonal learning process. All of these learning courses accumulated into the interviewees' goal, vision, professional knowledge, the concept of active aging learning, practice for the program planning, and negotiation skills when they promoted the older adult education. The interviewees' professional experience regarding active aging learning program planning might be a totality of all the experiential learning from the past. Furthermore, the planners' experiential learning may signify generational experiential inheritance. The authors then provided the finding of this study as a reference for the professional training of old adult educators.

Keywords: Active Learning Center, experiential learning, older adult learning, program planning

1. Introduction

There are 2.6 million seniors over 65 living in Taiwan (11.36% of the overall population) as in 2013 (Ministry of Interior, 2013). On the one hand, it is expected that in 2030 the elderly population will reach 23.9%, indicating that one in four people will be a senior citizen (Council for Economic Planning and Development, 2005).

On the other hand, the low birth rate in Taiwan has also indirectly affected the development of the country's older adult education. For example, the number of newborns dropped from 400,000 in 1980 to 160,000 in 2010 (Ministry of Interior, 2011). The low birth rate affects the educational system of elementary schools, junior high schools, senior high schools, and universities. Subsequently that caused some schools to use their resources, including teachers, classrooms, and facilities, to organize lifelong learning activities (Ministry of Education, 2009). Therefore, the aging population and low birth rate are the reasons why older adult education in Taiwan has gradually increased importance.

In 1989, the Practical Plan of Education for Older Adults was the first educational activity provided by the Ministry of Education for senior citizens in Taiwan (Huang, 2005). In 2006, the Ministry of Education promulgated a white paper titled, "Toward an aged society: Policies on education for older people," marking an important milestone in the development of older adult education in Taiwan (Ministry of Education, 2006). In the beginning of 2009, the Ministry of Education has established Active Aging Learning Centers (AALC) in 319 townships and villages around Taiwan to provide senior citizens residing in cities, communities, and villages an opportunity to learn (Ministry of Education, 2010). As on December 2012, the Ministry of Education had established 225 Active Aging Learning Centers in 20 counties and cities around Taiwan and had held 46,940 learning programs with a total of 1,221,093 participants (Ministry of Education, 2013).

2. Literature Review

2.1 Program Planning of Older Adult Learning

The program of elder education includes the design of the program, development, (Uhland, 1994) and the continued process of the evaluation of the learning result (Cho, & Kim, 2004). The program planning needs the planners to organize, manage, and evaluate through the systematic ways (Long, Larsen, Hussey, & Travis, 2001). The program planners play a vital role during the process of carrying the learning program. They need to understand the needs of learners, to learn to get used to the situation, and to have the basis of adjusting the curriculum (Duay, & Bryan, 2008; Willans, & Seary, 2011). It is contributive for the planners to provide the suitable education program through the commanding the needs and characteristics of learning of the elders and in addition to the application of the ways of practice of pedagogy (Justice, & Dornan, 2001; Requejo-Osorio, 2008; Willans, & Seary, 2011). Moreover, the elder education program planners should take the learners as the main part, should take the guidable ways to diagnose their learning needs, and should encourage learners to plan their learning goals, sources, and strategy (Falasca, 2011). Planners also should understand the vision and goal of the elder education learning organization. That is contributive to the needs and expectations of the learning activities (Wei et al., 2012).

The process of the practice of the program planning emphasizes the systematic thinking. That can make the designing, executing, and benefiting for learning more systematically (Lee & Yeh, 2012; Wei, 2005). This research of the elder education learning program means that the program planners, taking the elders as the center, under the principle of conforming the goals and vision of the learning organization, mastered the learning needs and characteristics to design the various learning programs for fitting the elders through systematically thinking.

2.2 The Learning Experiences of the Program Planners

The one of the representative figures of the experiences learning is Kolb, who indicated that “learning is the process of creating knowledge through the transformations by the experiences.(Kolb, 1984: 38)” This learning is lifelong from experiences to produce the process of the result of the learning (Trinh, & Kolb, 2012). Huang (2002) indicated that experiential learning is individuals recombining and changing through experiences to carry out the purposed and organized learning activities. That goal is to promote the increasing of knowledge and competences or the changes of behaviors and attitudes.

The planners usually experience the process of many experiential accumulating, recombining, and learning. It has the close relationships between the experiences and professional abilities of the planners and the effects of carrying out the adult education (Wei, 2005). The results of Hsiao’s research (2011) indicated that the characteristics and leading behavior of the planners deeply affect the development of the organizations. Besides, they should need the innovated managing ideas, passions, and powers.

In the process of developing the ability of planners, their learning, professional ability of working, and accumulated experiences contain very important influences. The results of Black’s research (2011) found out that there is the high relations between the specific techniques learning at old ages, educational activities, as well as personal experiences and promoting the educational practical tasks. Couper et al. (1999) indicated the importance about the experiences and backgrounds of planners for the educational practical tasks; because the experiences can make planners understood the situation of operating of the educational organization, the organized framework, or being contributive to the design of the curriculums. From this, the program planners need to developing the various abilities and integrated experiences, and learnings and preparations at various and different levels (Firmin, & Craycraft, 2009).

Active Aging Learning Center (AALC) has important significance for elder educations of Taiwan. While every aging learning center usually managed by a planner, who is responsible to manage.

They are responsible for the program designing, carrying out, and evaluating. However, the program planning is a complex task. The planners usually need to learn through different levels and to accumulate various different experiences, in order to handle the needs of the missions of the organization (Black, 2011; Couper, Norsman, & Sulick, 1999; Firmin, & Craycraft, 2009; Wei, 2005, 2007).

As for the planners of AALC, what kinds of learning experiences did they have been through? What kind of meanings does the process for the planners designing and carrying out produce? They all need to investigate. This purpose of the research is to investigate the process for learning experiences of the planners in AALC.

3. Method

3.1 Participants

Purposive sampling was used in this study to select the planner of AALC. The researchers chose the interviewees through the recommendations of the leader of older adult educational organizations, or from the campus of the researchers. There are 7 interviewees including 4 males and 3 females, ages ranging from 58-80 and averaging 66.6 years old. All the interviewees appeared anonymously by a combination of “digit, alphabet, digit” which represent the sequence, gender e.g. 3M represents the third male interviewee.

Table 1: The background of 7 participants

digit	ages	Working experience	Interviewing time (minute)
1M	61	direct selling	110
2M	80	manufacturer	100
3F	58	Primary school heads	90
4F	78	primary school heads	70
5M	70	drug manufacturer	100
6F	59	social welfare institution	90
7M	60	elder welfare institution	80

3.2 Data Collection

Semi-structured 70-110 minute interviews were conducted in this study. The locations of the interviews were at workforces of interviewees. Before beginning the interview, an explanation of the research topic, purpose, fund resource, and the embodiment were given to the interviewees. Also, basic background information was collected, such as the interviewee’s ages, education and working experience. Recorded face-to-face interviews were conducted with the participants’ permission, followed by data analysis of the transcripts from the recording.

3.3 Data Analysis

At first the researchers read the whole transcript sentence by sentence, marked the important points, and then simplified those sentences into code. After inducting the similar codes into some meaning units, the writers used the same mode to induct the meaning units into subcategories. Finally, the logic of the structure of each code, of the meaning unit, of the subcategories, and of the main category was examined. Then the research results were reached based on this structure.

4. Results

4.1 The Dimensions of Experiential Learning of the Planners

Family cultivation

There is an interviewer who cultivated their enthusiasm of educational tasks and working attitude. For instances, I was affected a lot by my mother about the idea on the educational aspect. She told me that we should love other people's children the same as our children. That influences me to set the elder educations into action(4F). My father makes me to have the adaptive development. I think that influences me to make the idea of the elder education, and I became paying attention to what the needs of the elders are more. (3F)

Life experience

Life experiences might evoke the motive of the elder education, or design them into the activities of the curriculum. For example, the interviewers said, "I found out many elders' daily lives seems that something is missing through their community lives. That should lead in learning. Then I went to apply the plan of AALC (5M).

Due to many cultural histories in the community, I thought of turning these into the curriculums to teach the elders in the community (1M).

Educational experience

The multiple professional areas make the interviewers to get many chances of the professional knowledge and learning. For instances, I learned the commercial designs before, and I studied in the department of Business Administration afterward as well as the studies divided into classes of the Master degree in the area of the social work (6F).

Before I came here to be a manager, I took the studies divided into classes of the Master degree in the area of the social work as well as taking the courses in the graduate school of the public welfares (2M).

Working experience

Working experiences make interviewers to accumulate the practical experiences of the elder education, the elder services, and the administrative experiences. For example, when I have been serving in the foundation, I contacted the elder learning, the elder caring, and the task of the community services for twenty years (2M).

At first, I had been administrative personnel for five years. Then, I had been a deputy-director about four years. After that, I became the director (6F).

Career training

The interviewers accumulated the theoretical and practical knowledge or practical applications from the training courses. As the interviewers said, “Going to the courses of the trainings can accumulate more theoretical knowledge, and it can look at others’ experiences of the pragmatic actions. Their experiences can be combined with our own experiences (7M).”

After starting to take the courses of the training, I can be cadre members of AALC to train others and to educate the elders (3F).

Interpersonal learning process

It may make interviewers gaining more experiences through the experts, scholars, people in same generation, or the communication of cooperative partners. For instance, I can ask for advice with some professors, and make my view become much wider. And when encountering questions, I can learn from them (6F).

The classmates have a great diversity in the graduate school, including being the Directors of Education, the legislators, the teachers of high school and elementary school, as well as board chairmen. There are different levels of ages, and there are more “colliding” in the discussion groups. I benefited a lot from that (4F).

4.2 The Experiential Learning Results for the Program Planning

Goal and vision

Some interviewers found the goals and passions in the educational experiences. For instances, I planned the education of the elders with a great passion. My goal is to see the elders happily learning. I hope to do this until I cannot do this anymore (1M). Through the training, I can evaluate my developing directions in AALC, then make the goal of every level (3F).

Professional knowledge

The results of the past experiences of the learning make the interviewees accumulate their professional knowledge to apply in the learning at the active elder age. For instances, it accumulates a lot of theoretical knowledge by the courses of the school, every seminar, visiting, in addition to one's research thesis of the elder learning. I can use them on the courses of AALC or human resource planning (1M).

The knowledge I used to work in the medicine factory now can be told to the elders in AALC, and can made them learn (5M).

The concept of active aging learning

There are interviewees establishing the lifetime learning and the concepts as well as the principles of courses of the elder education design. For instances, since learning to plan in AALC, I am more clear about how to set into action about the courses of increasing abilities as well as contributions of the elder education (6F).

I myself am a planner in AALC. I am also a middle-high aged person. And I am a lifetime learner, too. Live and learn (5M).

Practice for the program planning

There are the cases that the interviewees applied the results of the learning experiences to the practice. For example, the experiences of accumulating previously the evaluation tasks of adult education can be applied in the evaluation tasks in AALC. The new parts can be learned when you first met them (4F).

After I went to study the graduate school of adult education, I can understand the elder learners more and plan the activities of the curriculum more flexibly. I also can market the both the courses which the elders are interested in and which they are not interested in together (3F).

Now I undertook AALC all by the initial background knowledge of social services and management of marketing (1M).

Negotiation skills

It can make interviewees apply the personal communications in AACL through communicating experiences accumulating under the office elites. For instances, on the one hand, I can communicate with the board chairmen under the organization. On the other hand, I should communicate with the employee on the lower level. Then I should understand how to deal with reacting and even to do the inner marketing tasks well (6F).

I cultivated the techniques of public reactions on business before. Now I can catch the elders' hearts in AACL as catching the customers' hearts (1M).

Generational experiential inheritance

Some interviewers are over the age of 60, or even 70 or 80 years old. They started thinking about passing down the experiences of the educational tasks, "I cultivated some people, and then I passed down my working and accumulated experiences to them at presence. (4F)"

However, there are some interviewers with the difficulties of passing down the tasks, "The reason is that young people do not want to do the work about the active aging education. I only can do this until I cannot do this anymore so far. (2M)"

5. Discussion

Previous studies have shown that planners often experienced accumulating various educational and work experiences. And their the learning process has important implications.

(Black, 2011; Couper · Norsman, & Sulick, 1999; Firmin, & Craycraft, 2009; Wei, 2005, 2007) ◦ The results of this study indicated that the dimensions of experiential learning of the planners, including family cultivation, life experience, educational experience, working experience, career training, and interpersonal learning process.

Moreover, the planners' experiential learning at six levels might create meanings for their program planning for six portions, such as goal and vision, professional knowledge, the concept of active aging learning, practice for the program planning, and negotiation skills, generational experiential inheritance.

According to the former meanings of six levels, the result of the research further clarified interviewers' goal and vision of the program planning. It might concern the experiential learning from families, lives, educations, and the learning experiences. The accumulating professional knowledge mainly comes from the experiences of the education and working, in addition to the training and personal interactions of experiences leaning results. The interviewers' concepts of the active aging learning might concern to their former families, tasks, and training experiences. In the aspect of program planning, the interviewers accumulate the knowledge and experiences from lives, education, working, training, and personal interactions, concerned to this part. The interviewers' techniques of the consulting might learn from the experiences of tasks and personal interactions. Therefore, the interviewers' professional experience of the program planning might be the result of having been accumulated from the past to the presence.

At last, the older interviewers began to start to think and prepare to pass down their experiences of program planning to other generations. The experiential learning and program planning analysis is shown in the Table 2.

Table 2: The matrix of the results between the dimensions and implications of experiential learning in program planning

Category 2	Category 1					
	Family cultivation	Life experience	Educational experience	Working experience	Career training	Interpersonal learning process
Goal and vision	*	*	*		*	
Professional knowledge			*	*	*	*
The concept of active aging learning	*			*	*	
Practice for the program planning		*	*	*	*	*
Negotiation skills				*		*
Generational experiential inheritance				*		

6. Conclusion

The results of the research showed that the planners interviewing in AALC might experiences different experiential learning processes, including from families, lives, educations, tasks, trainings, and personal interactions. Moreover, these process of experiential learning might be formed their goals and visions to manage AALC. Therefore, the interviewers' professional experiences of active aging learning program planning might be the result of accumulating from the past to the presence. The result of this research can provide information for references for AALC training professional elites. In the future, this can be aimed at doing the research of inheritance generation of the planners and the issues of the sustainable operation.

7. References

- Black, K. (2011). Professional and personal factors associated with gerontological practice: Implications for training and education. *Educational Gerontology, 37*(11), 982-994.
- Cho, D. & Kim, H. (2004). *The most frequent lenses to see recent program planning for adult: 1999-2003*. Indianapolis, Indiana: IUPUI, Conference.
- Council for Economic Planning and Development (2005). *The second plan of human resource development in the new century*. Retrieved from <http://www.cepd.gov.tw/dn.aspx?uid=1327>
- Couper, D. P., Norsman, A. S., & Sulick, B. (1999). Retired educators as advocates: Promoting K-12 education about aging. *Educational Gerontology, 25*(6), 519-530.
- Duay, D. L., & Bryan, V. C. (2008). Learning in later life: What seniors want in a learning experience. *Educational Gerontology, 34*(12), 1070-1086.
- Falasca, M. (2011). Barriers to adult learning: Bridging the gap. *Australian Journal of Adult Learning, 51*(3), 583-590.
- Firmin, M. W., & Craycraft, A. (2009). Life meanings for past and present: Case studies of four retired faculty. *Education Research Quarterly, 32*(4), 17-35.
- Hsiao, C. C. (2011). A study of the relationship between community university innovation management, leadership traits of innovation, innovative climate of organization, and knowledge management capability. *Journal of Education Research, 45*(1), 45-69.
- Huang, C. S. (2005). The development of a university for older adults in Taiwan: An interpretive perspective. *Educational Gerontology, 31*(7), 503-591.
- Huang, F. S. (2002). *Adult learning*. Taipei, Taiwan: Wu Nan.
- Justice, E. M., & Dornan, T. M. (2001). Metacognitive differences between traditional-age and nontraditional-age college students. *Adult Education Quarterly, 51*(3), 236-249.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
- Lee, Y. H., & Yeh, C. T. (2012). An exploration of the learning process of successful aging retirees. *Educational Review, 39*, 41-75.
- Long, A. B., Larsen, P., Hussey, L., & Travis, S. S. (2001). Organizing, managing, and evaluating service projects. *Educational Gerontology, 27*(3), 3-21.
- Ministry of Education (2010). *The second year project final report provided by the Activity Aging Education Consultant Team*. Unpublished manuscript. Taipei, Taiwan: Author.
- Ministry of Education (2013). *The statistic results of Active Aging Learning Center in Taiwan 2012*. Retrieved from <https://moe.senioredu.moe.gov.tw/ezcatfiles/b001/img/img/288/219057865.pdf>
- Ministry of Education. (2006). *Toward the aged society: Educational policy for the older people white paper*. Taipei: Ministry of Education.

- Ministry of Education. (2009). *The first year project final report provided by the Activity Aging Education Consultant Team*. Unpublished manuscript. Taipei, Taiwan: Author.
- Ministry of Interior (2011). *The survey of current population on birth and death*. Retrieved from <http://sowf.moi.gov.tw/stat/month/list.htm>
- Ministry of Interior (2013). *The survey of current population in 2013*. Retrieved from <http://sowf.moi.gov.tw/stat/month/list.htm>
- Requejo-Osorio, A. (2008). The learning of the elderly and the profile of the adult educator. *Convergence*, 41, 155-172.
- Trinh, M. P., & Kolb, D. A. (2012). Eastern experiential learning: Eastern principles for learning wholeness. *Career Planning and Adult Development Journal*, 27(4), 29-43.
- Uhland, R. (1994). Social policy and adult education program planning: Perspectives on the Tyler and Boyle models. *Journal of Lifelong Learning*, 3, 62-70.
- Wei, H. C. (2005). Positioning of program planning in the domain of adult education: Roles, paradox and surpassing ways. *Kaohsiung Normal University Journal*, 19, 43-59.
- Wei, H. C. (2007). The creative instructional design and implementation on the course of "program planning": An action research approach. *Curriculum & Instruction Quarterly*, 10(4), 63-84.
- Wei, H. C., Hu, M. C., Yeh, C. T., Chen, C. L., & Liu, W. C. (2012). The exploration of managerial model and strategies of the Taiwanese Active Aging Learning Center: Perspective from the managers. *Educational Policy Forum*, 15(2), 1-37.
- Willans, J., & Seary, K. (2011). I feel like I'm being hit from all directions: Enduring the bombardment as a mature-age learner returning to formal learning. *Australian Journal of Adult Learning*, 51(1), 119-142.

Law II & Politics

AV Room

10:40-12:10

Friday, May 9

Session Chair: *Prof. Mohsin Hingun*

ICSSAM-770

Some Legal Challenges Affecting Offshore Trusts Post 2008 Financial Crisis

Mohsin Hingun

International Islamic University Malaysia

ICSSAM-786

Federalising Religious Courts in Malaysia: Lessons from the Indonesian Peradilan Agama

Farid Sufian Shuaib

International Islamic University Malaysia

Nik Mohd Fitri Nik Yahaya

International Islamic University Malaysia

ICSSAM-447

Public Engagement and Public Satisfaction: Empirical Evidences from Mainland China, Hong Kong and Taiwan

Wei Wu

Nanyang Technological University

Wenxuan Yu

Nanyang Technological University

Yu Meng

Nanyang Technological University

Liang Ma

Nanyang Technological University

ICSSAM-747

Governance for Improving the Public-private Partnership in Brownfield Redevelopment

Tsuey-Ping Lee

National Chung Cheng University

ICSSAM-936

Managed Competition: Malaysia Electricity Experience, Powering a Sustainable Future

Wan Liza Md Amin

International Islamic University Malaysia

ICSSAM-770
Some Legal Challenges Affecting Offshore Trusts Post 2008 Financial Crisis

Mohsin Hingun

Associate Professor, Faculty of Law, International Islamic University, Malaysia.

Email: mohsin@iium.edu.my

Abstract

The phenomenal growth of offshore trusts valued in billions of dollars at the end of the last century as a result of its ability to attract, transfer and protect substantial sums of money from the settlor's country to overseas jurisdictions with the potential to save, reduce, avoid and evade taxes have been subjected to critical examination by tax authorities, the courts, non-governmental organisations and the media, especially in the years following the 2008 financial crisis. The objective of this paper to briefly introduce the nature and uses of offshore trusts and to focus on some of the important challenges they face in a hostile environment.

An area of evolving interest is the secrecy issue inherent in offshore trusts which has been abused as veil for tax avoidance/tax evasion.

Keywords: Offshore trusts, 2008 Financial Crisis, Secrecy, Tax Avoidance

1. Introduction

An offshore trust has become an important tool for wealth planning and preservation. Scores of financial offshore centres have sprung up and most of these provide facilities for the creation of offshore trusts as one of their offshore structures. Secrecy and confidentiality are hallmarks of offshore trusts, for example in some jurisdictions no registration is required and no person who has by any means access to any record, book, register, correspondence, document, material or information, relating to the business and affairs of a the trust shall give, divulge, reveal, publish or otherwise disclose to any person such record, book, register, correspondence, document, material or information without a court order.(See Section 8A Labuan Trust Act 1996). Coupled with this offshore trusts provide greater protection from creditor claims and incorporate several pro-settlor provisions. While tax havens provided the locus for fraudulent business model such as those offered by Bernie Madoff, Allen Stanford and others, offshore centres offer unhealthy competition revolving around tax and regulations to attract a bigger share of world capital: Tax Justice Network (2014)

2. The Nature and Uses of Offshore Trusts

In England the early emergence of the *use*, a device which enabled the transmission of property developed into *trust* by the thirteenth century, under which the legal title vested in the trustee while the beneficiary could in equity enforce the terms of the trust enabling him to derive the benefit he was intended to be given by the settlor. Originally recognised and enforceable by the Court of Chancery, Underhill (2010) describes a trust as follows:

"A trust is an equitable obligation binding a person (who is called a trustee) to deal with property over which he has control (which is called the trust property), for the benefit of persons (who are called beneficiaries or *c'estui que trust*), of whom he may himself be one, and any one of whom may enforce the obligation. Any act or neglect on the part of a trustee which is not authorised or excused by the terms of the trust instrument, or by law, is called a breach of trust."

The main features of a trust are:

- a 'settlor' the owner of property creates the trust and the terms of the trust with the trustee for the benefit of the beneficiaries
- it is a legal relationship, under which a trustee manages the assets for a 'beneficiary';
- the trustee owes fiduciary duties not to the settlor but to third party beneficiaries.
- it is the beneficiaries as equitable owners who have *locus standi* to enforce the terms of the trust.

In a typical trust the creator of the trust (the settlor) transfers property to trustees who manage the property for the benefit of beneficiaries. Trustees as legal owners are given powers of managing the property and beneficiaries as equitable owners can enforce the trust. It is a very flexible and versatile instrument, and its development over the centuries, has been in the words of the modern jurist F W Maitland (1936), 'the greatest and most distinctive achievement performed by Englishmen in the field of jurisprudence.'

Today the flexibility of trusts has manifested in various types, for example they can be fixed, discretionary, secret, protective, charitable or non-charitable and under certain circumstances they can be implied by the law as constructive or resulting trusts.

Although in medieval times trusts were used to avoid certain forms of feudal taxation and to manage property for illiterate beneficiaries (women and children of crusaders), today they are widely used as a tool for planning and managing the family wealth and have assumed increasingly greater importance in the field of investment such as unit trusts and pension funds and in tax planning. Over the past decades it is the offshore trust that has been able to attract enormous sums of money and it can with ease be created in over 150 offshore jurisdictions all over the world.

An offshore trust is similar in nature to an onshore trust except that it is formed under the laws and jurisdiction of another country. As creator of the trust, normally the settlor is non resident and immovable property situated in the chosen offshore jurisdiction cannot be included in the subject matter of the trust.

A typical description of an offshore trust is provided by S.3 of the Labuan Trust Act 1996 as follows:

“A trust exists where a person holds or has vested in him or is deemed to hold or have vested in him property of which he is not the owner in his own right and is under an obligation as a trustee to deal with that property-

- (a) for the benefit of any beneficiary, whether or not ascertained or in existence;
- (b) for any purpose which is not for the benefit of the trustee; or
- (c) for both such benefit and purpose mentioned in paragraphs (a) and (b).”

Offshore trusts are very popular vehicles available in many offshore jurisdictions including tax havens and they can be used to manage assets for a number of reasons, some of which are:

- Asset protection
- Tax planning
- Avoiding forced heirship rules
- Confidentiality and anonymity
- Protection from creditors
- Estate planning
- Avoiding Inheritance taxes

Two of the more important reasons are protection of assets through overseas asset protection trusts (OAPT's) and tax avoidance schemes through which tax payable can be reduced or eliminated.

Although initially these trusts were available to the very rich, rapid development in travel and communications coupled with unregulated advertisements extolling the virtues of offshore finance planning meant that by 1980 scores of offshore jurisdictions were competing with each other to offer this service. To attract offshore trust business through the creation of favourable legal environment has resulted in very settlor-friendly legal provisions in trust law which have been framed without the wider ethical considerations as to render offshore trusts as attractive as possible to non resident clients

2.1 The structure of the offshore trust

Traditionally once a trust has been created, legal title to the subject matter vests in the trustees who hold and manage the trust property for the benefit of the beneficiaries. The parties to a completely constituted trust are bound by the trust and the settlor cannot alter its terms: *Paul v Paul*(1882 20 Ch 742); *Re Bowden*(1936 Ch 71). The typical offshore trust will contain a number of protective devices that will enable the settlor to exercise some control over the trust property and protect against adverse changes in circumstances. These include: (1) a trust protector clause and (2) a non-binding letter of intent. A trust protector is someone who is appointed by the settlor to act as an advisor to the trustee and who is charged with making sure that the trustee carries out the settlor's wishes. In some cases, the consent of the protector may be necessary for the trustee to perform certain acts. In addition, the protector may be empowered to remove the trustee, change the beneficiaries or even change the situs of the trust. For example Section 35 of the Labuan Trusts Act 1996 provides that the terms of a trust may expressly require the appointment of a protector who shall be consulted upon by the trustee in the exercise of all or certain specified powers as may be provided in the terms of the trust. Either the settlor or a beneficiary can be the settlor with extensive powers:

- (a) to remove a trustee and to appoint a new or additional trustee, but if the protector removes a trust company as a trustee, the protector shall appoint another trust company as a new trustee in its place
- (b) to determine the law of which jurisdiction shall be the proper law of the trust, in the event it is not provided in the trust deed or by the settlor;
- (c) to change the place of administration of the trust; and
- (d) to withhold consent from specified actions of the trustees either conditionally or unconditionally.

2.2 Asset Protection

In an asset protection trust (APT) ownership of property is transferred by the “settlor” (person creating the trust), to the “trustees”(person managing the trust), for the benefit of beneficiaries or a charitable purpose. The trust is created by executing a legal document known as the “trust deed” or “trust instrument”. Sometimes the settlor also appoints a protector who will have the duty of controlling the trustees. The settlor can even appoint himself as one of the protectors. It is a trust set up with an objective of adding a layer of protection to one’s assets. It is normally an offshore trust. Over the years, wealthy individuals have had recourse to offshore trusts in several locations including Jersey Island, Cook Islands, Bahamas, Cayman Island, Mauritius and Labuan in Malaysia. It is true that, to establish and maintain an asset protection trust, it will be costly, but nevertheless it is a way to ensure that the trust assets will be out of the reach of most creditors and other financial predators.

Just like other types of trust, the settlor, will transfer the assets into the trust and there will be trustees who will administer the assets.

The APT is founded on the principle that the transfer of the legal title of the subject matter in the offshore trustees removes its ownership from the settlor. The subject matter is kept out of creditors' reach removing the incentive to litigate. Wealthy people including successful professionals, film stars and others have been using this method of asset protection. The APT provides lots of benefits to the settlor. It protects his wealth and assets transferred to the trust giving him the right to enjoy his wealth but keeping it out of creditors' claims. personal security and safety. It also provides total privacy, especially in jurisdictions where there is no obligation to get the trust registered. He can also be protected from forced heirship rule if he wants to bypass the inheritance laws of his country.

2.3 Protection from Creditors

Invalidation of trusts to defeat the rights of creditors has a long history. English law has forbidden an individual to transfer his property into a trust to shield it from his creditors. The Statute of Elizabeth (1571) equally prohibits conveyances made with the "intent to delay, hinder or defraud creditors or others of their just and lawful actions." The spirit of this old statute has been maintained in several modern common law jurisdictions. Notwithstanding this prohibition, many settlors protect their assets from their creditors by creating trusts for the benefit of their families with the intention of preventing their creditors' access to their assets. Many nations have enacted laws to prevent fraudulent transfers which prohibit a debtor from transferring assets in order to hinder, delay or defraud creditors. A court will set aside a fraudulent transfer enabling the creditor to recover the debt from the transferred property: *Regal Castings v Lightbody and Ors* [2009] 2 NZLR 433 (New Zealand) in which the transfer of the family home to the family trust was set aside as it had been made with intent to defraud creditors.

However, most offshore jurisdictions and financial centres have repealed the Statute of Elizabeth and replaced it with weaker fraudulent conveyance standards, making these centres more attractive for offshore asset protection trusts. For example, the provisions of most offshore legislations potentially weaken the ability of the creditors to reach assets under fraudulent conveyance law. For example, an offshore trust created in Malaysia requires proof beyond reasonable doubt, the onus of which is on the claiming creditor, to prove that the Labuan trust was so created by or on behalf of the settlor with the principal intent to defraud the creditor; and it did, at the time such creation took place, render the settlor, insolvent or without property by which that creditor's claim, if successful, could have been satisfied : *Section 11 (1) Labuan Trusts Act 1996*. Similar provision can be found in Cook Islands.

In addition to the high burden of proof required on the part of the creditor, a shorter limitation period is imposed. In a Labuan trust the creditor is given only a two year period to bring his claim after which it is statute-barred: *Section 11 (2) Labuan Trusts Act 1996* and a settlor shall not have imputed to him an intent to defraud a creditor solely by reason that the settlor has created or registered a Labuan trust or has disposed of property to such trust within two years from the date of that creditor's cause of action accruing; or that the settlor is a beneficiary *Section 11 (5) Labuan Trusts Act 1996* .

If the transaction between the creditor and debtor occurred after the funds were transferred into the trust, most offshore jurisdictions will not allow, as a matter of law, an action to set it aside as fraudulent: *Patterson v Shumate, 504 U. S. 753 (1992)*

2.4 Forced Heirship Rule and Offshore Trust

The Forced Heirship Rule applies to limit the discretion of the testator to distribute assets under a will. It can be found in civil law countries and countries where the applicable inheritance law is Islamic law. This rule provides for shares fixed by law to a family member in the estate of a decedent despite the fact the decedent desired to exclude that family member under his dispositive testamentary documents. Lawyers, who are in favor of the forced heirship rule, put forward the view that this is a perfectly proper practice and that, testators should be forced to vary their will if ever they are leaving dependants destitute. The countries recognizing forced heirship rule, do so with the aim that testators make adequate provision for their dependants. Consequently, an individual's parents, spouse and children will usually be entitled, by law, to a fixed share of his estate on his death. One of the easier ways of circumventing this rule is through an offshore trust. Once the offshore trust is created the office of trusteeship will not expire. Trustees can be replaced if the need arises and in extreme cases the Court will assist in the appointment as Equity will not allow a trust to fail for want of a trustee.

3. Secrecy and Confidentiality

After the financial crisis of 2008, several developed countries in Europe and the USA found themselves cash-strapped and launched a campaign to ensure that their citizens who invest offshore contribute their fair share of money to the Inland Revenue. In 2009 the USA took United Bank of Switzerland (UBS) to task for refusing to disclose financial information on their American clients with offshore accounts. To avoid criminal prosecution UBS agreed to pay \$780 million in fines, penalties and restitution to the U.S. government and to disclose the names of those suspected of avoiding/evading U.S. taxes. The bank ought to have withheld \$400 million from the clients as tax payable to the US Government which it had failed to do: William P B, Novack J (2009)

In 2012, one of Switzerland's oldest bank, Wagelin founded in 1741 was charged with conspiracy to defraud the USA of more than \$1 billion by assisting wealthy Americans to evade taxes through secret accounts. In January 2013 it pleaded guilty and agreed to pay \$57.8 million to the United States in restitution and fines.

Following these cases and more than a dozen other Swiss banks under investigation, Switzerland a well known bastion of secrecy and a tax haven reached a historic accord on August 29, 2013 with the United States to allow some Swiss banks to disclose information and to participate in a settlement program with the US Department of Justice. This would enable these banks to avoid criminal prosecution in connection with Swiss accounts maintained by US taxpayers. An essential element of the program requires these banks to provide information that will assist the United States to trace money to other Swiss banks and other banks located internationally.

4. Tax Information Exchange Agreements (TIEAs)

The initiative against *harmful tax practices* launched by the OECD in 1998 received positive support by a number of countries including well known jurisdictions offering offshore financial services. The purpose is stated in Article 1 of each TIEA:

exchange of information that is foreseeably relevant to the administration and enforcement of the respective laws of the Contracting Parties concerning taxes covered by this Agreement, including information that is foreseeably relevant to the determination, assessment and collection of such taxes, the recovery and enforcement of tax claims, or the investigation or prosecution of criminal tax matters.

TIEAs are bilateral agreements which facilitate the exchange of tax information. It allows upon request the exchange of tax information between signatories to the agreement.

Scores of jurisdictions have entered into bilateral agreements and some TIEAs have even been signed by individual countries.

4.1 The Foreign Account Tax Compliance Act, USA (FATCA)

The objective of FATCA, enacted in 2009 is to combat tax evasion by US citizens holding investments in offshore accounts. It requires U.S. taxpayers holding foreign financial assets with an aggregate value exceeding \$50,000 to report certain information about those assets on a new prescribed form that must be attached to his annual tax return. Reporting applies for assets held in taxable years beginning after March 18, 2010. Failure to report foreign financial assets will result in a penalty of \$10,000 to \$50,000 for continued failure.

Additionally there is a penalty on the unpaid tax. It also requires foreign financial institutions (“FFIs”) to report directly to the Inland Revenue Service certain information about financial accounts held by U.S. taxpayers, or by foreign entities in which U.S. taxpayers hold a substantial ownership interest. FATCA reporting due to commence in 2015 has become a potent armoury in the USA arsenal of anti tax avoidance devices:

“FATCA's reach is truly breathtaking. Every single non-U.S. entity in the world has a FATCA classification. This is as true for a shell company with no assets or activity as it is for the biggest multinational. It is as true for the most informal two-person partnership in the most far-flung country on the planet as it is for the most massive offshore fund. And it is also true for every non-U.S. trust, even though trusts aren't really entities.”(Cotorceanu, 2013)

The aggressive outlook of the US to combat tax avoidance and the development of devices such as TIEAs and FATCA no doubt pose a serious challenge to offshore trusts which are traditionally shrouded in veils of secrecy:

“It isn't a secret that one of Fatca's central aims is to "out" offshore trusts that have concealed assets from the IRS and others. As a result, says Steven Cantor, a lawyer at Cantor & Webb in Miami who often advises multinational families, "Trusts are the area of most complexity and uncertainty" in Fatca for individuals. He and others say the law even could require reporting of a foreign trust that a beneficiary doesn't know about or receive money from—if that person has a green card or is a U.S. citizen.”(Saunders, 2013)

4.2 Intergovernmental Agreements(IGAs) UK

Following the USA FATCA model the UK is aiming at a similar information exchange on its UK resident taxpayers, initially focusing on financial services businesses in its Crown Dependencies and Overseas Territories (CDOTs) – Jersey, Guernsey, the Isle of Man, Gibraltar, the British Virgin Islands, the Cayman Islands, Bermuda, Montserrat, the Turks and Caicos Islands and Anguilla – and currently extended to a total of 42 countries which include many of its former colonies and famous offshore centres by signing IGAs. As from 2016 this mechanism will ensure the UK’s access to information and data on assets held by British taxpayers offshore. Among others, service providers of trusts who deal with offshore trusts and companies will fall under Financial Institutions (FIs) and will need to consider their reporting obligations in respect of the financial accounts they maintain: HMRC (2014)

5. Onerous Court Decisions

5.1 Residency of Trusts

The usual test of residency of offshore trusts is determined with reference to the residency of trustees. Since an offshore trust is located overseas, as are the trustees, the residency of the foreign trustees is determinative of the trust residency.

Recently in *St. Michael Trust Corp v Her Majesty The Queen* [2012] 1 SCR 520 Canadian settlors created offshore trusts in Barbados, where unlike Canada, capital gains are not subjected to tax. Two years later shares in a Canadian holding company, the subject matter of the trusts were disposed realizing a gain of \$478 million. The trusts claimed the exemption from tax under the relevant treaty, which provided that only the contracting state of which the seller is a resident has the right to capital gains tax from the disposition. Assuming the trusts were resident in Barbados, there would be no tax on the realized capital gain. The Tax Court of Canada held that the corporate residence test with modifications applied to determine the residence of trusts. The Judge concluded that the central management and control test as enunciated in *De Beers Consolidated Mines, Ltd. v. Howe*, [1906] A.C. 455 was equally applicable to trusts. Since the role of the Barbados trustees was limited to administrative matters dictated by the central management and control exercised by Canadian individuals the trusts were resident in Canada. The Federal Court of Appeal upheld the decision of the lower court and the Supreme Court of Canada approved the reasoning of the Judge in the Tax Court:

“As with corporations, residence of a trust should be determined by the principle that a trust resides for the purposes of the Act where “its real business is carried on” (*De Beers*, at p. 458), which is where the central management and control of the trust actually takes place. As indicated, the Tax Court judge found as a fact that the main beneficiaries exercised the central management and control of the trusts in Canada.”

5.2 The rule in *Hasting Bass* - A New Direction

In re Hastings-Bass Deceased [1975] Ch 25 established a mechanism that allowed the Court, in certain circumstances, to set aside actions taken by trustees which had unintended results, including tax consequences. It was explained by Lloyd LJ in *Sieff v Fox* [2005] 1 WLR 3811 as follows:

"Where trustees act under a discretion given to them by the terms of the trust, but the effect of the exercise is different from that which they intended, the court will interfere with their action if it is clear that they would not have acted as they did had they not failed to take into account considerations which they ought to have taken into account, or taken into account considerations which they ought not to have taken into account."

The rule was intended to protect beneficiaries, but has also been used to exculpate trustees to undo something they have done where the effect is different from that which they intended. For example *In the Matter of Seaton Trustees Limited* [2007] it was applied to "turn back the clock" because trustee's misinterpretation of advice resulted in an unintended substantial inheritance tax on the beneficiary.

Recently the English Court of Appeal in *Pitt v. Holt* [2011] STC 809 held that the law took "a seriously wrong turn" twenty years ago in that there is in fact no such "rule" although it has been successfully invoked by trustees to undo transactions resulting in unintended tax consequences. Successful reliance on the rule required an applicant to show a breach of fiduciary duty or breach of trust on the part of the fiduciary or trustee. On appeal, the Supreme Court confirmed the judgment given by the Court of Appeal, and clarified that there is unlikely to be a breach of fiduciary duty where that fiduciary has obtained and followed professional advice. The effect of this ruling will act as a deterrence limiting its use in the English courts. In future applications are more likely to be made by the beneficiaries as trustees will require an admission of breach of duties. Although in Jersey, the offshore trust law as amended by *The Trusts (Amendment No.6) (Jersey) Law 2013* provides a clear statutory framework for applications made on the basis of the rule in *Hastings-Bass* and the doctrine of mistake, a substantial number of offshore jurisdictions which either follow English law or where English cases are persuasive authority will adopt the doctrine in *Pitt v Holt* which poses new challenges to both trustees and beneficiaries.

5.3 Sham Trusts: The Ghost of *Rahman v Chase Bank* [1991] JLR 103

Abdel Rahman v Chase Bank (CI) Trust Co Ltd [1991] JLR 103 concerned a trust in which the settlor exercised essentially full control over the trust and its assets. On several occasions, the settlor withdrew substantial funds from the trust fund without the knowledge of or, it appeared, any complaint by the trustee. Since the settlor and trustee treated the trust fund as the settlor's own property it was held that it was a sham.

The often cited dicta of Diplock LJ in *Snook v London and West Riding Investments Limited* [1967] 2 QB 786 at 802 provides a classic definition of sham:

"if it has any meaning in law, it means acts done or documents executed by the parties to the "sham" which are intended by them to give to third parties or to the Court the appearance of creating between the parties legal rights and obligations different from the actual legal rights and obligations (if any) which the parties intend to create."

The principle was developed further by the Jersey Royal Court in *Re The Esteem Settlement, Group Torras SA v Al-Sabah & Ors* [2004] WTLR at 54 which has subsequently been followed in the UK High Court decision of *Shalson v Russo* [2005] Ch 281. Following these cases, a sham trust claim requires proof of a common intention of both the settlor and the trustees that the trust assets should be held otherwise than as set out in the trust deed and they had a common intention to mislead third parties by giving a false impression of the position.

It is submitted that given offshore trusts being pro-settlor in nature and the latitude afforded to them to control the trustees through the appointment of protectors, there is risk that they can be challenged as sham. Recently the Privy Council in *TMSF v Merrill Lynch* [2011] UKPC 17 held that the settlor's unfettered power to revoke meant the trust could be treated as his property and could be claimed by the settlor's bankruptcy receivers for the benefit of his creditors.

Conclusion

The financial crisis of 2008 has caused a reassessment of financial structures including offshore trusts, among other advantages for their potential to accumulate huge sums of money secretly in offshore jurisdictions and their use in reducing the tax burden of settlors and beneficiaries. It is submitted that in the current atmosphere of financial deprivation offshore trusts will experience increasing examination and analysis to curtail their unrivalled advantage of secrecy and confidentiality and their use in tax avoidance/evasion schemes.

References

- Tax Justice Network, *Tax Havens and Financial Crisis* (2014)
<http://www.taxjustice.net/topics/finance-sector/tax-havens-financial-crisis/>
- Underhill, *Law of Trusts and Trustees*, LexisNexis, 17th Ed (2010)
- Peter A. Cotorceanu: *FATCA and Offshore Trusts: A Second Bite of the Elephant* .
Taxanalysts, Oct 23, 2013
<http://www.taxanalysts.com/www/features.nsf/Articles/DA7E5C0B6EF087B385257C0D0046A8F8?OpenDocument>
- Laura Saunders, *Offshore Accounts: No Place to Hide?* WSJ, Sept 20, 2013
<http://online.wsj.com/news/articles/SB10001424127887324807704579085511331606786>
- Maitland F W. *Selected and Historical Essays* (1936) at 129
- Barrett W P, and Novack J, *UBS Agrees To Pay \$780 Million*. Forbes Feb 18, 2009
http://www.forbes.com/2009/02/18/ubs-fraud-offshore-personal-finance_ubs.html
<http://www.hmrc.gov.uk/fatca/index.htm>

ICSSAM-786
**Federalising Religious Courts in Malaysia: Lessons from the Indonesian
Peradilan Agama**

Farid Sufian Shuaib

Associate Professor, Faculty of Laws, International Islamic University Malaysia
pda702003@yahoo.com.au
farid@iium.edu.my

Nik Mohd Fitri Nik Yahaya

Master Student, Harun M. Hashim Law Centre, International Islamic University Malaysia

Abstract

Religious has an important place in the state and governance in Malaysia. The basic document of the state, namely the Federal Constitution, provides that Islam as the religion of the Federation and allows for the setting up of religious courts. As a federation consisting of thirteen states and the federal territories, Malaysia has fourteen courts of final appeals for its religious courts – known as Syariah courts in Malaysia. This comes about since religious courts are under the respective states and federal territories' powers. As a unitary state, it is possible for Indonesia to provide a comparative framework for Malaysia to learn in its quest to harmonise religious courts. The structural framework of the judicial system in Indonesia such as the relationship between the religious courts (peradilan agama) and general courts (peradilan umum) could be compared with the Syariah courts and the civil court in Malaysia. Furthermore, the singular reference to the Indonesian Supreme Court of cases from different provinces smoothen harmonisation of various courts' decisions.

ICSSAM-447

**Public Engagement and Public Satisfaction: Empirical Evidences from
Mainland China, Hong Kong and Taiwan**

Wei Wu* Wenxuan Yu, Yu Meng, and Liang Ma,

School of Humanities and Social Sciences, Nanyang Technological University, Singapore

*wwu@ntu.edu.sg

Abstract

Consultative policy making is a necessity in the modern world, as public issues have become increasingly more complex and multi-dimensional. Also the more affluent and better educated public has become more demanding for more engaging and transparent policy making process. A recent Accenture survey showed that citizens' top priority for public services should be "better understanding the needs of citizens and communities." It is now not enough for a government to describe a policy to the public to implement it. It is not even enough just to explain it. Governments need to consult and connect with citizens even while the policy is being formulated in order to deliver the policy in integrated ways to provide exactly what's needed, when needed, in the most appropriate manner.

This paper uses and compares the data from the three large scale surveys of all 36 key cities in Mainland China, Hong Kong and Taipei to find out the empirical evidence of the relations between the city governments' efforts in engaging the public in formulating their policies and the public satisfaction of the cities' public service delivery, especially the public policy making process.

ICSSAM-747
**Governance for Improving the Public-private Partnership in Brownfield
Redevelopment**

Tsuey-Ping Lee

Department of Political Science, National Chung Cheng University, Taiwan, ROC
tsueyping.lee@gmail.com

Abstract

Political conflicts caused by unavoidable incompatible interests among stakeholders in public and private sectors, including relevant government agencies, polluters, land developers and investors, grassroots non-profit organisations, and brownfield residents, frequently impede redevelopment in numerous industrial polluted sites (brownfields). However, good governance in numerous successful brownfield revitalization cases in Organisation for Economic Co-operation and Development (OECD) countries has disconnected the causal relationship between incompatible interests and political conflicts among stakeholders and improved public-private partnership. We used a case study to answer 2 research questions.

First, what are the most critical incompatible interests and possible political conflicts involved in revitalizing brownfields? Second, what are the vital components in brownfield governance that have disconnected the causal relationship between incompatible interests and political conflicts among stakeholders? The results showed that conflicting interests inevitably existed in redeveloping brownfield sites; however, 2 components of good governance helped improve stakeholder partnership, namely, upholding a public-interest-oriented vision of brownfield redevelopment and constructing a meaningful public participation mechanism in brownfield sites. Brownfield regeneration is particularly complex when it involves specific polluters, pollution victims, and families who have experienced job loss, property loss, or health problems, or have even lost their lives. Therefore, brownfield revitalization cannot be considered a value-free technical problem because of justice-related issues in solving pollution problems. Good brownfield governance emphasizing a public-interest-oriented vision admired by stakeholders and a meaningful public participation mechanism shows respect for victim loss and improves public-private partnership in brownfield redevelopment.

Keywords: Brownfield Governance, Environmental Governance, Environmental Policy

Introduction

No universal definition of brownfield exists. In the United States, “brownfield site” is defined in the Small Business Liability Relief and Brownfields Revitalization Act (the Brownfields Act) as a property in which the presence or potential presence of a hazardous substance, pollutant, or contaminant may complicate its expansion, redevelopment, or reuse⁸. The U.K. government defined a brownfield site as a previously developed and currently derelict and vacant land (Schulze-Bäing, 2011: 1424). Pollution or the potential threat of pollution is the prerequisite for defining brownfields in the United States, but not in the United Kingdom. We adopted the U.S. definition of brownfield, assuming that brownfield pollution increases the complexity of revitalization. We explored the incompatible interests among stakeholders involved in brownfield revitalization processes and identified the key factors of good governance that improve public-private partnerships for effective redevelopment.

Brownfield redevelopment is complex because of inevitable mutually exclusive interests; however, successful revitalization cases in OECD countries have shown that good brownfield governance prevents the transformation of incompatible interests into political conflict, which impedes effective revitalization. Good brownfield governance involves various managerial and coordinated actions. We identified two essential aspects of successful brownfield revitalization cases, upholding a public-interest-oriented vision and constructing a meaningful public participation mechanism, that effectively prevent mutually exclusive interests from evolving into political conflict.

Defining Brownfield Governance

The World Bank defined governance as the rule of rulers⁹, and the Organisation for Economic Co-operation and Development (OECD) followed the World Bank’s definition, stating, “governance denotes the use of political authority and exercise of control in a society in relation to the management of its resources for social and economic development.”¹⁰

⁸ The Brownfields Act, <http://www.gpo.gov/fdsys/pkg/PLAW-107publ118/html/PLAW-107publ118.htm>, retrieved on May 9, 2013.

⁹<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EXTMNAREGTOPGOVERNANCE/0,,contentMDK:20513159~pagePK:34004173~piPK:34003707~theSitePK:497024,00.html>. Retrieved May 6, 2013.

¹⁰ Organisation for Economic Co-operation and Development. (1995). *Participatory Development and Good Governance*. p. 14. Retrieved May 6, 2013, from <http://www.oecd.org/dac/governance-development/31857685.pdf>.

The United Nations Development Programme (UNDP) defined governance as “a neutral concept comprising the complex mechanisms, processes, relationships, and institutions through which citizens and groups articulate their interests, exercise their rights and obligations, and mediate their differences.”¹¹ According to the aforementioned definitions, governance has two aspects. One aspect is that an authority manages public affairs through a managerial mechanism, whereas the other is that citizens exercise their rights and obligations under an existing institution. Governance is the interaction between the authority and the citizens, and the purpose of governance is effective public affairs management.

Brownfield governance is complex because of current pollution or potential pollution threats. Pollution renders interaction among stakeholders intractable because it entails a rivalry between polluters and pollution victims. The situation becomes increasingly complex when polluters are state-owned companies because it jeopardizes the relationship between the government and the pollution victims. Difficulties arise when the government administration manages brownfield issues because pollution victims typically distrust a government in charge of the state-owned company responsible for pollution. The government must overcome the distrust of brownfield residents and establish a cooperative platform among stakeholders.

Research has shown that numerous pollution sites are located where minority populations or poor people reside (Asch & Seneca, 1978; Bryant & Mohai, 1992; Bullard, 1990, 1992; Freeman, 1972; Gelobter, 1992; Gianessi, Peskin, & Wolff, 1979; Kuehn, 1996; Perlin, Sexton, & Wong, 1999; Sexton, 1997; Sexton & Anderson, 1993; United Church of Christ Commission for Racial Justice, 1987; U.S. Environmental Protection Agency, 1992; U.S. General Accounting Office, 1983: 1). In polluted areas where residents typically depend on the natural environment for living, environmental pollution may directly affect resident subsistence (United Nations Development Programme etc., 2003: 16-18). Researchers have argued that brownfields may result from environmental injustice. Therefore, protecting brownfield residents from further pollution damage and assisting the polluted community to redevelop in a sustainable manner is the foundation of brownfield redevelopment.

Because brownfield communities typically experience multi-dimensional deterioration, the purpose of brownfield governance is to revitalize brownfield communities environmentally, economically, and socially. Environmentally, cleaning pollutants and protecting residents from further pollution damage are high priorities for redevelopment.

¹¹ Governance for Sustainable Human Development—A UNDP Policy Document. Retrieved May 6, 2013, from <http://mirror.undp.org/magnet/policy/glossary.htm>.

Because of limited government financial resources, pollution remedies require assistance from private businesses such as land developers and investors. A liability protection policy motivates private companies to assist in brownfield redevelopment to reduce land developer and investor uncertainty (Perkins, 2007). Economically, redevelopment involves increasing local job opportunities, attract external investment, and promote business activities. Ensuring that residents benefit from economic redevelopment is vital. Because brownfield communities tend to be easily stigmatized, social capital might be reduced (Lee, 2012). Therefore, to help residents identify themselves with the community in which they reside, rebuilding trust among residents and reducing stigmatization caused by pollution are key objectives.

Incompatible Interests and Political Conflicts Regarding Brownfields

Brownfield redevelopment requires coordination and cooperation among stakeholders. In successful brownfield redevelopment cases in OECD countries, program formulation typically involves identifying stakeholders and their viewpoints for redevelopment. In this section, primary stakeholders in brownfield governance are identified and the incompatible interests among them and potential political conflicts are explored. The primary stakeholders in brownfield redevelopment include the government, the land developer, and the brownfield community residents.

Stakeholders in Brownfield Governance

A government plays multiple roles in brownfield redevelopment, including information provider, revitalization policy decision maker, financial supporter, and cooperative platform constructor. Although the government is a key player in regenerating a brownfield community, partnership with other stakeholders is necessary for successfully implementing a redevelopment program. Given the ubiquitous financial distress governments currently face, the role of governments in brownfield redevelopment may need to change from regulator to facilitator.

Land developers willing to invest in brownfields mitigate the pressure of capital shortage in brownfield revitalization. A private company typically does not have a strong motivation to initiate or participate in a brownfield redevelopment plan because current or potential pollution problems cause uncertainty of future land usage. The safety of the soil and underground water is always dubious when a land has been polluted, even after the pollutants are cleaned. Thus, investing in a previously polluted area is unattractive to land developers unless a redevelopment program provides a strong incentive. A liability protection policy is necessary for people dedicated to a pollution remedy and for improving a land developer's participatory motivation.

Brownfield community residents and community-based non-profit organizations should have a channel to communicate their thoughts regarding a blueprint of the future community. Although meaningful public participation is time consuming, a comprehensive redevelopment plan that meets resident needs and expectations requires resident participation.

However, resident participatory behaviour changes over time. Residents who often participate in community affairs do not necessarily represent the public interest. Therefore, community-based non-profit organisations (NPOs) are crucial for integrating resident viewpoints. Particularly in brownfield communities where people have suffered from environmental injustice, a long history of distrust between the government and the residents causes multiple difficulties for mutual communication. Local NPOs can facilitate the rebuilding of the government-resident communication channel. An excellent example is the South Side Local Development Company, a company managed by local residents, that successfully led brownfield revitalization in South Side Works, Pittsburgh, Pennsylvania (Perkins, 2007). The U.S. Environmental Protection Agency (EPA) has also emphasized public participation when conducting brownfield redevelopment. The EPA has advocated collecting and integrating public opinion in the early planning stage, considering that public participatory incentives decrease over time; therefore, authority at every level should be highly aware of changing incentives. The EPA has also advocated including diverse ideas from the brownfield community residents in the redevelopment plan to distribute benefits equitably among stakeholders (U.S. Environmental Protection Agency, 2012).

Incompatible Interests and Political Conflicts

Diverse standpoints and perspectives can create incompatible interests among the government, the land developer, and brownfield community residents. These relationships become complex if issues regarding indemnity are involved, which may cause severe political conflicts that hinder redevelopment.

The incompatible interests of the government and brownfield residents can be extremely severe in a scenario in which the polluter is a state-owned company or a government-promoted industry. In this case, a failed government policy or environmental mismanagement often causes pollution. Brownfield community residents typically view themselves as pollution victims and do not easily forgive the polluter. Because the loss caused by pollution is huge and typically unmeasurable, victims may attempt to maximize indemnity from the government or polluters and the future benefits of brownfield redevelopment. The relationship between the government and the residents may not be a zero-sum game.

However, once the government compromises with the residents (e.g., the government admits mismanagement), requests from pollution victims become more reasonable. When interests are incompatible, residents may initiate a massive demonstration to oppose the government and request that responsible officials resign, whereas the government may establish a brownfield redevelopment program or indemnity decision without accepting input from local residents, which increases resident anger and strengthens the rivalry between the government and the residents.

The relationship between the government and the land developer depends on how they transform incompatible interests into a coalition. Enhancing the participatory incentive of the land developer requires formulating two types of policies. The first type is liability reduction.

According to this policy, land developers that voluntarily clean pollutants or maintain pollutant levels below a national standard are not held responsible for potential future damage related to the current pollution. The second type is a subsidy or financing policy for reducing the investment risk faced by the land developer. De Sousa (2005) observed that all brownfield stakeholders believed that the most valid government method for facilitating brownfield redevelopment is providing financial resources. However, governments are currently affected by severe financial stress, which makes government fiscal support increasingly infeasible.

Therefore, to facilitate brownfield redevelopment, the government typically employs tax-increment financing to attract land developers to invest in revitalizing brownfields (Bartsch, 2002). However, under such a policy, the land developer earns profits without bearing excess risk, whereas public education systems are deprived of local tax revenue that would have been used for improving education quality (Rubin, 1997).

The land developer is profit seeking when participating in brownfield redevelopment, whereas brownfield community residents expect the redevelopment to compensate them for their losses. Both the land developer and residents attempt to maximize their benefits from the redevelopment program, and the incompatible interests between both sides are obvious. Land developers maximize profits by constructing a coalition with the government, providing short-term cash benefits to buy resident support, and concealing crucial information. Residents who are not lured by cash benefits or do not want to compromise with land developers may initiate a massive demonstration opposing the land developers, rendering cooperation among stakeholders even more difficult.

Good Brownfield Governance – Preventing Incompatible Interests from Evolving Into Political Conflicts

Do inevitable incompatible interests cause political conflicts among stakeholders? How does good governance disconnect the causal relationship between incompatible interests and political conflicts? Successful brownfield redevelopment cases in OECD countries indicate at least two common aspects in brownfield governance. One is public-interest-oriented values, whereas the other is the willingness of stakeholders to establish a meaningful public participation mechanism.

Public Interest-Oriented Values

In a situation of incompatible interests, a public-interest-oriented value that all stakeholders respect can mitigate increasing political conflicts. Bruyn (1999: 25) indicated that when the government, businesses, and NPOs cooperate to create systems of social accountability for the common good, the market becomes civil and self-regulating, which is an indicator of a true civil society. When stakeholders perceive that they are accountable for the common good, public interest may overshadow self-interest and individual social behaviour is subject to moral control (Halpern, 2005). In brownfield redevelopment, stakeholders may self-regulate and make mutual concessions if they identify with a vision for the future community.

A suitable example is the revitalization of Kitakyushu City, Japan, which has been threatened by air pollution since 1901 when the iron steel industry and the petrochemical industry began to prosper. Since the 1950s, uncontrolled air emissions from factories have severely harmed residents' quality of health and life. The deteriorating environment prompted citizens, particularly women, to challenge the economic and environmental management of the local government. Local women initiated an environmental movement to raise the environmental awareness of citizens, the government, and businesses, and to motivate the government and businesses to develop strategies to control environmental pollution (Kono, Shirakawa, & Imura, 2003). The local women established “we want a blue sky”¹² as the main value of the environmental movement. Since then, “we want a blue sky” has been a value for which Kitakyushu people are proud.

Meaningful Public Participation Mechanism

To establish a meaningful public-participation mechanism, stakeholders should behave in a supportive manner. We summarize three necessary conditions to make public participation meaningful. The first condition is government willingness to establish a public-participation mechanism and incorporate it into formal regulation or law.

¹²History of Overcoming Industrial Pollution in Kitakyushu City. Retrieved May 6, 2013 (in Japanese), from <http://www.kcta.or.jp/shugaku/ayumi.php>.

The second condition is residents' willingness to cultivate their participatory capacity and exercise their rights and obligations as citizens. The third condition is that "outsiders" (e.g., the environmentalist or social activists who support pollution victims) positively affect the brownfield community.

The government should actively initiate and formulate a public-participation mechanism to show respect for pollution victims who reside in brownfield communities. An analysis of the brownfield redevelopment regulations and laws of OECD countries revealed that the U.S. Brownfields Act emphasizes public participation the most, which relates to the U.S. environmental justice movement. The U.S. Brownfields Act emphasizes resident needs in every subsidy regulation. Agencies seeking federal financial support for brownfield redevelopment are required to provide a proposal that describes how resident needs are to be met¹³. In the same law, federal financial assistance to a state response program is based on several conditions, including the "mechanisms and resources to provide meaningful opportunities for public participation including public access to relevant documents, prior notice and opportunity for comment on proposed clean-up plans and site activities, and so forth."¹⁴

A brownfield regeneration agenda called the "Manchester model" in the United Kingdom is a famous redevelopment program that emphasized public participatory capacity empowerment. Because of the collapse of traditional industry and the consequent unemployment and outmigration, East Manchester was affected by depression and was inhabited by a poor population. Groundwork Manchester, a national federation of environmental regeneration charities, conducted a Community Environment Programme in cooperation with the Manchester City Council, community organizations, and private companies to rebuild East Manchester. Groundwork Manchester identified the needs of community residents, designed various community regeneration programs to meet resident needs, and improved connections among local organizations. Community residents participated in the regeneration process to design and manage these diverse programs, benefitting from the training courses provided by Groundwork Manchester. The courses raised the self-confidence of community residents, who participated in increasingly more regeneration programs. East Manchester became a paragon of brownfield redevelopment in the United Kingdom and earned the British Urban Regeneration Association Award in 2002. The success of this program is attributed to an empowered public participation capacity (U.K. Sustainable Development Commission, 2003: 19).

¹³ The Brownfield Act, SEC.211(b)(5)(C)(vi).

¹⁴ The Brownfield Act, SEC.128(a)(2)(C)(i-iii).

Environmental pollution typically attracts the concern of environmentalists and social activists, particularly when involving injustice. These “outsiders” have more professional knowledge than brownfield community residents do and are adept at formulating political participation strategies. They educate, empower, and affect residents’ thoughts and participatory behaviour. These “outsiders” increasingly become “insiders” when community residents heavily depended on their opinions. In the case of a peaceful demonstration in Warren County, North Carolina in 1982, the origin of the environmental justice movement, scholars used easy and understandable phrases to educate residents regarding the harm caused by PCB (Geiser & Waneck, 1994: 44-48) and how the soil in Warren County was unsuitable for building a PCB landfill (Labalme, 1988: 25). Numerous NPOs, including Coley Springs Baptist Church, the United Church of Christ Commission for Racial Justice, the Southern Christian Leadership Conference, and political groups such as the Congressional Black Caucus all joined to support the movement (Bullard, 1990: 37; Labalme, 1988: 27-30). Many of them were civil right activists who transformed local landfill problems into a statewide environmental justice movement.

Conclusion

In the complex process of brownfield redevelopment, incompatible interests among stakeholders may cause obstructive political conflicts. We analysed how brownfield governance in successful cases in OECD countries disconnected the causal relationship between incompatible interests and political conflicts. We observed two key factors of good brownfield governance, public interest-oriented values respected by stakeholders and the willingness of stakeholders to establish a meaningful public participation mechanism. The values of “we want a blue sky” in Kitakyushu City and “environmental justice” in Warren County created a vision and led stakeholders on the same path toward redevelopment, reducing the possible social costs generated by political conflicts. Incompatible interests in brownfield redevelopment can easily cause political fights if there is no esteemed vision of motivating self-regulating behaviour.

Meaningful public participation is an essential factor for successful brownfield redevelopment. However, public participation is not meaningful if stakeholders are unwilling to establish a support mechanism. Governments should show their respect for public participation by establishing public participation institutions. Brownfield residents should learn to exercise citizenship by seizing the opportunity to participate in public affairs. Outsiders concerned about brownfields play complex roles in brownfield redevelopment and empower community capacity for meaningful community participation. However, they may hinder brownfield regeneration if they inappropriately use their influence on the community.

Brownfield redevelopment is a long process involving competing interests among stakeholders. Stakeholders can learn to be better citizens by using their willingness to self-regulate for a public-interest-oriented purpose. When a community is the victim of environmental injustice, the government can remedy the injustice by assisting the community to become environmentally, economically, and socially sustainable, which is the goal of brownfield redevelopment.

References

- Lee, T. P. 2012. *Brownfield Redevelopment Policy Analysis—A Community Capacity Perspective*. Taipei, Taiwan: Wu-Nan Book Co. Ltd.
- Asch, P. & J. J. Seneca. 1978. "Some Evidence on the Distribution of Air Quality." *Land Economics* 53 (3) : 278-297.
- Bartsch, C. 2002. "Financing brownfield cleanup and redevelopment." *Government Finance Review* 18 (1) : 26-31.
- Bruyn, S. T. 1999. "The moral economy." *Review of Social Economy* 57 (1) : 25-46.
- Bryant, B. & P. Mohai. (eds.) . 1992. *Race and the Incidence of Environmental Hazards: A Time for Discourse*. Boulder CO: Westview Press.
- Bullard, R. D. 1990. *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder, CO: Westview Press.
- Bullard, R. D. 1992. "In Our Backyards, Minority Communities Get Most of the Dumps." *EPA Journal* 18 (1) : 11-12.
- De Sousa, C. 2005. "Policy performance and brownfield redevelopment in Milwaukee, Wisconsin." *The Professional Geographer* 57 (2) : 312-327.
- Freeman, A. M. 1972. "The Distribution of Environmental Quality." in *Environmental Quality Analysis*, ed (s) . Kneese, A. V. & B. T. Bower. Baltimore: Johns Hopkins University Press for Resources for the Future, 243-280.
- Geiser, K. & G. Waneck. 1994. "PCBs and Warren County." in *Unequal Protection: Environmental Justice and Communities of Color*, ed (s) . Bullard, R. D. Bullard. San Francisco, CA: Sierra Club Books, 43-52.
- Gelobter, M. 1992. "Toward a Model of Environmental Discrimination." in *Race and the Incidence of Environmental hazards. A Time for Discourse*, ed(s). Bryant, B. & P. Mohai. Boulder: Westview Press, 64-81.
- Gianessi, L. P., H. M. Peskin. & E. Wolff. 1979. "The Distributional Effects of Uniform Air Pollution Policy in the United States." *The Quarterly Journal of Economics* 93 (2) : 281-301.
- Halpern, D. 2005. *Social Capital*. Cambridge, UK: Polity Press.

- Kono, N., H. Shirakawa. & H. Imura. 2003. *Handbook of Environmental Measures in Kitakyushu City: The Building Blocks Towards a Sustainable Society*. Kitakyushu City, Japan: City of Kitakyushu, Japan International Cooperation Agency, Institute for Global Environmental Strategies. in <http://enviroscope.iges.or.jp/contents/76/index2.htm> , Retrieved on 5/9/2013.
- Kuehn, R. B. 1996. "The Environmental Justice Implications of Quantitative Risk Assessment." *University of Illinois Law Review* 13 (1) : 103-172.
- Labalme, J. 1988. "Dumping on Warren County." in *Environmental Politics: Lessons from the Grassroots*, ed. Durham, B. H. NC: Institute for Southern Studies, 23-30.
- Perkins, N. 2007. "A tale of two brownfield sites: Making the best of times from the worst of times in western Pennsylvania's steel valley." *Boston College Environmental Affairs Law Review* 34 (3) : 503-532.
- Perlin, S. A., K. Sexton. & D. W. S. Wong. 1999. "Sociodemographic Characteristics of People Living near Industrial Sources of Air Pollution: Part 1: Three Case Studies Examining Issues of Environmental Justice." *Journal of Exposure Analysis and Environmental Epidemiology* 9 (1) : 29-48.
- Rubin, I. S. 1997. *The Politics of Public Budgeting: Getting and Spending, Borrowing and Balancing*. (3rd ed.) Chatham, N.J.: Chatham House Publishers.
- Schulze-Bäing, A. 2011. "The future of strategic brownfield regeneration in England—Between urban intensification and green infrastructure provision." in *Change for Stability: Lifecycles of Cities and Regions. Proceedings of 16th International Conference on Urban Planning, Regional Development, and Information Society*, ed (s) . Schrenk, M., V. V. Popovich. & P. Zeile. Zollverein World Heritage Site, Essen, Germany, 1421-1426.
- Sexton, K. H. 1997. "Sociodemographic Aspects of Human Susceptibility to Toxic Chemicals: Do Class and Race Matter for Realistic Risk Assessment?" *Environmental Toxicology and Pharmacology* 4 (3-4) : 261-269.
- Sexton, K. H. & Y. B. Anderson. (eds.) 1993. "Equity in Environmental Health: Research Issues and Needs." *Toxicology and Industrial Health* 9 (5) : 679-977.
- UK Sustainable Development Commission. 2003. *Mainstreaming Sustainable Regeneration: A Call to Action*. London: UK Sustainable Development Commission.
- United Church of Christ Commission for Racial Justice. 1987. *Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites*. New York: United Church of Christ.

- United Nations Development Programme, United Nations Environment Programme, World Bank, World Resources Institute. 2003. "World Resources 2002-2004: Decisions for the Earth: Balance, Voice and Power." Washington, D.C.: World Resources Institute. in <http://www.wri.org/publication/world-resources-2002-2004-decisions-earth-balance-voice-and-power#>. Retrieved on 5/9/2013.
- US Environmental Protection Agency. 1992. *Environmental Equity Reducing Risk for All Communities*. Washington DC: US Environmental Protection Agency, Office of Policy Planning and Evolution.
- US Environmental Protection Agency. 2012. "Partnership for Sustainable Communities Brownfield Pilots – Lessons Learned. Fact Sheet for Local and State Stakeholders." in http://www.epa.gov/brownfields/sustain_plts/factsheets/PSC-FS-Lessons-Learned-508-030212.pdf. Retrieved on 5/9/2013.
- US General Accounting Office. 1983. *Siting of Hazardous Waste Landfills and Their Correlation With Racial And Economic Status of Surrounding Communities*. GAO Report Number: GAO/RCED-83-168.

ICSSAM-936
Managed Competition: Malaysia Electricity Experience, Powering a Sustainable Future

Wan Liza Md Amin

International Islamic University Malaysia

wanliza@iium.edu.my

Introduction

After many years of debate on competition policy, Malaysia's federal government embraced competition, initially via electricity sector regulation, and then followed by full adoption of a law that brings competition, which has been ongoing since January 2012. Enacting a competition law is typically perceived as a cornerstone of liberalization and a pro-market reform.¹ However, the mere adoption of a law is necessary but not sufficient for the law to be part of market reform² because there is a conflict between theory and outcome that has left restructuring at a crossroads. Governments are examining the elements and structure needed to realize the promise and benefits of competitive markets in electricity.³

A study of this dilemma argues that policymakers need to answer several important questions.⁴ First, is the physical infrastructure (particularly, adequate supplies of generation and transmission) in place to support new market entrants and a competitive market? Second, are the incentives for the investment in new electricity facilities adequate? Third, what can be done to improve these incentives if they are lacking? Fourth, do new institutions need to be developed to facilitate this new structure for delivering electricity? Fifth, should these be federal, regional, state or quasi-public institutions? Sixth, should restructuring expose consumers to changes in electricity prices, even when those prices can be volatile? Seventh, what is the relationship between meeting environmental goals and generating greater power supply? Can these two successfully coexist?

¹ J.H. William & R. Ghanadan, *Electricity Reform in Developing Countries and Transition Countries: A Reappraisal*, 31 ENERGY, 815 (2006). See also Jim Rossi, *The Electric Deregulation Fiasco: Looking to Regulatory Federalism to Promote a Balance Between Markets and the Provision of Public Goods*, 100 MICH. L. REV. 1768 (2002); C.K. Woo, M. King, A. Tishler & C.H. Chow, *Costs of Electricity Deregulation*, 31 ENERGY, 747 (2006); David Spence, *The Politics of Electricity Restructuring: Theory vs. Practice*, 40 WAKE FOREST L. REV. 417 (2005).

² Michal S. Gal, *The Ecology of Antitrust: Preconditions for Antitrust Enforcement in Developing Countries*, in COMPETITION, COMPETITIVENESS AND DEVELOPMENT: LESSONS FROM DEVELOPING COUNTRIES 22, (Phillipe Brusick et al. Eds., 2004).

³ *Id.*

⁴ William & Ghanadan, *supra* note 1, at 2-3.

These issues need to be addressed by Malaysian leaders as the deregulation process is administratively costly, institutionally demanding, and politically challenging. Scholars have identified numerous issues concerning the restructuring and deregulation process. Some of the primary concerns are pricing by incumbent generators, transmitters, and distributors, and discriminatory network access by monopoly transmitters and distributors. The volatile nature of electric demand, supply costs at peak times, the lack of real-time price notification and response by consumers raise issues of stranded costs, and political and consumer resistance to increases in retail prices. There are also issues regarding entry (the time required to get a new power plant online is often years), the difficulty in obtaining the financing required to construct a new power plant (despite technological advances), and the risks involved in plant financing during an environment of volatile prices.⁵

Today, there is tremendous uncertainty about this industry's future, and that itself holds this industry back. Developments in the electricity industry in recent years have brought the industry to a cross-road. While the move to competitive markets has fostered enormous benefits, some serious problems have given rise to a significant policy debate, especially over the past two years. We have three basic policy choices:

- First, go back to comprehensive rate-regulation for wholesale power sales. Have the federal government set regulation for TNB power prices. Abandon reliance on market forces and competition as the underpinning of federal electricity policy.
- Second, maintain the status quo with a single buyer. Defer making decisions on major policy issues. Continue to straddle the fence.
- And third, complete the transition to effective competition in wholesale power markets.

Going back to comprehensive rate regulation is not really an option. Too much has happened, and too much has changed. The process of change introduced into electricity markets by federal policies is probably irreversible. Legislation before the Parliament today will need to put this country on a forward path toward a better electricity markets. It should further the transition to more-effective markets.

In reference to all three options, regardless, of the structure chosen there should be an emphasis on the importance of the legal system that would define rights and responsibilities of each market participant under any of these options. The legal system should be a combination of structural remedies of a workable competitive organization, behavioral remedies to govern the market participants conducts in the markets. These should include:

- Increase of antitrust enforcement commensurate with the pace of deregulation

⁵ S. Borenstein & J. Busnell, *Electricity Restructuring: Deregulation or Reregulation?* 9-10 (Univ. of Cal. Energy Inst., Program on Workable Energy Reg. Working Paper PWP-074, 2000), available at <http://www.ucei.berkeley.edu/PDF/pwp074.pdf>; E.P. Coyle, *Economist Stories, and Culpability on Deregulation*, 15ELEC. J. 90, 91 (Oct. 2002).

- Prohibit stranded cost recovery mechanisms that act as barriers to competition and
- Mitigate discriminatory and other anticompetitive behaviors with “codes of conduct”

Before any conclusion on these ultimate questions can be reached, it is important to understand how electricity deregulation has been carried out thus far. Indeed, the Malaysian experience represents a failure in design rather than the concept; this may lead to an understanding of more realistic designs that can avoid the deficiencies of the traditional regulatory approach, even if it cannot completely embrace the purity of free markets. The analysis of this paper will focus on the Malaysian electricity sector, deregulation, and the evolution of the reform policy. The paper will identify regulatory failures which are inherent in the existing restructured electric sector and will demonstrate the potential impacts of a reform policy that will sustain a workable competitive electric sector. Lastly, it will propose an array of recommendations as an alternative regulatory future for Malaysia’s utility sector.

This paper proposes how to create a workably competitive electricity market that is in line with competition law objectives and a competitive market that would boost economic development. It asks which foundational perspective should inform a workably competitive electricity sector in an emerging economy comparable to Malaysia. The assessment within each section will address two general questions. First, is it justified to assess the performance of present reform policy as dismal? Second, is the current regulatory policy in fact the best response to the issues? Lastly, it will propose an array of recommendations as an alternative regulatory future for Malaysia’s utility sector.

Background

Most experiences in restructuring reveals three main challenges faced by governments, the three impediments are vertically integrated –monopoly system, regulatory problems, and technological organizational constraints. Creating a workable competitive market requires the appropriate or conducive market conditions. There are studies on what is necessary to sustain a workable competitive electric market. Also studies exist on the effects of regulatory reforms in electricity supply on electricity prices in developing and developed countries. However, caution should be exercised, as it is important to differentiate and acknowledge that “one size fits all “is not applicable for this commodity.

As mentioned in the introduction alternative deregulation proposals can be best understood in comparison to the vertically integrated, monopoly structure of traditional electric market.

The Malaysian Experience: Reform Plans and Restructuring Journey

The first principle of Malaysian electricity sector reform policy was that competition in the electric power industry will further the economic and environmental well-being of Malaysians. The basic objectives of moving to a more competitive structure is to satisfy

consumers' interest at minimum resource cost,⁶ to promote competitive market conduct, to prevent abuse of dominant positions or monopoly powers, and to ensure that consumers benefit from competition and efficiency.⁷ However, today, Malaysian electricity deregulation represents a good illustration of a sector reform where vertical disintegration and sector competition law are inadequate to sustain a competitive electricity sector.

It was a mistake to assume that the previous regime has always generated a poor performance.⁸ And the scholars have also highlighted the challenges were due to the homogenous characteristic of electricity.⁹ Therefore, a competitive ESI should not be considered as a panacea to all existing ESI problems. It is no surprise that the Malaysian policymakers' efforts to introduce competition in the MESI have revealed two contrasting results.¹⁰ The first result is the disadvantage caused by limited modifications of the endogenous condition of the ownership integration. The second result is the advantage of retaining a 'managed market model'.

Reforms have eliminated Tenaga Nasional Berhad's (TNB) (the only provider) monopoly power in generation and, as an alternative, have created an oligopolistic market. The market now consists of TNB and "selected" new market participants in generation independent power producers (IPPs).¹¹ This does not promote fair competition in the sector. In addition,

⁶ Energy Policy Agenda research finding carried out in the period-April 2000, *available at* <http://apecenergy.tier.org.tw/database/db/ewg20/gndppr/10.3-5.pdf>

⁷ *Id.*

⁸ The vertically integrated monopoly model (model 1 in chapter 3) satisfied the energy policy, particularly reliability in supply objective, and realized its social objectives in, for example, the electrification of the remote areas of PM, Sabah and Sarawak. NEB, and later TNB, had before the 1990s successfully provided the investment and financing of many power plants projects in order to meet the increasing demand of energy supply due to rapid development in the manufacturing sector. Before the 1990s, the sector was providing supply to the country generated by fifteen power plants from four main resources – coal, gas, oil and hydro. Most importantly, cost-of-service incentives managed to sustain the tariff prices lower than neighboring countries. In addition, the MESI market did not experience high levels of political corruption as Asean countries; Malaysia has been able to be a politically stable country until today.

⁹ Carstensen, *supra* note 19; Carstensen, *supra* note 45; Hunt, *supra* note 45; Spence, *supra* note 1

¹⁰ *Supra*, Chapter Two at 2.5, the policymakers have adopted the elements of reform as suggested in the standard text, and proceeded to introduce a replication of a single buyer model.

¹¹ New market participants in the generation are companies selected by the government, where special concessions are given to some of the new players. The concession is given through the long-term contract known as Power Purchase Agreement entered between TNB and new gencos.

creation of a single purchaser model as a ready buyer (monopsony power) ¹²has resulted in unnecessary burdens and responsibilities for TNB. Today, TNB faces increasing debt because of the contracts with the IPPs. The model built to combat against monopoly power now faces a different dilemma – “opportunistic” behavior and unequal bargaining power between the IPPs and TNB.

Theories, however, have a way of being forced to confront reality. For example, today’s performance of the 3M market¹³ has shown little change in electricity prices, increase in market discipline, elimination of distortion, or promotion of fair competition. The managed market model thus far has generated some advantages and weaknesses - mostly due to the government’s¹⁴ attempt to manage competition in the electric market. This resulted in government’s over-involvement in the sector, lack of transparency in selection of IPPs, high barriers to new entrants, and increasing price caps justified by high marginal cost of the industry.

In contrast, the advantage of maintaining a managed competitive market has allowed some positive results compared to other electricity reform experiences. This 3M model has an average price of 33 cents per kWh (equivalent to 10 cents USD)¹⁵ and the power sector has never in the past 17 years (1995-2012) recorded a substantial or irreparable price spike. All the stakeholders have enjoyed increased access to electricity.

¹² Monopsony power refers to a market where there is a single buyer in any market. It is similar to monopoly powers. The difference is just that a monopoly refers to single seller power and monopsony is the single buyer power in the market.

¹³ Throughout this chapter and the following chapters will refer to the managed market model, or 3M.

¹⁴ Policymakers (are also the 3rd school of thoughts as categorized in chapter one) supra. This chapter and following chapters refer to the parliament of the country. Malaysia’s legal framework is comprised of the constitution (the highest law of the land), the parliament, and the courts.

¹⁵ See Tenaga Nasional Annual Report 2011, available at <http://www.tnb.com.my/tnb/application/uploads/annualreports/b9541634ceb42977021f5064bebab605.ppd> (stating that “comparisons average electricity from 2004 till to dates shows tariff prices had been decline in its prices but steady increase of tariff since its reform”).

in the generation market where a competitive segment also exists. The next option addresses these questions more positively.

Dilemma of Option 2;

A study entitled “Adoption of Single Buyer Model in Asia, African Countries and Eastern Europe” asserts that the mechanism of this model was “appropriate” for developing countries. It “fit the developing countries modus operandi -introducing a limited form of competition and simultaneously preserving an artificial monopoly”. Because these countries wanted to maintain the monopoly position of the national power sector, the model allows a monopoly over the electricity wholesale trading even after the vertically integrated national power system is unbundled. These countries are able to announce that their electricity industry is competitive in nature, which conforms to standards and requirements of the WTO, World Bank, and other international financial institutions. The model is also a mechanism to attract much needed foreign investment.

In this option, there is little and no major change to the structural organization to accommodate a complete competitive market. In addition, trading arrangements are limited to the three options as this model only promotes and provides partial competition in the ESI system.

Third Option: Wholesale Competition

This option would require substantial reform measures and modification of basic condition, structure legislation and institutions. However, this option has been argued to be the best option that promotes competition in the market and thus address the limited competition issue in MESI. The legislation would have to identify the framework suitable to MESI. There are five major changes required for wholesale competition. These changes are:

1. Supply Side: remove barriers to entry. Buy out of the old regime by valuing the assets and addressing stranded cost. Expand market areas by improving transmission. If necessary for market power control, divest utility generation into smaller units.
2. Transmission Operation: control of transmission separate from traders; pricing, and expansion arrangements. Either through regional profit-making regulated Transco’s incorporating the system operator or co- operatively -owned by all traders. As discussed in chapter 6
3. Demand Side: hourly metering for most of the consumption, and price designs that expose customers to the spot price for some of their consumption.¹⁸

¹⁸ In the present market, we are accustomed to paying electricity on specific of contract based on full requirements of tariff set by TNB and regulated by EC. The hour metering would mean that the meter must record usage by the hour. Most meters now record total use only and are read once a month, although some large customers have” interval” meters that can record usage every hour. This meters record usage by sub -periods within the billing (time- of use-rates), and some record both total energy use and monthly peak demand (actually maximum average energy use over a short period such as 15 minutes). Hourly metering does not mean that the information necessarily has to be transmitted by the

4. Trading arrangements: system operations separate from all traders (sellers and buyers), regionally consolidated and based on an integrated model, with central dispatch and locational energy prices.

5. Gradual implementation of retail access. When production market is working, choice for all customers should be in place. This requires an extensive settlement mechanism and customer full comprehension on retail competition implication and process, and decisions but default provision.

6. Develop regulatory mechanism for detection and control of market power

These changes must permit competitive markets in electricity to meet the ordinary requirement of commerce. Many buyers and sellers must be able to access each other easily, they must be able to make contracts in advance and at spot prices; and they must be able to transport the electricity with a high degree of certainty as to the price and availability of the transmission network.

Implementing wholesale competition includes¹⁹:

- 1) All generation should be deregulated and able to transact or sell in a competitive market
- 2) Creation of multiple buyers in the form of distribution companies and or large buyers
- 3) Distcos and large customers should be able to purchase competitively in the wholesale market.

The key structural elements of a deregulated wholesale competition include²⁰:

hour to the billing system. The data is transmitted may be transmitted periodically over regular, telephone lines, cellular telephone networks, or by roving vans. The bill should show an hourly price, multiplied by the amount used, for each hour of the month. The hourly price does not have to be the spot price in the wholesale market; customer can get contracts from the retailers that will give them affixed priced. Third, the customer should have information about the price he will be paying. See further details Hunt; *supra* note 45, at 77.

¹⁹ *Supra* Chapter Three, at 130

²⁰ What the United States calls *wholesale competition* under the 1992 Act is not what we mean by Model 3 in Chapter 3. The wholesale market was (and in some places still is) a marginal or fringe market where regulated utilities sell power to one another. Utilities can also purchase from independent generators for incremental load, or when they close old generating plants. In the United States, there is an additional purchasing sector, the municipal utilities and cooperatives that own no generation. Independent generators and utilities are permitted to sell to them. But there is not much of a market in selling to vertically integrated utilities that have their own generation, plus a few municipals. This is hardly vibrant competition—most of the sector is still regulated; the number of potential buyers from an independent generator are minimal. This may be called wholesale competition, but it should really be called marginal or fringe competition. Nowhere in the United States has a Model 3 approach with competitive generation been considered—the approach of making generation fully competitive but keeping the number of deregulated final buyers much smaller. If deregulation comes, it always comes as full retail competition.

1. Elimination of market entry barriers in power supply (for both new and existing facilities)
2. Vertical disintegration of industry structure through separate ownership of generation, transmission and distribution functions.
3. Creation of regulated entity (with a common carrier obligation) to own, operate and maintain the power transmission network and serve as “a central market place” for power transactions.
4. Multiple independent distribution companies providing service to retail customers.

A wholesale option allows competition in production, which is where most of the benefits are. It requires many buyers to pull through the benefits of lower prices. It avoids the costs and problems of providing retail access for all the small customers.²¹

There would be no cost-of-service regulated generation.²² Distribution companies (distcos) and large customers would be the purchasers, but wholesale competition still gives the Distcos a monopoly over the entire smaller final customer.²³ This option demands major changes and modifications to MESI endogenous conditions if it to be implemented.²⁴

In addition, to facilitate a workable competition for MESI, the government needs to formulate and pass a number of policies and regulatory levers to generate market competition, encourage efficiency, and mitigate market power.²⁵ The core elements are open access to network, market expansion, efficient market design, and mitigation of market power.

The key elements include²⁶:

1. To achieve an open access network, there must be a workable regulation to enforce non-discriminatory and non-preferential rates for transmission service and transparency as to information for all market participants.
2. Legislation to formulate a workable market design- Chapter Three has discussed the importance of a correct market design and its problems.
3. Create an independent system operator (ISO) and forward markets for electricity. What type of ISO would be appropriate is a choice between centralized versus decentralized.

²¹ Hunt, *supra* note 45, at 43

²² *Id.*

²³ By contrast, Model 4 (retail competition), which we discuss later, permits all customers, large or small, a choice of supplier.

²⁴ Perhaps the simplest test would that it does not require the whole new consumer-oriented billing, settlement, and information infrastructure needed for retail access in option 4 or retail competition.

²⁵ Richard and Udi have cited that in the US, following several years of development, the FERC has issued landmark policy in this regard in 1996, through Order 888 and 889. Order 888 required utilities to set non-discriminatory and no preferential rates for transmission service, and Order 889 improved transparency by requiring firms to post their available transmission on the Internet. RICHARD O’NEILL & UDI HELMAN, REGULATORY REFORMS OF THE US WHOLESALE ELECTRICITY MARKETS, articles in the book written by Marc K. Landy, Martin A Levin & Martin Shapiro editors of the Creating Competitive Markets: The Politics of Regulatory Reform. (Brookings Institution Press, 2007), at 133.

²⁶ *Id.*

The crux of this debate is whether, given the nature of power technology, a liberalized ESI can achieve economic efficiency without a relatively high degree of centralized hierarchical coordination, detailed market rules, and possibly some administratively determined prices.²⁷ A centralized ISO would operate both the spot markets and the transmission system.²⁸ As an alternative, a more decentralized vision exists in which private entities would form largely unregulated forward exchanges (similar to other organized commodity exchanges) separate from an ISO which would operate transmission.²⁹ The bulk power trading would take place within these exchanges, and ISOs would largely be limited to adjusting the forward energy positions through voluntary bidding process, such as for congestion management during the day.³⁰

4. Introduce a short-term auction market. In general, the ISO would operate two energy spot markets, a day-ahead market, which typically in the mid-afternoon before the operating day (and hence could be characterized as a forward market, although most spot trades clear in the market), and a real-time or “dis-patch” market, which clears as often as every five minutes of the operating day.³¹

5. Regulate transmission pricing and access rights

6. Ensure adequate generating resources and capacity markets

7. Promote demand side participation

²⁷ Proponents of the centralized market models answered this question essentially in the negative as the owners and operators of private generators would not have the technological capability, informational and system control to create an economically efficient and reliable interface between forward financial transactions and the physical operations of the grid in the short time frames needed (hours, minutes and even seconds).

²⁸ The best example of such a centralized features was the market in England and Wales, in operation since 1990. The design proposed in California and elsewhere in the early 1990s were often variations on those (evolving) rules.

²⁹ In this context, “independent” generally means that the supplier is independent of the vertically integrated utility that it may be selling to. Merchant means that the supplier is entirely reliant on market revenues (that is, its assets are not under any form of cost-of-service regulation). See O’Neill & Helman, *supra* note 492.

³⁰ California established a version of the decentralized market model in 1998. On the other side of the country, PJM in 1989-1999 and in New York in 1999 (and subsequently in the eastern and Midwestern ISO markets). Following the California crisis, the mood shifted away from the decentralized design. O’Neill & Helman, *supra* note 492, at 19. California itself, under FERC guidance, has completed but not yet implemented a redesign of its market along the principles that had prevailed in the eastern ISO markets. See FERC, “Order on the California Comprehensive Market Redesign Proposal,” 100 FERC 61,060 (July 2002).

³¹ Offers of the bids to buy wholesale power (denominated in dollars per megawatt-hour) must be submitted a few hours before the markets clear. Most of the physical market activity is on the selling end, as few buyers of power are currently “price-responsive”- and that is they simply buy at the clearing price, whatever it is. There is also substantial quantity of what is called “virtual” buying and selling by arbitrages between the day-ahead and real-time, resulting in a convergence of market prices between these two markets. In addition, to energy, the ISO markets include products “ancillary services” notably operating reserves, which unused capacity on available generators that is held in reserve in the event of an unplanned outage of a large generator or transmission facility and regulation, which is output used for maintaining the second-by-second balance of energy supply and demand. These ancillary service markets are much smaller financial consequence than wholesale energy and hence will not be discussed in this chapter.

8. Monitor and Mitigate generation market power

This option has to deal with other challenges First, there is the constraint of the natural monopoly in transmission. Second,³² stakeholders' dilemma in addressing electricity conduct issues because of its homogenous characteristics. Third, because of the variances in demand, this model faces important challenges from market power abuses.³³ Fourth, market participants will have incentives to manipulate the market. To conclude, there is the lack of institutional mechanism to address these issues.

In addition, wholesale service is not premised on a statutory obligation to serve, but instead is based primarily on voluntary contractual obligations. Rates, terms, and conditions of service would be determined largely by these negotiations. Legislative and regulatory decisions have addressed ways to promote competition and modified regulatory roles for a market environment but unlike state initiatives, have not required an older paradigm based upon an obligation to serve to be undone.³⁴

This also requires good trading rules to govern all new market participants. Today, the lack of understanding and appreciation of the implications of a wholesale market from all stakeholders poses a great challenge in implementing wholesale competition. Even though the benefits outweigh the challenges in the long run, policymakers will face a difficult task ahead in addressing the customer's apprehension of price spikes.

In reference to all three options, regardless, of the structure chosen there should be an emphasis on the importance of the legal system that would define rights and responsibilities of each market participant under any of these options. The legal system should be a combination of structural remedies of a workable competitive organization, behavioral remedies to govern the market participants conducts in the markets. These should include:

- Increase of antitrust enforcement commensurate with the pace of deregulation
- Prohibit stranded cost recovery mechanisms that act as barriers to competition and
- Mitigate discriminatory and other anticompetitive behaviors with "codes of conduct"

Present legislative remedies within the existing federal laws have not anticipated the restructuring of the electricity industry, particularly at the retail level. Federal and state regulators, if established, will need new authority to impose additional structure and behavioral remedies to eliminate or mitigate market power. These include:

- Enact regulatory reforms to complement the needs of a new industry structure
- Ensure adequate access to books and records by agencies to monitors inter –affiliate transactions
- Clarify the authority of MEGW and EC to review utility Mergers

³² *Supra* Section 3.2 of this chapter. Where a more detailed explanation has been provided to illustrate the dilemma and challenges of stakeholder in addressing conduct issues in electric market.

³³ *Supra* Chapter Two. *See also* Section 2.5 and Section 3.0, *supra* Chapter Three.

³⁴ *See* Griffin & Puller, *supra* note 18

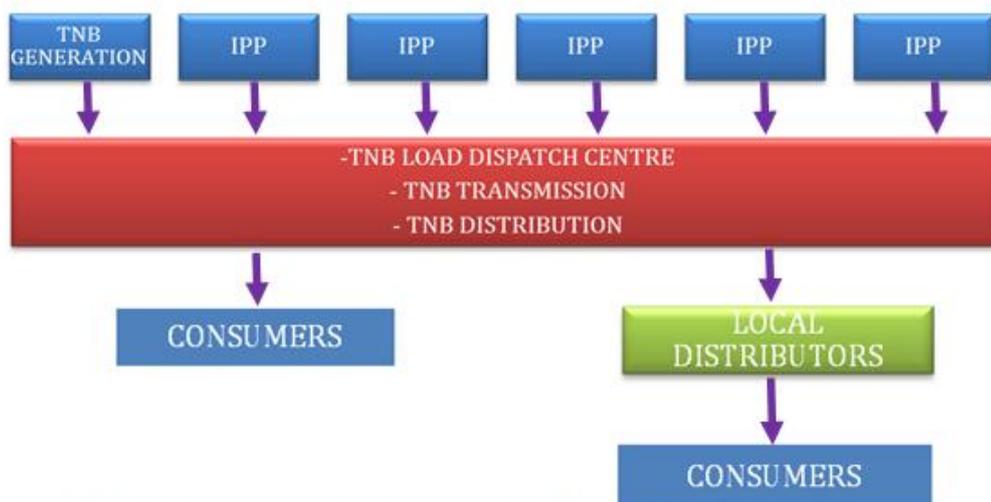
- Establish a commercial practices standards setting organization
- Repeal obsolete policies and acts after competitive markets have been formed.

The legal system proposed should be an independent and transparent as this would facilitate the monitoring of the new competitive market.

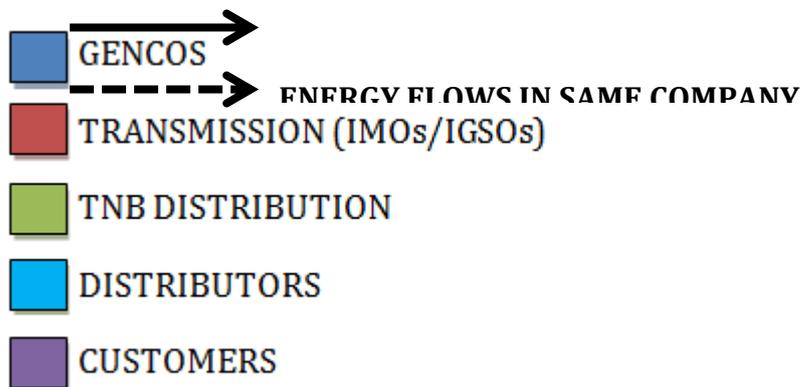
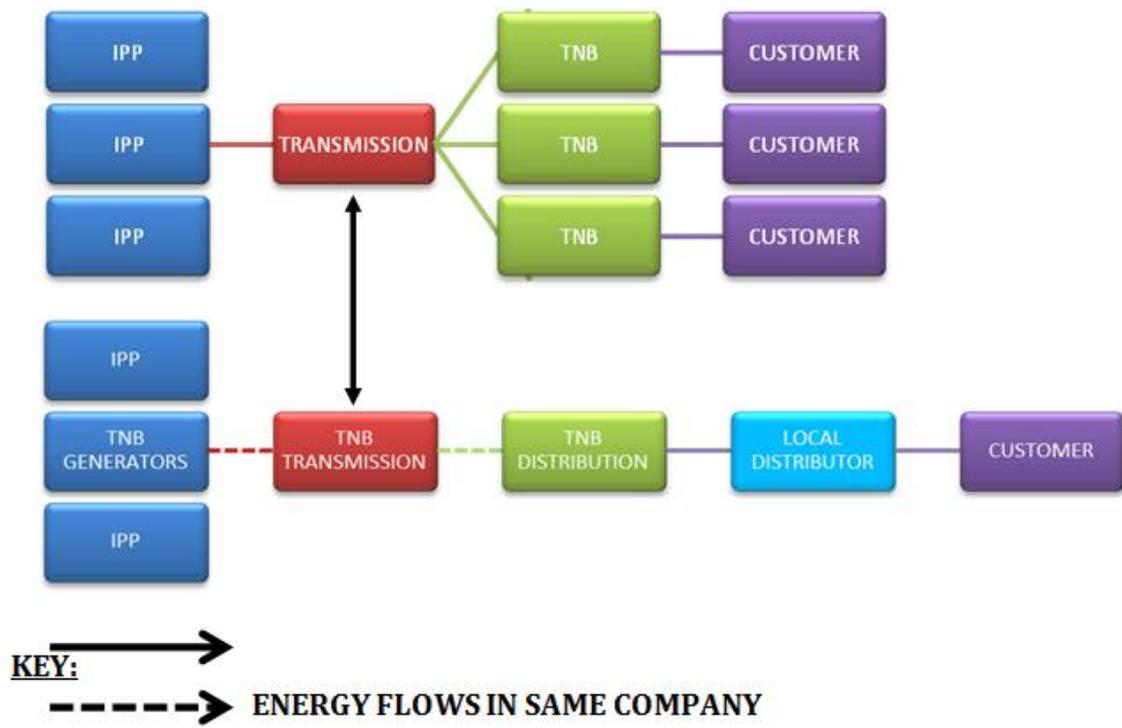
Structural Alternatives

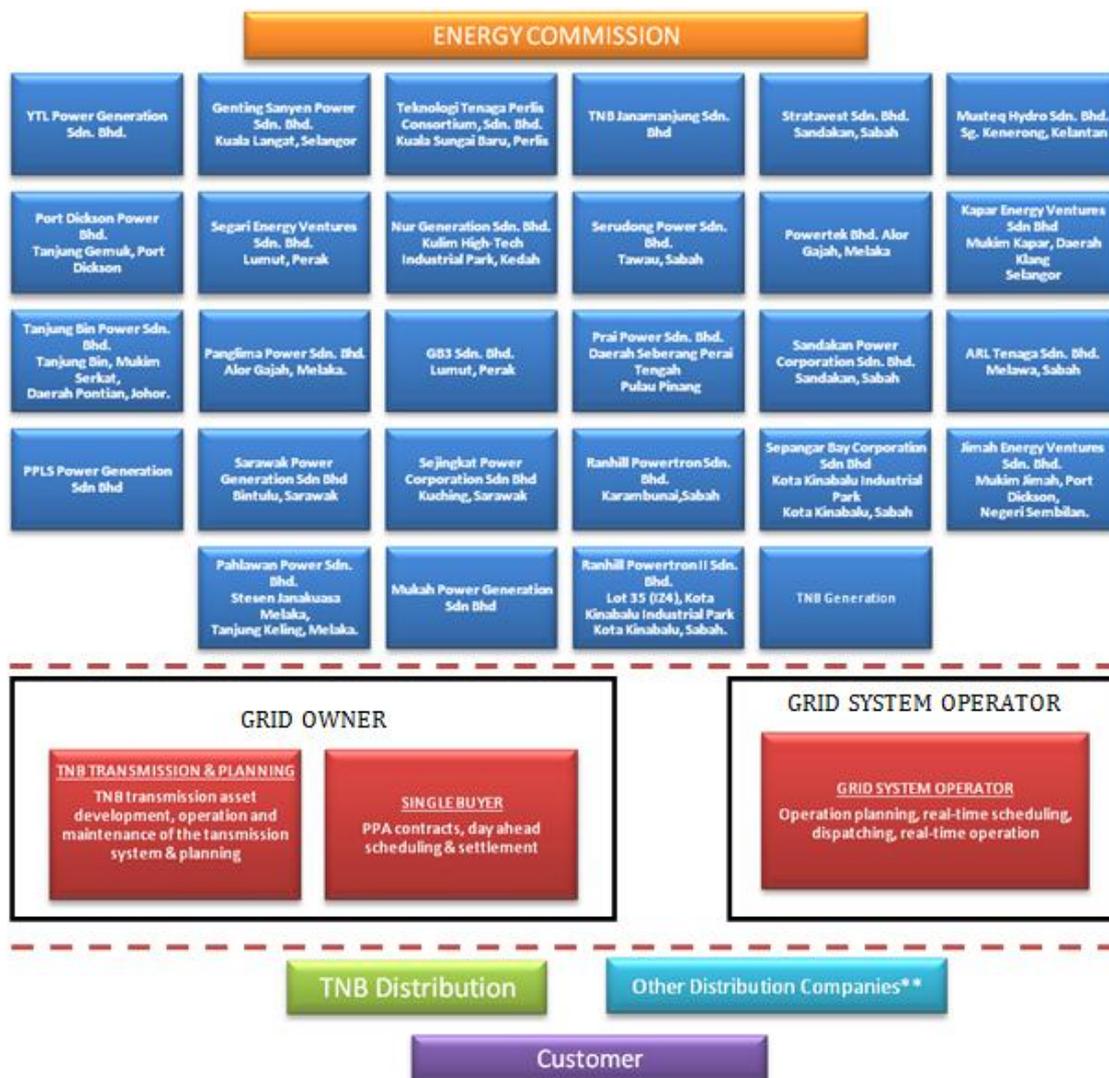
Characteristic	Model 1 Vertically integrated	Model 2 Single buyer purchasers	Model 3 Wholesale	Model 4 Retail
Definition	Monopoly at all levels	Competition in generation	Competition in generation and choice for Distco	Competition in generation and choice for final consumers
Competition Generators	x	✓	✓	✓
Choice for retailers	x	x	✓	✓
Choice for final customers	x	x	x	✓
Transmission /Distribution	x	x	x	x

MESI Single Purchaser Agency



Market Model (3M) Replicates Single Buyer Model(SBM)





KEY:

- Regulator
- Generator
- Transmission
- TNB Distribution
- Local Distribution**
- Customer

** There are 121 local distributors providing service to the local areas designated by EC. Refer to http://www.st.gov.my/v4/index.php?option=com_content&view=article&id=5682&Itemid=4303&lang=en

Limited Competition in MESI

Malaysian electricity deregulation’s experience represents a failure in design rather than concept. The reforms did not go as planned. Just like other reforms, MESI’s deregulation was implemented on weak competitive policy basis; this is because the policymakers’ and other market participants’ underestimated the ESI reforms challenges. The first weakness was

its goal. The aims' of the deregulation or reforms to restructure did not capture the 'real' objective of competition laws and policy. Rather it was purely based on microeconomic impetuses. The restructuring aims and its enabling laws were later adjusted to incorporate vague and ambiguous competition law and policy.³⁵

The second disadvantage is both policymakers' and market participants' lack of understanding of the market design's function and its importance, which led to a limited reform of endogenous conditions resulting in rather dismal performance of the sector. The dismal performances are evident as present market design could not address issues of a competitive market, such as market power issues, TNB's accumulating debts acting as the off-takers in the system³⁶, government's reluctance to allow prices based on the competitive market system, and the inability to address potential challenges for example investment who and how to bear future new power plants, managing the increasing transactional costs in this sector.³⁷

The third disadvantage was the indifference to or lack of commitment for a comprehensive and transparent legal framework. The Energy Commission established in 2003 has not been able to act on any competition infringements. Its current role has simply been regulating the TNB, acting as a mediator if there is deadlock between TNB and IPPs. Indeed, for the past eleven years, there is no disclosure or action taken for unfair conducts of all market participants. The EC also oversees the requirements for potential and new license for power plants.

Retaining a managed market model has created issues and concerns which are exclusive to MESI:

1. Limited Competition

The current weaknesses in MESI do not rest solely on the market participants, but instead, they are generated from design of the market. Retaining the transitional arrangements for more than 18 years brought on single buyer market (SBM) weaknesses to MESI. The weaknesses were generated because this model could not address all the key elements of a reformed ESI.³⁸ Consequently, MESI suffers from:

³⁵ Elaboration on this issue is provided in a later section of this chapter and Chapter Six.

³⁶ The EdgeMalaysia.com dated Wednesday, 30th May 2012, reports that the RAM ratings reaffirmed as end of 2011, TNB debt load remained hefty at RM 19.05 billion (incorporating the group fixed capacity payments to the various IPPs, its adjusted gearing ratio stood at 1.46 at the same date. The most recent update from TNB Annual Report 2012, at 227, is that its non-current liabilities are RM 51 million). Potential challenges here includes the monopsony power clearly still in the hands of single buyer TNB, the PPAs issues, as explained in discussed later in this chapter and other issues.

³⁷ Issues of potential power plants finance and improvements of the National Grids and market power issues.

³⁸ 1. The mechanism promotes partial deregulation of ESI as such it is not a good market design. This market saw many policymakers adopted random elements of reforms (discuss in chapter two), as a

1. As section 4.4 of this Chapter shows, decisions on adding generation capacity are made by federal government officials who do not have to bear the financial consequences of their actions. There has been upward bias in the generation capacity. The apparent reason is that government officials found it difficult to resist powerful interest groups pushing for state-guaranteed capacity expansion. To date, TNB and its affiliates maintain the “artificial monopoly” in generation sector in Sabah where SESCO is affiliated with TNB. TNB’s Annual report³⁹ indicates the practice of granting IPPs license to TNB increase TNB’s gencos to 14 within the 27 generators in the generation segment in Sabah . As a result this created only a limited form of competition.

2. The Power purchase agreements create a contingent liability for the TNB, because all IPPs’ output are sold to TNB transmission and distribution and the power producers do not have the access to other customers. TNB transmission and distribution has the authority to pick and choose a number of generators that will supply the demand required by customers. There agreements run for 21 years (whereby the usual range is 15 to 20 years) and guarantee return for the IPPs with little risks. This measure was considered as “necessary” to secure the private participation. The main economic elements of PPAs are the clauses relating to energy prices and payment for availability.⁴⁰ These terms and conditions in the PPAs, created a problem to TNB.⁴¹

result, the new market does not have the right endogenous conditions for the single buyer market to operate. This led to a lack of mechanisms to address transmission and fair access among market participants because of insufficient or limited rules to address conduct issues in this market.

2. No change in government status quo, as governments are usually in transmission and distribution
3. National purchaser agency creates a conflict of interest. The conflict arises when a purchaser as a single buyer for example TNB who also has generation companies, which can create a conflict if the buyer favors its subsidiaries over other market participants.
4. Energy sales need to be secured by long term contract.

³⁹ TNB Annual Report 2012, *supra* note 364, at 13

⁴⁰ Mohammad Yusri bin Hassan, Faridah Hussin & Mohd Fauzi, *A Study Of Electricity Market Models In The Restructured Electricity Supply Industry, Centre Of Electrical Energy System*, Faculty of Electrical Engineering Universiti Teknologi Malaysia (2009), for further readings and details on this concerns. The terms in PPAs differ between IPPs and most placed the risks on TNB to bear, the prices are fixed and not subjected to any increase of fuel prices hikes and demand of the electricity.

⁴¹ Debt as of December 2012 was at RM 23.1 billion equivalent to USD 7.26 billion.

3. Hands- on intervention of the EPU and EC ⁴² in market participants trading arrangements in MESI. Both often imposed their regulatory power over TNB and IPPs when negotiation deadlocked.
4. The cash-based budgeting typically used in MESI hides the fiscal exposure associated with guarantees, creating perverse incentives that distort the government’s decision making. The government’s new policy is that increased fuel price is to be shared between three parties, i.e., TNB, Government, and PETRONAS.
5. The single-buyer model responds poorly when electricity demand falls short of projection. Ideally, electricity prices would fall, stimulating demand, and revenue losses would be allocated to private financiers best equipped to manage market risks. Under the single–buyer model, however, wholesale electricity prices rise because take–or–pay quotas (or fixed capacity charges) must be spread over a shrinking volume of electricity purchases. When these high prices cannot be passed on to final consumers, taxpayers must bear the losses. There is a proposed “new” concept to address these issues (FFTUCP) which critics argue will finally include the additional cost to the end users bills.⁴³
6. The single-buyer model hampers the development of a cross border electricity trade by leaving it to a single–buyer, a state-owned company without a strong profit motive. This can become a major disadvantage when neighboring countries adopt a less restrictive market model.⁴⁴At present, TNB expand its horizons to Pakistan and Thailand and Vietnams but this cross borders policy is creating additional liability on TNB cash flows.
7. The single–buyer model weakens the incentives for distributors⁴⁵ to collect payments from customers. The state–owned, single–buyer is often reluctant to take politically unpopular action against delinquent distributors, and its aggregation of cash proceeds from distributors allows it to spread the shortfall caused by poorly performing distributors among all generators. When distributors see that paying and nonpaying distributors are treated alike, their motivation for cutting off nonpaying customers weakens.

⁴² EPU, is economic Planning Unit, EC is the energy Commission, please refer to page 23 and 24 under regulatory bodies. Both authorities are important here, this is why I have included the explanation at the earlier discussion. It is these two bodies that will act as evidence that the government exercise too much involvement in the current market.

⁴³ TNB Annual Report 2012, *supra* note 364, at 12

⁴⁴ Thailand and Philippines both are adopted a rather aggressive competitive policy driven by four microeconomic impetuses, however both fail to realize their dreams due to political instability in the country eventually both had to revert to less restrictive market model . *See* Jamasb, Newberry & Pollitt, *supra* note 97. *Also see* Rector, *supra* note 313.

⁴⁵ *Supra*, Chapter Two, Section 2.3.3 at 39. Critics commented that TNB has not taken an active action against its government delinquent’s customers and government link companies. However, till to date there is no disclosure of data (locally or international) data that support these assumptions.

8. The single-buyer model makes it easy for the government to intervene in the dispatch of generators and the allocation of cash proceeds among them despite clear guidelines. The EU and EPU both have interfered and made decisions on the above issues.⁴⁶

9. The single-buyer model increases the likelihood that under the pressure from vested interests, governments will indefinitely delay the next step toward fully liberalized electricity markets.⁴⁷

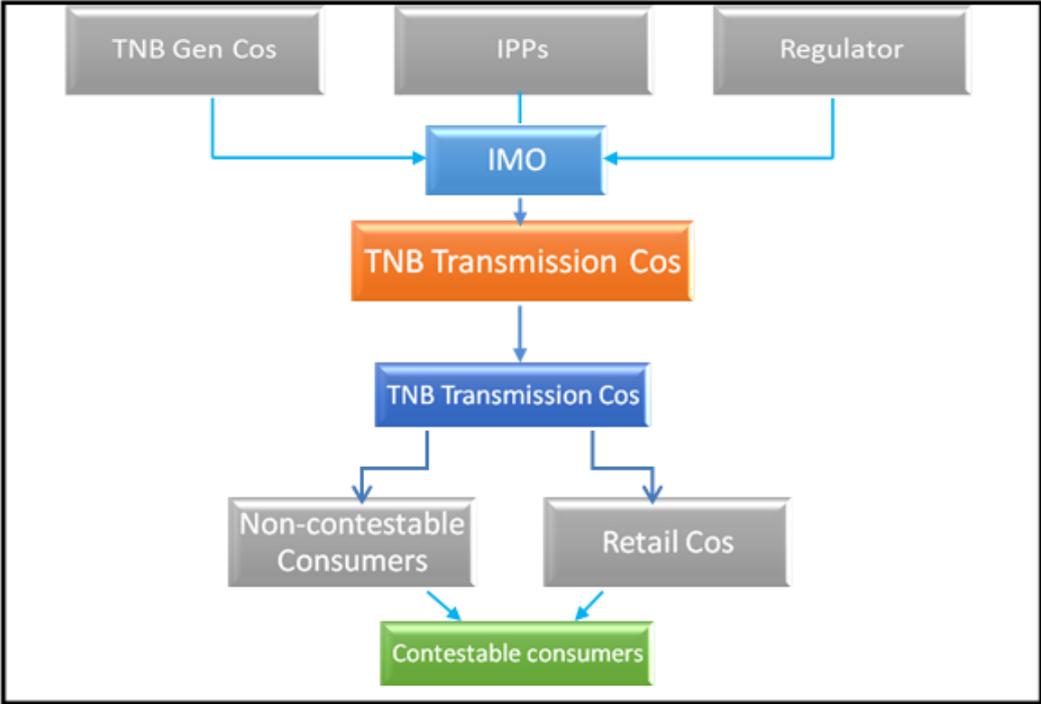
The problems are mainly a result of over involvement of the government in the industry and lack of commitment to competitive theory. In addition, deviation from some of the “standard” model prerequisites contributed to the above mentioned outcomes.⁴⁸ Below is an illustration of the 3M market model:

⁴⁶ In Poland and Ukraine, for example, pressure groups formed by coal miners have obtained special treatment for coal-fired power plants. In countries with high level corruption an equally important concern is the temptation to divert cash to illegal purposes, such as funding political campaigns.

⁴⁷ These problems form the basis of the arguments that there is no necessity to shift to single buyer transitional arrangements before the conditions for a competitive market are satisfied. Both Lovei, *supra* note 236 and Hunt, *supra* note 45, has conducted studies on this model and suggested that policymakers should just skip this stage and proceed with competitive ESI market by adopting a market model with multiple buyers immediately after unbundling. Lovei’s findings show that the single-buyer model has major disadvantages, particularly in countries with weak or corrupt government and low discipline. However, some developing countries adopted this model not entirely for political reasons, but rather the original plan for a full wholesale market (for example, Malaysia and Thailand) was abandoned due to the California. The policymakers in these countries were enthusiastic about the deregulation concept but California’s disastrous experiences provided a valuable lesson. It provided the right impetus for the policymakers of the developing countries to adhere to some form of sequencing strategy in their reform agendas. Present developments in Malaysia and Thailand show that both countries will introduce the multiple market buyers by 2020.

⁴⁸ The electric sector after 15 years of deregulation is still recording a gradual increase in its electricity tariff, no changes on its cross subsidies issues, and still faces bottlenecks and transmission concerns affecting its power supply reliability in the country. Granted, reacting to the reform in the 1990s, the market showed evidence of price spikes in the first two years of the reform phase. However, price hikes were resolved through control measures undertaken by TNB and ST (Energy Commission). Indeed, regulation and the PPAs’ long-term contracts have been suggested as the key elements to ensure that the MESI do not experience price spikes as experienced in California, New York, and Singapore.

Possible MESI Development



A Workable Competitive Electric Market Model

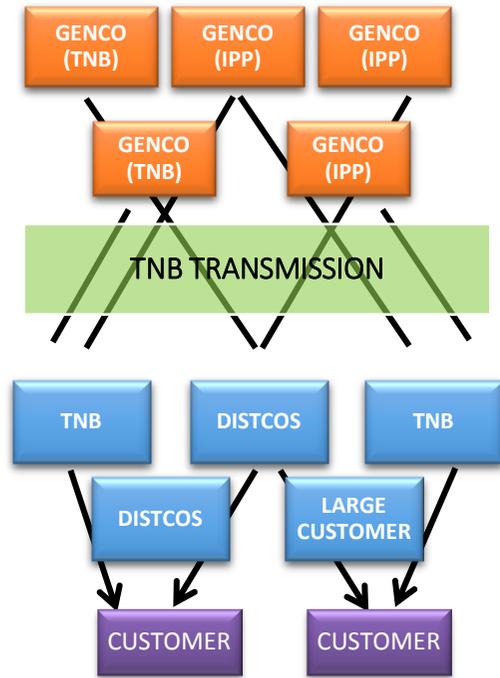


Figure 5.1

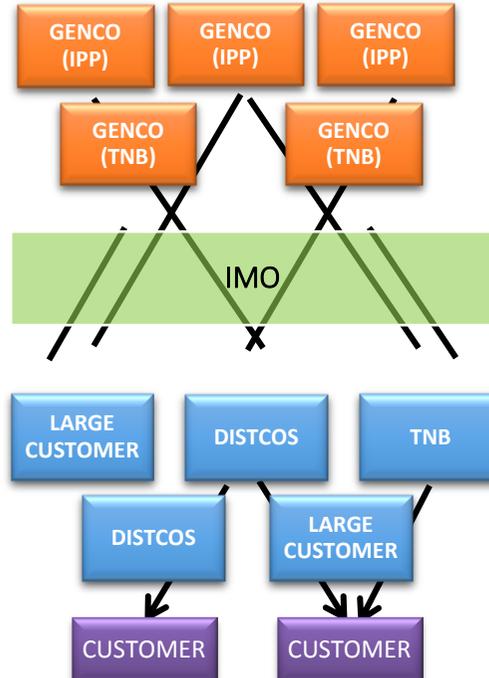


Figure 5.2

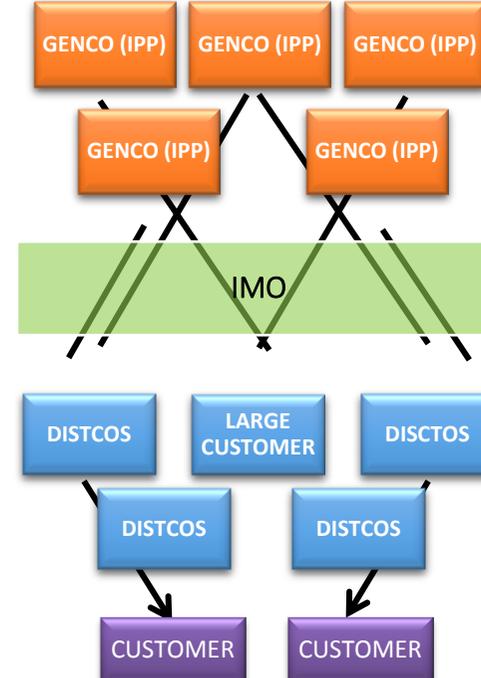


Figure 5.3

KEY:



: Generation



: Transmission (Wholesale MarketPlace)



: Distribution



GENCO : Generation Company

TNB : Tenaga Nasional Berhad

DISTCOS : Distribution Company

The above diagrams are illustrative of possible options. The first figure 5.1 retains TNB as the regulated monopoly by allowing TNB's gencos and the IPPs in generation. In this model, the number of producers may be increased by having more IPPs particularly in Sabah and Sarawak. The appropriate numbers in the market would be influenced by technology developments and power demand. This figure will not require major modification or changes because TNB will preserve its function and act as the ISO. This suggestion may be justified because TNB has the experience and facilities to operate as the ISO. The challenge will be on how TNB can ensure that it is independent and transparent in carrying out its duties as system operator. Simultaneously, TNB needs to address its investment issues and upward bias in its operation.

Distribution will have to permit other sellers as distcos to compete with TNBD and provide for the large customers to be local distributors. This aspect will not be a difficult task presently 121 local distributors serve remote and commercial areas. However, TNBD will have a difficult task to ensure fair access is guaranteed to distcos.

The second alternative in Figure 5.2, assumes a separation of the three functions, TNBG still exists among other market players, and however, transmission will be under "sole responsibility" of an ISO, carrying out its central role of a highway for all producers. At the same time, the distribution function again will be a combination of TNBD and other distcos this will create more sellers in the distribution sector. This figure will eliminate conflict of interest, monopoly and monopsony issues as transmission is placed under an ISO (that could be cooperatively owned by all market participants), it will also address policymakers concerns on the issues of market powers abuse such as withholdings, and opportunistic behavior of market participants on forward markets. The business culture in an emerging economy such as Malaysia are very different that an advanced countries such as UK and US. The merchants are accustomed to command and control regime and thus investment for social welfare are not a common phenomenon for the market participants. The private sector interest would purely driven by profit motivation. This evident in the first five IPPs at the beginning of the deregulation process in 1992.

However, current market players and consumers are better informed compared in the 1990s, thus with a complete deregulation, market participants will be forced to conduct business free from pure economic interest and opportunistic self-conduct. These participants will eventually understand that a competitive market regime commands them to observe conduct rules and behave in accordance with competitive market requirements.¹ Figure 5.3 shows the most appropriate model of wholesale for MESI. This model calls for a **total** separation of the three functions enforced by the government. All generation should be deregulated and able to sell in a competitive market. Second, **multiple buyers** must be created in the form of distcos and large customers. Third, the distcos and large customers should be able to

¹ *Supra* Chapter Three, Prof Carstensen's theory,

purchase in a competitive market. Transmission will be managed by an ISO through a centralized or decentralized form as discussed above.

Indeed, this would mean the dissolution of TNB and its subsidiaries as the single utility. However, its experience and facilitates could serve as a BO. Alternatively, it could decide to continue as a distribution utility in some part or parts of the country. In this case, it would be required to divest its generation and transmission assets. But TNB's distribution operations might have to be divided into several companies in order to create the necessary number of buyers. If TNB followed either of these options, it would have to divest its generating facilities. There are two options each designed to compensate investors for at least the book value of such assets

1) Utility stockholders could be assigned pro rata shares in a new (totally independent) corporation based on their equity in TNB.

2) Alternatively, TNB could sell its generating assets and distribute the proceeds to current shareholders. Any differential between sales price and book value would be recovered over time through surcharges imposed on power sales to the distribution companies.

TNB could also elect to continue as an unregulated power supplier. Then it would be required to divest its distribution network. Mortgage bond indentures and outstanding preferred stock will constitute formidable barriers to vertical disintegration.

The distribution facilities could either be transferred to newly formed distribution companies whose shares are distributed on pro rata basis to all shareholders of the existing company or they could be sold. But the law should limit any one generator to no more than 35% of installed capacity.

The outcome of these efforts would then be two distinct set of firms; unregulated power suppliers and regulated distribution utilities. The remaining (and the most uncertain) element of this deregulation is the treatment of power transmission function. Most advocates of "traditional deregulation scenario" propose some form of regulated entity (with common carrier obligations) to provide power transmission services linking suppliers with distributions utilities. Proposals for creating such transmission entity vary with regard to such factors as :

1. The geographic scope of the entity (i.e. should it conform to existing service areas or should it assume a more regional character)
2. Ownership (public or private)
3. The method whereby it acquires transmission facilities from TNB (e.g. ,condemnation)
4. Role in the system planning (e.g., assuring adequate capacity is constructed where and where needed);
5. Role in coordination (e.g., economic dispatch, reserve pooling, etc);

6. Role in “creating markets’ for bulk power transactions (i.e., brokering between buyers and sellers);
7. The process whereby it sets rates for transmission services; and
8. The mechanism whereby its rates and charges are regulated.

All the above proposals lead to a number of options for structuring a transmission entity. The policymakers will have to decide who should run transmission, the transmission market design, pricing model and investments issues.

Evaluation of Legislative and Institutional Elements

Deregulation means ceasing to control prices and restrict entry to the markets. But this would be disastrous for if it were done without necessary safeguards or supportive market regulation. Just declaring the industry deregulated and providing access to the transmission system cannot produce a competitive market in electricity.² The present legal framework does not provide the appropriate remedies to govern a competitive market. The present legal framework would need to be more comprehensive, comprising structural³ and behavioral remedies.

Policymakers need to reject the premise that competition will regulate the conduct of market participants regardless of the structure of those markets. This will not suffice to bring about workable competition. However, this suggestion rests on questionable assumptions about the market participants. First, because changes in conduct can feedback to structure directly and indirectly to the basic conditions, it is possible that changes in conduct can cause the conditions and structure of wholesale markets to be transformed. Second, there may be a belief that if market participants are told that they must compete, they will do so regardless of their economic self-interest. The second assumption is naïve given the incentives created by existing structures for strategic conduct. The first assumes either very strong feedback effects that could only occur if very draconian conduct rules existed or that the structure and condition of electricity market do not require much in a way of modification. However, not only are the current and most possible conduct rules insufficiently draconian, but it would be seriously wrong to assume that only minor adjustment in structure are needed for electricity.

4

Workable competitive markets require rules and regulations that facilitate their operation. A fundamental fact of economy activity is that markets need to be constituted and facilitated by

² In the best case, nothing happens at all. The United Kingdom had a law on the books permitting competitive entry and requiring open access from 1984 onwards; but since it did not provide the “trading arrangements” for access to the transmission that were mentioned in other chapters, there were no takers at all until the industry was totally restructured in 1990.

³ Examples of structural remedies are operational separation, antitrust review of new mergers and acquisitions, and also independent regional grid management, while examples of behavioral remedies are antitrust enforcement, prohibition on stranded cost recovery as a barrier to competition and also regulation of discriminatory and other anticompetitive behavior. Examples of legislative remedies are adequate regulatory authorities, access to books and records and also merger approvals.

⁴ Carstensen, *supra* note 19

adequate and enforced legal and regulatory commands if they are to fulfill their roles. Viable electric wholesale market need to be reliable, not subject to manipulation, competitive, and accessible to buyers and sellers. When shaping regulations for a workable market, regulators must consider structure and the strategic conduct feasible for rational market participants. Moreover, when market conditions and structures are inconsistent with workable competition, conduct oriented remedies are unlikely to bring about competitive results. Hence, if the public policy relies primarily on conduct rules to induce a workably wholesale market, it is unlikely to succeed.

It is important that an evaluation of the present legislative and institutional aspects be carried out. Indeed, based on the earlier discussion in the introduction, the challenges of a deregulated competitive market require modification and expansion of both legislative and institutional factors to address these problems. Failure to institute a comprehensive legislative and institutional reform would lead to weak outcomes and create intrinsic challenges as suggested in chapter 4. Implementation of wholesale competition requires a legal framework amendable to a more liberalize MESI.

To proceed with wholesale competition will require major changes to the structure of MESI to increase players (aside from TNB and IPPs) in the market. This in turn needs trading arrangements to govern all players as sellers and buyers, and an ISO or independent transmission owner.

These new regulations will supplement the five key structural and conduct elements stated above, and provide the remedies to balance electricity's exogenous conditions. This will influence the conduct of the competitors both buyers and sellers. The expansion of the MESI market thus creates the need for a better and more comprehensive legal system. The recommendations in the following sections are the basic conditions that would be necessary to address potential challenges in a liberalize or wholesale MESI. Detailed regulatory control and specific competition law to govern anti-competitive and opportunistic behavior of incumbent and potential players in the MESI would be important and should be discussed as part of MESI deregulation. But for the purpose of this dissertation, the focus is on the prerequisites of a workable competitive MESI.

Reform Electricity Act and Energy Commission Act.

The key to sustaining a workable competitive restructuring is a strong legal framework.⁵ The electricity reform must have a clear legal basis for steps such as restructuring, private participation, and establishment and role of regulatory bodies. Indeed, the government has revised the Energy Commission Act and the Electricity Act. However, simply revising and adding general, 'blanket' or 'umbrella' competition provisions leads to a vague and ambiguous law. This was inadequate to address existing problems in the sector. Chapter 4 has highlighted the only two sections that specifically mention the word competition. The rest of

⁵ Jamasb, *supra* note 125

the legislation has not embraced the competitive provisos needed to address anti-competitive practices that a newly deregulated wholesale option would produce.

Amending the Electric Energy Act

Plans to build effective and efficient market competition in MESI depend on the amendment of the Electric Energy Act. The amendments should address the changes proposed in wholesale competition. Past experience validates the need for specific definition of the scope and functions of sellers and buyers in generation and distribution, empowerment of the EC and MEGW, creation of trading provisions, and a revised code of conduct for the transmission grid to suit the competitive market.

The Electric Energy Act should, first, provide for the separation of generation, distribution, and transmission of the MESI sector. The provisions should provide rules for access to essential facilities.⁶ These rules should enable new entrants to have access to transmission and distribution.⁷ The amendments should include provisions for the access regime, interoperability so that different systems, products and services work together transparently, standards for reliability, codes of conduct for both sellers and buyers, legitimate reasons to deny access, and remedies for violating any of these rules.⁸

Amending, the Electricity Act 2003 to serve a new revamped MESI will also have to incorporate:

1. Trading rules for the liberalized market.
2. Definition of market participants' rights under the new 'unbundled' scheme.
3. Define current contractual rights of PPAs and limit any future contracts to no more than 15 years.
4. Reorganize the MESITA funds structure to facilitate the new transmission organization essential to sustain a workable competitive transmission network. MESITA funds are already in place and need a slight modification to provide a fair management of transmission operation. The changes should also deal with expansion of transmission as needed.
5. Provide for the independence of all the three main components of the market from the Federal government control.
6. Create an independent and transparent divestiture process
7. Assure the Independence of the EC in the new market

These amendments will move towards creating a market –based regime in the Malaysian power sector, and consolidate the law governing generation, transmission and distribution,

⁶ A. Al-Sunaidy & Richard Green, *Electricity Deregulation In OECD (Organization For Economic Cooperation And Development) Countries*, ENERGY, 31.6, 769-787(2006). See also, Frank A. Wolak, *Measuring unilateral market power in wholesale electricity markets: the California market, 1998-2000*, The American Economic Review, 93.2, 425-430 (2003)

⁸ The OECD (Organization for Economic Cooperation and Development) 1996, available at <http://www.oecd.org/competition/abuse/1920021.pdf>

trading and use of electricity. The Electric Act even as amended leaves certain policy issues unresolved which have to be decided by regulators in consultation with the appropriate government ministry. These issues include:

1. Network pricing complexities-when production is in excess or there is a shortage
2. Mechanisms for pricing supply until open access is allowed
3. A settlement system in the context of the present cash shortage of parties in the system
4. Policies to eliminate transmission bottlenecks affecting open access
5. Environmental concerns must be addressed in context of the reformed market
6. Specific rules to control market dominance by generators that may result in increased prices
7. Mechanism for preventing sharp increases in prices.

Most importantly, the legislation will need to sequence implementation of the open access system. The competitive provisions should be framed to maintain the free and fair market competition. The amendments thus will create a “fairer environment” and guarantee that competition between new entrants and dominant incumbent operators occurs in a fair and free manner.⁹ Focusing on the retail sector, the act would contribute to the creation market competition. This will then contribute to market efficiency and improvements in retail services for MESI customers.

Other considerations such as political will, regulatory capacity and expertise, adequate supply of power, increased numbers of market players are also necessary to create market competition. However, this part considers that the preliminary step to an open market based reform is to change the legislation and include the rules that will allow the new market entrants to participate.

The amended law should also address the need for additional generation in Malaysia, the role of captive power generation, the impact on utilities of the new transmission system in particular the implication of the massive investment required with minimal possibilities of return (in terms of revenues)¹⁰. The amended act should establish rules for the new discos to spell out delivery services and pricing strategies.

Special attention should be given to consumer protection and environmental concerns.¹¹ Last but not least, the amended act needs to define the time frame for the regulators to establish the open access system and for the Government to transfer all the functions specified in the

⁹ J. LUIS GUASCH, *Granting And Renegotiating Infrastructure Concessions: Doing It Right*, World Bank Publications, (2004) at 7. *See also*, Paul Twomey, Richard J. Green, Karsten Neuhoff & David Newbery, *A Review Of The Monitoring Of Market Power* CMI Working Paper 71, University of Cambridge, (2005).

¹⁰ The Association of Electric Company's Economics Division, Edison Electricity Institute, *Alternative Models of Electricity Power Deregulation* (May, 1982). *See also*, Tripta Thakur, *Distribution Sector Reforms In India: The Tasks Ahead*, International Journal Of Global Energy Issues, 23.2, 196-217 (2005).

¹¹ *Id.* *See also supra*, Section 5.

act to the regulator. The amended act should also specify a time frame for elimination of cross-subsidies.

Revision of the Energy Commission Act 2010

Even though, the blue print discussed in chapter 4 reveals that the policymakers understood the importance of the regulator in a competitive market. Unfortunately, the policymakers have failed to appreciate that the “artificial independence “of the regulator will not work. The EC has not generated the outcomes desired. The statute that provides for the establishment of this body will need to be revised. The Energy Commission Act should also be amended to incorporate specific measures to promote competition. The provisions within the Act that require the commission to ‘support’ the SOEs should be repealed, and the statute should mandate neutrality between public and private operators.¹² With this change, the EC would be able to create competitive market and deal with the SOEs anticompetitive conduct.¹³ The amendment to the Energy Act should provide the EC with an opportunity to be the exclusive institution that leads the liberalization and reform of electricity supply toward market competition. The amendment should include:

1. Detailed and specific powers for the EC to monitor the wholesale market. This includes controlling for self-serving conduct,¹⁴ anti competitive practices, and specific antitrust infringements.
2. Ensure the independence of this authority is upheld and implement in a real sense. Lessons from other countries indicate the independence of the regulator is the most important element in creating a strong and robust legal system to protect a competitive market from market abuses. Thus, agency independence should be provided in the act.
3. Increase the EC’s regulatory power with respect to its administrative practices particularly when there is no specific detailed provision about procedure and process.
4. Remove the exemption from the Malaysian Competition Act 2010 for electricity or alternatively, include provisions of Parts 1 to 4 of the Malaysia Competition Act in the Energy Act adapted to MESI market specifics.

¹² ERIG 2007, available at http://www.ret.gov.au/energy/documents/erig/erig_main_report20070413181231.pdf; OECD 2009, available at <http://www.oecd.org/newsroom/43125523.pdf>; Matthew Rennie, & Fiona Lindsay, *Competitive Neutrality and State-Owned Enterprises in Australia: Review of Practices and their Relevance for Other Countries*. No. 4. OECD Publishing, (2011)

¹³ Frank M. Gollop & Stephen H. Karlson, *The Impact Of The Fuel Adjustment Mechanism On Economic Efficiency*, THE REV. OF ECON. & STAT.60.4, 574-584(1978); Catherine Wolfram, *The Efficiency of Electricity Generation in the US After Restructuring*, WP 111, Center for the Study of Energy Markets, University of California, Berkeley, California (2003)

¹⁴ See Shirashi Tadashi, *The Electric Power Industry and Competition Law in Japan*, 19 SOFT LAW J., University of Tokyo, Graduate Schools for Law and Politics, (2012). The Japanese ESI had issued a caution to Hokkaido Electric Power, blaming it for long-time contracts. According to the Japan Fair Trade Commission (JFTC), the incumbent obliged long-time customers to pay too large an amount of monetary penalty when terminating a contract and switching to PPS. But, since the introduction of an administrative surcharge to the Exclusionary PM in January 2010, the JFTC has not been reported to have made a ‘dawn raid’ concerning an Exclusionary PM, probably because of the large amounts involved and the difficulty of calculation. This episode provides a good lesson for balancing illegality and enforcement.

5. Revision of this act requires focus on both structural and institutional abuses. Clear guidelines on market definition, sellers and buyers roles in the market, and offences that fall within the ambit of the act will assist agency enforcement.

6. A detailed provision on merger analysis is also needed.

The EC needs not only expanded power but also resources. It is important that engineers, economists and competition experts be appointed to assist the agency in carrying out its role as regulator. This need has long been overlooked by policymakers. In the past, added staff for the agency was limited to engineers. This resulted in creating structural changes that lacked a comprehensive competitive legal system.

The above discussions are not exhaustive but for the purpose of this dissertation would be useful recommendations to be implemented in order to create a workable competitive market.¹⁵ While it is clear that there are some political and institutional circumstances that might affect the regulatory role of EC,¹⁶ the amendments would change its role in building market structure and conduct toward market competition.

Increasing the role and discretion of the EC must occur in concurrence with the obligation of the EC to achieve accountability, transparency and efficiency.¹⁷ The EC might employ the OECD toolkits that give useful strategies to develop regulations and regulatory tasks in order to achieve efficient market competition.¹⁸ The toolkits provide methods for the EC to regulate the electricity sector in an efficient manner without restricting creation of market competition in the electricity sector. The recommendations in the toolkits are that sector regulators must understand and recognize (1) framework to assess competition in markets, (2) regulatory interventions that affect or facilitate market competition and (3) framework for the competitive assessment of regulations.¹⁹

1. Institutional Change

It is also important to improve the capacity of the EC where it has to face the greater role in regulating tariff and supervising the market toward competition. The government has to provide sufficient capacity, both in budget and staffing, to the EC. By having sufficient budgets, the EC will thus be able to develop its regulatory capacity in human resources and technical skills in order to regulate the electricity market toward efficient market competition.

¹⁵ Brian Levy & Pablo T. Spiller, *The Institutional Foundations Of Regulatory Commitment: A Comparative Analysis Of Telecommunications Regulation*, JL ECON. & ORG. 10, 201 (1994)

¹⁶ *Id.* See also S. Mustafa Durakoğlu, *Political Institutions Of Electricity Regulation: The Case Of Turkey*, ENERGY POLY 39.9, 5578-5587 (2011),

¹⁷ Yin-Fang Zhang, David Parker & Colin Kirkpatrick, *Competition, Regulation and Privatisation of Electricity Generation in Developing Countries: Does the Sequencing of the Reforms Matter?*, Centre on Regulation and Competition, (2004). See also, John Cubbin & Jon Stern, *Regulatory Effectiveness and the Empirical Impact of Variations in Regulatory Governance*, World Bank Policy Research Working Paper, 3535 (2005)

¹⁸ OECD 2011, available at <http://www.oecd.org/daf/competition/42228385.pdf>. See also, OECD 2011, available at <http://www.oecd.org/daf/competition/45544507.pdf>

¹⁹ *Id.*

At present, the courts and Malaysian Competition Commission have no involvement in this sector. Drawing on the experiences of other countries, it is important that the involvements of these two agencies are included in the deregulated competitive legal system. The courts play a role in assuring impartial justice particularly in an emerging country where the former regulatory system was command and control based. In moving to a market based system thus requires the involvement of the judiciary and would provide additional avenues for all stakeholders to seek redress. It would also provide a greater form of check and balance over the EC's investigations and decision making. The burden of this effort is the cost of educating judges and facilitating court procedures for review of these new laws. This is demanding, however not impossible.

2. *Relationship between the Energy Commission and the Competition Commission.*

While the new competition law in Malaysia exempts electricity and the law itself tends to be very ineffective, the EC should consider the possibility of cooperation with the Competition Commission. Where electricity liberalization is the goal, the regulators and competition authorities are required to have a better understanding of the special features of the electricity markets, and will need to collaborate to adopt appropriate regulatory mechanisms to prevent market abuse and anticompetitive conduct in the MESI electricity sector.²⁰ Cooperation may be initiated by way of advocacy by the Competition Commission to the EC relating to market competition in the electricity sector. This advocacy then will be an important step for establishment of formal collaboration between institutions that will facilitate complementary roles between the Competition Commission and the EC in supervising and regulating the MESI electricity sector.²¹ In addition, possible statutory ways to develop this inter-institutional cooperation and to prevent possible conflict of regulatory decisions between the energy commission and electricity commission include: (a) making the guidelines and principles laid down in competition law binding on the EC²² (b) requiring the EC to seek advice from the competition commission on competition issues in the electricity sector (c) allowing the Competition Commission to participate in the proceedings before the EC; (d) establishing a common appellate body to ensure coherence in law enforcement.

Summary and Comments

And the end of all our exploring

²⁰ David M. Newbery, *Problems of Liberalising The Electricity Industry*, European Economic Review 46.4, 919-927 (2002)

²¹ ABD, 2010a; OECD, 2004, available at ,
<http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>

²² Francesco Maria Salerno, *The Competition Law-ization of Enforcement: The Way Forward for Making the Energy Market Work?*, (2008), available at
http://cadmus.eui.eu/bitstream/handle/1814/8108/RSCAS_2008_07.pdf?sequence=1

*Will be to arrive where we started
And know the place for the first time.*²³

In the preceding headings, it is noted that electricity restructuring plans should be in line with and address future developments within the local, regional and international aspects (for example the Asian Energy hub 2015). A full liberalization of the sector that addresses the concerns should be able to guide policymakers and incumbent and potential market participants. It is possible to formulate a more comprehensive market design before restructuring takes place in 2020. The design should respond to the elements of reform already discussed. Failure to do so will tend to create vested interests that may resist or complicate subsequent a

²³ T.S. ELIOT, Little Gidding, in THE COMPETITIVE POEMS AND PLAYS 1909-1950, at 138, 145 (1980), cited by Botchway, Francis N. "Role of the State in the Context of Good Governance and Electricity Management: Comparative Antecedents and Current Trends, The." *U. Pa. J. Int'l Econ. L.* 21 781 (2000)

Management & Marketing V

Room B

13:10-14:40

Friday, May 9

Session Chair: *Prof. Robert Kucęba*

ICSSAM-890

The Power of Team-member Exchange on Knowledge Sharing: The Moderating Effects of Leader-member Exchange Differentiation and Collectivism Orientation

Liang-Chih, Tai *Yuan Ze University*

Min-Ping Huang *Yuan Ze University*

ICSSAM-915

Sustainable Organizing in the European Enterprises of the Future

Arnold Pabian *Czestochowa University of Technology*

Felicjan Bylok *Czestochowa University of Technology*

Robert Kucęba *Czestochowa University of Technology*

Marcin Zawada *Czestochowa University of Technology*

ICSSAM-916

Changes in the Behaviour of Consumers and Their Implications for Business in Poland at the Beginning of the 21st Century

Felicjan Bylok *Czestochowa University of Technology*

Arnold Pabian *Czestochowa University of Technology*

Robert Kucęba *Czestochowa University of Technology*

Marcin Zawada *Czestochowa University of Technology*

ICSSAM-917

Prosumer Energy Dimension in the Conditions of Sustainable Micro-region Development in the EU

Robert Kucęba *Czestochowa University of Technology*

Felicjan Bylok *Czestochowa University of Technology*

Arnold Pabian *Czestochowa University of Technology*

Marcin Zawada *Czestochowa University of Technology*

ICSSAM-844

The Effect of Leadership on Workforce Results: a Comparative Study between Public and Private Hospital in Thailand

Sookyuen Tepthong *Thammasat University*

ICSSAM-818

A Study on The Impacts of School Environment on Students' Creativity in Higher Education

Tzu-Ling Huang

Chung Yuan Christian University

Shu-Fen Su

Chung Yuan Christian University

ICSSAM-802

An Economic Analysis on Taiwan's Modern Textile Industry

Chung-Fang Ho

Chung Yuan Christian University

Hsiao-Hsuan Yu

Chung Yuan Christian University

ICSSAM-890

The Power of Team-member Exchange on Knowledge Sharing: The Moderating Effects of Leader-member Exchange Differentiation and Collectivism Orientation

Liang-Chih,Tai

R60309,135 Yuan-Tung Road, Chung-Li, Taiwan

Yuan Ze University, Taiwan

circle-22@hotmail.com

Abstract

Knowledge is not only a tactical business asset, but also a key element to build lasting competitive advantage. Knowledge exists in brain, if employees don't share with others, it can't bring into full play. Only when share knowledge with others and to apply it, then the organizations create higher values.

Team members are the most important interaction objects of organizations, assisting and caring behavior are benefited knowledge exchange. However, to discuss team dynamics, excluding the horizontal interaction between members, the vertical interaction between team leader and members have to consider. However, in group-level and cross-level, the relationship between team-member exchange (TMX) and leader-member exchange (LMX) had not been widely validated.

The study induce the references in the past to infer the probably relationship between TMX and LMX differentiation, to analyzed the effect of knowledge sharing, simultaneously examines the moderating role of collectivism orientation. Because the reason of knowledge sharing is difficult to promote often cause of "people", different values of member often bring different knowledge sharing behavior.

Data will be collected 60 work teams, which has one leader and a few team numbers from local corporations. For the sake of objectivity, it will be adopted dual questionnaire. After analyzing data, contributions, limits, future directions and implications are discussed at the end.

Keyword : TMX, LMX differentiation, Knowledge Sharing, Collectivism Orientation

ICSSAM-915
Sustainable Organizing in the European Enterprises of the Future

Full Professor Arnold Pabian

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland
a.pabian@zim.pcz.pl

Prof. Felicjan Bylok

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland
byl.f.s@zim.pcz.pl

Prof. Robert Kucęba

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland
robertk@zim.pcz.czest.pl

Marcin Zawada, PhD

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland
zawada@zim.pcz.pl

The corresponding author: Prof. Robert Kucęba

Abstract

Actions for sustainable development taken for many years have not had a significant impact on improvement of the health of the Earth. The ever increasing unsustainability leads to surpassing of the tolerance limits of nature and uncontrolled growth of social problems. To stop these unfavourable tendencies, it is necessary to transform contemporary consumer societies into sustainable societies. Sustainable management should play a key role in this transformation. Sustainable management will be useful in practice only if its main functions, i.e. planning, organizing, leading/influencing/staffing and controlling are implemented in compliance with sustainability principles. This paper deals with one of these functions called sustainable organizing with regard to a sustainable enterprise. The solutions presented in the paper have a model character. Sustainable organizing comprises: sustainable organizing of structure, sustainable organizing of resources and sustainable organizing of activity. As a result of sustainable organizing of structure organizational structures of a sustainable

enterprise are created. Sustainable organizing of resources allocates specific resources (people, tangible and intangible goods) to organizational structures. Sustainable organizing of activity sets this system in motion. One of the forms of this motion is sustainable production and its results. The contents of this paper are set in the reality of the European Union, which has significant achievements in the field of sustainable development.

Keywords: sustainable development, sustainable management, sustainable organizing

1. Introduction

Actions for sustainable development taken for many years have not had a significant impact on improvement of the health of the Earth. Data contained in the Living Planet Report 2012 confirm that ecological and social threats are growing. An analysis of many indicators presented in the said Report, including the Living Planet Index and Ecological Footprint led to formulation of the following conclusion: „clearly, the current system of human development, based on increased consumption and a reliance on fossil fuels, combined with a growing human population and poor overall management and governance of natural resources, is unsustainable” [1]. The ever increasing unsustainability leads to surpassing of the tolerance limits of nature and uncontrolled growth of social problems, in consequence of which future generations will to a considerable extent be deprived of chances for development – as the Earth is an isolated system, powered from outside only by solar energy and in future this system will be unable to carry the burdens created by man [2]. To prevent it, it is necessary to transform contemporary consumer societies into sustainable societies. Management should play a key role in this transformation. In the aspects of sustainability it acquired the form of sustainable management. It is a young, only just emerging field of knowledge, being a part of sustainable science. In order to be able to use sustainable management in practice, it is necessary to adapt planning, organizing, leading/influencing/staffing and controlling (classical management is described with regard to these functions in many works of the literature of the subject, including: [3, 4, 5, 6, 7]) to its needs. These functions are the essence of managerial work and determine its results. This paper is devoted to one of them called organizing. The chief aim of the paper is to outline, from the European Union’s perspective, model solutions for a sustainable enterprise and sustainable organizing of its structures, resources and activity. Implementation of the proposed solutions in practice is very difficult. Despite that, they should be gradually introduced in the economy and business because nowadays there are no solutions alternative to sustainable development.

2. The role of management in sustainable development of the European Union

The European Union strategy for sustainable development was adopted by the European Council at its meeting in Gothenburg in 2001 and then renewed in 2006. It defines the desired directions of changes for sustainable development in long-term perspective. These changes should be implemented in the economic, social and ecological sphere [8].

The document identifying strategic economic, ecological and social targets for the European Union is called *Europe 2020*. It was adopted by the European Council on 17th June, 2010. The basic instruments of implementation of the *Europe 2020* strategy on the Member States' level are the so-called National Reform Programmes [9]. The *Europe 2020* strategy is based on the following three priorities: smart growth, sustainable growth and inclusive growth. Table 1 shows figures of the significant indicators related to this strategy and their targets.

Table 1. Indicators of the Europe 2020 strategy for smart, sustainable and inclusive growth

EU-28		2005	2011	2012	Target
Employment	Employment rate (percent of population aged 20-64)	67,9	68,5	68,4	75
EU-28		2005	2010	2011	Target
R&D	Gross domestic expenditure on R&D (percent of GDB)	1,82	2,00	2,02	3
EU-27		2005	2010	2011	Target
Climate change/energy	Greenhouse gas emissions (index 1990 = 100)	93	86	83	80
	Renewables in gross final energy consumption (%)	8,5	12,5	13,0	20
	Primary energy consumption (million tonnes of oil equivalent)	1703	1645	1583	1474
EU-27		2005	2011	2012	Target
Education	Early leavers from education and training (percent of population aged 18-24)	15,8	13,4	12,7	less than 10
	Tertiary educational attainment (percent of population aged 30-34)	28,0	34,6	35,8	40 or more than 40
EU-27		2005	2011	2012	Target
Poverty or social exclusion	People at-risk-of poverty or social exclusion (million)	123,9	119,8	124,4	95,7

Source: [10]

As shown in Table 1, the European Union has adopted ambitious targets in respect of sustainable development and has been successful in this sphere. The successes are proved by positive values of most of the indicators in the years 2005 – 2012. The ambitious aims are

reflected by the figures in the Target column, which the European Union intends to achieve by 2020.

In spite of many positive changes, progress in sustainable development does not keep up with the rate of growth of ecological and social problems. It is indispensable to speed up the transformation of consumer societies into sustainable societies. An important role in this transformation should be played by sustainable management. It is a young, only just emerging field of knowledge, being a branch of sustainable science. S. Cohen in his book published in the U.S. in 2011 states: „sustainability management is in its infancy (...). It today will not be able to predict its pace, shape or trajectory” [11]. According to that author „sustainability management is the practice of economic production and consumption that minimizes environmental impact and maximizes resource conservation and reuse (...). At the heart of sustainability management is a concern for the future” [11]. B. Bossink defines sustainable management in the aspect of eco-innovations „as the development of new initiatives in an organization to sustain, improve and renew the environmental, social and societal quality of its business processes and the products and services these business processes produce” [12]. A. Pabian perceives sustainable management with regard to its functions. He defines sustainable management as planning, organizing, leading and controlling leading to establishment, operation and development of a sustainable organization, that is an entity contributing to the balance of intergenerational needs [13]. A. Pabian adapts these functions to the needs of sustainable management calling them: sustainable planning, organizing, leading and controlling. These functions should be implemented by sustainable managers on all levels of management. The following part of this paper is devoted to one of these functions, called sustainable organizing.

The role of management in promotion and implementation of sustainable management, also in the European Union, arises from its universal nature. Over 20 million enterprises are operating in Europe (99% are small and medium enterprises employing from 10 to 250 staff) [14]. Transformation of these businesses into sustainable enterprises and managing them according to the principles of sustainable management would mean not only a change of the character of their resources but also a change of the structure of purchases, production and sales. In consequence of increasing supply of and demand for sustainable products and services, markets for these goods should grow, which would considerably contribute to sustainable development. Such a transformation of enterprises and markets should be accompanied by widespread education campaigns for sustainable development carried out on all levels of educational system and in all organizations, including manufacturing enterprises operating in the European Union economy (for more details see: [15, 16]).

3. An enterprise as a sustainable organization

Sustainable enterprises constitute one of the foundations of sustainable societies and economies. Manufacturing enterprises, which to the greatest extent contribute to growing ecological and social problems, play a special role among them. Figure 1 presents a concept of a sustainable enterprise.

Figure 1. Sustainable enterprise concept

Sustainable enterprise	Sustainable incoming goods
	Sustainable resources
	Sustainable operation
	Sustainable operating results

Source: own work

A sustainable enterprise is an organization whose resources and operation have a sustainable character (contribute to sustainable development). Sustainable human resources and sustainable basic goods i.e. buildings, machinery, equipment, fittings and other tangible goods owned by the enterprise rank among the most important resources of a sustainable enterprise. Sustainable human resources are ecologically and socially sensitive employees of the organization, observing the principles of sustainable development in their work. Among them there are sustainable managers (top managers, middle level managers, supervisory managers) and sustainable operational employees. A characteristic feature of sustainable employees is their triple orientation – focus on their own needs as well as on social and ecological needs of the present and future generations.

Buildings and other enclosed structures owned by a sustainable enterprise have been designed, located and erected according to the sustainable development principles. They are environment friendly and do not cause any social harm. Use of those buildings and structures requires consumption of small amount of energy coming from renewable sources. For example, solar collectors and solar cells convert solar radiation into heat used to heat water and rooms (solar thermal energy – STE) and into electric current (photovoltaics). Machinery, equipment and other appliances located within this infrastructure, used in the operation of the enterprise, also have pro-ecological and pro-social character.

Operation of an enterprise requires incoming goods, including raw materials, materials, components, office supplies and other products. A sustainable enterprise procures and introduces into its system only such basic and incoming goods which have sustainability features.

The essence of sustainable operation and its results will be illustrated with an example of a sustainable manufacturing activity. It is based on production of safe, efficient and durable products, manufactured in the processes of clean production. A characteristic feature of clean production is elimination of harmful gases, liquids, solid substances and radiation from technological processes and limitation of wastage of energy, heat, water, raw materials and other factors of production. It is advisable that clean production should be carried out by all enterprises which form the production chain of the particular product, also by manufacturers of materials, components and sub-assemblies.

Sustainable organizing as one of the functions of sustainable management plays an important role in creation and operation of a sustainable enterprise.

4. Sustainable organizing of structures, resources and activity

Organizing as a management function can be considered in different aspects. The authors refer in this paper to the concept of sustainable management presented in Figure 1. This concept provides the basis for distinction of three fundamental areas of sustainable organizing:

- sustainable organizing of structure,
- sustainable organizing of resources,
- sustainable organizing of activity.

As a result of sustainable organizing of structure organizational structures of a sustainable enterprise are created. Sustainable organizing of resources allocates specific resources (people, tangible and intangible goods) to organizational structures. Sustainable organizing of activity sets this system in motion. One of the forms of this motion is sustainable production and its results.

Forms of organizational structures are not subject to any essential changes from the point of view of sustainable organizing of structure. However, names and descriptions of jobs included in these structures and lists of required qualifications do change. For instance, Figure 2 shows components of sustainable divisional structure which is composed of separate business units working to produce a specific products (product structure). All descriptions of jobs forming this structure should contain the wording requiring the performance of work in these positions according to the principles of sustainable development. These principles apply also to machinery, equipment and materials used in production by the employees. In order to meet the requirements specified in job descriptions, candidates for these jobs should have definite qualifications. The list of required qualifications will, therefore, contain requirements concerning the applicants' ecological

sensitivity, knowledge of sustainable development principles, ability to apply these principles in production and other sustainability related issues.

Figure 2. Main components of sustainable product structure

Sustainable Product Organizational Structure	Sustainable Chief Executive Officer (SCEO)
	Sustainable Corporate Managers
	Sustainable Divisions
	Sustainable Functions

Source: own work

Likewise, other documents formalizing the organization status in a sustainable enterprise should impose pro-ecological and pro-social behaviour on the employees. An example of such behaviour are document circulation instructions. An instruction based solely on paper documents and requiring an excessive number of copies to be made is contrary to the sustainable development principles – it causes waste of paper, human work and work of equipment used to make and copy documents.

Sustainability provisions contained in documents formalizing organizational structures of enterprises and principles of their operation enforce pro-ecological and pro-social activity of the employees – this activity is a part of their formal duties and responsibilities, which they will have to account for.

The next stage of actions following the sustainable organizing of structure is sustainable organizing of resources. It consists in filling organizational structures with specific resources in the form of people, tangible and intangible goods. These resources have to be procured and located in the appropriate places of the organizational structure of the sustainable enterprise. Filling management positions with right people is particularly important. Sustainable managers, making key strategic, tactical and operational decisions in the enterprise should set a direction compatible with sustainability principles. Sustainable managers have the following significant characteristics:

- want to be responsible for the health of the Earth,
- work for future generations, to make it possible for them not only to survive, but also to develop,
- focus on the future (also very distant future),
- pursue economic, ecological and social goals,
- sustainability (in production, consumption, sales etc.) is more important for them than growth,
- control the impact of their organizations on man and the environment,
- minimize negative impact of their organizations on the Earth,

- develop products, services and technologies in conformity with the principles of sustainable development [11].

Top management plays special role in creation of favourable conditions for actions to be taken in this sphere. Appropriate staffing policy together with giving support and setting an example favour building sustainable organizations.

Not less important is the provision of equipment to positions within organizational structures in accordance with sustainable development principles. Each position, irrespective of its profile, should be provided with pro-ecological and pro-social equipment. The scope of this equipment is very broad, from manufacturing positions where machinery and equipment are installed to office positions provided with office equipment. Thus, sustainable organizing of resources means procurement and allocation of resources to the particular segments of the organizational structure, including positions. Tangible resources for particular positions are allocated to definite employees specifying the principles of the equipment usage. For the functioning of positions raw materials, materials, components, office supplies and other products included in incoming sustainable goods are necessary. These products have to be purchased and supplied to the particular positions.

The rational combination of sustainable resources, including people with tangible goods and incoming goods allows to proceed to the phase of sustainable organizing of activity, which is ongoing coordination of work and resources in such a way that the adopted goals can be achieved bearing in mind the principles of sustainable development. Work processes are organized in ecologically and socially responsible way. Employees process raw materials and materials economically, eliminate machinery overloads and unproductive machinery operation, observe the scheduled date of maintenance services, respect occupational health and safety rules. At the same time they are creative in such modernization of their activity that it can become more and more environment and society friendly. The outcome of it should be safe, efficient and durable products, which can be disposed of without negative side effects. A safe product is not hazardous to life or harmful to the consumer's health. An efficient product, depending on its intended purpose, consumes small amount of electric energy, water, gas or other factors needed for its functioning. Products of this type should be durable, which will make them usable for a long time.

5. Conclusion

We are quite certain nowadays that critical loads to nature have been exceeded, it is not clear only to what extent [17]. Such a situation requires intensification of sustainable development measures. Transformation of consumer societies into sustainable societies can be significantly speeded up by transforming traditional enterprises into sustainable enterprises. In order to create and operate businesses of this type, sustainable management has to be implemented. Sustainable management will bring the expected results only if all its functions are based on the principles of sustainable development. One of them is organizing. Sustainable organizing makes it possible to create sustainable organizational structures of enterprises, to fill them with sustainable resources and to carry out sustainable activity, including manufacturing. The European Unions takes numerous measures for sustainable development and will carry them on also with regard to enterprise operation. It has to be remembered, however, that these initiatives will not save our planet from global disasters. Sustainable development requires involvement of the global society, which should unite in defence of its own home – the Earth.

6. References

- [1] WWF International, *Living Planet Report 2012*, Switzerland 2013.
- [2] Pabian A., Działalność promocyjna w koncepcji sustainability, „*Marketing i Rynek*” No. 8, 2013.
- [3] Ghillyer A., Management. A Real World Approach, *McGraw-Hill*, New York 2009.
- [4] Certo S., Certo T., Modern Management. Concepts and Skills, *Pearson Education International*, London 2009.
- [5] Rue L., Byars L., Management. Skills and Applications, *McGraw-Hill*, New York 2009.
- [6] Lussier R., Management Fundamentals. Concepts. Applications. Skill Development, *South-Western Cengage Learning*, Australia 2009.
- [7] Daft R., Marcic D., Management. The New Workplace, *South-Western Cengage Learning*, United States 2013.
- [8] www.stat.gov.pl, Lecture 17.12. 2012
- [9] Ministry of Economy, *Poland 2012. Report on the Condition of Economy*, Warsaw 2012.
- [10] Basic figures on the EU, Winter 2013/2014 edition, *Eurostat*, Compact Guides.
- [11] Cohen S., Sustainability Management, *Columbia University Press*, New York 2011.
- [12] Bossink B., Eco-innovation and Sustainability Management, *Routledge Taylor & Francis Group*, New York and London 2012.
- [13] Pabian A., Zarządzanie w koncepcji sustainability – ujęcie funkcjonalne, „*Przegląd Organizacji*” 2013, No. 10.
- [14] <http://ec.europa.eu>. Lecture 14.02.2014

- [15] Pabian A., Działalność edukacyjna ośrodków akademickich w koncepcji sustainability, „*Nauka i Szkolnictwo Wyższe*” 2012, No. 1/39
- [16] Pabian A., Koncepcja sustainability w działalności ośrodków edukacyjnych [in:] *Ekonomia dla przyszłości, Odkrywać naturę i przyczyny zjawisk gospodarczych, IX Congress of Polish Economists*, Warsaw 28-29 November, 2013, abstract (p. 94) and lecture on CD.
- [17] Rogall H., *Ekonomia zrównoważonego rozwoju. Teoria i praktyka*, Wydawnictwo Zysk i S-ka, Poznań 2010.

ICSSAM-916

Changes in the Behaviour of Consumers and Their Implications for Business in Poland at the Beginning of the 21st Century

Prof. Felicjan Bylok

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland

byl.f.s@zim.pcz.pl

Full Professor Arnold Pabian

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland

a.pabian@zim.pcz.pl

Prof. Robert Kucęba

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland

robertk@zim.pcz.czest.pl

Marcin Zawada, PhD

Czestochowa University of Technology, Faculty of Management
Armii Krajowej 19 B, 42-200 Czestochowa, Poland

zawada@zim.pcz.pl

The corresponding author: Prof. Robert Kucęba

Abstract

This paper describes the conditioning of changes in consumer behaviour at the beginning of the 21st century. The authors at hand describe the chosen factors determining consumer behaviour, namely the spreading of the ideology of consumerism, the growth in significance of hedonistic values in consumption, the development of e-consumption, expansion of the segment of low prices of goods and consumer services, expansion of offers of goods and services into new spheres of social life, changes in the functions of goods satisfying basic needs, the transformation of the structures of consumption and the development of the notion of sustainable consumption. There is a subsequent concentration on the analysis of the patterns of consumer behaviour of Polish people. In this paper, there is also a description of the issue of the implications of change in consumer behaviour in terms of the functioning of

enterprises. The necessity for enterprises to create strategies directed at creating partnership ties with consumers has been indicated.

Keywords: consumption, consumer behaviour, enterprise, business

1. Introduction

Over the past two decades in Poland, apart from the processes of socio-economic transformation there has also been the phenomenon of the gradual change in the role of consumption in both the economic and social spheres. Poland with a society featured by a lack of consumer goods characteristic of the 1980s has become transformed into a society featured by a surplus of consumer goods. Consumption has become the important driving force for economic development. Likewise, it has created a significant influence on the pace of social change. First and foremost, the social attitude to consumption has changed. For many people consumption has become an aim to strive towards that influences the direction of their actions and motivates them to undertake economic and social activity. Indeed, it has also become the factor that enables the identification of singular identity and the sense of belonging to a group. It has also had an impact on the shaping of the system of values and personality of man.

Changes in consumer behaviour evoke specific implications for producers. They may constitute a threat for many enterprises, while for others they may be an opportunity of rapid growth and increase in market share. To a large extent, this is conditioned by the type of strategy an enterprise adopts with regard to new consumer trends.

The authors of the main aim of research set out to search for answers to the following questions: What conditioning determines consumption in the 21st century? What patterns of consumer behaviour are characteristic of Polish people? What implications bring change in the behaviour of consumers in terms of the strategies of enterprises? In the search for the answers to these questions, the authors analyse the quantitative and qualitative results on the changes of consumer behaviour of Polish people at the beginning of the second decade of the 21st century.

2. Conditioning of Changes in Consumption at the Beginning of the 21st Century

In analysing the sphere of consumption at the beginning of the 21st century, it is worth considering its conditioning. The most important aspects include the spreading of the ideology of consumerism, the growth in significance of hedonistic values in consumption, development of e-consumption, expansion of the segment of low prices of goods and consumer services, expansion of offers of goods and services into new spheres of social life,

changes in the functions of goods satisfying basic needs, the transformation of the structures of consumption and the development of the notion of sustainable consumption. One of the most important determinants of human behaviour in modern society is the spreading of the ideology of consumerism that propagates excessive consumption associated with experiencing positive emotions. It is of a totalitarian nature, as it has an impact on all spheres of social life. As noted by Bauman, consumerism coordinates the reproduction of the system, social integration, social stratification and the formation of human entities [1]. In turn, R. Bockock perceives consumerism as an active ideology which suggests that life is first and foremost based on purchasing items and feeling the experience delivered in packages with consumer goods [2]. This ideology suggests that a person becomes a full member of society thanks to consumption. This indicates that the most important aim for a person should be that of consumption. As noted by S. Miles, consumerism subjugates streams of consumers all over the world. It penetrates everyday life and the structures of everyday experiences of people. By means of constant change in its form, it becomes attractive and reinforces its impact on people [3].

The power of the impact of consumerism on the behaviour of consumers lies in the fact that it provides instruments (consumer goods and patterns of consumption) serving to create individual and collective identities for all people. It also offers new forms of social life and forms of identification which blur the differences between tiers or classes. It is possible to state that it ensures the illusion of equality in inequality, or in other words, that people have equal access to consumer goods, but only those who are in possession of the appropriate financial resources are able to purchase them.

The impact of consumerism on the behaviour of consumers strengthens hedonistic values that take on the form of the orientation towards pleasure and the orientation “here and now”. Pleasure constitutes the essence of modern consumerism. An attempt to clarify this phenomenon was undertaken by C. Cambell, who indicated that the feeling of pleasure in consumption is the result of tension existing between a dream and usefulness [4]. However, A. Appaduraj states that pleasure lies in the tension between the existing nostalgia with relation to the past and the dream whereby the present is presented as if it was the past [5]. Orientation towards pleasure signifies a situation whereby a consumer purchases products not because of their functional value, but due to their intangible features such as smell, aesthetic appearance etc., which influence the subjective feeling of pleasure. The intangible content of goods is becoming an important component of the subjectively felt quality of life [6]. The hedonistic approach of a consumer is best reflected by the motto: “*life should be availed of here and now*”[7]. The orientation “here and now” means that a consumer in purchasing a given item strives towards the feeling of satisfaction immediately. This in turn, means that

consumer goods should bring satisfaction immediately and the sense of satisfaction should end at the moment of when the time of need for their consumption has ended (compare: [8]).

In the 21st century, a significant influence on the behaviour of people in the sphere of consumption is being exerted by modern means of communication – the Internet, cellular phones, which create new patterns of consumption. The Internet via various forms of Web 2.0, among others Wikipedia, YouTube, Facebook, Flickr, in which consumers actively participate, has an impact on their behaviour in the sphere of consumption [9]. The commercial Internet changed the approach of many people towards consumption, namely thanks to the access to electronic shopping malls people may satisfy their needs without passing through the threshold of an actual shop. One of the forms of consumption realized by the Internet is that of *group buying* or *social buying* [10]. These involve the collection of a sufficiently large group of people, thanks to which the power of the group may be availed of in negotiations with producers or sellers. Consumers by creating such groups have the possibility of not only availing of cheaper purchases, but also becoming familiar with information about producers whom they had not known before.

Influence on consumer behaviour is exerted by the growing quantity of various consumer goods on the market. This is the result of the constantly expanding offer of goods and services that signifies the diversification of the spheres of consumption and their constant expansion. This process is the result of the occurrence of four trends: differentiation of the offers of goods and services with regard to the target groups, growth in the quantity of cheap substitutes of trademark products of comparable use value, expansion of consumption into areas that did not belong to consumption prior to this, e.g. the sacral sphere, art, sex, leisure time etc; expansion of fashion and providing consumer goods with symbolic meaning and emotions that evoke the phenomenon of the increasing differentiation of products with the same use value [11]. Simultaneously, a change in the function of consumer goods is taking place, namely, the domination of the primacy of the semantic function over the utility function of goods [12]. The sphere of utilizing consumer goods is being transformed in the direction of viewing where taste has acquired a specific colour. Consumers search for goods that create the illusion of happiness, satisfaction, success, love, health, wealth etc. Associating symbolic meaning with goods facilitates integrating products with specific ways of use and perceiving them in terms of new significance.

The feature of the contemporary market is the expansion of the segment of low prices of consumer goods and services. The number of discount stores and outlets is rising where the principle of “fast and simple” is prevalent. These shops sell articles of everyday use, furniture, household appliances, electronics etc.[13] The development of the segment of low prices is

supported by the process of walmartization (Wal-Martisierung), which involves the change in the structure of retail trade [14]. In the segment of consumer goods, the so-called fast-moving, small and medium sized shops are being displaced by global concerns.

In the 21st century significant gradual transformation of the structures of consumption is taking place. Firstly, in terms of consumer expenses the significance of consumer goods in satisfying the need for feeling pleasure is growing. Secondly, the role of products and services associated with leisure time is increasing. This is the result of change in the lifestyles of contemporary consumers, in which emphasis is placed on the growth of activation of the forms of spending leisure time, particularly in the area of the ideology of health, which translates into the formation of pro-health styles geared towards the development of cycling, water and foot tourism. Thirdly, there is a growth in the significance of consumer goods associated with sustainable consumption. The characteristic feature of sustainable consumers is a threefold orientation – concentrating on personal needs, as well as social and ecological needs of the current and future generations [15]. Sustainable consumers are featured by ethical behaviour to a large extent [16]. In terms of their behaviour, sustainable consumers during the course of taking decisions on purchases prefer products that are safe to use, long-lasting and energy-saving. They take into account the potential possibilities of subjecting them to recycling and degradation in accordance with the standards of environmental protection. In fact, they are willing to forego the purchase of some products if they are produced via the violation of social justice, e.g. when workers' rights are not adhered to during the course of production. In order for such behaviour to become commonplace, F. Belz and K. Peattie indicate that consumers in terms of their behaviour should pay more attention to altruism, openness to change, ecocentrism, biocentrism and post-materialism [17]. However, S. Alexander and S. Ussher propose the spread of the notion of the The Voluntary Simplicity Movement among contemporary consumers [18].

By way of conclusion, we may state that on the one hand, we are observing lifestyles associated with the ideology of consumerism that results in excessive consumption, wasting and destroying consumer goods, while on the other hand, lifestyles that are associated with sustainable consumption are appearing that are saturated with pro-ecological elements. The awareness of the responsibility for the natural environment of man is growing.

3. Patterns of consumer behaviour of Poles

Together with the development of the market economy in Poland, new consumer goods and new patterns of behaviour appeared in the sphere of consumption. The situation of surplus consumer goods on the market occurs. With relation to this, consumers are constantly confronted by a wide range of consumer goods and are subject to the impact of various

marketing instruments. As a result of this fact, various patterns of consumer behaviour are appearing. With the aim of diagnosing the most frequently occurring patterns of consumption in mind, it is worth following the stages of consumer behaviour. One of these stages is that of acquisition that is determined by the place and form of sales, which may be divided into the place of direct contact between the seller and the buyer (local shop, supermarkets, the so-called discount stores, hypermarkets bazaars etc.), as well as the place of indirect contact (mail-order shops, Internet shops, Internet auctions). The results of research run on a representative research sample of Polish people run by Centrum Badań Opinii Społecznej (Centre of Research on Social Opinion) in 2011 [19] indicate that Polish people most often do their shopping in supermarkets and hypermarkets (40%), in which they mostly purchase food products (54%) and cleaning products (59%), as well as cosmetics (40%). However, they purchase clothing, underwear and shoes in these shops more rarely (28%). The second position in terms of the frequency of doing shopping is that of small shops where the goods are handed out by the shop assistant (25.4%), as well as small and medium-sized self-service shops up to 3 tills (23%). In these shops, consumers usually purchase food products and cleaning products. Polish people do their shopping relatively rarely in shopping chains (18.4%), in which they first and foremost buy clothing, shoes (30%), cosmetics (23%) and books, CDs, films (28%). Polish people relatively seldom purchase consumer goods in Internet shops (5.2%). If they decide to do their shopping on the Internet it mostly relates to books, CDs and films (17%). The choice of the defined types of shops is formed to a large extent by such factors as age, the material status of consumers, as well as the distance from the place of abode. Elderly people and less wealthy people travel to supermarkets and hypermarkets for shopping more rarely, but buy products in small local shops more frequently. The attractiveness of these shops results from the fact that they are situated not far from the place of abode which does not require additional costs of travelling to them. In turn, young people purchase products in hypermarkets, supermarkets and in Internet shops. In Internet shops and auction portals young consumers most frequently purchase clothing (34%), books or multimedia (28%), cosmetics (24%), mobile equipment (17%) and products connected with health (13%) [19].

In the process of buying consumer goods, an important role is played by the features of the product that a consumer intends to buy. According to Polish people, the most important feature of a product is its favourable price. This factor is important to almost 78% of those analysed. High quality is in second place, which is important to almost 71% of Polish people. The further positions in terms of taking decisions to buy a given product are consumers taking account of habits (29%) and previous experience with a given trademark (29%). A relatively significant factor conditioning the purchase of a given product is its place of origin (22%) and recognisability of the trademark (21%). Despite the fact that almost all products

are advertised, the majority of them in an attractive way, Polish people trust acquaintances in the selection of a product (14%) or information on the packaging (13%) rather than advertisements (5%). Polish people almost completely fail to pay attention to the attractiveness of the packaging (2%) [20].

The motives behind which Polish people choose the place of making purchases and choose consumer goods and services are varied. Most frequently, Polish people in the sphere of consumption search for the satisfaction of various needs in life (35%), followed by the search for pleasure and satisfaction (24%), the possibilities of demonstrating their wealth (19%), emphasizing their sense of belonging to a specific social group (13%) and the possibilities of presenting their own individuality [21].

Analysis of the situation that a buyer is confronted with while making purchases facilitates the definition of the patterns of buying behaviour. Among the Polish people analysed, the largest group is constituted by those whose buying behaviour is featured by rationality. These are buyers in search of consumer goods of good quality, but cheaper, which is reflected by these responses: *“I usually check what the prices are in various shops and try to buy more cheaply”*(59%) and *“I buy what is necessary, by trying to manage my money carefully* (89%). These people plan their shopping beforehand: *“Before I buy something, I check it thoroughly to see if I can afford it”*(84%) [20].

The consumer behaviour of a relatively large research group indicates features characteristic of sustainable consumption, namely care about the natural environment and not creating danger to it. Almost 72% of those analysed declare avoiding the purchase of products harmful to the environment. Over 90% of Polish people declare that they only use some chemical agents for cleaning, washing clothes or washing up. Likewise, limitation of the use of electric power (90%), water (83%) and gas (79%) is important to Polish people in their flat/house [22].

Another pattern of behaviour of consumers is to succumb to market stimulants that are characterized by unplanned purchases, succumbing to influences of fashion and attractive packaging. Polish consumers rarely make unplanned purchases. The saying *“I buy something because it may be useful, although it is unnecessary for me now”* is characteristic for 27% of those analysed, however the saying *“I buy items and later feel that they are unnecessary”* is felt by 13% of those analysed. Likewise, nice packaging, fashion, decor of the shop are not strong stimulants that encourage the purchase of a given product. The impact of fashion on consumer decisions is declared by 17% of Polish people, however nice packaging is important for 10% of Polish people [20].

Purchasing behaviour sometimes indicates the similarity with the consumption of pleasure, which is featured by among other things, the achievement of pleasure from doing shopping and viewing the displays of elegant shops. Contemporary consumers achieve pleasure not only by means of possessing luxury goods and their consumption, but also by means of walking around with the aim of viewing the displays of elegant shops [23]. Such consumer behaviour is characteristic of many consumers who like doing shopping, spending time walking around shops, viewing and choosing products (39%), consumers relatively often go shopping to lift their spirits (21%) and spend their leisure time in shopping malls (11%) [20].

An addendum to the analysis of the patterns of buying behaviour is that of carrying out purchases of luxury goods which is reflected by the frequency of purchases made in elegant shops. Such a type of consumer behaviour is characteristic of 12% of Polish people. These consumers usually buy what is the best, regardless of the price [20].

In consumer behaviour apart from purchasing, an important role is attributed to that of possession, which usually refers to durable goods. A significant indicator of this is the level of resources of consumer goods that is characteristic of contemporary society, namely IT-communication equipment, domestic appliances, and means of transport. The quantity of consumer goods in possession certifies to the wealth of a household and is the indicator of prosperity. In analysing statistical data relating to the possession of durable goods in households in Poland, it is worth indicating several issues. Firstly, in terms of households and modern domestic appliances, the greatest saturation occurs with relation to food processors (60.2%) and microwave ovens (54.3%), while more rarely dishwashers (19.5%). Secondly, in the segment of equipment associated with communication, Polish people most frequently possess a TV set (97.9%), equipment for satellite TV or cable TV (69.4%), personal computer with access to the Internet (63.7%) and cellular phones (92%). Thirdly, in the sphere of goods connected with communication, the majority of adult Poles possess a car (60.1%) [24].

In sum, we may state that in Polish households differentiation is being observed in terms of access to luxury goods. This mainly relates to equipment associated with domestic appliances, communication (computer with access to the Internet) and means of transport (car). An addendum to this analysis is the research on the indicator of purchasing durable goods over the past year. As research results of CBOS indicate, most frequently purchases were made of electronic equipment associated with entertainment in the home - TV, digital camera, e-book reader, radio - (36%), while subsequently furniture and/or domestic appliances (32%) and computer equipment (desktop, notebook, tablet) (19%). The purchasers of these goods

were more often than not people with a good material situation, at best educated, while also young, being no older than 34 years of age [25].

In sum, the analysis of the consumer behaviour of Polish people should emphasize that a significant impact is exerted on it by patterns typical of cosmopolitan cultures of consumption. Polish consumers are to a significant degree imitators of trends and behaviour propagated by the mass media and try to duplicate elements of lifestyle and consumption characteristic of a consumer society.

4. Implications for enterprises resulting from the changes in the behaviour of consumers

The changes that are taking place on the contemporary market (rapid spread of new products, shortening of their market life cycle, expansion of global trademarks, erosion of trust on the part of consumers with relation to firms, formation of a new “digital world”, “global proximity”), as well as in consumer behaviour (growth in significance of e-consumption, pluralism and homogenization of lifestyles, growth in significance of consumer values, approach to the consumption of pleasure, growth in the role of pro-ecological consumption) significantly influence the enterprise-consumer ties. These changes are a great challenge for enterprises. They may constitute a threat to many enterprises, as well as becoming an opportunity for rapid growth and gaining a stronger market position. This is to a large extent conditioned by the type of strategy that an enterprise adopts with regard to new trends in consumer behaviour. One of the strategies is the creation of innovative products that are adjusted to the expectations of consumers. With this aim in mind, enterprises acquire as many varied types of information possible, e.g. relating to tastes, aesthetic preferences, aspirations, emotions etc., strengthening their competences via information, which enables them to gain a competitive advantage on the market. Thus, it is becoming necessary to provide a new definition of market space, in which they operate in order to concentrate on the most promising areas that may ensure market success. This task is not easy, as it requires managers to be alert and constantly monitor the trends appearing in the environs of the enterprise, as well as the constant monitoring of the behaviour of consumers that ensures constant access to information about consumers. Acquiring as much information as possible about dreams, aspirations, expectations, motivations and various aspects of the everyday life of consumers is an important factor that determines the success of a firm. With the aim of improving the collection of information on consumer behaviour in mind, it is worth availing of modern IT technologies that enable processing, systematizing and grouping the information acquired in various forms. The information on consumers collected facilitates the creation of individual market offers. However, the personalization of the offers of products should be based on managing contacts with individual purchasers, whose element is that of dialogue, listening to their opinions, remarks and comments.

From the point of view of changes that are taking place in the ties between enterprises and consumers, it is worth mentioning the increase in the participation of consumers in the strategies of firms that are oriented towards interaction with the addressees of their offer of consumer goods. The conviction that a loyal client for a firm in conditions of a competitive market is the most important is encouraging many enterprises to build different types of loyalty programmes aimed at long-lasting ties with consumers. One such undertaking may be the concept of social production serving to create products of unique features that enable them to distinguish themselves from market competitors [26]. Thanks to this, enterprises on the one hand, acquire knowledge, skills and involvement of consumers at a low cost, while on the other hand, build long-term ties with them.

5. Conclusions

The deliberations and analysis of consumption in Poland run does not exhaust the complexity of factors determining the changes of consumer behaviour. This is to a large extent the result of social and economic transformation, as well as the development of modern technologies. They exert a significant influence on the behaviour of consumers, as well as on the ties between consumers and producers, sellers and service providers. On the one hand, consumers are becoming more frugal by considering their purchases. In foregoing the purchase of expensive products they postpone their purchases until later. Nevertheless, they also search for goods that satisfy their need to experience pleasant feelings, e.g. luxury cosmetics, trademark products, clothing accessories, Premium chocolate etc. On the other hand, consumers are becoming equal partners in the processes of market trade. Consumers by means of increasing the disposability of part of their incomes and articulating their expectations are having an increasingly greater impact on market decisions. They are more frequently the leading player in market ties by deciding what producers shall produce and how long the given goods shall be produced.

These changes are an important premise for the creation of partnership strategies between an enterprise and its consumers. Consumers are more and more frequently playing the role of a partner in the processes of creating various products and services. The so-called “prosumer” is being formed that realizes two roles as follows: that of a producer and a consumer. The skilful use of these trends enables enterprises to achieve market success.

6. Reference

- [1] Bauman Z., *Consuming Life*, Polity Press, Cambridge, 2007.
- [2] Bockock R., *Consumption*, Routledge, London, 1993.
- [3] Miles S., *Consumerism – as a Way of Life*, Sage Publications Ltd., London, 1998.

- [4] Cambell C., *The Romantic Ethic and the Spirit of Modern Consumerism*, Basil Blackwell Publisher, London 1987.
- [5] Appadurai A., *Modernity at large: Cultural Dimensions of Globalization*, University of Minnesota Press, Minnesota, 1996.
- [6] Weinberg P., *Erlebnisorientierte Einkaufsstattengestaltung im Einzelhandel*, „Marketing ZFP”, 1986, nr 8, pp. 97-102.
- [7] Beyring L., *Der neue Konsument. Was ihn auszeichnet ist seine jeweilige Einzigartigkeit*, Marketing Journal, 1987, nr 5, pp. 434-440.
- [8] Bauman Z., *Globalizacja. I co z tego dla ludzi wynika*, PIW, Warszawa, 2000.
- [9] Koschel Kay-Volker, *Zur Rolle der Marktforschung in der Konsumgesellschaft*, in: D. Schrage, M. R. Friederici, (ed.) *Zwischen Methodenpluralismus und Datenhandel. Zur Soziologie der kommerziellen Konsumforschung*, VS Verlag für Sozialwissenschaften, Wiesbaden, 2008.
- [10] Bilińska-Reformat K., *Group Buying as a New Form of Winning Customers under the Conditions of Economic Crisis*, *Handel wewnętrzny*, 2012, maj-czerwiec, pp.152-160.
- [11] Schneider N. F., *Konsum und Gesellschaft*, in: Rosenkranz D. (ed.) *Konsum: soziologische, ökonomische und psychologische Perspektiven*, Verlag Leske+Budrich, Opladen, 2000.
- [12] Tanner J., *Industrialisierung, Rationalisierung und Wandel des Konsum- und Geschmackverhaltens im europäisch-amerikanisch Vergleich*, in: H. Siegrist (ed.) *Europäische Konsumgeschichte: zur Gesellschafts- und Kulturgeschichte des Konsums (18. bis 20. Jahrhundert)*, Campus Verlag, Frankfurt/Main, New York 1997.
- [13] Bosshart D., *Die Ökonomie des Billigen. Der unaufhaltsame Siegeszug in einer satten Wohlstandswelt*, du 743. *Zeitschrift für Kultur*, 2004, nr 1, pp. 24-28.
- [14] Jäckel M., *Einführung in die Konsumsoziologie. Fragestellungen-Kontroversen-Beispieltexte*, Verlag für Sozialwissenschaften, Wiesbaden, 2006.
- [15] Kryk B., *Konsumpcja zrównoważona a proekologiczne style życia*, *Studia i Materiały Polskiego Stowarzyszenia Zarządzania Wiedzą*, 2011, nr 51, pp. 206-218.
- [16] Barnett C., Cloke P., Clarke N., Malpass A., *Consuming Ethics: Articulating the subjects and spaces of ethical consumption*, *Antipode*, 2005, 37(1): 23-45.
- [17] Belz F. M., Peattie K., *Sustainability marketing*, John Wiley & Sons, UK, 2010.
- [18] Alexander S., Ussher S., *The Voluntary Simplicity Movement: A multi-national survey analysis in theoretical context*, *Journal of Consumer Culture*, 2012, 12 (1): 66-86.
- [19] E-commerce Track, www.wirtualne.media.pl/artykul/ (reading 20.02.2014)
- [20] *Mania kupowania, czyli o postawach konsumenckich Polaków*, *Komunikat z badań Centrum Badań Opinii Społecznej*, BS/5/2011, www.cbos.pl (reading 20.02.2014)

- [21] Mróz B., Konsument w globalnej gospodarce. Trzy perspektywy, *Oficyna Wydawnicza Szkoła Główna Handlowa*, Warszawa, 2013.
- [22] Zachowania proekologiczne Polaków, Komunikat z badań CBOS, BS/23/2011, www.cbos.pl (reading 20.02.2014)
- [23] Byłok F., *Konsumpcja w Polsce i jej przemiany w okresie transformacji*, Wydawnictwo Politechniki Częstochowskiej, Częstochowa, 2005.
- [24] *Household Budget Survey in 2012. Statistical Information and Elaborations*, Central Statistical Office, Warsaw, 2013.
- [25] *Ceny i zakupy*, Komunikat z badań, CBOS, BS/161/2012, www.cbos.pl (reading 20.02.2014)
- [26] Benkler Y., *The Wealth of Networks. How Social Production Transforms Markets and Freedom*, Yale University Press, New Haven and London, 2006.

ICSSAM-917

Prosumer Energy Dimension in the Conditions of Sustainable Micro-region Development in the EU

Prof. Robert Kucęba

Częstochowa University of Technology, Faculty of Management, Poland

robertk@zim.pcz.czest.pl

Prof. Felicjan Byłok

Częstochowa University of Technology, Faculty of Management

Armii Krajowej 19 B, 42-200 Częstochowa, Poland

byl.f.s@zim.pcz.pl

Full Professor Arnold Pabian

Częstochowa University of Technology, Faculty of Management

Armii Krajowej 19 B, 42-200 Częstochowa, Poland

a.pabian@zim.pcz.pl

Marcin Zawada, PhD

Częstochowa University of Technology, Faculty of Management

Armii Krajowej 19 B, 42-200 Częstochowa, Poland

zawada@zim.pcz.pl

The corresponding author: Prof. Robert Kucęba

Abstract

The authors included in the paper taxonomy of prosumer energy, synergetics and sustainable micro-region development. In this grasp prosumer energy is treated as transformation from fossil fuels to small scale renewable energy, dedicated to energy prosumers. This concerns the change of large-scale (system) energy dominance towards effective energy production and management in the dispersed energy systems and decentralized one. Energy consumer in this grasp is an energy producer (from the polygeneration energy portfolio), and the one who introduces and sells its surpluses in the decentralized micro-regional system as a prosumer.

Keywords: prosumer energy, sustainable development, sustainable micro-regions, sustainable energy.

1. Introduction

The observed civilization progress, dynamic growth of innovative technological systems, their components and new services and products, by definition stimulating the growth of social welfare - may be the source of inhibition at the same time. In particular, they stimulate the growth of environment degradation, connected with man's productive activity and substantial impoverishment of natural resources. In this reference an idea of a new concept of further civilization development defined as "*sustainable development*"¹. It should be stressed, in accordance with still valid Declaration of United Nations Conference "Environment and Development" from Rio de Janeiro (1992) [1] and the adopted document Agenda 21 [2], that each individual has - "*the right to healthy and creative life in harmony with the nature*", at the same time assuming that environment protection should constitute "*an integral part of development processes*".

The concept of sustainable development is also nowadays considered to be philosophy, as well as a superior strategy of a conscious, responsible individual and social life - in symbiosis with the natural environment, economic development - at simultaneous social acceptance and "*noticeable*" growth of social welfare [3]. The above is confirmed by OECD strategy (2011) - *Green Growth Strategy*. In the strategy, in reference to sustainable development, "green growth" is defined as an activity aiming at achieving economic development, at simultaneous prevention of environment degradation, preserving bio-diversity and using natural resources in the way which does not disturb ecological balance.

We should emphasize here that sustainable development and the portfolio of related strategies has a global reference (the "top down" approach), however its success at simultaneous acceleration of "sustainable society" is conditioned primarily by taken proper actions in micro-region perspectives (the "bottom up" approach) - "Think globally, act locally". In particular, on the regional level sustainable development concerns environment protection, rational use of natural resources, satisfying the needs of local societies, increasing the employment accessibility (creating new workplaces), region citizens participation in the decision-making process and operations aimed at development, access to high quality services and creating cultural heritage. The mechanism of the sustainable development concept functioning, also at regional level, requires application of a system approach, simultaneously taking into consideration co-operation of three basic elements (spheres) [4]:

¹ The concept of balanced development appeared for the first time in 1972 during the United Nation's Conference in Stockholm "We have only one Earth". A declaration was adopted then, that Earth's natural resources must be protected for the good of present and future generations through planning and proper management. The notion of sustainable development was specified in 1987 in the report "Our Common Future" prepared by the UN's World Commission of Environment and Development under the supervision of Gro Harlem Brundtland. The definition included in the report determined the goal of present generation development in the way that enables the same for future generations.

- an economic element, which results from the need to strive for economic growth, bringing a real welfare improvement with simultaneous avoidance of actions having negative influence on the natural environment,
- a social element which comes down to satisfying human needs, and thus, ensuring equal chances of development;
- environmental factor, consisting in rational use of natural resources, not depleting them, and protecting productivity of systems maintaining life on Earth.

In particular, the European Union in the Long-term Strategy of EU Sustainable Development (2006) proposes and monitors ten basic levels of the ratio analysis of the EU sustainable economic growth [5, 6], including the growth of sustainable micro-regions value: 1. social-economic development measured as the real GNP, 2. level of sustainable consumption and production measured through resources productivity, 3. social inclusion level in micro-region sustainable development - measured with poverty threat or social exclusion indexes, 4. demographic changes level measured with the elderly employment index, 5. public health level measured with average lifespan and average lifespan in health indexes, 6. climate and energy change level - measured with greenhouse gasses emission indexes and the percentage share of renewable energy sources in total energy balances, 7. Sustainable transport level, identified by energy use in transport in relation to GNP (taking into consideration first and second class bio-fuels), 8. natural resources level, in particular with the use of indexes of common bird species appearance and fish resources protection indexes, 9. social-public partnership level, evaluated through support mechanisms for the EU sustainable development, including micro-regions. Last of the relevant mentioned levels is the tenth one - 10. the level of micro-region governing and system management, promoting revival and conjuncture growth within sustainable development of the European Union.

Thus, the task of individual micro-regions, regions and national economies in the EU (also in the global perspective) is search for innovative - complementary - system solutions [7], which constitute an accelerator of convergent and synergetic improvement of the abovementioned indexes. According to the subject matter of the paper defined in its title one of the solutions is promoting and starting support mechanisms for prosumer energy, in particular small scale renewable energy sources - implemented, which needs particular stressing, on the side of the energy prosumer and its created value.

2. Prosumer Energy - as a Micro-Region Sustainable Development Stimulator

Prosumer energy fits in both the presumption concept as well as the concept of sustainable development. In the literature it is assumed that the term prosumer was introduced by A. Toffler (1980) [8], interestingly, a writer and a futurist. He proposes the two categories of prosumers. In the first category we distinguish a prosumer involved in the presumption activities of the first wave - generating economic benefits resulting from presumptive activities - that is a user and consumer who self-produces products and services in order to consume them for their own needs. In the second category in turn a prosumer is an individual involved in presumption activities of the third wave - generating, apart from economic benefits, also social and ecological ones - frequently connected with the tendency to bear greater costs, however, stimulating improvement of their welfare at their simultaneous social and ecological responsibility.

According to Bill Quain, currently a new era is coming into existence in the area of Corporate Social Responsibility (CSR) - a prosumer era [9]. Previously a consumer was perceived as a passive receiver of what a producer offered. Nowadays this attitude has changed from the passive to the active one. Consumer wants to be producer's partner. Consumer possesses extensive knowledge on producer's services or products, creates or co-creates them, shares own knowledge and experience, communicates with the producer and the environment. Presently, and particularly in the time of WEB 2.0, WEB 3.0, cloud computing - prosumer is no longer perceived futuristically but is an unit co-creating consumption value, and thus, GNP growth.

Prosumers' activeness, in accordance with the above is visible in the virtual environment, also in *social media* environments [10], as well as in related models of crowdsourcing and astroturfing. The role and value of the prosumer within the last decade has been growing dynamically also in the area of sustainable development [11], with reference to producers/consumers of energy from micro- and small renewable sources - at the technological (eco-innovative), economic, ecological and social justification.

The literature of the subject lacks unequivocal, generally accepted definition of energy prosumer. Attempting to introduce such a definition, on the basis of the subject literature query and correlated definitions of prosumer, we can assume that it is the former energy receiver, who makes use of available on competitive market energy technologies (production and efficiency ones on the demand side, that is on the side of energy and fuels use) in order to satisfy own energy needs. In particular the prosumer undertakes production of fuels and poly-generational energy for their own use in Renewable Energy Sources (e.g. production of: biomass, bio-fuels, bio-gas, hydrogen, as well as electricity, heat or coolness), as well as in

dispersed poly-generational micro- sources. The energy prosumer changes the product attitude in the scope of satisfying energy demand, stimulating the use of economic energy potential of RES of the given region [12].

In the third wave prosumption grasp, according to A. Toffler - prosumer energy should, among others, be defined as transformation from energy products obtained from fossil fuels in centralized energy sources in the direction of energy value chains of RES energy, co-created in economic micro-spaces generating economic, ecological and social benefits [13]. New energy value chains stimulate new business models on energy markets - moving from centralized models towards decentralized ones. They stimulate a new group of local entrepreneurship, new workplaces, new diversified investments, local social and ecological responsibility.

Prosumer energy should stimulate locally new social "green initiatives" promoting sustainable region development [14].

It should be stressed that currently it is difficult to recognize as energy prosumers in the context of sustainable development - centralized commercial energy sector, despite the fact that about 10% of the energy it produces is used for its own needs.

Accepting the abovementioned restrictions, it is assumed that in the energy prosumers portfolio we should distinguish: households, farms, territorial government units, communal and living administration, economic organizations - units producing energy for their own needs selling energy surpluses and its values in local decentralized systems.

Prosumer energy is also treated, according to the "EU roadmap to 2050" as a evolutionary-perspective one, while the large-scale - commercial energy industry (fossil-fuel power plants, nuclear power plants) is treated as a bridging one. It concerns the change of large-scale (system) energy domination towards effective energy production and management in dispersed energy systems and decentralized one. In accordance with the EU directives: the Directive 2009/28/WE (defining goals of 3x20 Package in the scope of RES - beginning of electricity, heat and transport markets integration) and the Directive 2010/31/WE (concerning zero-energy buildings), we also distinguish among prosumer energy determinants its chances of synthesis with other region economic areas, such as [12]:

- **CONSTRUCTION INDUSTRY** - reduction of fossil fuels use in heat production, e.g. the need to produce electricity from RES to power heat pumps and cars.
- **TRANSPORT** - increase of electric transport, building spaces economical in the transport sense, e.g. teleworking.

– **AGRICULTURE** - intensification of agricultural resources use to promote RES production.

This synthesis, indirectly stimulating also the growth of other sustainable development indexes, correlated in the present paper, is currently recognized as a new multi-area science and economy department defined as synergetics.

3. Current and Perspective Prosumer Energy Evaluation Indexes in the EU Sustainable Region Development Dimension

In this part of the paper the authors correlated two groups of indexes/factors of prosumer energy evaluation. The first group includes balance development indexes aggregated by EUROSTAT. The second group is a system grasp containing factors of prosumer energy acceleration in heterogeneous dimensions of sustainable development - factors aggregated by the authors.

In the EU countries current evaluation of prosumer energy development and evaluation of its influence on region sustainable development may be conducted on the basis of indexes of climate and energy coming from renewable energy sources. In particular, through identification of greenhouse gases emission intensity connected with energy consumption and production and use of energy from RES. In table 1, on the basis of EUROSTAT statistical data [15], the authors correlated sustainable development indexes on the level of climate and energy change - measured by greenhouse gases emission indexes and percentage share of renewable energy sources in total energy balances - with reference to primary energy demand.

Table 1 Sustainable development index on the level of climate and energy change (including renewable energy sources)

EU countries	Primary energy consumption 2010 [million TOE -tonnes of oil equivalent]	Primary energy consumption 2011 [million TOE -tonnes of oil equivalent]	Share of renewable energy in gross final energy consumption 2010 [%]	Share of renewable energy in gross final energy consumption 2011 [%]	Greenhouse gas emission 2010 [in CO2 equivalent indexed to 1990]*	Greenhouse gas emission [in CO2 equivalent indexed to 1990]*
Belgium	53.0	51.6	4.9	4.1	92.97	85.12

Bulgaria	17.3	18.6	13.7	13.8	55.2	60.45
Czech Republic	41.9	40.6	9.2	9.4	70.43	68.42
Denmark	19.9	18.5	22.0	23.1	90.34	83.39
Germany	311.1	294.7	10.7	12.3	76.7	74.48
Estonia	6.1	6.1	24.6	25.9	49.45	51.81
Ireland	14.9	13.7	5.6	6.7	113.32	105.82
Greece	27.7	27.0	9.8	11.6	111.52	109.61
Spain	122.8	121.4	13.8	15.1	125.35	126.43
France	255.0	245.5	12.8	11.5	93.86	88.9
Croatia	8.0	7.9	14.6	15.7	90.21	89.12
Italy	165.0	162.6	9.8	11.5	97.45	95.3
Cyprus	2.6	2.6	5.4	5.4	150.58	147.47
Latvia	4.7	4.3	32.5	33.1	46.7	44.67
Lithuania	6.1	5.8	19.8	20.3	43.26	44.31
Luxembourg	4.6	4.5	2.9	2.9	101.88	100.22
Hungary	23.8	23.1	8.6	9.1	68.99	67.19
Malta	0.9	0.9	0.2	0.4	149.66	151.27
Netherlands	71.1	66.3	3.7	4.3	101.37	94.67
Austria	32.7	31.9	30.6	30.9	110.16	107.57
Poland	96.0	96.3	9.3	10.4	88.09	87.56
Portugal	22.6	21.9	24.4	24.9	118.55	116.49
Romania	34.3	34.8	23.4	21.4	47.76	50.46
Slovenia	7.0	7.2	19.6	18.8	105.75	105.88
Slovakia	16.8	16.2	9.4	9.7	64.03	63.19
Finland	35.6	34.1	31.4	31.8	106.65	96.56
Sweden	48.7	47.8	47.9	46.8	91.26	86.03
United Kingdom	203.3	190.4	3.3	3.8	79.92	74.81

*This index shows trends in total greenhouse gases emission in CO2 equivalent in the "Kyoto basket" with reference to 1990 Source: Own analysis on the basis of [15]

The above summary shows mutual relationships among sustainable development indexes on the level of climate and energy changes. The growth of Renewable Energy Sources share stimulates reduction of fossil fuels in the energy balances, as well as greenhouse gases reduction calculated in CO2 equivalent (according to the Kyoto Protocol "United Nations Framework Convention on Climate Change" -1997) [16]. Mutual relations among correlated indexes confirm the thesis that growth of Renewable Energy Sources share reduces

consumption and impoverishment of natural energy resources (non-renewable) and reduces greenhouse gases emission. Indication of these relations is relevant with reference to realizing global and the European policy in the scope of sustainable development, as well as realizing the European treaty 3x20 of December 2008 (20% reduction of primary fuels use, 20% reduction of CO₂, 20% growth of Renewable Energy Resources share).

Tabulated summary, and the presented superior conclusion concerning the meaning of RES share growth in regional energy balances, the EU's, confirms the righteousness of the developing concept of prosumer energy, the one that requires global political, economic and financial support, but, first of all social acceptance in the bottom up perspectives - in micro-regions.

Prosumer energy is also favoured by low marginal costs of RES investments, investment redistribution, short time of realization (for example the time of realizing a 1MW Bio-gasworks investment - 1 year - on the assumption of producing 1600MW - 1600x1MW realization time - 1 year/investors dispersion, building a nuclear block in turn 20 years - cumulated financing/individual investments).

That is why, correlated in Table 1 sustainable development indexes, allowing for CO₂ level reduction, reduction of demand for primary fuels stimulated by the growth of Renewable Energy Resources share- including prosumer energy, do not fully reflect the "added value" of the proposed evolutionary and perspective energy pillar. The nature of region development balancing and its individual levels - the value of prosumer energy is the system approach including its determinants in heterogeneous dimensions. The authors attempt to aggregate acceleration factors of "evolutionary" prosumer energy on the basis of statistical and legislative periodicals query and own research (observations and expert opinion surveys - intentional choice of the research sample) . These factors are correlated in Table 2 in four dimensions of sustainable development: the physical (spatial) one, the economic one, the social one and the environmental one.

Table 2. Acceleration factors of prosumer energy in the EU region sustainable development dimensions

Dimensions of EU region sustainable development	Factors stimulating prosumer energy development in EU
PHYSICAL	<ul style="list-style-type: none"> ✓ diversity and dispersion of energy sources in local perspective (e.g. micro-windmills, micro-biogasworks, photovoltaic and photothermal sources), ✓ fuels and energy sources diversification, ✓ independence from the centralized energy industry system, ✓ energy independence stimulated by the increased exploitation of RES economic potential, ✓ increased local energy security, ✓ "black-outs" reduction, ✓ increased supply of eco-innovative technologies stimulated by the increased demand for construction, transport, agriculture (energy ones), ✓ synergetic bi-directional influence of prosumer energy on construction, transport, agriculture (energy ones).
ECONOMIC	<ul style="list-style-type: none"> ✓ development of EU regions specialization portfolio, activity, fuels saving, ✓ pollution reduction, ✓ incorporating external costs into the fuels and secondary energy prices, low marginal costs with reference to large-scale energy blocks costs, ✓ short times if investment realization, ✓ higher investment return rates, ✓ increased potential, position and competitive advantage of energy prosumers, ✓ increased number of investors, energy producers, ✓ financial streams from the EU sources, ✓ reserving conditions of energy prosumers incorporation in land use plannings, ✓ benefit "basket" growth, ✓ knowledge exchange and transfer of eco-innovative prosumer technologies,

	<ul style="list-style-type: none"> ✓ creating new workplaces, ✓ growth of social-ecological responsibility in micro-regions.
SOCIAL	<ul style="list-style-type: none"> ✓ energy consumption culture stimulating the growth of ecological awareness, ✓ education systems (among others, in the scope of ecology, eco-innovative energy solutions dedicated to prosumers), ✓ increased welfare and the willingness to pay (Cost-Benefit Analysis), ✓ increased local communities activeness, ✓ citizen participation in public life, ✓ maintaining local traditions, ✓ knowledge creation and transfer, <p>In the social dimension we distinguish the micro-region authorities activity in the scope of, among others:</p> <ul style="list-style-type: none"> ✓ stimulating economic, financial activeness and legislative mechanisms of supporting activities promoting prosumer energy in the region, ✓ creating motivating systems for energy prosumers, ✓ preventing poverty and social exclusion, ✓ ensuring equal access to prosumer technology as well as products from the polygenerational energy portfolio.
ENVIRONMENTAL	<ul style="list-style-type: none"> ✓ lithosphere, hydrosphere, aerosphere pollution reduction, ✓ self-reconstruction ability of regional natural environment, ✓ regional adjustment with reference to environmental conditionings (technical and economic energy potential, environmental capacity) and biological diversity, ✓ adjustment of prosumer energy space size with protected areas consideration (in the EU, e.g. according to the protocol NATURE 2000), ✓ determining environment absorptiveness and its resources condition (in the quantitative and qualitative grasp), ✓ introduction of reliable, complex environment evaluation, ✓ ability to manage protected areas without the harm to their inhabitants lives.

Source: Own analysis

To sum up, we must emphasize the important role in the stimulation and realization of the above factors - local and regional authorities. They conduct numerous tasks: create development strategies and plans, attract investors, promote regions. Their tasks also include taking care of infrastructure, providing services (healthcare, education), care for environment, counteraction to poverty and social exclusion.

4. Conclusion

The biggest challenge to development of activity and improvement of contemporary micro-regions welfare is building support systems for their sustainable social-economic growth. The systems which would realize the needs of local community, would be cost-effective and would not contribute to environment degradation, at simultaneous social acceptance. The proposed antidote is prosumer energy whose justification cannot be limited to presently used sustainable development indexes. It requires a system approach with consideration of correlated factors: physical ones, economic ones, environmental ones and social ones. Only in this grasp prosumer energy may be treated as prosocial one, perspective/evolutionary one - changing the paradigm in the economy - transformation of centralized fossil fuels based energy industry towards decentralized energy industry using the resource-energy potential of micro-regions - friendly to the social and environmental surroundings.

5. References

- [1] The Rio Declaration on Environment and Development of 14 June 1992. Final documents of the United Nation's Conference "Environment and Development", <http://libr.sejm.gov.pl/publish/TEK01/02/80/00/00/TEK01.000000280.html>
- [2] Agenda 21 – Global operations programme for the XXI century, I Earth Peak 1992r. Rio de Janeiro http://biurose.sejm.gov.pl/teksty_pdf_95/i-291.pdf
- [3] Pabian A., Management in sustainability concept – functional grasp, „Organization Review”, 2013.
- [4] Parysek J., Basis of local economy, Wyd. UAM, Poznań, 2001, pp. 213-228.
- [5] Borys T., Sustainable transport development measure, [in:] Ecological problems of sustainable development, (edited by): Kielczewski D., Dobrzańska B., *Wyd. WSE w Białymstoku*, Białystok, 2009.
- [6] EUROPE 2020 - Strategy for intelligent and sustainable development promoting social inclusion. European Commission. Brussels 2010, http://ec.europa.eu/eu2020/pdf/1_PL_ACT_part1_v1.pdf
- [7] Niedziółka D., Green Energy in Poland, *CeDeWu*, Warszawa 2012, p. 15.

- [8] Toffler A., *The Third Wave*, William Collins Sons & Co. Ltd., New York 1980.
- [9] Quain B., Prosumer era, *E-Commerce Editors*, 2008.
- [10] Kucęba R., Pabian A., Byłok F., Zawada M., Influence of IT on Changes in Contemporary Management, *International Journal of Management & Computing Sciences (IJMCS)*, Vol. 3, nr 1, pp. 79-90, Canada.
- [11] [Szymusiak T., Social and economic benefits of Prosumption and Lead User Phenomenon in Germany - Lessons for Poland, \[in:\] Sustainability Innovation, Research Commercialization and Sustainability Marketing, Sustainability Solutions, Kraków, 2013.](#)
- [12] Popczyk J., *Dispersed Energy, PKEOM*, Warszawa, 2011.
- [13] Kucęba R., Virtual power plant. Chosen aspects of dispersed generation subjects organization and management, *Wydawnictwo: Towarzystwo Naukowe Organizacji i Kierownictwa „Dom Organizatora”*, Toruń 2011.
- [14] Shandurkova A., Bernt A., Rainer B, Ottesen S., Nilsen A., Prosumer Oriented Energy Market Developments and future outlooks for Smart Grid oriented energy markets. IMPROSUME Publication Series #3 NCE Smart Energy Markets, Halden, 2012.
- [15] EUROSTAT, <http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators> (Accessed 02.02.2014)
- [16] Kyoto Protocol to Framework United Nation's convention on climate changes drawn in Kyoto on 11 December 1997 Dz. U. z dnia 17 października 2005 r., Dz.U. 05.203.1684.

ICSSAM-844

The Effect of Leadership on Workforce Results: a Comparative Study between Public and Private Hospital in Thailand

Sookyuen Tephong

Thammasat University, 2 Prachan Road, Phranakorn, Bangkok 10200, Thailand.

sookyuen@hotmail.com

Abstract

This paper aims to examine the components of Scouller's leadership model and the structural relation between leadership, leading, workforce focus, and workforce results. The criteria of excellence model such as national quality award, hospital accreditation, were developed for formulating a conceptual framework. Based on the survey research, 101 and 100 samplings were gathered from the employees of a public hospital and a private hospital in Thailand. The research was primarily based on quantitative method. Confirmatory factor analysis (CFA), structural equation modeling (SEM), and content analysis were used for analysis. The finding confirmed that three components of leadership model; public, private, and personal leadership (3P) were the members of Scouller's The Three Leadership Model. The results also found that the structural models of both hospitals were fit, and all hypotheses were accepted excepting the relationship between leading and workforce results. However, the multigroup analysis found that the model of public and private hospital were different. The results of this study will be contributed to leadership theories and management. This paper also provided the recommendations regarding the future directions of research study.

Keywords: The Three levels of leadership, Leading, Workforce Focus, Workforce Results.

1. Introduction

Nowadays, hospitals are facing with a turbulent circumstance. There are both internal and external forces affecting their survival such as customer need, competition, standard criteria, and quality improvement (Poole, et al. [1]). How to improve and maintain the quality in their operations and services are key issues. Hospital accreditation (HA), international standard, and quality award are management tools which they have tried to satisfy for stakeholder recognition and social legitimacy. The quality of hospitals also affect to several bodies including patients, consumer organizations, government agencies, NGOs, standard bodies, shareholders, and academic field. Hospital workforce and management system are vital factors for their success. However, there are quite limited evidences supporting factor effecting workforce results caused by leadership and workforce focus.

Leaders play a chief role for workforce performance and organizational succession (Uysal [2]). However, from the literature review, there is no single model or theory can be covered all leadership behaviors and situations. The previous leadership theories in the past have both strengths and weaknesses that cannot be applied in any circumstances. The new approach of Scouller's The Three Levels of Leadership model needs to be proved for its validity. Moreover, public and private organizations have similarity and differentiation criteria. In this paper based on research, there are reviews and discuss the similarities, differentiations, and then comparisons between public and private organization. The previous researches also suggest that a causal relationship between leadership and outcome should be studied in the future. Mix methods and evidence-based strategies will be adopted (Avolio et al. [3]). This paper aims to examine the components of Scouller's leadership model and the structural relation between leadership, leading, workforce focus, and workforce results. Workforce in this study refers to the employee actively involved in achieving the work of an organization concerning permanent, temporary, and part-time employees, as well as any contract employees.

2. Literature Review

The Three Levels of Leadership Model was introduced by James Scouller in 2011. He proposed that this approach combines the strengths of previous leadership theories while addressing their limitations (Businessball.com [4]). The Three Levels comprise public, private and personal leadership (3P). Public leadership is the 34 behaviors influencing two or more people simultaneously while private leadership is 14 behavior influence individuals one to one. Personal leadership is an inner level concerning a person's leadership presence, knowhow, skills, beliefs, emotions and unconscious habits. The effective leader must work on all three levels in parallel (Scouller [5]). In this study, 3Ps were fragmented in to 18 survey items by the author.

H_{1,1}: Public leadership is a member of the three levels of leadership model.

H_{1,2}: Private leadership is a member of the three levels of leadership model.

H_{1,3}: Personal leadership is a member of the three levels of leadership model.

Leadership is generally used as an independent variable affecting to other variables (i.e. employee satisfaction, job performance, effectiveness, knowledge sharing, personal traits) (Nanjudeswaraswamy & Swamy [6]). In the quality management model leadership plays an important role in organizational system such as leading, workforce focus, and results. The effects of the leadership on leading, workforce focus, and workforce results will be observed in the study. Leading is measured by 9 items including, excellent work, share values, customer satisfaction improvement, continuous improvement, and environment. For workforce focus, 14 items regarding employee support will be asked. 12 items will be measured workforce results which are the outcome of workforce focus.

- H₂: Leadership has a positive relationship with leading.
- H₃: Leadership has a positive relationship with workforce focus.
- H₄: Leadership has a positive relationship with workforce results.

Leading is basically related to organizational effectiveness (Vijande and Gonzalez [7]; D'Souza and Sequeira [8]). According to Thailand Quality Award criteria, leading describes how organization guide and sustain an organization, and how communicate with workforce and encourage high performance. This study includes the question about vision and valued, promoting legal and ethical behavior, create and environment and workforce culture, communication, focus of action, and social responsibility (Thailand Productivity Institute [9]). Leading is probably related to human workforce focus and results.

- H₅: Leading has a positive relationship with workforce focus.
- H₆: Leading has a positive relationship with workforce results.

The workforce focus examines the ability to get workforce capability and build a workforce environment for high performance. Based on Thailand Quality Award criteria, workforce focus in this study observes how the hospital engages, manages, and develops workforce to utilize its full potential in alignment with the organization (Thailand Productivity Institute [9]).

- H₇: Leading has a positive relationship with workforce focus.

Public and private hospitals in this study are basically different in the business philosophy to serve their stakeholder. They differ in organizational size, age, and specialization. However, they share similarity by adopted hospital accreditation, quality award criteria, and entrepreneurial orientation. Therefore, it seems to be the same structural model.

- H₈: There is no difference between the structural model of public and private hospital.

3. Research Methodology

This paper is mainly upon quantitative method by using a sample survey with a cross-sectional data which were collected through a questionnaire. Hair e. al. [10] suggested that 100 minimum sample sizes is enough for five or fewer constructs, therefore, 101 and 100 samplings were gathered from the employees of public and private hospital, and analyzed by using confirmatory factor analysis (CFA), structural equation modeling (SEM), and content analysis. The multigroup analysis was also applied to observe the differentiation between the structural model of public and private hospital. There are many fit indices for model assessment. Hu and Bentler [11] suggest main fit indices using for model assessment including Comparative Fit Index (CFI) and Non-Normed Fit Index (NNFI) could be above .09, and Root Mean Square Error of Approximation (RMSEA) below .08 is acceptable.

For the respondent's characteristics of public hospital, most of the respondents are female, 31-40 years old, and hold Bachelor's degrees corresponding with private hospital which most of respondents are female, 31-40 years old, and hold Bachelor's degrees. Table 1 indicates that reliability coefficients of all variable were acceptable, and the AVE values ranged from .50 for all constructs both public and private organizations.

Table 1 Construct Reliability and Average Variance Extracted

Variable	Construct Reliability (CR)		Average Variance Extracted (AVE)	
	Public Hospital	Private Hospital	Public Hospital	Private Hospital
	Leadership	.752	.750	.502	.500
Leading	.897	.897	.500	.503
Workforce Focus	.928	.949	.501	.501
Workforce Results	.921	.921	.500	.501

4. Finding

For confirmatory factor analysis and structural equation modeling, the measurement model fit, Root Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI), Comparative Fit Index (CFI) were used to determine the fit indices of the model (Joreskog and Sorbom [12]). The adjusted chi-square statistic is as low as 2.0 indicated good model fit (Kline [13]). For parameter estimation, the results of loading factors with t-value exceeded the critical value of absolute 1.96, 2.58, and 3.29 at the significance levels of .05, .01, and .001, respectively, indicating valid relationships among observed variables and their constructs. A second-order of leadership variable comprises with public, private, and personal leadership was tested. Table 2 demonstrates the result of confirmatory factor analysis of four constructs; leadership, leading, workforce focus, and results of workforce focus which all constructs are fit. The p-values were insignificant implied that empirical data correspond with theoretical models.

Table 2 Summary of Measurement Models

Measurement Model		χ^2	df	p	χ^2/df	GFI	IFI	CFI	RMSEA
Leadership	Public Hospital	131.680	109	.069	1.208	.902	.990	.990	.046
	Private Hospital	135.486	114	.083	1.888	.915	.983	.990	.083
Leading	Public Hospital	124.968	109	.126	1.146	.947	.992	.992	.062
	Private Hospital	34.981	23	.052	1.521	.933	.977	.977	.073
Workforce Focus	Public Hospital	67.987	51	.056	1.333	.903	.988	.987	.058
	Private Hospital	65.790	52	.095	1.265	.909	.985	.984	.052
Workforce Results	Public Hospital	45.893	43	.353	1.067	.935	.997	.997	.026
	Private Hospital	56.026	41	.059	1.366	.915	.980	.979	.061

Multigroup analysis was used to analyze whether the structural model of public and private hospital are the same. Table 3 reports the various fit indices and the chi-square difference tests. By observing $\Delta \chi^2$ It appears that some differences emerged in the model across the two groups. It concludes that there is difference between the structural model of public and private hospital.

Table 3 Fits indices for invariance tests and $\Delta \chi^2$

Models estimated	χ^2	df	χ^2/df	CFI	RMSEA	Nested model	Δdf	$\Delta \chi^2$	p
M ₁ : Unconstrained	1944.44	1102	1.764	.884	.062				
M ₂ : Measurement weights	1999.88	1135	1.762	.881	.062	M ₂₁	33	55.45	.009
M ₃ : Structural weights	2007.28	1141	1.759	.881	.062	M ₃₂	6	7.39	.286
M ₄ : Structural variance	2018.68	1142	1.768	.879	.062	M ₄₃	1	11.41	.001
M ₅ : Structural residuals	2022.99	1145	1.767	.879	.062	M ₅₄	3	4.31	.230
M ₆ : Measurement residuals	2462.69	1254	1.964	.834	.070	M ₆₅	109	439.70	.000

According to figure 1, the structural model of public hospital indicated that all hypotheses were satisfied excepting hypothesis 6 (leading was not significantly impact to workforce result), the same as private structural model.

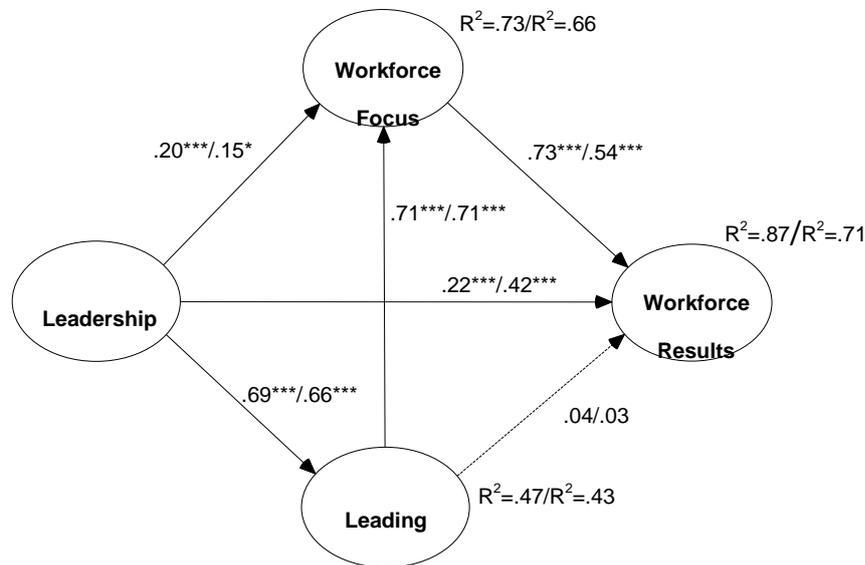


Figure 1 Result of Path Analysis and Hypothesis Testing (Public/Private Hospital)

*** $p < .001$, ** $p < .01$, * $p < .05$

5. Discussion

According to the results, public leadership, private leadership, and personal leadership were components of Scouller's leadership model. At the theoretical level, the empirical data shown that leadership can be classified in three levels. It is a new approach of leadership study. However, please note that this finding was based on 18 questions adapted from the concept of the three levels of leadership behaviors. The other assumptions of 3P model such as it can be applied in any circumstance, and it has benefit for leader development, were not examined in this study. Almost hypothesizes were accepted; leadership has a significantly positive effect to leading, workforce focus; and workforce results; leading has a significantly positive effect to workforce focus and workforce results; workforce focus has a significantly positive effect to workforce results. However, leading has no effect to workforce results. Both public and private hospitals have the same result. Surprisingly, multigroup analysis reports that there is different between public and private structural model. There could not have "one best way" for structural model of any organizations. They have to design and adapt a suitable model for themselves. The finding of this study also has management contributions. Hospitals can apply this research result to promote their leadership behaviors, leading system, and workforce results.

This study has several limitations. Firstly, The Scouller's three levels of leadership model comprise many assumptions while in this paper examine only the components of leadership; are three levels of leadership; public leadership, private leadership, and personal leadership. The left should be clarified in the future research. Secondly, the leadership question items using in this study were adopted by the author from the three levels of leadership concept, not all original question. Finally, this paper is strongly focused on quantitative orientation which observes on the relationship among variables. Qualitative data should be studied for detail of each relationship. For future research, other assumptions of Scouller's leadership model should be clarified; longitudinal data should be observed. 3P model could be adapted to other kinds of organization.

6. Conclusion

Based on the new leadership approach and the criteria of excellence model, this paper examines the components of Scouller's leadership model and the structural model of public and private hospital. The finding proves that 3P are components of this model. Leadership has a significantly positive effect to leading, workforce focus, and workforce results. Leading has a significantly positive effect to workforce focus and workforce results. Workforce focus has a significantly positive effect to workforce results. However, leading has no effect to workforce results. Although separately structural model of public and private are fit, the integration of them was not fit. It can be implied that public and private hospital has a different structural model. The results of this study will be contributed to leadership theories level, and management level. The recommendations of future directions were also proposed.

References

- [1] Poole, M. Scott, Andrew H. Van de Ven, Kevin Dooley, and M. E. Holmes. (2000). *Organizational change and innovation processes: Theory and methods for research*. New York: Oxford University Press.
- [2] Uysal G. (2012). Human Resource Focus in TQM Awards. *Journal of US-China Public Administration*. 9(3). pp.338-345.
- [3] Avolio, B., Walumbwa, F., and Webber, T. J. (2009). Leadership: Current Theories, Research, and Future Directions. Management department Faculty Publications. Retrieved from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1036&context=managementfacpub>. (16 October, 2013).
- [4] Businessball.com. (2012). Leadership development methods and tips. Available at <http://www.businessballs.com/leadership.htm>. (13 August 2013).
- [5] Scouller, J. (2011). *The Three Levels of Leadership: How to Develop Your Leadership Presence, Knowhow and Skill*. Cirencester: Management Books 2000.
- [6] Nanjundeswaraswamy, T.S. and Swamy D R. (2012). A Literature Review on Quality of

Work Life and Leadership Styles. *International Journal of Engineering Research and Applications*. 2(3). pp.1053-1059.

[7] Vijande S. and Gonzalez A. 2007. Innovativeness and Organizational Oriented Firms: the Moderating Role of Market Turbulence. *Technovation*. 27(9). pp.514-532.

[8] D'Souza, S C., Sequeira A. H. (2011). Application of MBNQA for service quality management and performance in healthcare organizations. *International Journal of Engineering, Science and Technology*. Vol.3, No.7 2011, pp. 73-88.

[9] Thailand Productivity Institute. (2012). *TQA Criteria for Performance Excellence 2012-2013*. Pongwarin: Bangkok.

[10] Hair, J.F, Black W.C, Babin B. J, and Anderson R. E. (2010). *Multivariate Data Analysis: A Global Perspective*. Pearson: New Jersey.

[11] Hu, L.T. and Bentler, P.M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure

Analysis: Conventional Criteria Versus New alternatives. *Structural Equation Modeling*. 6(1). pp.1-55.

[12] Joreskog, K. G. and Sorbom (1996). *LISREL 8: User's Reference Guide*. Scientific Software International, Chicago.

[13] Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling*. 2nd ed. New

York: Guilford Press.

ICSSAM-818

A Study on The Impacts of School Environment on Students' Creativity in Higher Education

Tzu-Ling Huang

Graduate Institute of International Business, Chung Yuan Christian University,
200, Chung Pei Rd, Chung Li, Taiwan 32023, R.O.C

Eilleenhuang2@hotmail.com

Shu-Fen Su

Graduate Institute of International Business, Chung Yuan Christian University,
200, Chung Pei Rd, Chung Li, Taiwan 32023, R.O.C

Su781026@hotmail.com

Abstract

Current social pursuit of progress, consumers like new experiences, various industries are needed in order to get on the innovation of the original professional change, it is the choice of industry professionals, not only focus on personal professional, are also focus on their personal creativity. Therefore, people have professional knowledge, and the ability to innovate and create, in order to have a competitive advantage. So, today's school students are no longer just the professional knowledge or skills, still need to train students to jump off the shackles of tradition. Inspire the students' innovative ideas, ability to create for students after graduation, no graduation means unemployment fears, but was generated by competitive confidence. Therefore, learning environment is the impact on the students' creativity is the focus of our research.

Keyford: Creativity, Innovation, Satisfaction, Lifestyle

ICSSAM-802
An Economic Analysis on Taiwan's Modern Textile Industry

Chung-Fang Ho

Dep. of International Business Chung Yuan University
Chung-Li, 32023 Taiwan
E-mail: chunfang@cycu.edu.tw

Hsiao-Hsuan Yu

Dep. of International Business Chung Yuan University
Chung-Li, 32023 Taiwan
E-mail:candyblue7658@hotmail.com

ABSTRACT

Historically, textile industry provides daily living linens and clothing necessities to human beings. Even in modern times, the living patterns have changed tremendously; the importance of clothing products is still significant, because the fashion style may reflect a person's taste and social rank. With the current evolution of cultures, many consumers have raised their level of demands for apparel fiber material quality as well as fashionable designs which associated with different prices, brands, quality of material and many other elements, rather than just keeping people warm and being protected from cold weather. In the past seventy years, Taiwan's textile industry has been booming, because Taiwanese government has strongly supported the industry and greatly promoted the improvement of textile technology, which have laid a sound foundation for the prosperous future of textile industry. However, along with the overall economic takeoff in the past two decades, the industry encounters some problems such as increased labor costs, scarce factory lands available and government policy changes as well as some other factors, therefore, many textile-related industries and factories start a trend to move manufacturing sections outside Taiwan in seeking for lower labor costs in production. This study tries to perform an economic analysis on current status of the textile industry in Taiwan for the purpose of finding out some applicable strategies in operating the textile factories with an edge.

Keywords: Economic takeoff, Textile technology, Regression model.

Communication II

Room C

13:10-14:40

Friday, May 9

Session Chair: *Prof. Saodah Wok*

ICSSAM-721

A Pilot Study of Social Interactions between Robot Pets and Children with Autism

Hsiao-Chen You *National Taichung University of Science and Technology*

Shao-Yi Weng *National Taichung University of Science and Technology*

Tsung-Hao Hung *National Taichung University of Science and Technology*

Man-Wen, Hsu *National Taichung University of Science and Technology*

ICSSAM-750

“Human Interest” Poster Communication Message Strategy for Urban Peoples

(A Study in Emphatic Educational Communication in Social Community Environment)

Jeanny Maria Fatimah *Hasanuddin University*

ICSSAM-751

Media Communication Technology Based Bugis Ethnic Local Language in Improving Self-study Process of Cocoa Farmers

Tuti Bahfiarti *Hasanuddin University*

ICSSAM-837

A Study of Accessible Web Menus

Nien-Tsan Wang *National Taiwan University of Arts*

Cheng-Da Ji *E-Lead Electronic Co., Ltd*

ICSSAM-886

The Mediating Effect of Attitude on Perception towards Impact Change after Watching Islamic Films

Saodah Wok *International Islamic University Malaysia*

Faridah Abdul Manaf *International Islamic University Malaysia*

Rizalawati Ismail *International Islamic University Malaysia*

ICSSAM-448

Negotiated Order between Writers and Readers: A Symbolic Interaction Perspective on Chinese Online Literature

Xiaoli Tian

The University of Hong Kong

Michael Adorjan

The University of Calgary

ICSSAM-959

Poetic Analysis of the Postmodern Poster Designer - Visual Poet - Gunter Rambow

YingYu Hsu

*National Yunlin University of Science and
Technology*

Li-Hsun Peng

*National Yunlin University of Science and
Technology*

ICSSAM-721

A Pilot Study of Social Interactions between Robot Pets and Children with Autism

Hsiao-Chen You ^a, Shao-Yi Weng ^b, Tsung-Hao Hung ^{c, *}, Man-Wen, Hsu ^d

Department of Multimedia Design, National Taichung University of Science and Technology,
No.129, Sec. 3, Sanmin Rd., North Dist., Taichung City 404, Taiwan

^aEmail: hcyous@gmail.com

^bEmail: jk750326@gmail.com

^cEmail: ygoodboy2002@gmail.com

^dEmail: mandy262623@gmail.com

Abstract

With the maturity of robotic technology, various types of social robots have been developed for children with autism to improve their communicative and social skills. This study aims to explore whether the design features of robotic animal companions would affect the social response of autism children during their playful engagement with robots. A puppy-like robot, built with LEGO® Mindstorms®, was designed to get autistic children involved in playful interaction. We observed how three Taiwanese autistic children (10-13 years old) interacted with this Lego robot pet and another non-programmable, furry puppy toy in a playroom at a day-care center for children with special needs. Video clips recorded from 12 observation sessions (4 sessions for each subject) were further investigated using the Observer XT software to analyze the subjects' behaviors and responses in relation to the features of robot pets. The result revealed that: (1) besides cooperative and obedient feedback, resistive feedback from the children-robot-interaction could also catch autistic children's attention as well. (2) The appearance of robot pets does affect autistic children's willingness to interact with robots. (3) Well-planned sounds and movement coordination in the design of robots' behaviors could improve the autistic children's attitude towards and acceptance of robotic companions. To conclude the study, guidelines for robotic animal companions design are proposed for future related studies.

Keyword: Robotics, toys, autism, social interaction, children-robot-interaction

3. Introduction

As the robot technology develops, researchers of human-robot-interaction from worldwide have developed various models of service-based robots for children with autism, in attempt to enhance the interaction between autistic children and other people. In particular, Stanton et al. (2008) conducted a study under the concept of animal-assisted therapy by observing the

interaction between the autonomous robot dog, AIBO, stuffed puppies and children with autism, in addition to conduct coding analysis on the interactive behaviors. It was discovered that the most frequent interactive behaviors between children with autism and AIBO included “verbal engagement”, “reciprocal interaction” and “authentic interaction”. The experiments also showed these autistic children gradually increased social interactions and relatively reduced autism behaviors. In view of this, robot pets can bring positive effect with respect to social interaction. Nonetheless, the majority of foreign studies on the interaction between autistic children and robots emphasize on the discussions on helping them to improve social behaviors through existing robots, which rarely emphasize on robot design targeting at children with autism. Hence, this study mainly discusses the features and interactive designs of robot pets and whether they have impact on the response of autistic children, thereby to understand the design factors of robot companions that are suitable for children with autism.

4. Literature Review

2.1 Symptoms and Characteristics of Autism

Children with autism tend to show developmental anomaly before reaching the age of 3 when compared with the average peers. They commonly show symptoms of impaired social interaction, impaired communication and the presence of repetitive behaviors. Males are four times more likely to be diagnosed with autism than females (World Health Organization, 1993). Symptoms of repetitive behaviors in autistic children tend to start in early childhood. They also display unusual behaviors in playing with toys, such as biting toys, beating toys, and arranging toys in certain way instead of playing with them. The most common challenges in oral communication for people with autism include delayed language development, syntax errors and pragmatic disorders. About 70% or more children with autism show mental retardation (Song, 2000). Moreover, due to their limited interests, lack of empathy, inability to cooperate, weak imagination, and difficulty carrying out symbolic activities through playing, autistic children show relatively poor social interactions with their peers (Education Bureau of Hong Kong, 2002). Nonetheless, children with autism not only face challenges in social interaction, communication and repetitive behaviors, Yang and Li (2006) suggested that other problematic behaviors, such as self-injuries, murmuring, crying or screaming, might be derived due to their impairment in social skills, communication, or environmental factors.

2.2 Interaction between Robots and Autistic Children

Studies on the interaction between children with autism and robots have become an emerging research field in recent years. Ricks and Colton (2010) conducted a comparative study on robot-assisted autism therapy and concluded robot-based therapies did help children in the treatment, and different types of robot could lead to varying outcome. Stanton et al. (2008)

applied the concept of animal-assisted therapy to 11 autistic children. The subjects were accompanied and assisted by nurses to interact with an autonomous robotic dog “AIBO” and a simple mechanical toy dog (KASHA). The study showed that AIBO might aid in the social development of autistic children and elicit more social interactions between children with autism and nurses. Compared with the simple toy dog, AIBO scored higher on triggering “verbal engagement,” “reciprocal interaction” and “authentic interaction” in children with autism. Kozima, Nakagawa, and Yasuda (2005) developed a yellow snowman-like robot, Keepon, for therapeutic activities for children with autism and related developmental disorders. Kozima, Nakagawa, and Yasuda had observed how autistic children (2 to 4 years old) interacted with Keepon without any experimental setting or instructions in a playroom for one and a half years. The observation showed that Keepon's simple appearance and predictable responses gave the subjects a playful and relaxed mood, and encouraged them engaged 2-way interactions (e.g., eye-contact, touch, vocalization). Some of subjects then expanded their 2-way interactions into 3-way interpersonal interaction, where they tried to share with others the pleasure they found in Keepon.

5. Experiment Process and Design

The study primarily investigated whether a robotic dog might aid in the social development of Taiwanese children with autism, by using the work done by Stanton et al. (2008) as our fundamental framework. In addition, this study also employed the data analysis method conducted by Robins, Dautenhahn, Te Boekhorst and Billard (2004), by using qualitative method to analyze specific behavioral incidents in order to understand the interactive behaviors between the robot and children with autism. After each experiment, the researcher conducted recording interview with the counselor in order to understand the overall behaviors of the respondents on that day.

3.1 Participants

Three children with autism were recruited from Erhlin Happy Christian Homes (EHCH), a private Christian nursery in Changhua County, Taiwan. These study subjects included one 10-year-old boy with moderate autism and accompanied by mental retardation (Student A), one 13-year-old boy with severe autism and accompanied by mental retardation (Student B), and one 13-year-old girl with severe autism and accompanied by mental retardation (Student C). Two counselors working in EHCH were also recruited in this study as moderator to guide and help children interact with experiment artifacts. These two Counselors are addressed as Counselor A and Counselor B in this paper, where Counselor A worked on the first and second experiments while Counselor B worked on the third experiment. Additionally, to understand whether if children engage in different behaviors when faced different moderator, the fourth experiment was conducted by the fourth author of this study.

3.2 Research Tools

The research tools used for the study included Lego® robot dog, mechanical toy dog sold in the market, and assisting tools, which will be introduced below:

(1) Lego® robot dog

A robotic dog built with Lego® Mindstorms® NXT, a programmable robotics kit released by The LEGO® Group (2005). The components can be made into different shapes. In this study, a dog-like robot pet is applied (Figure 1) as the primary experiment shape in response to using pet-assisted therapy as basis. Four types of behaviors are program into this Lego® robot dog: turning the head and staring, making different sounds, catching a ball, and circling. The behaviors of the Lego® robot dog can be controlled wirelessly through Bluetooth, so members from our research team can control its responses according to the participants' action in real-time.

(2) Mechanical toy dog

Mechanical toy dog is a stuffed toy dog available in the market (Figure 2), whose behaviors and responses are non-programmable. External sounds can randomly trigger one of the three behaviors: crawling, sitting down, and kneeling down. Each action is accompanied by different barking.

(3) Assisting Props

In the experimental site, small yellow balls, plastic play food, story books, Rubik's Cube, and plastic insects (Figure 3), are provided for use by the respondents during the experiment.



Figure 1. Lego- Robot Dog



Figure 2. Mechanical Toy Dog



Figure 3. Assisting Props

3.3 Experiment Design

At the beginning of experiment, the counselor accompanied the respondents to the experiment site already installed with cameras and experiment tools; and the respondents interacted with robot dog and mechanical toy dog. The interaction for each tool was 15 minutes and adding up to half hour in total. The experiment was carried out for 4 weeks and once a week. There were 4 observation sessions for each study subject and the counselors could freely decide to suspend the experiment if they found the subject being impatient or out of control during the experiment session.

3.4 Behavior Coding

Video clips recorded during observation sessions are logged and analyzed by using the Observer XT software based on the coding categories and procedures proposed by Stanton et al. (2008) and Kahn, Friedman, Perez-Granados and Freier (2004) to summarizing interaction among the subject, the experiment artifacts, and the counselor. Table 1 is the behavioral coding applied in this study, which consists of six categories. The last category, “Artifact Investigation” is added by our research team in this study to understand whether the subjects are attracted by some features of the robot or toy dogs.

Table 1. Behavioral Coding

Coding Categories	Description
Verbal Engagement	Greeting, farewell and general conversation.
Affection	Stroking, tickling, gentle touch, kissing, hugging and proper laughter.
Animating Artifact	Simulation of puppy moves, puppy sounds, puppy eating, and puppy playing games
Reciprocal Interaction	Behavior of expecting the artifact to respond, including instructing artifact with gestures, instructing artifact with language, playing ball, and feeding artifact.
Authentic Interaction	Treating artifact as working partner and the tones, sound speed, volume, difference in behaviors displayed following the different environment. The interaction can be divided into two-way interaction (interaction between subject and artifact) and three-why interaction (interaction between subject, artifact, and counselor).
Artifact Investigation	Staring (staring only without any movement), tentative touching (staring with curiosity and touching), and disassemble the artifact. The timing unit for behavioral coding is 30 seconds, and the same behavior appears twice or more in 30 seconds (i.e. stroking) will be counted as “one” behavior. Any behavior appears while other action is still in process, then it is treated as an interruption. The data coding in this study are done by two different researchers in attempt to verify whether the coding reach reliability of Kappa 0.8 or higher.

6. Experiment Results

Due to the limited time and the small sample size of this pilot study, the progress in communicative and social skills of our subjects is not significant; furthermore, the relevance between subjects' changes in behavior and features of test artifacts is not significant statistically by using the Observer XT software to log and analyze the three subjects' behaviors in their observation sessions. However, our experiment does show that the interactive pattern somewhat varies among the three subjects, due to the different autism levels and personalities of our subjects, the different interactive features of the artifacts, and situational factors of the test setting. The following refers to the interaction between the three children and the tool dogs and the oral information obtained from the interview with the counselor.

(1) Student A

Student A tentatively interacted with the mechanical toy dog in the first experiment and only one "feeding behavior" occurred during the process. After interacting with Lego® robot dog, his "feeding behavior" increased, which consequently affected his number of "feeding behavior" to the toy dog during the second experiment. We discovered that when Lego® robot dog shook his head while student A was feeding it, student A tended to push or even pull the head of robot dog (Figure 4). Hence, the study suggests that student A is curious about robot dog's expression of rejection. Due to the fixed response without variation and autonomy from the interaction with the mechanical toy dog, student A discovered that the engagement was similar to playing a toy and he soon have lost interests in the mechanical toy dog.

(2) Student B

Student B showed rare interactive behaviors with the Lego® robot dog while the interactive behaviors were more inclined towards "tentative touching." However, in the third experiment, student B showed "two-way interactions", such as knocking the back of Lego® robot dog, and responding to robot's barking (Figure 5).

(3) Student C

From the initial experiment, student C showed clearly to be more interested in the furry mechanical toy dog than Lego® robot dog by constantly "stroking" the toy dog and made joyful laughter and even put hands under the mouth of toy dog, producing a behavior model of "instructing the puppy with gesture" (Figure 6). The difference lies on that student C showed more "staring behavior" for her engagement with Lego® robot dog.

In the third experiment, student C kissed the mechanical toy dog once and imitated Counselor B to pull up the ears of the toy dog (Figure 7) while making “laughter.” These were not discovered from the first two experiments.



Figure 4. Student A



Figure 5. Student B



Figure 6. Student C



Figure 7. Student C

7. Conclusion

Many foreign studies have discussed the use of robots to develop technology of assisted therapy for children with autism for years. However, few studies in Taiwan have investigated on the interaction between the robot companions and autistic children. Based on the data collected from the 12 observation sessions and the post-experiment interview, the design suggestion for developing robot pet for children with autism is yielded, and described as follows:

1. The appearance of robot pet is important. For instance, furry texture and friendly looking can elicit users' touching behavior.
2. The feedback behavior responded by the robot can enhance the interaction between autistic children and robot pets.
3. More emulating appearance and larger quantity of joints on robot pet will contribute to more natural motions and behaviors, in addition to wider range of interactive models. For example, the raising ears and biting mouth will surprise the children with interests while the interaction will be relatively improved.
4. Robot pets with sensor can enhance the occurrence of interaction behaviors. For example, children can place their hands under the mouth of the pet so that the robot pet will perceive the thermal heat by lowering the mouth and rubbing against the palm of the children as their responses.
5. Proper sound and motion will attract children with autism and even encourage children to interact more with the robot pets.

In sum of the aforementioned five design suggestions, it is discovered that the emulating appearance of robot pets and more autonomy behaviors will provide positive assistance for children with autism. However, the results of the interview indicated that using robot pets on younger autistic kids is more effective than the older ones.

Children are more likely to be attracted by novelties from the outside world as they age, and they might lose interest in robot pets. Hence, in the future study, we will conduct relevant study on a younger group participants and use a more elaborate robot in the HRI experiment to attain statistical significance to verify our findings warrant consideration.

8. References

- Education Bureau of Hong Kong. *Remedial Teaching Programme for Autistic Children in Special Schools*. Retrieved Aug 2, 2013, from http://www.edb.gov.hk/attachment/tc/about-edb/publications-stat/publication/rtp_guide.pdf,2002.
- Kahn P H Jr, Friedman B, Perez-Granados D R, Freier N G. Robotic pets in the lives of preschool children. *CHI '04 Extended abstracts on human factors in computing systems*. York, NY: ACM, 2004, pp. 1449-1452
- Kim E S, Berkovits L D, Bernier E P, Leyzberg D, Shic F, Pau R, Scassellati B. Social robots as embedded reinforcers of social behavior in children with autism. *Journal of autism and developmental disorders*, 2013, 1-12.
- Kozima H, Nakagawa C, Yasuda Y. Interactive robots for communication-care: A case-study in autism therapy. *The 14th IEEE International workshop on robot and human interactive communication*. Nashville, TN, USA: IEEE, 2005, 341-346
- LEGO® Mindstorms® - NXT. Retrieved Aug 2, 2013, from <http://www.lego.com/>, 2005.
- Martin F, Farnum J. Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research*, 24(6), 2002, 657-670.
- Redefer L A, Goodman J F. Brief report: pet-facilitated therapy with autistic children. *Journal of autism and developmental disorders*, 19(3), 1989, 461-467.
- Ricks D J, Colton M B. Trends and considerations in robot-assisted autism therapy. *2010 IEEE International Conference on Robotics and Automation (ICRA 2010)*. Anchorage, Alaska, USA: IEEE, 2010, 4354-4359.
- Robins B, Dautenhahn K, Te Boekhorst R, Billard A. *Effects of repeated exposure to a humanoid robot on children with autism*. In S. Keates, J. Clarkson, P. Langdon & P. Robinson (Eds.), *Designing a more inclusive world*. London: Springer, 2004, 225-236.
- Song W C. *Autistic Child Guidance Manual*. Retrieved Dec 28, 2012, http://tec.nkuht.edu.tw/files/archive/233_18f778b7.pdf , 2000.
- Stanton C M, Kahn P, Severson R L, Ruckert J H, Gill B T . Robotic animals might aid in the social development of children with autism. *HRI '08 Proceedings of the 3rd ACM/IEEE international conference on human robot interaction table of contents*. New York, YN: ACM, 2008, 271-278

- Wada K, Shibata T. Living with seal robots—its sociopsychological and physiological influences on the elderly at a care house. *IEEE Transactions on Robotics* 23(5), 2007, 23(5): 972-980.
- World Health Organization (Ed.). *The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research*. Retrieved Jan 5, 2012, from <http://www.who.int/classifications/icd/en/GRNBOOK.pdf> , 2012.
- Yang T Z, Li H L. *Autistic Student Guidance Manual*. Retrieved Aug 5, 2013, from <http://r2.ntue.edu.tw/imgr20400/pdf/r2040207.pdf>, 2006.

ICSSAM-750
“Human Interest” Poster Communication Message Strategy for Urban Peoples
(A Study in Emphatic Educational Communication in Social Community Environment)

Jeanny Maria Fatimah

Departement of Communications, Faculty of Social & Political Science, Hasanuddin

University Makassar Indonesia

Email : jeannyfatimah@gmail.com

Abstract

A human Interest Poster type for urban communities in Indonesia is more popular serves emotional expression which shows the poor with life problems. The poster appears and presents the messages that in the form of drawings and writings compiled to influence human emotional feelings and concerns. Emotional feelings include, among others, a sense of happy, excited, proud, sad, worried, and anxious and so on. This type of poster communication message attracts and demand attention because it shows a message of humanity and caring elements.

Human Interest Poster message communication strategies for urban communities’ aims to provide empathetic education, to think, act and behave according to the meaning of the poster message. To achieve the objectives of this research, we use field data collection techniques include: inquiry, observation, in-depth interviews, and focus group discussions. Furthermore, the data were analyzed in mixed-research method qualitative and quantitative to reach conclusions.

This Research found that Human Interest Poster message communication strategies for urban communities can be identified by two (2) categories of messages, humanitarian/emotional message category and caring /moral message. Category of Human Interest poster entitled "Child in Waste Environment", "Beggar" and "Children and Waste". Human Interest Poster Category which caring message Concern (morally) entitled "In the embrace of the Mother" and "Greening". Urban communities prefer posters filled with pictures instead of writing (77%) in a bright color (50%). It was the basis for making posters. For strategic communication messages using a message structure and format of the image that is able to provide a sense of Human Interest. Display of the poster uses simple language and images presented in the form of a persuasive (invitation) that will directly hit accordance with the contents of the message.

For example, the message in the poster image has a very big role in the learning process because it can motivate, mobilize attention and emotional response to those who see.

The results of this study also revealed that the human interest Posters will be effective if it has illustrations and simple design with the look of realistic short messages (73%), as well as the content of the message there is proximity to the conditions of target communities (80%), the message of the poster gives a positive learning benefits for the development of awareness, attitude and behavior that are empathetic in the social environment, especially in urban communities.

Keyword: Poster, Human Interest, and Communication Message Strategies

Preface

A. Background

Kind of Human Interest Poster in Indonesia is more popular in describing the lower classes of society life. Grassroots life or can be said as people can not afford their daylife cost and have a lot of complex problems. The lives of Indonesian people as a developing country, the majority still live below the poverty line, so that the story can be expressed in the poster as a medium of communication messages. This poster attracts attention because it shows the message elements of the Human-Interest.

Poster of Human Interest empathic communication social care education is important to reveal the human interest aspect of the message from persuasive and informative prosocial urban communities. According to Robert and Strayer (1986:2) empathetic communication is often used for urban communities associated with prosocial behavior public. Poster display not only provides information but also provide educational function, to understand the feelings, concern and attention.

Human interest Poster as a communication medium is present in empathic educational efforts to understand the others. Therefore, the empathic education communication that needs to be addressed is how to understand other people. Do not do the opposite, ie, expect others understand to us first. This attitude of course must be mutual, only then will appear mutual understanding. On the basic of this thinking, the parties will implement interconnected empathic communication that is not too difficult to foster mutual understanding and mutual respect in the act of communication. Similarly, according to Baron and Byrne (2005: 111) empathy is the ability to sense the emotional state of others, feel sympathetic and try to resolve the problem, and take the perspective of others.

The Highest Factors that influence prosocial behavior is empathy. Empathy Ability presented in poster form as Human Interest Poster campaigns media that touches the audience in understanding the feelings of others. Media requires good promotional communications messages that can be received well too. The poster is one that has a piece of graphic art style, flow, and the trend of its own that can not be separated from an era. Therefore, poster is created to convey the message or information, the poster will be an element of visual communication design.

The development of the creative industries and their supporting devices has created a high creativity by combining technologies from various fields for the benefit of promotion and advertising sector. Likewise, the posters as media campaigns, to fulfill the advertising is needs make advertising planning carefully so that maximum results can be reached. Communication message strategies in attracting significant attention to provide the desired impact of empathetic message.

For example, readers can get knowledge, the process of thinking, behaving, and behave according to the expectations of the poster maker. The problem is a type of poster and poster communication message strategies for Human Interest urban communities who are able to provide emotional feeling, sympathetic feeling and try to resolve social problems or providing empathetic education. So that urban communities have ability to understand other people's feelings and emotions as well as the ability to imagine oneself in someone else's place.

B. Purpose of the Study

The purpose of this study are;

1. Identify the type of poster that gives Human Interest or cause a sense of humanity to acquire the knowledge, attitudes and behavior in the empathetic social environment.
2. Providing communication message strategies information and the addition of knowledge and understanding of the practical-creative skills through the medium of the bottom line of a special kind of Human Interest Poster nuance.
3. Raise community awareness, especially other community members in the neighborhood in order to think, feel, behave and act in accordance with the expectations of the meaning of poster message.

Literature Review

A. Human Interest poster as Media of Emphatic Education Communication

Poster is a medium of communication to convey information posted in a public place or a place that can be read by the public. Poster is made with strong contrasting colors, brief language, dense, interesting, and persuasive (to be invited).

Human Interest poster is a types of communication media (Below The Line Media) that provide message information or a picture of human person life or human interaction that shows human emotional expressions with life problems, concentration or achieve a life of success, which is where all of it brings a sense of interest and sympathy for the people who listen drawings and writings on poster paper.

This Human Interest poster is photographs that able to describe the ups and downs of human life journey. When a photograph can represent the work of humanitarian feelings in those who see the photographs can be grouped into the picture Human Interest. In general, humanistic feelings are universal feelings inherent in every human being. Every human being can feel funny when see an object that tickles. At other times, a person can feel emotion when watching blue state sued the sense of justice in him. This is a normal situation, because the people feelings of humanity would be easier aroused when witnessing the circumstances or conditions that are easily led empathy.

Empathy is defined as the ability for another human to understand another's perspective or "put themselves into another's shoes" so they can feel the way another person does in regard to a particular situation or problem (Olson, 1995; Price & Archbold, 1997). Empathy is also further broadened to include the ability to perceive and reason coupled with the ability to communicate understanding of another's feelings and attached meanings.

Selection of poster media as a medium of empathic learning because it has illustrations and simple design with a short message display, accompanied by a strong message, be entertaining, there is the proximity of the contents of the message with the target communities, and can be delivered over and over again. Posters, in addition has a simple and easy to produce, including relatively inexpensive media in terms of cost. Picture ini the poster has a very big role in the process of empathic learning communication because it can motivate, mobilize attention and make emotional responses of the beholder.

Poster as Media Emphatic Education Communication has three functions as Widyatama said (2007: 151):

1. Function to provide information, namely that the posters provide information that is valuable to the audience.
2. Audience persuasive function, namely to persuade the audience to follow what is suggested in the body of the message poster.
3. Function to educate the audience, the audience that is taught over a particular construction.

B. Poster Message Communication Strategy

A message impact will be delivered as expected needs to be packed as good as possible. In the package the message communication can be noted three things as described by Wells, William; Mortiaty John Burnett & Sandra , (2007 : 432), namely :

Message Content

The contents of the message is a matter of the message. The material is a matter of the message contained by the message. In this terminology, the contents are known four kinds : rational, emotional, moral and their combinations .

- Rational message is a message that is arranged to affect the audience common sense. Book has compiled facts that acceptable logic.
- Emotional message is a message that is arranged to affect the feeling of the people. Emotional messages are presented to affect the feeling of happy, excited, proud, sad, worried, and anxious to the people.
- Moral message is prepared to touch the audience the feeling of moral or humanitarian feelings (humanistic) of the audience.
- Combination Messages is prepared by combining the messages between the rational, emotional, and moral imperative to improve the effectiveness of the message. In the application after the stated rational is supported by data, plus the things that makes sense of fun, and touching audience sense of humanist.

Message Structure

The structure of the message includes opinions or topics presented. Opinions in the form of a message as the message structure of human interest is purposed for touching feeling so that opinions or topics presented can be received by the peoples.

Message format

The message format is how the message is delivered. Format message according to some experts put forward as the style or presentation style. Format referred to in this occasion how messages are arranged in combining verbal and non-verbal so the effect is better. The message format can be established by considering the media used. Print includes typography, illustration, and color and audio include: Voice, intonation, sound effects, and audiovisual. Typography, illustration, and color, sound, intonation, sound effects, and movements, body language.

The strategic effectiveness of a communication message will have an impact on knowledge, attitudes and audience behavior. Audiences in communication studies can be individuals, groups, and communities.

Research Method

A mixed-method design involving the collection and analysis of both qualitative and quantitative data was used to address the research questions in this study (McMillan, 2004). Mixed-method design used a multi-method approach that combined qualitative and quantitative methods; each method is designed to answer different kinds of questions since the qualitative research involves analysis of data collected from interviews, observations, questionnaires and so forth, while the quantitative method involves analysis of numerical data.

Qualitative data involved social community environment' messages, responses to open-ended survey items, and the instructors' anecdotal notes, used as supplemental data. Quantitative data were derived from social community environment' responses to survey rating items. these data reflected the socio-cultural and instructional context of the participants' experiences, and were interpreted in terms of the strategy of poster. To achieve the objectives of this research, we use field data collection techniques include: inquiry, observation, in-depth interviews, and focus group discussions. Furthermore, the data were analyzed in mixed-research method qualitative and quantitative to reach conclusions.

Research Result

Human Interest Poster is images and photographs works which place more emphasis on the story, especially with regard to human. The purpose of human interest photography is work that is more geared to depict scenes of human life in the activities of daily life or main object is human individual (being alone, or interacting) and the group, which is primarily intended to show the feelings and attitudes.

This Research found that Human Interest Poster message communication strategies for urban communities can be identified by two (2) categories of messages, humanitarian/emotional message category and caring /moral message. Category of Human Interest poster entitled "Child in Waste Environment", "Beggar" and "Children and Waste". Human Interest Poster Category which caring message Concern (morally) entitled "In the embrace of the Mother" and "Greening".

The concept of presenting images give a sense of social reality how urban communities who need emotional feelings of humanity or anyone who saw it, especially in urban communities.

This poster portrait also tried to provide a reality of people who need treatment from the government and relevant parties, this appeal became the main objective of this poster, in addition to elemental composition of the image based on the reality that there is no concept of

writing composition layout and visual communication that showed, for example, "He's Not need pity, he needs attention" has the meaning of constructive messages for the various parties specifically addressing social problems. Sentence invitation posters presented in two categories of human interest are the messages given by the simple and persuasive language that is easily understood and absorbed by the public so that may arise awareness to protect and preserve them. Empathic feelings will give a feeling of pity, to the actions taken or planned to help without caring motives of the helper, arises because of the suffering experienced by others that include helping each other, comfort each other, friendship, generosity, rescue, sacrifice and sharing.

Urban communities prefer posters filled with pictures instead of writing (77%) in a bright color (50%). It was the basis for making posters. Images are trying to deliver the message of empathic education communication as behavior that benefits others. Concretely, as an action for a variety of (sharing), cooperation (cooperation), help (helping), honesty (honesty) generous (generosity) and consider the rights and welfare of others. Empathic communication, through the display of messages and images intended for a human-interest that drives one's actions in the urban community to interact, cooperate, and help others without expecting anything for herself.

For strategic communication messages using a message structure and format of the image that is able to provide a sense of Human Interest. Display of the poster uses simple language and images presented in the form of a persuasive (invitation) that will directly hit accordance with the contents of the message. For example, the message in the poster image has a very big role in the learning process because it can motivate, mobilize attention and emotional response to those who see.



Picture : Humanitarian/Emotional Message and Caring/Moral Message.

The message in the poster image has a very big role in the learning process is packed with very interesting to pay attention to three things in packaging the message. First, the content of the message or the message of human interest material in the form of humanitarian message category/emotional and caring/moral, rational, structured messages are factually acceptable logic. Furthermore, the emotional message or messages that are organized to influence public feeling empathetic in this poster creates a feeling of sadness, worry, and compassion.

Audience moral sense or feeling of humanity (humanistic) of society. The structure of the message, making the message, especially persuasion, it is necessary to have an argument that supports the idea or topic presented. The argument that no research was tested by placing the appropriate arguments, the placement of text and picture messaging, and positioning of the content of the message text and precise image right.

The results of this study also revealed that the human interest Posters will be effective if it has illustrations and simple design with the look of realistic short messages (73%), as well as the content of the message there is proximity to the conditions of target communities (80%), the message of the poster gives a positive learning benefits for the development of awareness, attitude and behavior that are empathetic in the social environment, especially in urban communities. Education as a form of empathic communication directed Traffic every man to put you in someone else so that other people seemed to be part of the self. Further described by Baron and Byrne (2005: 111) which states that empathy is the ability to sense the emotional state of others, feel sympathetic and try to resolve the problem, and take the perspective of others. Educational posters empathic communication is something human interest of honest, sensitive and not made-up based on what happened to someone else. In other words, education empathic communication is the ability of individual to understand and appreciate the feelings of others in a way to understand the feelings and emotions of others as well as looking at the situation from the viewpoint of others.

Conclusion

1. Human Interest Poster message communication strategies for urban communities can be identified by two (2) categories of messages, humanitarian/emotional message category and caring /moral message. Category of Human Interest poster entitled "Child in Waste Environment", "Beggar" and "Children and Waste". Human Interest Poster Category which caring message Concern (morally) entitled "In the embrace of the Mother" and "Greening".

2. Urban communities prefer posters filled with pictures instead of writing (77%) in a bright color (50%). It was the basis for making posters. For strategic communication messages using a message structure and format of the image that is able to provide a sense of Human Interest. Display of the poster uses simple language and images presented in the form of a persuasive (invitation) that will directly hit accordance with the contents of the message. The results of this study also revealed that the human interest Posters will be effective if it has illustrations and simple design with the look of realistic short messages (73%), as well as the content of the message there is proximity to the conditions of target communities (80%), the message of the poster gives a positive learning benefits for the development of awareness, attitude and behavior that are empathetic in the social environment, especially in urban communities.

Recommendation

Empathic communication skills need to be raised again to repair communication failures, good interpersonal, group, organizational, social and intercultural communication often has fueled misunderstanding, mutual judging, blaming, if this is allowed, it will bring conflict, even violence may threaten the relationship fellow citizens heterogeneous nation.

Furthermore, the use and utilization of lower-line media, such as posters can be used as an alternative to raise awareness and behaviors (empathic education) concerning public health issues, environmental, social, legal, and others.

References

- Burton, Philip Ward, 1990. *Advertising Copywriting*, NTC Business Books, Lincolnwood.Illinois
- Cangara, Hafied. 2008. *Pengantar Ilmu Komunikasi*. PT.Grafindo Persada. Jakarta
- Creswell J.W ., 2008, *Research Design: Qualitative and Quantitative Approaches*, Sage Publication, Thousen Oaks.
- Jennings, Simon, 1987. *The New Guide to Illustration and Design*, Quarto Publishing, London.
- Kusrianto, Adi. 2009. *Pengantar Desain Komunikasi Visual*. ANDI. Yogyakarta
- Rhenald Kasali, 1990. *Manajemen Periklanan dan Aplikasinya di Indonesia*, Graffiti Press, Jakarta
- Runyon, Kenneth E., 1984. *Advertising*, Charles E. Merrill Publishing Company, A Bell & Howell Company, Columbus, Ohio.
- Widyatama, Rendra. 2007. *Pengantar Periklanan*. Pustaka, Yogyakarta
- Wells, William; John Burnett & Sandra Mortiaty, 2007. *Advertising Principles and Practice*, Printice Hall Inc, Englewood Cliff, New Jersey.

<http://emjaiz.wordpress.com/2009/09/04/below-the-line-btl/>

<http://wa2npo3nya.blogspot.com/2009/10/apakah-yang-dimaksud-dengan-periklanan.html>

<http://wa2npo3nya.blogspot.com/2009/10/apakah-yang-dimaksud-dengan-periklanan.html>

<http://wa2npo3nya.blogspot.com/2009/10/apakah-yang-dimaksud-dengan-periklanan.html>

ICSSAM-751

Media Communication Technology Based Bugis Ethnic Local Language in Improving Self-study Process of Cocoa Farmers

Tuti Bahfiarti, S.Sos, M.Si.

Faculty of Social and Political Science, Departement of Communications, Hasanuddin University, Makassar, Indonesia
Email: tutibahfiarti@yahoo.com

Abstract

Communications media technology has brought a fundamental change in society, especially cocoa farmers in South Sulawesi, Indonesia. Characteristics of the information society also have impact on Indonesian society, including rural communities which subsistence as farmers in the third largest producer of cocoa in the world.

Progress in access and the dissemination of communications technology more affordable, it has little impact on changes in Indonesia's rural communities. The biggest obstacle is due to disparities in access information and communication technologies, especially in the rural areas and the delivery of the message content using Indonesian or English. The language becomes a barrier factor in understanding the content of the message which is presented through the medium of communication technologies, especially the Internet. This is due to the majority of rural people in South Sulawesi dominated by Bugis Ethnic who use Bugis language in their daily life.

This condition is also caused by the characteristics of communities that are relatively low levels on education so that the language understanding becomes a major obstacle in the process of self-learning cocoa farmers. Self-learning with a good understanding of the language becomes an important concept to learn a variety of innovative information, such as planting, maintenance, diseases/pests, harmful pesticides, cocoa prices in local/ national/ international scale. However, the universal typical of language as a tool that is very necessary to communicate.

The problem is how to use, utilization, access and dissemination of communication technology which Bugis Ethnic local language-based can be used to improve the self-learning cocoa farmers in South Sulawesi. The goal is the creation of self-learning as an alternative solution to the use of media communication technology based Bugis Ethnic local language as the efforts for production sustainability, quality, independence, well-being of cocoa farmers groups in South Sulawesi.

The research used a Mixed-Method research-type. This type of research-method combines qualitative and quantitative research studies. Data sources which become research subject are 360 selected respondents of farmer group members. Data collected through observation, indepth interviews, Focus Group Discussion, and questionnaires.

These Research result is the identifying of various direct communications media technologies or personal learning (education) and indirect communication (via the media) include: Mobile, Brochures, Leaflets, Posters, and the Internet, and audiovisual media. As the result, we found that most commonly used media technology by government extension percentage of instructional media exposure frequency (94.44%) and Media Non-private (89.44%). Frequencies of exposure include posters, leaflets, and brochures (73.61%), Mobile learning media (89.44%), and the use of Internet only (20.5%).

This research also revealed that the local language-based media technology is utilized as a source of information in the self-development of cocoa farmers in improving knowledge through self-learning process. Furthermore, the effectiveness of the model is coupled use of media communication technology based Bugis Ethnic local language in the creation of self-learning process. Hopefully, there will be knowledge transfer among cocoa farmers or farmer key to other cocoa farmer group members conveyed so that it can increase production and the welfare of cocoa farmers.

Keyword: Communication Media Technology, Local Language, Bugis Ethnic, Cocoa Farmers

Preface

The development of communication media and information technology has brought changes in the world community. Era without space and time is a best term to describe the development of communication media. It is also penetrated the developing countries which most of the people work as farmers, such as Indonesia.

Access to communication media and information has functions to spread and take information also been used by the majority of cocoa farmers. For example, innovative information such as planting, maintenance, diseases/pests, and harmful pesticides, price information in locally, nationally, and internationally scale which has been shown to maintain price stability, changes of the wet cocoa and dry cocoa price every day. These developments reduce the access gap of communication media and information technology in rural areas.

The benefits of media communications technology presence has been harnessed by cocoa farmers, especially in the province of South Sulawesi as the second largest producer in the world. However, the language barrier is a barrier in understanding the content of the message is presented through the medium of communication technologies, such as brochures, posters, the Internet, and audiovisual media as a medium for self-learning cocoa farmers.

This condition is caused by, *first*, the majority of rural people in South Sulawesi, especially buginese cocoa farmers. So that Bugis language as a mother language which use in their daily activities. *Second*, low level on education factor levels among the cocoa farmers, for example, do not go to school, and only finished elementary school. This trend led to cocoa farmers is less able to talk Indonesia properly. As a result, the delivery of the message content uses Indonesian or English become communication barriers.

Indonesian data indicate that there are 300 ethnic groups and 741 languages identified areas. Diversity of local languages in Indonesia is on the second largest after Papua New Guinea two (820 languages). Language barrier becomes the major factor inhibiting the delivery of the message, because the dominant rural communities using native language. Transfer of knowledge which using a universal language has distinctive properties as necessary tools to communicate and complex transfer process information, including local languages.

Local ethnic Bugis language acquisition factor in everyday activities among cocoa farmers led to the need to develop local language-based learning media. Because, effective language understanding can help cocoa farmers independently learn to understand the meaning and significance of the media message. The use of local languages to help knowledge transfer cocoa farmers by personal and group learning through a farmer lock (*key farmer*) to the members of the group.

The use and utilization of access and dissemination of communication technology which not local bugis ethnic-based communication becomes barrier in process of self-learning. Cocoa farmers, either the leader or key farmers and farmer groups requires all members of the media communications-based learning local languages Ethnic Bugis for independent study. The goal is the creation of self-learning as an alternative solution to the use of communication technology which local Bugis Ethnic-based as the efforts of sustainability of production, quality, independence, well-being of cocoa farmers groups in South Sulawesi.

Research Focus

There are several research questions, such as:

1. How the diversity of use and utilization of access and dissemination of Bugis ethnic language-based communication technology which is use to improve cocoa farmers self-learning in cocoa plantations center in South Sulawesi?
2. How the strategic model to use Bugis ethnic language-based Communication technology to improve cocoa farmers self-learning in cocoa plantations center in South Sulawesi?

Research Objectives

The purposes of this study are:

1. Motivate interest or action, and persuade farmers' groups both individuals and groups to increase the diversity of knowledge and learning independence independent local language-based cocoa farmers ethnic Bugis.
2. Creating strategic model to use Bugis ethnic language-based Communication technology to to improve cocoa farmers self-learning in cocoa plantations center in South Sulawesi.

Then, the usefulness of this study is expected to:

1. Increasing awareness, alternative solution in using Bugis ethnic language-based Communication technology for the independence of ethnic Bugis cocoa farmers.
2. Increasing Motivation and concern of the government, private sector, non-governmental organizations (NGOs), to develop media-based language learning through the availability of local ethnic Bugis learning media to support economic empowerment programs cocoa farmers.

Literature Review

Language and Media as Means of Independent Learning

In general humans communicate using language. Excess humans compared with other beings are human beings have the ability to think and communicate with others. Human communication occurs when a message or information move from one person to another, either a message that has meaning or not. However the language helps our minds more quickly. Bruner Research's (in Hardy and Hayes) found that behaviors related to communication using a language can accelerate intellectual development.

Furthermore, the word media comes from the Latin *medius*, which literally means 'middle', 'intermediate', or 'introduction'. Gerlach & Ely (1971) says that in general media is known as human, material or events that establish conditions under which learners are able to acquire the knowledge, skills, or attitudes. More specifically, the notion of media in learning process tends to be interpreted as a graphic tool, photographic, or electronically to capture, process, and reconstruct visual or verbal information.

Another limitation noted by AECT (Association of Education and Communication Technology, 1977) defines as all forms of media and channels used to convey the message or information.

The function of learning media is a crucial part of the effectiveness and efficiency of learning objectives achievement. Think Overall, the Straubhaar and LaRose McKnow (1997) medium consisting of several functions: *first*, transform formal education, which means the instructional media that were previously abstract into the concrete, which previously theoretical learning into practical functional. *Second*, raise the motivation to learn, *third*, clarify the presentation of messages and information. *Fourth*, provide a stimulating learning or desire to find out. The function of the media, especially the visual media is also expressed by Levie and Lentz, as cited by Aref R Sadiman (2002) that the media has four functions: the function of attention, affective function, cognitive function, and compensatory functions.

Knowledge Transfer Through Two-Stage Model of Mass Media and Personal Influence by Katz and Lazarsfeld (1955).

Two-Stage Model of Mass Media and Personal Influence by Katz and Lazarsfeld (1955) is a model that considers the influence of the mass media to the public through opinion leaders (*opinion leaders*). Classic statement of the effect of the two phases is interpersonal influence has a very strong force influencing audiences. Personal influence or opinion leaders have an important role in changing the behavior of individuals within a group. For more detailed descriptions of the following images direct effects model of mass media and two-stage models:

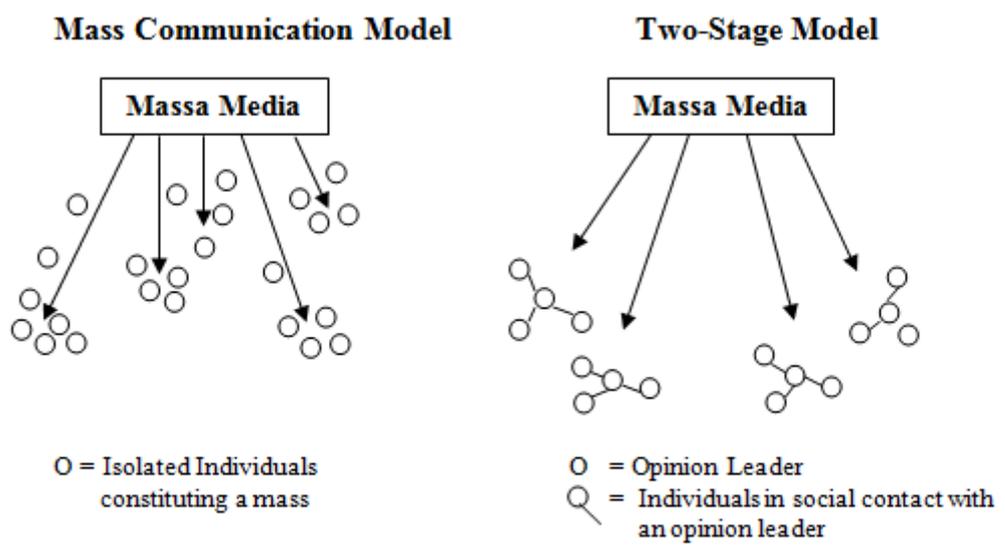


Figure 1. Two-Stages Model from Media Influence Compare with Traditional Mass Communication (adopted from Katz and Lazardsfeld (1955) Source: Dennis Mc Quaill & Sven Windahl (1992:19).

Two-stage models have some basic assumptions, such as that developed by Katz and Lazarsfeld (1955) by looking at a very strong personal influence, the basic assumptions, among others :

1. Individuals are not socially isolated, but are part of a part of the social groups to interact with other people.
2. Response or reaction media messages do not directly and immediately, but mediated and influenced by the social relations that exist in society.
3. Two processes are involved, one reception and attention and other responses in the form of influence or information acceptance and rejection. Receipts are not responded to or received due to any secondary acceptance of personal contacts.
4. Individuals considered not receive the message at the campaign, but the role of the communication process and its main active can accept and reject the idea / notion of media primarily through personal contact.
5. Leaders have an active role (*opinion leaders*) are more dominant and more use of mass media, higher level, self-perception affects others and serves as a source of information.

Preview of this model conclusion that the mass media does not operate in a social vacuum but give very complex input from social relationships and competence sources, ideas, knowledge and power to influence others.

Innovation diffusion model of Robinson (1976) revealed that there is a difference between the people involved in their social networks to get the information of what is termed the '*opinion givers*'. Other models of diffusion of innovations Rogers and Shoemakers (1973) emphasizes the use of the diffusion of innovations for the farmers and the people residing in rural areas, especially for the developing countries. Elements of diffusion of innovations related agriculture, health and social, and political life element. This model also emphasizes the large interpersonal component on the effects of mass media, especially the media which is applied to the study of rural sociology and agent of change.

The impact of mass communication process prioritizing diffusion processes that take place, non-media (more personal), source (close people, experts, and others, changes in behavior, and tries to motivate and change people's attitudes. Then by Rogers and Shoemaker (1973) that based on the stage of the diffusion process, the following:

- Stages of knowledge: an individual has awareness of the innovation and gain an understanding of how it functions.
- Stages of persuasion: forms of innovation for individuals that are favorable or unfavorable attitude toward the innovation.

- Stages of decision: individuals actively choose to adopt or reject the innovation which is given.
- Stages confirmation: individual seeking re exuded innovation decisions are made.

In the event of acceptance or rejection of an innovation is a decision that made a person/ individual to receive an innovation. This is according to Rogers (1983), the innovation decision-making process is a mental process within the individual, through the process of a person/ individual gain firsthand knowledge about an innovation to forming an attitude toward the innovation, then decide to reject or accept, practice new ideas and ultimately upheld the decision of the innovation acceptance.

Research Method

Research Type

Research about Bugis ethnic language-based Communication media technology is used Mixed-Method Research. This research type combines qualitative and quantitative approaches by triangulation. Triangulation techniques based on Donyei (2007) view explain that mixed methods study involves the collection or analysis of quantitative and qualitative data in a single study with a few attempts to integrate the two approaches in one or more expectations of the research process.

Combining qualitative and quantitative data is used to obtain accurate data. Qualitative methods Emphasis on breadth (Breadth) and depth (depth) and make researcher enables to study specific issues in depth with data collection is not limited to specific categories.

Research Location and Object

The location of this research is center of South Sulawesi cocoa cropping which majority is Bugis ethnic and use Bugis language in everyday activities. Location based on the area breadth and production of cocoa, covering Luwu, North Luwu and East Luwu.

Object of this study is an individual or a group of cocoa farmers in Luwu (Buah Harapan, Noling Mujur, Sipakainge, and Siwata), North Luwu (Resotemmangngingi tld, Bulo, Pammana, Deceng Simata), and East Luwu (Sinar Cendana 1, Sinar Cendana 2, and Sinar Cendana 3). The focus of the research is oriented on the use of media and communication technologies through the Bugis ethnic local language for the independence of cocoa farmer's individual learning, farmers group and intermediaries' key (*key farmer*).

Research Source of Data Options and Number

The selection of researcher or informants data sources to replace term research subjects who are willing to provide information based on knowledge and experience in using communications media technology, particularly cocoa farmers.

The determining of informants technique is using non-random assignment type of purposive sampling. According to Patton (2002) purposive sampling focused on the selection of cases (individual) that have specific information that can answer the research questions. Researchers have determined the criteria and characteristics of individuals, groups, and leaders or key farmers' groups of each farmer directly observed. For example, farmers have planted cocoa more than 5 years, has a certification certificate, and chairman of the farmer groups that have been shown to have key competencies as a leader or a farmer. Based on this technique, researcher chooses 11 key farmers as informant.

Random sampling area to represent districts that become center cropping area in South Sulawesi that consists of three districts namely: Luwu, North Luwu and East Luwu. Furthermore we select 11 farmers' groups whose members each 30-35 people or as many as 360 cocoa farmers.

Data Analysis

Data analysis in mixed methods according to Onwuegbuzie and Tiddlie (2003), consists of seven stages: data reduction, exposure of data (display data), data transformation, the linking of data (the data correlation), consolidation of data, the comparison of data, and integration of data.

Research Result

Communication and language is a fundamental and vital factor in human life. Similarly with the use of media and communication technology that has become a crucial factor in knowledge transfer from the communicator to the communicant. The process of knowledge transfer has a specific barriers, such as language, which are less or not understood by the recipient, this study focuses on the use of media and communication technology-based language for self-reliance of local ethnic Bugis and welfare of cocoa farmers in South Sulawesi landscaping centers.

Diversity in Using and Utilizing Access and Spread of Local Bugis Ethnic Language-based Communication Technology in Improving Independent Study Cocoa Farmers in South Sulawesi.

The diversity of media and communication technologies, especially the communication medium can serve as a learning tool for farmers in rural areas of South Sulawesi. Cocoa farmers can access information of individuals, groups, or through key farmers who act as Leader for studying the problems of cocoa. For example, cultivation/planting, maintenance, disease/pest/ pesticide, the quality of cocoa beans, the price Local/National/International.

The results of this study found that communication media exposure by using Bugis language message contents in the communication media become their choice in receiving information compared to using Indonesian and English. This is based on mastery of the Bugis Ethnic local language as the daily-language for fellow cocoa farmers so that it easier to understand the meaning of the messages which conveyed by the media.

The diversity of the use and utilization of information resources access is obtained by cocoa farmers by identify a variety of communications media technologies direct or personal learning (*education*) and indirect communication (*mediated*). For example, Mobile, Brochures, Leaflets, Posters, and the Internet, and audiovisual media. As a result, media technology most commonly used by government extension percentage of instructional media exposure frequency (94.44%) and Media Non-private (89.44%). Frequency of exposure include posters, leaflets, and brochures frequency (73.61%), Mobile learning media (89.44%), use of the Internet only (20.5%).

Utilization of government instructional media and Non private media is very high due to the use of local language by speaking Bugis ethnic average (91.94%). In contrast to access resources through communication cocoa indirect (mediated), such as the Internet are relatively low (20.5%) due to the language barrier in understanding the information presented. Characteristics of cocoa farmers with low education and skill levels of individuals utilizing the media are the main constraint.

The Use of media as a means of communication can be used as a self learning process of cocoa farmers. However the use of instructional media consumption as a communication medium is an attempt to find information that suits farmer's needs. For cocoa farmers, learning communication media has a strategic role and function in the achievement of learning objectives. The use of instructional media can enhance learning motivation and self-beneficial to the economic productivity of the cocoa farmer groups.

The Learning media of sustainable cocoa become alternative solutions to be pursued and empowered. Government or private Field extension functions are not only facilitators who teach but help cocoa farmers to solve the problem. Government extension workers and private sector must work together to provide guidance cocoa farming benefits so farmer didn't switch to palm oil or other short-term plant. The Important aspect must be known by the government and private is economic value and economic productivity of cocoa farmers.

Strategic Model in Using Bugis Ethnic Local Language-Based Media and Communication Technology to Improve Self Learning of Cocoa Farmer in South Sulawesi.

Basically level of experience of cocoa farmers self-learning process through the medium of learning aims to improve economic productivity. Effective use of the media related to understanding the material or cocoa information messages. The role of the individual, the group, as the recipients of the message have different characteristics, such as level of education, level of understanding of the information that presented. Leader or key farmer as a source of competence transfer messages back to members other farmer groups; the main content of the message is the novelty of instructional media innovation for farmers.

This Research indicates that local language-based media communication technology dominantly chosen and used as a source of independent information for cocoa farmers either individually or in groups. Self-development of cocoa farmers to improve their knowledge through self-learning process is very synergistic with the selection of the ethnic Bugis local language. Cocoa farmers understand the local language better so that the independence of the independent study looks very good (79.5%) than internet (20.5%). Ethnic Bugis local language-based Strategic development model can be seen in figure 2 below:

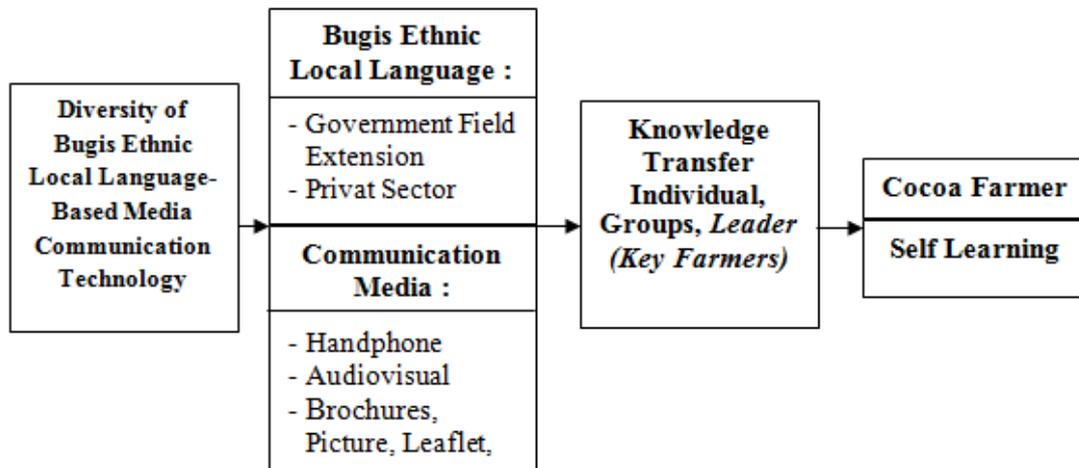


Figure 2. Strategic Model of Bugis Ethnic Local Language-Based Media Communication Technology

Model of Ethnic Bugis Local Language-based communications media technology diversity intended as individual knowledge transfer, group leader or a key or through farmer. This information is conveyed through other cocoa farmer group members so independently access and use the learning media. The goals are to increase economic production and welfare of cocoa farmers.

Independent learning of the cocoa farmers can accelerate diffusion process of the information novelty. Like the view of Rogers and Shoemaker (1973) that the phase of the diffusion process, the stages of knowledge: Stages of persuasion, Stages of Decision to adopt or reject the innovation. Phase Confirmation. Rogers (1983) also argued that the decision-making process of this innovation is a mental process within the individual cocoa farmers and strengthening leader or key farmer.

If there are acceptance or rejection of an innovation, that is a decision which made a person/individual to receive an innovation. According to Rogers (1983), through the process of a person/individual gain firsthand knowledge about an innovation to forming an attitude toward the innovation, then decide to reject or accept, practice new ideas and ultimately upheld the decision of the innovation acceptance.

Conclusions and Recommendations

Conclusions

Based on the results and discussion of this study can be summarized as follows:

1. The diversity of the use and utilization cocoa access information resources through direct communication or personal learning (education) government (94.44%) and private (89.44%). Communication indirect (mediated). For example, mobile phones, Brochures, Leaflets, Posters, audiovisual (73.6%), and use of the Internet only (20.5%). Contributing factor is the low level of education and individual skills in using the media.
2. Strategic Model of Bugis Ethnic Local Language-Based Media Communication Technology begins with the diversity and availability of instructional media both personal (extension), and mediated communication. The diversity of media used as cocoa farmer knowledge transfers both individual, group leader and a key or through farmer. Availability of Bugis ethnic local language-based learning independently because the cocoa farmers utilize instructional media to increase their economic production of cocoa.

Recommendations

1. Increasing the availability and diversity of Bugis ethnic local language-based media learning either through personal communication, mediated communication. The government should prioritize the delivery of information through Ethnic Bugis local languages in South Sulawesi cocoa farmers as a mother tongue.
2. Creating models of development and utilization of instructional media and technology based on local wisdom that corresponds to the cultural characteristics and acceptability of cocoa farmers.

References

- Arief S Sadiman, dkk. 2002. *Media Pendidikan*. PT Raja Grafindo, Jakarta
- Creswell, John W. 1994. *Research Design: Qualitative and Quantitative Approaches*. Thousand Oaks, Sage, California.
- Rogers, E.M. dan Shoemaker, F.F., 1971, *Communication of Innovations*, London: The Free Press.
- Rogers, Everett M, 1995, *Diffusions of Innovations, Forth Edition*. New York: Tree Press.
- Ruben D, Brent.1992. *Communication and Human Behavior*. Third edition. Prentice–Hall, inc A Simon & Schuster Company, New Jersey
- Setyosari, Punaji, Sihkabuden. 2005. *Media Pembelajaran*. PT. Elang, Jakarta
- Straubhaar dan LaRose.1997. *Communications Media in the Information Society*. Wadsworth Publishing, United State of Amerika.
- [Http://Www.M-Edukasi.Web.Id/2012/04/Fungsi-Media-Pembelajaran.Html](http://Www.M-Edukasi.Web.Id/2012/04/Fungsi-Media-Pembelajaran.Html) diakses tanggal 1 Maret 2013.
- www.m-edukasi.web.id Media Pendidikan Indonesia. diakses tanggal 1 Maret 2013
- <http://www.m-edukasi.web.id/2012/04/fungsi-media-pembelajaran.html>.diakses tanggal 1 Maret 2013

ICSSAM-837

A Study of Accessible Web Menus

Nien-Tsan Wang ^{a,*}, Cheng-Da Ji ^b

^a National Taiwan University of Arts, New Taipei City, Taiwan
Email: ntwang@ntua.edu.tw

^b E-Lead Electronic Co., Ltd, Taipei, Taiwan
E-mail: neil.dada@gmail.com

Abstract

To follow the trend of world allowing more minority group to use network in fairness, Taiwan government has started promoting accessible web site, successively organized training courses and reinforced construction plans of public affairs organizations since 2002. With efforts over years, the promotion progress still falls behind expectation. One of key problems is menu. Menu is the most important component of interaction between browser and website as well as the key for browser obtaining website information. The design for menu of accessible web site requires much attention. However, there is only few articles regarding menu set forth in standards of domestic and foreign accessible web site and also insufficient studies in related fields. Therefore, the essay adopted this research topic. First, the commonly used types of menus and principles of accessible design were summarized among literatures, followed by design of five experimental websites as taking “Taiwan Foundation For The Blind” as example to analyze the differences of accessible feeling among general users to five menu types. According to research result, the sequences of better menus for accessibility are Drop-Down menu, Fixed menu, and Simultaneous menu. They actually help promoting the accessible feeling of users as applied to accessible web site. Meanwhile, the operational function is major factor that affects the accessibility of menu.

Keyword: Web Accessibility, Menu, Visual Aid

1. Introduction

The usage of website in modern world has been growing widely fast, how to allow users to correctly find the information they need through website has become an important lesson. In order to help users successfully receive the information they need, Web menu has become the most common tool and is an important piece of element in a website structure. If a web menu is not designed properly, it can easily cause difficulty for the users while navigating the website. As web technology is improving, styles and design of web menu starts to vary and

become unique. Aside from the traditional web menu design, more multifunction, well decorated, and interactive menu design started to show up. But not all types of web design menu would match the needs of web accessibility website. Most especially for visually impaired people, complicated interactive designed web menu can cause these patients to lose focus, to not understand, and the failure to navigate (King, Evans & Blenkhorn, 2004; Rutter et al., 2006). So, this study aims to focus on web menu designs that can cause the failure to navigate for visually impaired people and discuss the feedbacks of web users of different types of web menu design. Using the research results to modify the problem and achieving the result to improve user experiences of websites at all level.

2. Literature Review

2.1 Sitemap and Menu

Specially mentioned in the “Web Accessibility Building Specifications”, to avoid users being disoriented in the process of using website, web pages must provide guiding information, site tour, sitemap etc., allowing users to successfully search for their desired information. Liang (2002) explained the importance of menu design towards guiding users, most especially homepage menu. It could define the entire web structure, allowing users to find the browsing path and their current position on the webpage. Kuo (2006) stated that web menu not only presents the entire site structure but also serves as an entrance for each subpages, providing users with a clear point of direction. Beaumont, Gibbons, Kerr, and Stephens (2002) believes that menu is a very important element for web design. It can directly provide users with clear understanding of the structure of the website. Every website will at least contain one set of menu design. Thus, proper design for web menu is important because it has a direct impact on whether the website has good maneuverability and whether it could correctly provide message.

This study combines the perspectives of Norman (1990), Shneiderman (1998), Fang (2003), and Kuo (2006) to consider the connection between the different options and the action of mouse trigger, then applying it to the five types of web menu, Fixed menu, Simultaneous menu, Drop-Down menu, Cascading menu, and the Pop-Up menu.

2.2 Principles of Web Accessibility Menu

Currently, researchers across the world only discuss about the principles of maneuverability towards web menu design. Studies and research towards the guide of web accessibility has shown that some of guidelines stated are similar with the principles of the researcher. So this study list out 18 maneuverability web menu design principle (Whitaker, 1998; Fleming, 1998; Beaumont et al., 2002, W3C, 2014).

3. Research Method

3.1 Experiment Website

The research aims to study the 50 websites that joined the contest “Free on Web”. Based on the structure, contents, design, and accessibility requirements each website applied, the website of Taiwan Foundation For The Blind (TFB, <http://www.blindness.org.tw>) was selected as a reference for this research. Then based on the reference, the research aims to focus on the menu design of TFB which includes the five types of menu (Figure 1), including Fixed menu, Simultaneous menu, Drop-Down menu, Cascading menu, and Pop-Up menu. Linked pages, information, and contents remain the same as the original TFB website.

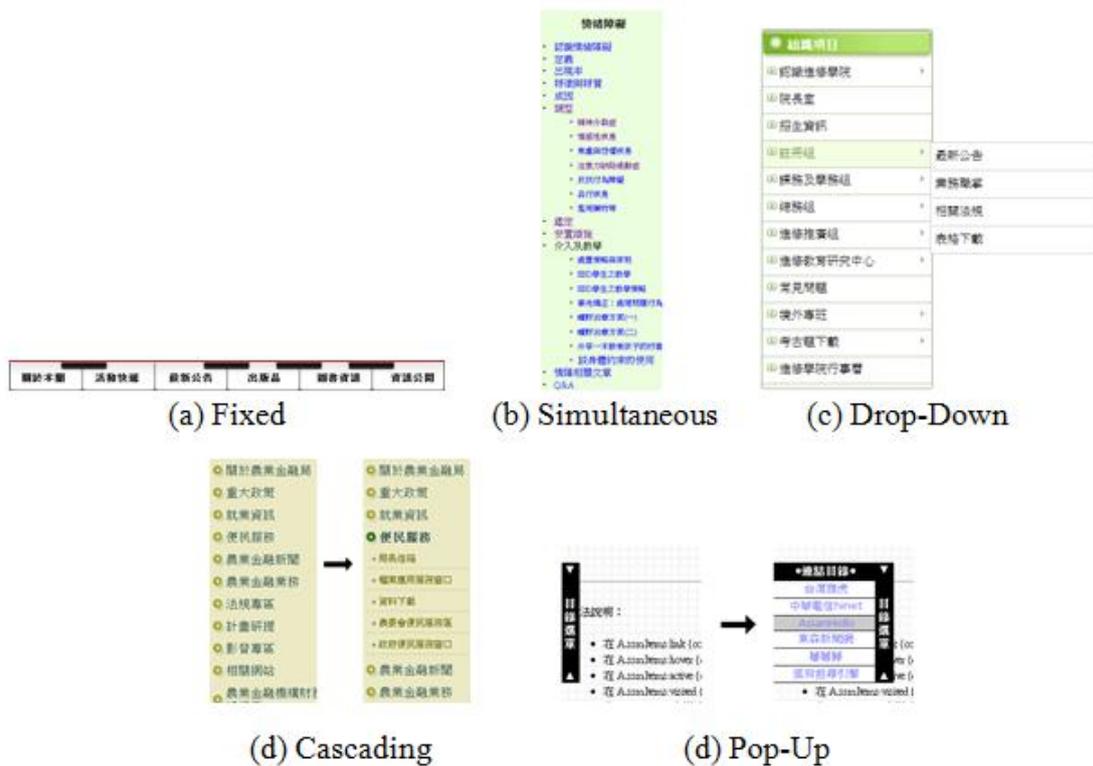


Figure 1. Five types of menu for experimentation

Before the actual experiment, the research must first conduct an internal test, testing standards will be based on the country’s “Web Accessibility Testing System” and after passing the least requirement settled by AAA of Executive Branch, the research can move on to the next process which is the actual human experimentation.

3.2 Questionnaire Design

The questionnaire designed for this research is a “semi-structural” type of questionnaire. Internet experience and accessibility evaluation question will be asked with multiple choices of answer. Mission tasks given to the subject will require the subject to fill in the blanks of

the questions. Upon completion of the questionnaire, researchers and evaluators will have to check the answers and the answers must be credible to be considered as an effective questionnaire.

3.3 Experiment

Base from the results of the previous stage, corrections and modifications for the menu is what will be executed in this stage. At the same time, satisfying the needs of visual aid patients and applying the regulations of web accessibility principle will be strongly implemented.

Each designed experiment is to be executed individually, the target subject for the experiment will be normal web users who are randomly selected or volunteered at the national libraries across the country. Each experimental website will only need 40 users; a total of 200 subjects will be needed for this experiment as there are 5 different websites. To equally distribute the websites to each subject, the subject will be required to draw raffle as to which website they will have to be navigating. Each subject will be given specific direction and after the experiment, the subject will be required to fill in the answers to the questionnaire. The answers of the subject will be an helpful reference to improve each web design and its menu then the evaluation will be checked and scaled using Likert Scale.

4. Results

4.1 Analysis of single factor value change towards menu style and accessibility

In the evaluation of accessibility, different groups of website examinees shows their difference ($F=8.024$, $p<0.001$), it means each examinee from different group provides different evaluation result.

4.2 Analysis of each menu and its accessibility towards single factor value change

Examinees of different website provide a different value under these categories. Perceivable ($F=5.028$, $p<0.001$), Operable ($F=10.554$, $p<0.001$), Understandable ($F=3.606$, $p=0.007$), and Robust ($F=6.537$, $p<0.001$). These value shows that different groups of examinees provides different feedback and evaluation towards the different types of category.

4.3 Analysis on the accessibility of each related category

On the analysis of each category, there are results that prove the existence of each categories connection. Among it, Perceivable and Operable holds the closest connection with a high value of ($r=0.799$, $p<0.001$) while the least connected is between Robust and Understandable with a low value of ($r=0.722$, $p<0.001$).

4.4 Reliability Analysis

The summed up reliability value of this questionnaire is 0.945. Base on the research of Nunnally (1978), as long as Cronbach's α value is greater than 0.7 is on the range of acceptable. This also means that the reliability of this questionnaire can be worth credited.

5. Discussion

5.1 Evaluation of Accessibility

Base on the result of Experimental Stage, the subject thinks that Fixed and Drop-Down menu provides effective accessibility, thus a higher rate would be given to the evaluation. Meanwhile, Cascading and Pop-Up menu receives a lower rate of evaluation during the experimental stage. With this result, it shows that Drop-Down menu is the best option for web accessibility, not only that it can effectively satisfy the users and it lowers the navigation difficulty while Pop-Up menu remains to be the type of menu that does not fit into the design for web accessibility.

5.2 Detail Evaluation of Accessibility

Menu can be set to be the main function of a website, but to justify whether the menu can allow users to properly navigate, the menu must be evaluated through the four types of category, Perceivable, Operable, Understandable, and Robust. This research analysis the result of each type of menu in the four different category and base from Perceivable, Understandable, and Robust, the rating for Fixed menu, Drop-Down menu, and Simultaneous menu are higher, difference between the three mentioned above are also the least, which means that the three types of menu has met the standard requirement for web accessibility. On the other hand, base from the Operable section, the value difference between each menu are higher, meaning that user feedback differs under the evaluation of Operable. From the rating result, Drop-Down and Fixed menu received the highest rating, Drop-Down menu being the best. So the research believes that base from the four types of category evaluation, the rating from Operable section has the most impact towards web accessibility menu design.

5.3 Appropriateness between Menu Design and Web Accessibility

Multiple analyses has shown that Drop-Down menu provides the best accessibility, but when web designers are producing web accessibility websites, they cannot be limited to only use Drop-Down menu. From the results of Yu and Roh (2002), Drop-Down Menu provides effective searching while Fixed menu provides better browsing, both maintains its own advantage.

Base on Tullis et al.'s (2005) research on several website menus, Drop-Down menu minimalizes web layout spaces, it does not need to be scrolled; Simultaneous menu allows users to view all buttons at once, providing a lot of convenience.

Hochheiser and Shneiderman (1999) stated in their research that Simultaneous menu takes up more space in the webpage; it is not suggested to be used in majority of web design despite for partial users, it provides them with convenience.

From this research and studies previously made by different scholars, Fixed menu, Simultaneous menu and Drop-Down menu all received good feedback under consistency evaluation, but base on the evaluation of Operable, Simultaneous menu has fallen behind the other two.

During the Evaluation Stage, several designers mentioned that Simultaneous menu provides too much information when hovering and it causes long scrolling for the web page, but the two visual aided examinees considers this type of menu convenient. This result allows the proponent's research to claim that Fixed menu, Simultaneous menu, and Drop-Down menu provides good accessibility for web accessibility website, web designers can choose among the three type when producing websites but must be alert when choosing Simultaneous website as it can distort and complicate user vision when operating the menu.

6. Conclusion

6.1 Appropriate Web Accessibility Menu Style

Web Accessibility aims to allow all users to successfully retrieve information they need from the website, these users most specifically includes visual impaired people. Allowing disabled people to successfully retrieve information is very important. This research made several menu studies under web accessibility, trying to find out the appropriate type of menu for different groups of user. Base on the results, Drop-Down menu, Fixed menu, and Simultaneous menu has the highest feedback, they provide good accessibility for web accessibility and at the same time it satisfies the needs of visually impaired users. But when using Simultaneous menu, the amount of buttons must be considered otherwise it can disturb users.

6.2 Menu Operation is the Key to Accessibility

Despite meeting the standards of Perceivable, Understandable, and Robust, menu design must provide users with proper feedback through its operating functions. Most especially for web accessibility, it must provide a different type of operation. For instance, the most important tools to function a personal computer is they keyboard and mouse, allowing these tools to properly function the web menu is important. Aside from studying the guidelines and principles for web accessibility, making changes to the settings of the website menu can improve the accessibility of the website.

6.3 Importance of Menu Accessibility

To create a good web accessibility website, the first requirement is to design the page under web accessibility circumstances, while for the menu portion, design studies can be referenced from the proponent's research studies for web accessibility. Menu accessibility can be divided to four categories, Perceivable, Operable, Understandable, and Robust. The effects brought by these four type all varies but being able to maintain their consistency means the menu is conducted with good accessibility. After website production, allowing different users to test the website and receiving feedback or suggestions from the users can help the proponent in revising the changes that are brought out and allows the proponent to be closer to the idea of creating "web accessibility" website.

7. Acknowledgement

This research was supported by the National Science Council of the Republic of China, under Grant No. NSC 99-2410-H-144-006.

8. References

- King A, Evans G, Blenkhorn P. WebbIE, a web browser for visually impaired people. 2nd Cambridge Workshop on Universal Access and Assistive Technology. Cambridge, UK: Springer Berlin, March 2004, pp.35-44.
- Rutter R, Lauke P H, Waddell C, Thatcher J, Henry S L, Lawson B, Kirkpatrick A, Heilmann C, Burks M R, Regan B, Urban M. *Web Accessibility: Web Standards and Regulatory Compliance*. New York: Friends of ED, 2006.
- Liang S J. *別裝了, 其實你根本沒創意*. Taipei: Rolling Stone, 2002.
- Kuo M Y. *The Effects of Adapting Different Menus Appearances at Top and Left Layout on Single Web page*. Master's thesis, National Yunlin University of Science and Technology, Taiwan, 2006.
- Beaumont A, Gibbons D, Kerr J, Stephens J. *Constructing Usable Web Menus*. Birmingham, UK: Glasshaus Ltd., 2002.
- Norman K L. *The Psychology of Menu Selection: Designing Cognitive Control at the Human/Computer Interface*. Norwood, NJ: Ablex, 1990.
- Shneiderman B. *Designing the User Interface*. Boston: Addison Wesley Longman, 1998.
- Fang Y M. *人與物的對話*. Taipei: Garden City, 2003.
- Whitaker L A. Human navigation. In Forsythe C, Grose E, Ratner J (Eds.). *Human Factors and Web Development*. Mahwah, NJ: Lawrence Erlbaum Associates, 1998, pp.63-71.
- Fleming J. *Web Navigation: Designing the User Experience*. Sebastopol, CA: O'Reilly & Associates, 1998.
- W3C. Web content accessibility guidelines 1.0. Retrieved February 22, 2014, from <http://www.w3.org/TR/WCAG10>

Nunnally J C. *Psychometric Theory*, New York: McGraw-Hill, 1978.

Yu B M, Roh S Z. The effects of menu design on information-seeking performance and user's attitude on the world wide web. *Journal of the American Society for Information Science and Technology*, 2002, 53(11), pp.923-933.

Tullis T S, Connor E, LeDoux L, Chadwick-Dias A, True M, Catani M. A study of website navigation methods. In Josephson C Z (Chair), Usability Professionals Association Conference, Montreal, QC, Canada, June 2005.

Hochheiser H, Shneiderman B. Using Interactive Visualizations of WWW Log Data to Characterize Access Patterns and Inform Site Design. *Institute for Systems Research Technical Reports*, 1999.

ICSSAM-886

**The Mediating Effect of Attitude on Perception towards Impact Change
after Watching Islamic Films**

Saodah Wok

International Islamic University Malaysia

wsaodah@iium.edu.my

Faridah Abdul Manaf

International Islamic University Malaysia

nfaridah@iium.edu.my

Rizalawati Ismail

International Islamic University Malaysia

rizalawati@gmail.com

ABSTRACT

Religious films play an import role in educating the viewers, especially the youth. This study tries to explore the relationships between perception and attitude towards impact change after watching Islamic films. Specifically, it analyses the mediating effect of attitude towards Islamic films on perception towards impact change on youth behavior. The results of the experimental design using questionnaire as the research instrument revealed that there are positive relationships between impact change with perception and attitude. Attitude in turn mediates the relationship between perception and impact change. Therefore, the social learning theory tested for the study holds true and the hypotheses developed were supported. In sum, based on the 141 youth studied, Islamic film, as a whole, is able to have a positive impact on them.

Keywords: Impact change, attitude as mediator, perception on Islamic films, social learning theory, youth

1. INTRODUCTION

Recent phenomena both in Malaysia and abroad show that there is an increasing tension between groups of people based on religious misunderstanding specifically of Islam and other religions or other groups which are Islamophobic. As such, understanding and respecting each other's religion to create peace and harmony is called for. To gauge the current situation in Malaysia, a quantitative research involving an experimental design with survey method was conducted.

Findings of the research would indicate whether or not there is a need to continue promoting religious understanding among Malaysian youth through films and/or film festivals with the intention of the need for religious understanding of the others. At the same time, it is a means of promoting faith-based film festival and Islam is chosen because it is the official religion of the country, with the largest number of followers. It was the intention of the Islamic Youth Short Film Competition to gauge the outcome of the films as a prime mover of change to the viewers, especially the youth.

The findings of this survey will also determine support for future faith-based film festival. It is hoped that through films, we are able to promote Malaysia among tourists who may be keen to know more about religions in Malaysia. In addition, it is also hoped that religions can be seen in a kind way and influence, and to educate others specifically young people who are so clueless of what is going around them, too, and who are keen to condemn without fully understanding about the 'others'. The ultimate outcome is that this could become the foundation to empower youth in their quest to establish and to expand faith-based film festivals as a means to address the need for stability in multireligious and multiracial societies in Malaysia and we hope the young ones are able to ensure that peace and harmony remain as assets for the nation.

1.1 Objectives of the Study

The main objective of the study is to create a platform for Malaysian youth short filmmakers to meet and discuss ways forward to project Islam and to share information on Islamic through visuals, that is, films.

The specific objectives of the study are:

1. To find out the level of perception on Islamic films;
2. To determine the level of attitude towards Islamic films;
3. To evaluate the impact of Islamic films on viewers' behavioral change; and
4. To analyze the relationship between perception and attitude towards impact change on Malaysian youth viewers of Islamic films.

2. LITERATURE REVIEW

2.1 Film and Religion

Every country to a certain extent has its own history on films. Lindvall (2004) highlighted the history and its criticism on religion and film with special emphasis on Christianity as the concerned religion. He states that "film scholars have noted the importance of religion in shaping the cultural landscape in which cinema emerged" (p. 7). Since religion is related to the way of life of the people and as a part of their behavior, therefore, there is a relationship between film and religion (Meyer, 2005).

In Malaysia, the history, especially the beginning, of films was elaborated by Mohd Zamberi and Aimi (2005) in a comprehensive coffee-table book. There is a special coverage on the Malay film in Singapore. Malay is associated with Islam as Islam is the religion that they worship. Earlier, Yusof (2003) highlighted the production houses for film making both in Singapore and in Malaysia. Later, Suria Hani, Mazni, Mohd Faizal and Noor Adzrah (2010) analyzed the religious theme in film. They confer that Malay films directly or indirectly serve as religious purpose. As such, “film is a powerful tool in learning process” (p.189). They contended that promoting inter-religious film is good for the sake of unity in Malaysia where inter-cultures and inter-religions meet.

Javed Mohammed (2010: 3) defines Islamic cinema as “film that conforms to Islamic laws, customs and values” while “Muslim cinema is a film movement by or about Muslims”. Malaysia is the sixth top Muslim countries by films released in 2008, trailing behind Iran, Indonesia, Egypt, Turkey and Pakistan.

In addition, Naim (2011: 11) proposed that Islamic films must be based on Islamic foundation, Islamic model and Islamic culture. All of them must be based on Al-Qur’an and Al-hadith as the source of inspiration. The films must not deviate from the basic source of information; failing to do that is subjected to the Code of Conduct under the Code of Law. He further identified three main objectives of Islamic film. They are (a) to inculcate ethical values, (b) to encourage good deeds (*amar maaruf*) and to forbid bad deeds (*nahi mungkar*), and (c) to propagate and disseminate Islamic information (*spread da’wah*).

2.2 Social Learning Theory

Social Learning Theory (Bandura, 1971; 1977) states that behavior is learned from the environment through the process of observational learning. However, in modern days, the media play an important role in teaching the viewers, regardless of their age, through the actor’s behavior. Television (TV) is the most important and influential medium in today’s era, superseding the other media, transcending across all types of viewers; and youth is no exception. The actors are the models, whom the viewers might imitate the behavior that they observed and, thus, inculcate the culture and reinforce their beliefs.

TV is the medium that has an array of programs. One of them is film. Drama is also popular as the source of entertainment to the audience. However, film may be able to create the awareness of the possible scenario in the community.

In Malaysia, all films have to undergo the censorship board so that the rights of all are protected, especially the sensitivity of other religions and races. This is underlined by the

code of conduct for the filmmakers. Even though Malaysia allows other religions to be practiced by their worshippers, Islam is the official religion of Malaysia. Unlike Nigeria (Krings, 2005), it is divided according to religions, where Northern Nigeria is mainly Muslims while the Southern Nigeria comprised of Christians. Therefore, the films in each part of the country are focusing on tailoring towards its own ardent viewers.

2.3 Relationships between Perception, Attitude and Impact Change on Youth

Watching Islamic-based films, containing Islamic message is seen as contributing to positive actions and behaviors (Rosmawati, Md. Salleh, Mohd. Nizam, & Muhammad Sham, 2012). They found a positive relationship between viewing Islamic-based films and the development of pro-social personality among teenaged audience. Islamic films in Malaysia are not that popular among Malaysians and the number of viewers is small. Therefore, it should be encouraged among youth themselves to produce Islamic films with their own slant and tests, as long as this benefits the young viewers.

2.4 Theoretical Framework

The theoretical framework for the impact change of Islamic-based films is presented in Figure 1, with relevant hypotheses identified, accordingly.

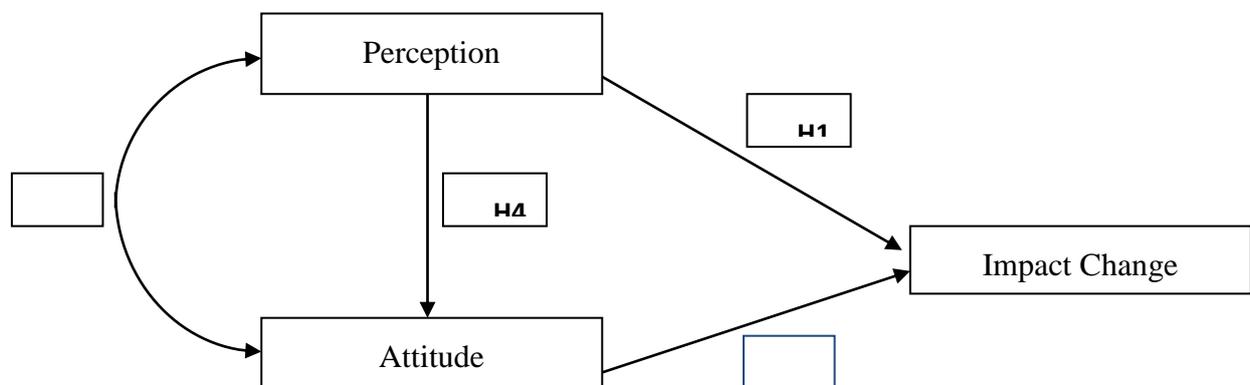


Figure 1: Theoretical framework for impact change model

2.5 Hypotheses of the Study

The hypotheses of the study are as follow:

H1: There is a positive relationship between perception of Islamic films and impact change after watching Islamic films.

H2: There is a positive relationship between attitude toward Islamic films and impact change after watching Islamic films.

H3: There is a positive relationship between perception of Islamic films and attitude toward Islamic films.

H4: Perception of Islamic films influences attitude toward Islamic films which in turn influences the impact change after watching Islamic films.

3. METHODOLOGY OF THE STUDY

3.1 Research Design

The study uses a quantitative research design. The method used is an experimental type. Specifically, it uses quasi experiment with pre-post measurement.

3.2 The Method

The experimental method adopted for the study is quasi pre- and post-test method. Two activities in this research were pre- and post- tests, without control group. The questionnaire was administered to the students prior to the treatment given, that is, the screening of a 10-minutes short religious film. First, the respondents were only asked to answer the first three sections of the questionnaire, involving demographic characteristics of the respondents, perception and attitude towards religious films. The pre-test is the prerequisite to assessing the post test. The post-test experiment is to access the change as the impact of the religious film on the students, especially on the understanding of others' religions, as highlighted in the film.

The main advantage of pre- and post-test quasi experimental method is that it involves change on the same person resulting from the treatment given to the individual concerned. Nonetheless, the only disadvantage of such method is that it is not a true experiment because there is no control group.

3.3 Population of the Study

The population of the study is Malaysian youth aged from 13-40 years old, belonging to the various ethnic groups, representing the Malaysian youth. They encompass both male and female with various religious backgrounds.

3.4 Sample and Sampling Procedure

Initially, it was meant to be a pilot study only with the target sample size of 60 cases. However, since the researchers thought that if comparisons were to be made, a larger sample size is needed. The different ethnicities were selected from a university that caters for the Malays, which made up of about 90% of the population of the university concerned. The college-university institution caters for the majority of the Chinese group while a secondary school represents the Indians. Therefore, three different localities were selected. All were located in Kuala Lumpur and Selangor. At the end of the experiment, a sample of 141 respondents was gathered.

3.5 Research Instrument and Operationalization of Variables

The research instrument for collecting data is a questionnaire. The questionnaire consists of four sections:

Section 1: Demographic characteristics of the respondents - it consists of 4 items, measuring for the race, religion, age, and gender.

Section 2: Perception on Islamic films - It consists of 10 items, addressing the perception and thought on Islamic films. Each item is measured on a 5-point Likert scale, where 1=strongly disagree, 2=disagree, 3=slightly agree, 4=agree, 5=strongly agree. The perception construct was created for its mean, whereby the average of the ten items was created to form the overall perception of Islamic films.

Section 3: Attitude towards Islamic films - It consists of 10 items, addressing the attitude of youth on Islamic films. Each item is measured on a 5-point Likert scale, where 1=strongly disagree, 2=disagree, 3=slightly agree, 4=agree, 5=strongly agree. The attitude construct was created for its mean, whereby the average of the ten items was created to form the overall attitude towards Islamic films.

Section 4: Impact change after watching Islamic films - It consists of 10 items, addressing the change in behavior of the youth after watching the Islamic film. Each item is measured on a 5-point Likert scale, where 1=strongly disagree, 2=disagree, 3=slightly agree, 4=agree, 5=strongly agree. The impact change construct was created for its mean, whereby the average of the ten items was created to form the overall impact change.

3.6 Validity and Reliability of Variables

Validity is the property of a test for actually measuring what it purports to measure. For this study, only the face validity is of concern. The reliability, on the other hand, is the property of a measure that consistently gives the same answer at different points in time. However, for this study, the reliability is being tested using the reliability test, where Cronbach's alpha would be tested against a known value of 0.70 as the cut-off point for assuming that the items

measure the construct of interest. Statistical Package for Social Sciences (SPSS WIN 17) was used to analyze for its reliability for the scale. In addition, exploratory factor analysis (EFA) was used to ensure that only one factor is used for the study. The Cronbach's alpha for perception is 0.755, attitude is 0.762, and impact change is 0.791. All values are above 0.70.

3.7 Data Collection

Data were collected at three different localities and at three different times, but within the month of October 2013. The researchers themselves administered the experiment. The first three sections of the questionnaire were answered first. Then, the film was screened. Later, the participants were asked to continue answering the questionnaire for section 4 - the impact change after watching the film. The respondents took approximately 20 minutes for the whole experimental process, that is, 10 minutes to answer the questionnaire and another ten minutes to watch the short film. A total of 141 questionnaires were collected for the experimental study.

3.8 Data Analysis

The data collected were coded based on the master code developed by one of the researchers. Data were analyzed using SPSS WIN 17 for both its descriptive statistics and inferential statistics. The descriptive statistics used are frequency, percentage, mean, and standard deviation. As for the inferential statistics, one-sample t-test with a test value of 3.0, correlation, and regression were used for the study to answer the objectives of the study and to test the hypotheses of the study developed based on the Social Learning Theory.

4 FINDINGS OF THE STUDY

4.1 Respondents of the Study

A total of 141 respondents participated in the study. The respondents of the study are described in terms of the selected demographic characteristics that are thought to be useful for the study.

4.2 Demographic Profile of the Respondents

The demographic profile of the respondents is presented in Table 1. Demographic profile in this study includes race, religion, age and gender. Chinese respondents constitute almost half (49.6%) of the entire sample in this study, followed by the Indians (25.5%) and the Malays (24.8%). Buddhists are the largest religious group in this study. Four in ten of the respondents (41.1%) practice Buddhism. Almost a quarter of the respondents (24.8%) belong to Islamic faith, followed by the Hindus (23.4%). The Christians (8.5%) and those belonging to other religions (2.1%) are minimal. Seven in ten of the respondents in this study are teenagers (70.2%). More than a quarter (27.0%) belongs to the adolescent category, while young adult

are the least age group (2.8%). More than two-thirds of the respondents (68.1%) are females compared to males (31.9%).

Table 1: Demographic characteristics of respondents

Demographic Characteristics	Frequency	Percentage
Race:		
Malay	35	24.8
Chinese	70	49.6
Indian	36	25.5
Total	141	100
Religion:		
Islam	35	24.8
Christian	12	8.5
Hinduism	33	23.4
Buddhism	58	41.1
Others	3	2.1
Total	141	100
Age:		
Teenage (13-19 years old)	99	70.2
Adolescence (20-25 years old)	38	27.0
Young adult (26-39 years old)	4	2.8
Total	141	100
Gender:		
Male	45	31.9

Female	96	68.1
Total	141	100

4.3 Level of Perception on Islamic Films

Table 2 presents respondents' perceptions and thoughts on Islamic films. Respondents generally agreed on the utility of films in general and Islamic films in particular (70.8%). Specifically, they strongly agreed that "watching movies is useful" (81.2%) and that "faith-based movies are educational" (82.6%). They also agreed to the importance of faith-based movies in multicultural country (77.4%), goodness and values of movies (75.2%), movies-induced interest about Islam (63.8%), and other religions (74.6%). Similarly, the respondents agreed that movies provide ample educational material about Islam (66.0%), and possess knowledge about other religions (60.6%). However, respondents only slightly agreed that they know much about Islam (54.2%). This means that, on the whole, youth are positive on Islamic films.

When tested using a one-sample t-test and using a test value of 3, the mean of 3.54 (SD=0.52) shows that the overall perception on Islamic films is positive ($t=12.410$, $p=.000$). This means that Islamic films are thought to be positive and all the items are significantly positive except for "I know about other religions" ($t=0.395$, $p=.694$). Another interesting finding is that youth do not know much about Islam. This is portrayed by the low mean value ($M=2.74$, $SD=1.01$). The result is supported by the test value ($t=-3.080$, $p=.002$). This means that youth are less knowledgeable about other religions, especially Islam. Despite the fact that Islam is the official religion in Malaysia, little is known about Islam. Therefore, the Ministry of Education should take heed about this issue so that Islam remains the official religion and is widely known to all youth as they are the future leaders, who, one day, are going to lead the nation. It seems that there are enough material to educate the youth on Islam and other religions, yet they claimed that they are still less knowledgeable on Islam. Nonetheless, the youth have positive perception on the possibility of Islamic films to educate them on Islam as a religion.

4.4 Level of Attitude towards Islamic Films

Overall, respondents agreed with good attitude towards movies, in general, and faith-based movies, in particular (72.2%). The results revealed that the respondents very strongly agreed that they love watching movies (88.2%). Respondents also agreed that: "they like watching faith-based movies" (66.6%), "prefer watching faith-based movies with friends and families" (70.0%), "feel there is too much sensitivity in making faith-based movies" (68.0%), and that "filmmakers should be given freedom to make faith-based movies for the general public" (73.8%).

Additionally, the respondents agreed that “faith-based filmmaking should be fully supported by the government” (77.4%), “faith-based filmmaking should be financially supported by the corporate sector” (71.4%), “faith-based film festival be an annual event at the national level” (73.8%), and that “faith-based film festival be an annual event at the international level” (74.8%). However, there is only a slight agreement to the statement “I prefer watching faith-based movies alone” (57.6%). On the whole, youth have a positive attitude towards Islamic films (72.2%). This is a good indication that Islamic films be accepted in disseminating good information of Islam as a religion.

When one-sample t-test was used to test the significant level of agreement to the items, using a test value of 3.0, findings showed that, on the whole, there is a positive attitude among the youth ($t=13.467$, $p=.000$). This means that youth attitudes towards Islamic films are positive. However, this does not apply to all items. The item that seemed not to give a positive agreement is that “I prefer watching faith-based movies alone” ($t=-1.335$, $p=.184$). Watching faith-based movies is not favored by youth on their own; instead, they would prefer to watch it with others. Probably, they prefer explanation and discussion on the latent intent of the faith-based movies, that is, normally indirect rather than direct behavior of the actors. Generally, it can be said that youth have positive attitudes towards faith-based films and they urged that the government and the corporate bodies to sponsor faith-based films and it should be conducted, not only at the national level, but also at the international level, as well. Therefore, there is an avenue for the faith-based films to be the vehicle to promote Islam as a religion of the nation.

4.5 Level of Impact Change from Watching Islamic Films

On the whole, respondents agreed on the impact change after watching Islamic film (63.8%). The highest agreement goes to “I respect other religions better” (75.0%). This is followed by the statement which says “I discover that the movie makes me question a lot of issues to do with religions in this country in general” (69.4%), and “I will promote cultural and religious understanding among friends and family members” (67.6%). Respondents also agreed that they: “understand Islam better” (63.2%), “enjoy watching faith-based movies” (66.2%), “faith-based movie has changed my perception of Muslims in general” (60.8%), and that “faith-based movie has changed my perception of minorities from other religions” (63.2%). Nonetheless, respondents slightly agreed that “faith in own religion is challenged after watching the movie” (55.8%), “portrayal of the lead character in the movie is biased towards Islam” (57.6%), and that “the portrayal of the minority religions is done justly in this movie” (59.4%). On the whole, the overall impact change on youth is also positive (63.82%). This means that Islamic films have positive impacts on youth behavior and this is a good indication of the potential of Islamic films to be provided with good ethical and civic

behavior among the youth, who are believed to adopt uncultured behavior from watching non-faith-based films. Therefore, the relevant authority should take the golden opportunity to educate the youth through morally designed and produced films.

Further analysis was conducted to each of the items on impact change and to the overall construct, using a one-sample t-test, with a test value of 3.0. Results showed that there are mix findings with regard to impact change. Surprisingly, youth had no significant impact change on understanding Islam better after watching the film ($t=1.828$, $p=.070$). But, if there the film was meant to change the behavior of the youth, then there is a possibility that the film was able to change the understanding of the youth on Islam as a religion. Nonetheless, after watching the film, youth, as a whole, claimed that they experienced a positive impact change ($t=3.881$, $p=.000$). This implies that, on the whole, the Islamic films were able to have impact change on the behavior of the youth. Worst still, they claimed that “I feel my faith in my own religion is challenged after watching the movie”. This means that Islam is able to change the beliefs of other religions since it is the last religion that shows the right path of living here and the hereafter. The three items that were not significant are that “I feel the portrayal of the lead character in the movie is biased towards Islam”, “The portrayal of the minority religions is done justly in this movie”, and “I am convinced that faith-based movie has changed my perception of Muslims in general”. This implies that the films have slight effects, either positive or negative on youth. Therefore, the writing of the Islamic films should be more cautiously done so that the intended motive of the films is achieved, not the reverse.

4.6 The Relationship between Perception, Attitude and Impact Change on Malaysian Youth Islamic Film Viewers

Table 2.1 shows the zero-order relationships between perception, attitude and impact change from watching Islamic films. Perception has a positive moderate relationship with attitude ($r=.566$, attitude has a moderate positive relationship with impact change ($r=.420$, $r=.000$). This means that both perception and attitude are able to correlate with impact change, but with different amount. Therefore, Hypotheses 1 and Hypothesis 2 are supported. Similarly, Hypothesis 3 is also supported.

When controlling for attitude, as the mediating factor, the relationship between perception and impact change is reduced tremendously ($r=.043$, $p=.610$). Therefore, the relationship is not significant and this means that attitude is the mediating variable between perception and impact change. Therefore, Hypothesis 4 is supported.

Table 2.1: Zero-order correlations between perception, attitude and impact change on youth film viewers

Control Variables (N=141)	Perception		Attitude	
None	r	p	r	p
Perception				
Attitude	.566	.000		
Impact change	.270	.001	.420	.000
Attitude				
Impact change	.043	.610		

Further analysis was carried out to determine the best predictor for impact change (Table 2.2). Results showed that attitude (Beta=.393, t=4.195, p=.000) is able to predict impact change better than the perception (Beta=0.48, t=0.511, p=.610) on Islamic films. Nonetheless, there is already an existing level for impact change (constant t=3.306, p=.001). Therefore, the equation for impact change can be written as **Impact change = 1.283 + 0.060 perception + 0.476 attitude**

Table 2.2: Simple multiple regression between impact change with perception and attitude towards Islamic films

Variable	Unstandardized		Standardized		
	B	SE	Beta	t	p
Constant	1.283	0.388		3.306	.001
Perception	0.060	0.118	.048	0.511	.610
Attitude	0.476	0.113	.393	4.195	.000

F(2,138)=14.916, p=.000, R=.422, R²=.178, R² adj=.166

5 DISCUSSIONS AND CONCLUSIONS

From 141 respondents of the study, comprising of students from a university, a college and a secondary school, results showed that the students are mostly females compared to males, in a ratio of 2:1. The students are mainly Chinese, followed by Indians and Malays. This distribution reflects their religions. Most of them are teenagers, followed by adolescents and finally young adults.

The students agreed to the overall perception of Islamic films. This means that Islamic-based film production house needs to be more rigorous in promoting Islamic-based films to the students. They also have a positive overall attitude towards Islamic films. Majority of the students love to watch movies. Therefore, if Islamic values are uncalculated in the movies, then it is possible to propagate the knowledge on Islam to the students so that there will be good understanding of Islam as a universal religion and as the official religion of Malaysia. They have positive attitude towards all the items except for “I prefer to watch faith-based movies alone”. Therefore, it is possible to incorporate the issue of family, friendship and community inside the Islamic-based films for the youth to watch. The impact of Islamic-based films is also acceptable, as the students slightly agreed/agreed to most of the items. In this case, through films youth are more tolerant to other religions and to the other races. This creates the possibility of peace and harmony in the nation. Yet, the students are not totally convinced on the change in them. Therefore, the production houses and Islamic authority should try to keep track of and monitor the production of the Islamic-based films.

Overall, there is a positive weak relationship between impact change and perception but a moderate positive relationship between impact change and attitude towards Islamic films. Nonetheless, the relationship between perception and attitude towards Islamic films is moderate positive. Using a partial correlation analysis, it is found that the relationship between perception and impact change has been reduced, that is, the relationship is negligible. Therefore, attitude is mediating between perception and impact change. In addition, impact change is being predicted by attitude towards Islamic films. This is supported by the hierarchical regression analysis. Hence, Social Learning Theory is supported.

REFERENCES

- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Eu-Kyoung, O. L., & Priesyer, M. A. (2014). Who is the help? Use of film to explore diversity. *Journal of Women and Social Work*, 29(1), 92-104.

- Javed Mohammed. (2010). Muslim Cinema: An Introduction. *MyFavoriteReview: Changing the world one story at a time*, 1-20. Available from www.myfavoritereview.com
- Krings, M. (2005). Muslim martyrs and pagan vampires: Popular video films and the propagation of religion in Northern Nigeria. *Postscripts*1.2/1.3, 183-205.
- Lindvall, T. (2004). Religion and film: History and criticism. *Communication Research Trends*, 23(4), 1-44.
- Meyer, B. (2005). Religious remediations: Pentecostal views in Ghanaian video-movies. *Postscripts*1.2/1.3, 155-181.
- Mohd. Yusof Hussain. (2003). Mass media in Peninsular Malaysia. In Mohd. Yusof Hussain (Eds). *Mass media in selected Muslim countries*. Kuala Lumpur: Research Centre.
- Mohd Zamberi A. Malek & Aimi Jarr. (2005). *Malaysian Films: The beginning*. Ampang, Selangor: FINAS.
- Naim Ahmad . (2011). *Filem Islam: Satu Pembicaraan*. Shah Alam: Uni-N Production Sdn. Bhd.
- Rosmawati Mohamad Rasit, Md. Salleh Hj. Hassan, Mohd. Nizam Osman, & Muhammad Sham Shahkat Ali. (2012). Relationship of viewing Islamic based films with pro-social personality among teenaged audience. *Malaysian Journal of Communication*, 28(1). 107-120.
- Smets, K. (2012). Connecting Islam and film culture: The reception of *The Message* (Ar Risalah) among the Moroccan diaspora. *Participations: Journal of Audience & Reception Studies*, 9(1), 68-94.
- Suria Hani A. Rahman, Mazni Buyong, Mohd Faizal Kasmani & Noor Adzrah Ramle. (2010). Religious theme in film. In Mazni Buyong, Nur Kareelawati Abd Karim, Sofia Hayati Yusoff & Suria Hani A. Rahman (Eds.). *Portrayal of Islam in the media*. Nilai, Selangor: USIM, pp. 182-190.

ICSSAM-448

**Negotiated Order between Writers and Readers: A Symbolic Interaction
Perspective on Chinese Pnline Literature**

Xiaoli Tian and Michael Adorjan

The University of Hong Kong and The University of Calgary

xltian@hku.hk

Introduction

A curious phenomenon has recently emerged within Chinese cyberspace – the production and consumption of online literature. Every day millions of netizens in China either write or read online literature. Compared to the West, online literature in China is different in two aspects. First, the large supply of literary works and an ever-increasing number of readers. The producers of online literature are largely unknown amateurs instead of professional or established writers, and are able to attract large numbers of readers (Zhang 2011). Up to December 2010, there were 195 million users of Chinese online literature; many of them loyal readers. Their loyalty is not only reflected in the fact that they spend time on reading and commenting, but also invest considerable amounts of real money (CNNIC 2010). Second, the content and format of the literary work produced are different. In the West, online literature is mainly hypertext or experimental forms of literary production, such as multiple authors producing non-sequential writing-text or one text composed of multi-media contents (Shacklefor 2005; Hayles 2001; Landow 2006; Chen 2011). In China, however, conventional pop culture, especially popular fictions dominate in online literature (Cui 2011, Li 2012, Ouyang 2011; Ma 2011).

In contrast to the vast quantity of online literature and the huge market and profit in this industry (Li 2012), many have observed the poor quality of online literature. It is commonly held, by both researchers of this phenomenon (mostly scholars of literary studies) and online readers themselves that with few exceptions, the quality of online literature in China is poor, or at least not exemplary (Ouyang 2011, Cui 2011; Ma 2011). For example, many stories are repetitive and extremely lengthy, with simple plots and stereotyped characters (Ouyang 2013; Ma 2011). Many of them are not even finished (Li 2012). Then, the puzzle is, if the quality of online writing is not great, or poorer than traditional literature, why are they able to attract so many readers? In this paper, we will examine this puzzle of why there are so many readers of online fictions produced by amateur writers in China.

It has become axiomatic for interpretive sociologists to underscore the processes through which people actively construct, challenge and negotiate meaning in social life. Yet, symbolic interactionists have just started to take seriously the impact of the internet, arguing that the ideal typologies of ‘offline’ and ‘online’ are increasingly ephemeral (Fernback 2007). In this paper we apply an interactionist framework to examine interactions between readers and writers of online literature in China. We advance the argument that these interactions, focused on the goal of producing ongoing and open-ended fiction, are best understood from the interactionist negotiated order paradigm.

We argue that the internet has changed the interactional mode between authors and readers found in traditional literature. While traditional literary production is a lonely process, or an interaction between publisher and the author, now it becomes a dynamic interaction between author and readers. Because of the characteristics of the online settings, the writers and the readers of Chinese online literature are drawn into a dynamic power relationship in which the writers are worshipped by the readers, but at the same time they are under considerable pressure to give readers what they want. There is constant negotiation between the writers and the readers. The readers are highly engaged in the online literature not only because of the stories, but because the reading process has become a unique experience, in which they have the power to influence both the development of the story and the fate of the writing (whether the story can become a successful one in terms of attracting more attention and making money).

In the following, we will first provide an overview of symbolic interactionism, especially as it relates to the internet and ‘cyber sociality’, followed by a focus on the negotiated order paradigm. We will then present data collected online. Focusing on the ongoing interaction and negotiated order between authors and readers and the impacts on the content and format of the outcome (online fictions), we conclude that the power dynamics and negotiated order between the writers and readers of online literature provide an explanation to this seemingly puzzling phenomenon.

Negotiated order, symbolic interaction and the internet

This section proceeds by outlining the general tenets of interactionist theory and negotiated order specifically, followed by interactionist examinations of online sociality generally. The section ends by suggesting the importance of considering online and related offline interactions as negotiated orders which highlight how power is dynamically contested and rendered.

Influenced by an earlier foundation of American pragmatism, symbolic interactionists examine the processes through which meanings are ascribed by social actors and the ‘lines of action’ through which power and agency are articulated, especially through language (Mead 1962 [1934]; Blumer 1969; Maines 2001). Interactionists often pay particular attention to the notion of agency at the level of micro interaction (Goffman 1961). This emphasis is influenced by the desire to counter versions of positivist sociology that often presume a more deterministic model of how power operates over and above individuals. Interactionists also address the perennial theoretical question of social order; i.e. how the agency/structure equation is played out in practice. A key concept here is the notion of “trajectory”, or the examination of how experienced phenomenon evolves over time, and the interactions which contribute to its evolution (Strauss 1993: 53). When considered over time (cf. Mead 1932), it is the trajectory of interactions involving “multiple actors and contingencies” which “may be unanticipated and not entirely manageable” (p. 53) which pinpoint the hermeneutic interactional dynamics undergirding wider social contexts and structures that may appear obdurate and omnipotent.

It is here that the concept of negotiated order applies best. Developed by Anselm Strauss and colleagues based on ethnographic research of two psychiatric hospitals in the early 1960s, the perspective has been subsequently applied largely to the study of organizations. As Maines (1982: 269) describes: “It is through negotiation...that the organizational structure is able to operate, and thus negotiation [is] seen as important for understanding stability as well as change”.

The negotiated order framework, then, stresses how “social orders are forms of activity” through which disagreement and conflict produce novel trajectories of action that perpetuate both stability and change (Strauss 1993: 254, see especially chapter 11; Strauss 1978; see also Munch 1994). It may be surprising, given the potential of the framework to be applied to innumerable social worlds and spaces, that subsequent to its original formulations it has largely been applied to traditional organizational contexts (see Fine 1984). More recent studies have examined, for instance, doctor-nurse interactions in a general hospital (Allen 1997), and maximum security prisons (Thomas 1984). Some studies have branched out beyond organizations per se, applying the negotiated order framework to, for instance, Swedish university cost allocations (Modell 2006), hostage negotiations (Donohue and Roberto 1993), policing practices (Meehan 1992), the United States’ General Accounting Office’s audit reporting process (Basu et al. 1999) and the ‘desexualization’ of encounters at public swimming pools (Scott 2011).

While the negotiated order framework has yet to be applied to studies of cyber sociality, symbolic interactionists have begun to advance theoretical and empirical insights. Scholarship has largely focused on questions of online self, identity and community, extending the Thomas theorem to argue “when people define the virtual as real, it becomes real in its consequences” (Gottschalk 2010: 513). Studies have examined the cooperative activity which renders meaning in virtual communities, underscoring the agency of participants to appropriate virtual spaces in novel ways not necessarily intended by their designers (Johnson et al. 2010). Importantly Robinson (2007), addressing the processes involved in ‘cyber-selfing’, examines how expressions are textually ‘given’ and ‘given off’ among Goffmanian front and back stages. New questions have also emerged. Fernback (2007: 66), for instance, argues “scholarship would benefit from a considered turn toward the nature of commitment in online social groups – how commitment is symbolically formed online; how commitment to online social relationships is manifested in everyday life; or to what extent the meaning of commitment to group is enacted in the online sphere.” The notion of community online is treated as a sensitizing concept by de Koster (2010: 554), who analyzes the “visual imagery” of online forums, arguing that meanings found online are best understood by relating them back to offline experiences.

Adding further to this theoretical toolkit, Zhao (2005) addresses the dynamics of ‘telecopresent’ interactions, involving situations where “individuals are electronically linked together while physically separate in different locations” (p. 390). He distinguishes between three types of telecopresent others: people not known at all, people known both offline and online, and people only known online (p. 391). The third category involves becoming familiar, over time, with people who are putatively strangers and perhaps even not recognizable offline. Yet Zhao found ironic how impactful the ‘virtual stranger’ can be. Quoting Simmel (p. 392, 1971: 145), he illuminates how the virtual stranger may become a close confidant who “receives the most surprising revelations and confidences . . . about matters which are kept carefully hidden from everybody with whom one is close [offline].” Emancipation from corporeal copresence seems to place even greater emotional emphasis on the thinner virtual strands of communication between people otherwise considered strangers.

In this paper we advance empirical knowledge of a particular virtual community - readers and writers of online Chinese literature, and apply a negotiated order framework to understand the particular dynamics of this community. In particular, we explicate the agency readers have to influence fiction writers to produce story lines in line with the desires of an online fan base. We also address the attempts by writers - largely strangers to fans beyond their identity as quasi-famous or famous fiction writers - to influence the demands placed upon them by their fans.

In terms of the goal - a finalized production of online fiction - Mead (1938) notes “the ‘end’ affects (as a condition) the formation of a line of action, but taking overt action is likely to bring about changes in the end” (quoted in Strauss 1993: 55). The interplay and trajectories of interactions render the lines of action between fans and writers a process of negotiated order.

In a study of a comparable group - online fans of American soap operas - Baym (2000) shows how one of the main appeals of watching soap operas is not just the content itself, but the chance to engage with other fans to discuss and debate plot lines. The online medium is still relevant for imposing restrictions on the form the interactions take, but, as Baym argues, “from a practice perspective, the key to understanding online and audience communities is to focus on the communicative patterns of participants rather than on the media through and in response to which members coalesce” (p. 5). Our focus in this paper explores the micro dynamics of another sort of fandom - those invested in online Chinese fiction. Both fans and writers participate in a unique interactional dance involving the ongoing revision of stories in line with continual permutations of negotiation, a subject we explicate following our discussion of methodology.

Data and method

To understand writer/reader interaction in Chinese online literature, we combine four years of online ethnography with content analysis of online posts.

Since 2009, the first author has been conducting online observations. She visited all the major literary websites in China, such as “Huang Jin Shu Wu”, “Rong Shu Xia”, “Hong Xiu Tian Xiang”, “Qi Dian Zhong Wen Wang” and “Jin Jiang Wen Xue Cheng”, to observe the ongoing interaction between writers and readers. On average she spent five hours per week on those websites, and read both the famous and less well-known fictions produced on those literary websites. She read work that had been finished, followed by those half way done, and witnessed those started from the beginning. She witnessed how writers adjusted their writing plans according to readers’ feedback and participated in the online discussions between writers and readers and among readers. She also joined various online discussion groups to spectate readers’ discussion of online fictions.

Second, she contacted the administrators of those websites via instant messaging to find out about their organizing structures, such as how to get signed as a professional writer for a website, the reward system for writers, how do readers reward a particular writer or fiction, the criteria for designating certain chapters visible to VIP members only, and the process for adaptation of online content into paper books or movies, etc. This information provides the online context of writer/reader interaction.

Third, based on the online observation data, we selected episodes of writer/reader interactions and conducted content analysis of those exchanges. The examples we show here are from the main literary websites in China. Most of them are from famous online fictions, but we include some less famous ones as well. All quotes are produced verbatim.

Taken together, these three types of data reveal the interactional process between writers and readers in this unique online setting. They allow us to understand how the online context influences the power dynamics between writers and readers, and the consequential influence on the content and format of the final products.

Characteristics of online writer/reader interaction

To understand the process of interactions between writers of online fiction and their fans, we need to identify three main characteristics of online production of fictions: Instant feedback, instant payoff and networked audience.

Instant feedback

Once uploaded to the Internet, a work can draw instant responses from readers. The interactive nature of the Internet provides freedom for the readers to provide instant feedback. Interaction takes place easily among writers and readers. Traditional literature can never compare with online literature in terms of readers' participation. Writer-to-reader communication is immediate, free and perceptible. Here is an example related to a story about a girl who became rebellious because her parents treated her and her younger sister unequally:

(1) Writer, 2009-12-28, under chapter 10; 11:09:46

"Book one has been finished. Posting of Book two will start tomorrow.

Besides, I'd like to know more about you, the readers of this story. Could you please tell me your age? And the parts of the story where you sympathize most with the characters? Or the parts you most dislike?

Thank you!"

(2) Reader, Momo: mark:2; 2009-12-28, 12:10:52; under chapter 10

This is so true! If you have two kids in one family, you need to treat them equally.

(3) Emily001aaa: mark: 2; 2009-12-28,12:10:21; under chapter 10

Probably the younger sister is jealous!

(4) Little 11: mark: 2; 2009-12-28, 12:01:12; under chapter 10

Sending a lot of flowers to the author.

(5) Noname 2009-12-28, mark: 0; 11:29:46

Well done! This is exactly how a child felt when ignored by parents and teachers.

(6) Reader "Xiao Xun", mark: 2; 2009-12-28, 11: 25:59; under chapter 10

"I was born in 1983. What impressed me most is that all teenagers' first romance is surprisingly similar."

From these exchanges between the writer and her readers, we see that the writer is trying to communicate with the readers about their experience related to what she was writing about and received immediate feedback from many readers. The readers expressed their appreciation of her writing and thanked her for her work. Such instant feedback is related to the unique online writing process. Online fictions usually come out part by part, making it convenient for readers and writers to interact in time. Many writers expressed that comments from readers motivated their writings and it is conventional for writers to ask for more and longer comments.

Instant payoff: monetary and non-monetary payment for the writers

Not only do online writers get instant textual feedback from their readers, some of them are able to receive instant payoff: either monetary or non-monetary payment from the readers.

For monetary payoffs, there are many different forms. Most online fiction writers' income comes from digital publishing. For an ordinary online fiction, the first a few 100000 words can be read for free¹. When the number of views or subscriptions reaches a certain number (varies for different websites), it could be transferred to a VIP club by website editors through a contract between the writer and the website. After that readers have to pay 0.2 - 0.6 yuan per thousand words to continue reading. This income will be shared between the writer and website. Writers can take 50%, sometimes even 100% of the proceeds. Apart from that, to encourage writers and attract readers, some websites have rewards for those writers who post every day. For example, they get paid a fixed monthly salary as long as they update a certain number of words daily.

Another way to earn money for a writer is to get rewarded by readers. Some literary websites allow readers to give money directly to specific writers, while the amount of money varies. Readers may also send gifts (in the form of online points) to the writers to show their appreciation of the work. Readers' points can be purchased from the website. There are cases of readers giving two thousand or even hundreds of thousands of yuan (RMB) at a time.

¹ As we will discuss later, online fictions tend to be extremely long. The shorter ones are around 200,000-300,000 words. It is usual to be as long as 2-3 million words.

Finally, established online writers can have their works published as paper books or adapted into movies or TV dramas and profit from royalties of selling. Editors of literary websites search for promising writers and sign contracts with them to gain the royalties of their books or adaptations. Editors then seek for off-line publishing or adaptation. Many readers would buy the printed books even after reading the novels online. They need to pay around 20-30 RMB (around 5 USD) per book and many fictions have multiple volumes.

Because of the reward system, it is possible for some writers to making a living just by writing fictions online. They are called professional online writers. Some even become millionaires that way. However, the majority of online writers are still not paid by money.

There are two million registered writers on literary websites, among whom around 100 000 have benefited economically (CNNIC 2010). Most in fact never get paid anything, holding other full-time jobs and write as a hobby (Li 2012). For those writers, non-monetary payoff provides the most important motivation for their writing. Non-monetary payment refers to the comments, the ranking, and online appraisals in various forms that readers give to writers. What they expect to get is higher ranking and more recognition from the readers. Those fictions that get high ranking will be recommended by the website editors to anyone who visit the website, and therefore become much more visible and accessible than others.

Networked audience

Another major characteristic of online literature production is that readers are networked rather than scattered. This telecopresence (Zhao 2005) is also facilitated by the Internet as a communication platform. In the online venue, reader-to-reader communication is also instant, free and perceptible.

Online writers don't usually finish the whole story at once, providing updates daily or weekly. This encourages followers to read regularly. Professional online writers usually post two to three chapters per day. One chapter is around 3000 words long and the sum will not exceed ten thousand words. In this way, readers have to check for updates daily, and reading becomes an interesting routine activity. After fans read the newest chapter, they may leave messages to express their feelings and opinions, send virtual 'flowers' as presents for encouragement, and urge writers to provide updates more frequently. With long-time interactions like reading, pushing, praising and posting comments, readers gradually develop a close relationship with writers and other readers through impressions 'given' and 'given off'. Many readers become huge fans through this process.

Such online interactions engender intimacy between writers and readers, and it is a reliable way for writers to win over their die-hard fans. For many readers, the reading process becomes an online party with other readers. For example, if some writers post a new chapter every day at 12:00 am, some readers would gather online a little bit before that and discuss with each other about both the stories and their own life. Because there are many others involved in the same telecopresent practice, the “waiting for update” turns into an online gathering or festival for the readers. As expressed by one reader, “there was a time when I fell for one piece of online fiction. Everyday [sic] that writer post the latest chapter at midnight, so we meet up online around that time, write messages to discuss story plots or express our excitement on BBS [bulletin board system]. It (BBS) is like a small community, fans are like friendly neighbors. Waiting for the update gradually becomes a must-do everyday. For us it is an irreplaceable part of our [sic] life” (Li 2012). In the process of waiting for updates, readers transform post boards into online communities where they could bond and share with each other.

It seems that by participating in online reading, worshipping, commenting and discussion, the readers form a sort of collective effervescence on the Internet. They appropriate the reading experience into a venue for them to bond with each other. In Durkheim’s (1912[2003]) discussion of collective effervescence during religious rituals, physical copresence is necessary. However, recent empirical evidence challenged the importance of physically copresent others (Zhao 2005) and scholars began to redefine copresence as “the *perception* of mutual entrainment between actors, where entrainment is the mutual synchronization of three components: attention, emotion, and behavior” (Campos-Castillo and Hitlin 2013). The Internet makes it possible for collective effervescence to be formed despite the physical and temporal separation of the participants. The venue provides a reservoir for participants’ sentiments because of its recordability and accessibility.

Apart from commenting on literary websites, online readers also discuss specific fictions in public online forums like Baidu Tieba and BBS. Topics of discussion include book rankings and reviews. Readers supporting different characters fight with each other in their comments. Even after the fiction is finished, it is still open for instant online discussion. Anyone can access the webpage, along with comments on the BBS. These comments often influence later readers’ opinions. Some might just read the comments and stop reading the fiction they originally intended to read. The results of such discussions are considered as a part of readers’ choices, and applied by writers through various ways.

Power dynamics between writer and readers and the influence on the content

In this session, we will show how the settings of interaction influence the interaction, especially the power dynamics between writers and readers.

Writers are worshipped

It is undeniable that writers are worshipped by readers. The idolization of online writers is quite obvious (Cui 2011). The writers are addressed by readers as “big big (Da da).” The relationship becomes personal with high loyalty and strong attachment. Here is an example of interaction between an online writer and one of her followers:

Chu Xiang Yun, Bo Cheng Ai Qing Gu Shi, chapter 44

<http://www.jjwxc.net/onebook.php?novelid=405136>

(1) Reader "iamsnoopy", rating 2/2, 2013-02-10, under chapter 44

"Known from news tonight that northeast America was attacked by snowstorm and I'm a little bit worried. Hope everything is good with you and your family. Today I came here to say happy new year to you when I happened to find this sequel. Haven't read your story for a long time. Wish you a happy new year and good luck."

Writer's reply, 2013-02-11

"I found this post when I was checking new comments. I was deeply touched!

Thanks snoopy for your kindness. Everything is fine with my family. Electricity supply wasn't cut off this time. Schools were closed on Friday and all after-school activities were stopped.

...

Dealing with snowstorm is the winter routine activity for northeast America. As long as electricity supply is fine there's no problem.

Wish you a happy new year! May everything is fine with you!"

This writer is known for writing a time travelling fiction on a popular literary website and she currently lives in NYC, US. A couple of years after she finished her story, she still got this greeting from her reader. The above quote shows that once emotionally invested, the fans could be very loyal. Fans show their supports of their favorite writers not just by writing comments and praises, but sometimes even by giving them real money in the forms of online points, fighting with anyone who criticizes the writers or their work, as well as establishing various online groups to worship the writer.

Readers' power over writers

Because of the instant feedback and payoff, as well as the fact that readers are networked, the readers of online literature have power over the writers in various ways.

Firstly, instant feedback provides the most important motivation for writers. Because writers don't choose to publish their whole stories, if they do not get enough positive feedback from their readers, they would stop writing, or abandon current writing projects and start new ones. This leads to enormous amounts of unfinished stories.

Writers are aware that positive feedbacks from readers sustain their productivity. Some writers actively ask for more credits in all forms from the reader (adding to favorites, commenting, sending flowers and other forms of online credits, joining the writer's own online discussion group, etc.). Some writers constantly ask for more votes or higher ranking. They feel warranted to do so especially when they update more chapters or words. There is a constant bargaining of power between writers and readers. When writers deliver more content, they have relatively more power.

At the same time, this power is negotiated; it is tethered to agency from readers to control writers and the writing process, as we will show below. Due to the instant payoff system, readers have huge influence on the fate of the writing. Those fictions which end up with higher rankings will be recommended by the website administrators to its visitors, thus becoming more visible and more likely to make a profit. The number of views and the ranking by readers are the most important factors that determine whether the writer will keep writing. In addition to sending online credits to their favorite writers in different forms, some readers even try to manipulate the ranking by lobbying among other readers. For example, some readers would encourage other readers to vote for their favorite work so that it could have the most recommendation tickets of that month.

Third, because readers are networked, they form a collective which places pressure on writers to give them what they want. While writers are worshipped by readers, they are at the same time whipped by the same group. Readers urge them to update more content, or more frequently. Readers feel like the writers need to pay back their loyalty by updating regularly and frequently. This appears to exist as an unwritten agreement between readers and writers. The readers become angry when writers fail to deliver expected updates. This could be illustrated with an example. Dang Nian Ming Yue is famous and one of the most successful online writers who wrote about the history of Ming Dynasty of China. Starting from the year of 2006, he wrote his book "The Stories of the Ming Dynasty" online. He usually updates every day on his blog during weekdays but no updates on weekends. When he does not update, he leaves a leave of absence message on his blog.

Leave of Absence (2009-03-12 21:42:24)

Dear Friends,

*Lots of things pile up today, so I'm afraid I can't post an update. **Please allow me** to take one day off, and tomorrow everything will go back normal.*

Thank you for your understanding.

Ming Yue

2009-03-12[Emphasis added]

Comments:

Reader 4: Anonymous user from Sina, 2009-3-12 21:59

You have my support, Ming Yue. If you feel like having a break, do it.

Reader 10: watcherdrj, 2009-3-12 22:01

Objection! I have been waiting here all night!

Reader 15: Anonymous user from Sina, 2009-3-12 22:03

No need to write a leave of absence, just update a little bit more everyday. Each day only a tiny bit has been posted, I can't read them enough!

Reader 16: dgs2, 2009-3-12 22:04

Update one more chapter tomorrow.

Reader 19: chenping0808, 2009-3-12 22:08

*I feel like Ming Yue hands in more leave of absence these days, is it because of your work or the side effect of fame? If it is the latter reason, I think you should think twice before you do it next time. Please finish *The Stories of Ming Chao*, **don't fail your readers**. [emphasis added]*

Reader 28: Anonymous reader from Sina, 2009-3-12 22:28

Just when I start to love it... Here comes the leave of absence AGAIN.

If you try this at work, watch out for your wages. But of course you can do whatever you want because we are in your territorial. You are the boss, whatever.

Reader 29: Anonymous reader from Sina, 2009-3-12 22:29

Not AGAIN. Darn.

Reader 30: focustom, 2009-3-12 22:30

I totally sympathize. It is not easy to keep a daily base update. We should be grateful, if the writer needs to take some time off, so be it. I'll keep waiting.

Reader 36: Anonymous reader from Sina, 2009-3-12 22:34

Sure he can do this NOW, because he is famous. Back when he was nobody, we were treated like god, he wouldn't dare to ask for a leave of absence.

Reader 44: Anonymous, post through cell phone, 2009-3-12 22:41

Don't make this a habit. It is not good!

From the above responses from his readers, we see that while not all readers were unsympathetic to this plea, many were less so. The posts, displayed in chronological order according to timestamp, further indicate how some readers were consistent in their loyalty to writers despite following a series of pejorative posts. Nevertheless, most readers urged the writer to write more and update more no matter what. Readers become furious and expressed their sense of betrayal when the writer failed to deliver what they were expected to. This expectation is reproduced by individual readers as a social process, but reinforces, over time, a wider culture of online writing production. Because of the comments, many writers feel enormous pressure to provide regular updates and express their frustration over not being able to update as often as requested by their readers.

Readers' influence on the content of online fiction

Because of this power dynamic between readers and writers, writers would consider their readership in deciding topics, characters, outline and structure *before* they start writing. They do so to satisfy their readers. Additionally, they would interact often with readers and modify their plans according to readers' feedback during the writing process. Readers put up suggestions to get what they want to read; writers listen to suggestions to satisfy readers. Readers have direct influence on the content of online writings, sometimes against writers' original writing plan. This is best illustrated with the following example:

Chu Xiang Yun, *Qing Feng Chui San Wang Shi Ru Yan Mie*, Book Two, chapter 22

<http://www.jjwxc.net/onebook.php?novelid=192873&chapterid=22>

(1) Writer, 2007-12-20, under chapter 22

"I did have more than one endings for this story, but didn't include this one.

My age, thoughts and wisdom make me reject this one. Although the characters are together, they are not necessarily happy. This is just a superficial "happy ending", which is actually cruel to both female and male protagonists.

Long before I posted the reference of some historical events in this story, I had been trying, step by step, to make you accept the result that was sad but most reasonable. I've done a lot, only to find my failure. Many of you has figured out the ending. But some of those people, who had praised me for reasonable plots, urge or even threaten me to write a "happy together".

*The Spring Festival is approaching and there are all there people asking me to make you happy. **But nobody wants to make me happy.** I was really unhappy!*

When I begin to type this chapter, I did intend to entertain you during festival. However, as I was typing word by word, my writing plan got upset and all I felt is aggrieved.

I suffered a lot writing this story. My life shouldn't have gone through these. I paid a lot but gained little. This is an unjust business to do.

A new year is about to start, so is a new beginning. Perhaps I should value my time and do something more meaningful for myself and my family, using the time I've spent writing this story.

Those you do not want whom to die, have been alive. Those you wish whom a happy together, they do.

When I started the story I hoped to end it within two hundred thousand words. Now there are already that many.

The reason I call this ending 'ending A' is because it's not the one I planned.

Wish you a happy life!" [emphasis added]

Here the writer was forced to write multiple endings for her fiction due to the requests from readers. The writer was forced by readers to provide a happy ending, though her response above reveals much reluctance and protest. As someone who has been writing online and interacting with her readers for a while, she was drawn into a relationship in which she felt an obligation to entertain the requests of her readers.

Reader-oriented writing is indeed an important reason for online fictions' popularity. As Li Xiao Min (Cao Dao Xing Li), the author of online fiction *Zhan Di Lang Yan*, said: "The real difference between web fictions and traditional fictions are the change of people who control the work's fate. While in the past editors had the final say, now readers do. In a sense, instead of satisfying editors or literature magazines, now writers try to satisfy readers directly"².

A more salient problem than providing happy endings is that writers are forced to stick to very specific genres because they need to attract the attention of readers within a short time. Genre fictions are the mainstream content of online literature in recent years. In the online fictions of 2011, the most popular genres are fantasy, time-traveling, and historical romance. None of these top ten genres are realistic fictions. Genre fictions are attractive to readers and writers find it easier to make a profit by formatting their stories in this genre. However, genre fictions' characters, plots and structures are all based on stereotypes. The literary quality is not emphasized by either writers or readers. Writers only desire the satisfaction of readers, to get in the top charts and maximize benefits.

Another tendency of online fictions is to be extremely lengthy. It is uncommon for an online fiction to have 2-3 million or more words. Some writers spend a few years updating one story. Because readers are involved in online literature not for the content of the stories, but because they get drawn into this interactional process, writers are urged to write long stories. Since long fictions are updated daily, their readers rely more on them than shorter ones.

² http://www.cnr.cn/gundong/201206/t20120628_510054844.shtml

Many readers would hope to read new posts regularly. The longer the story, the more likely for the fiction to attract more followers and to make a profit. One person who claims to be an online writer said this in an online forum: “As long as you write enough words, it doesn’t matter how suck you write. The readers swear and threaten to leave but they never really quit reading it. [...]”³ _

However, writers do not just strictly follow the advice for story lines from their readers. They are also expected to provide unexpected plot twists to surprise the readers. Readers try to predict the upcoming story and post their answers online, while writers make up some unexpected turnarounds as a surprise. It is a dialectical, interactive writing process (Cui 2011). As a result, many digital fiction writers do not begin with a well-structured plan, and even if they do, their original thoughts can be greatly altered in response to readers’ criticisms. For example, one writer posts this on her work: “There are lots of twists and turns coming, I wonder if they are what you have speculated⁴.” She already knows that the readers are discussing the possible turns of the story and she wants to surprise her readers with unpredictable changes to story plots. This interactional process becomes akin to an intellectual game between readers and writers who are always negotiating what is going to happen next in online fiction. While writers need to deliver what the readers want to some extent, they also need to demonstrate their creativity by providing unexpected plot developments. At the same time, these developments await further approval from readers.

In summary, we show that because of these characteristics and interactional dynamics, online writers and readers are engaged in constant negotiation and form a power dynamic in which the writers are worshipped and whipped at the same time. This power dynamic sustains both the writers and readers, making the production of online literature possible, but at the same time forcing the writers to stick to certain genres and write long stories. Most importantly, writers have to change their original plots according to the responses from readers, to both satisfy readers’ requests for happy ending and to provide surprises to fulfill readers’ desire for creativity. In this sense the development of story plots involves a negotiation involving not only the plot but a wider awareness context of writer biography and situated contexts (cf. Strauss 1964).

³ <http://bbs.tianya.cn/post-funinfo-2702071-2.shtml>

⁴ <http://novel.hongxiu.com/a/201358/2366057.html>

Discussion and Conclusion

In this paper, we show how cyberspace has changed the interactional mode between authors and readers regarding the consumption of traditional literature. While traditional literature production is a lonely process, or an interaction between publisher and the author, now it becomes an interaction between the author and the readers in which the writers are both worshipped and whipped by the readers. The writers and readers constantly negotiate various aspects of the stories, including their content and production, e.g. how frequently to produce updates, the nature of the turning points of the story, the fate of the protagonists, and how many credits (ranking, votes, points, etc.) the work should get. Readers become engaged in online literature not only because of the stories, but because they are drawn into a relationship in which they have power over both the writers and the work produced. Through the application of the negotiated order framework of interactionism, we are better able to understand the empirical puzzle of why such online literature has become so popular.

We contribute to symbolic interaction by showing how the interactional settings can change the power dynamics between actors. The Internet as a venue of interaction has its own characteristics that are different most obviously from face to face encounters. While it allows the online producers to have easier access to a wider audience, it also ironically subjects writers to the whims of the numerous readers online. It is impossible for writers to be immune from nor ignore the often visceral responses from their fan base. This finding shed light on how power is operated during interaction in social settings other than face-to-face, where for example features of the physical environment and physical presence of social actors contributes to power dynamics and definitions of the situation. But within the realm of online literature, where such physical infrastructure does not exist, power structures are signaled by other indicators, such as the amount of words published, and the order and content of posts.

Another theoretical payoff lies in the discussion of online community. Online fan base communities and subcultural communities has been discussed by many (for example, Williams and Copes 2005; Baym 2000; Koster 2010). They focus on the influence of online participation on the identity formation of those users. However, the case of online literature in China is different because in this community, the producers meet the consumers directly. We emphasize how the production has turned into a participatory process in which the readers influence the outcome in all aspects.

This is an exploratory study of an emerging new phenomenon which leaves several questions for further research. First, while it seems that writers and readers are constantly negotiating in an open-ended fashion, preliminary empirical evidence suggests that it is the readers who have more power over the nature and production of online literature. However, further interview data is required to explore the subjective understandings of the strategies by the participants of this form of interaction, i.e. why readers read those fictions online and the embeddedness in their offline life. Along this line, we also need to know which authors are more likely to write, why this is the case and under what conditions. Further, how is this consumption online impacted by the digital divide and those without access to the technological knowledge needed to provide agency to readers.

Another major question that we are not yet able to answer is why online fictions are popular in mainland China rather than other parts of the world. Some might suggest the explanation of escapism (Li 2012), but it is still not sufficient to explain why netizens in mainland China tend to choose this form of escapism. Nor does this explanation illuminate the Chinese fan base for online literature that extends around the world. In this paper we hint that it might have something to do with the fact that readers enjoy their power, such as voting and lobbying similar to what citizens would have in a democratic society. But further research is needed to support this potential explanation. Overall, more data is required, including macro level data regarding the scope of online Chinese literature and assessments regarding the quality of the work produced so far, and micro level data from the writers and readers' own accounts.

Bibliography

- Allen, D. (1997) 'The nursing-medical boundary: a negotiated order?,' *Sociology of Health & Illness*, 19(4): 498-520.
- Basu, O., Dirsmith, M. & Gupta, P. (1999) 'The Coupling of the Symbolic and the Technical in an Institutionalized Context: The Negotiated Order of the GAO's Audit Reporting Process', *American Sociological Review*, 64: 506-26.
- Baym, N. (2000) *Tune In, Log On: Soaps, Fandom, and Online Community*, California: Sage.
- Blumer, H. (1969) *Symbolic Interactionism: Perspective and Method*, Englewood Cliffs, NJ: Prentice-Hall.
- Campos-Castillo, Celeste and Steven Hitlin (2013) 'Copresence: Revisiting a Building Block for Social Interaction Theories.' *Sociological Theory*, 31(2): 168-192.
- Chen Dingjia (2011) 'Preservation and Innovation in Online Literature: A Brief Discussion', *Social Sciences in China*, 32(1): 129-145.

- CNNIC 2010. *Report on users on online Chinese literature, December 2010*. China Internet Network Information Center.
- Donohue, W. & Roberto, A. (1993) 'Relational Development as Negotiated Order in Hostage Negotiation', *Human Communication Research*, 20(2): 175-98.
- Durkheim, Emile (1912 [2003]) *The Elementary forms of religious life*. Malden, MA: Blackwell Pub.
- Fernback, J. (2007) 'Beyond the diluted community concept: a symbolic interactionist perspective on online social relations', *New Media and Society*, 9(1): 49-69.
- Fine, G. (1984) 'Negotiated Orders and Organizational Cultures', *Annual Review of Sociology*, 10: 239-62.
- Glaser, Barney G. and Anselm L. Strauss (1964) 'Awareness Contexts and Social Interaction.' *American Sociological Review*, 29 (5): 669-679.
- Goffman, E. (1961) *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*, New York: Doubleday.
- Gottschalk, S. (2010) 'The Presentation of Avatars in Second Life: Self and Interaction in Social Virtual Spaces', *Symbolic Interaction*, 33(4): 501-25.
- Hayles, N. Katherine (2001) 'The Transformation of Narrative and the Materiality of Hypertext,' *Narrative*, 9 (1): 21-39.
- Johnson, M., Hyysalo, S. & Tamminen, S. (2010) 'The Virtuality of Virtual Worlds, or What We Can Learn from Playacting Horse Girls and Marginalized Developers', *Symbolic Interaction*, 33(4): 603-33.
- Koster, W. D. (2010) 'Contesting Community Online: Virtual Imagery among Dutch Orthodox Protestant Homosexuals', *Symbolic Interaction*, 33(4): 552-77.
- Ma Ji (2011) 'Online Writing in the Course of Discourse Transformation: A Review of Ten Outstanding Online Novels of the Past Decade.' *Social Sciences in China* 32 (1):166-181.
- Maines, D. (1982) 'In Search of Mesostructure', *Journal of Contemporary Ethnography*, 11(3): 267-79.
- Maines, D. (2001) *The Faultline of Consciousness: A View of Interactionism in Sociology*, New York: Aldine de Gruyter.
- Mead, G. H. (1932) *The Philosophy of the Present*, Chicago: Open Court Publishing.
- Mead, G. H. (1962 [1934]) *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*, Chicago: University of Chicago Press.

- Meehan, A. (1992) "I Don't Prevent Crime, I Prevent Calls": Policing as a Negotiated Order', *Symbolic Interaction*, 15(4): 455-80.
- Modell, S. (2006) 'Institutional and negotiated order perspectives on cost allocations: The case of the Swedish university sector', *European Accounting Review*, 15(2): 219-51.
- Munch, R. (1994) 'Negotiated Order: Anselm Strauss', pp. 219-230 *Sociological Theory: Development since the 1960s*. Chicago: Nelson-Hall.
- Landow, George (2006) *Hypertext 3.0: Critical theory and new media in an era of Globalization*. Baltimore: The John Hopkins University Press.
- Ouyang Youquan (2011) 'Chinese Literature's Transformation and Digital Existence in the New Century,' *Social Sciences in China*, 32 (1):146-165.
- . 2013. 'Reflections on online literature,' *Study & Exploration*. 211(2): 122-125.
- Robinson, L. (2007) 'The cyberself: the self-ing project goes online, symbolic interaction in the digital age', *New Media & Society*, 9(1): 93-110.
- Scott, S. (2011) 'Reclotting the Emperor: The Swimming Pool as a Negotiated Order', *Symbolic Interaction*, 32(2): 123-45.
- Shackelford, Laura (2005) 'Narrative Subjects Meet Their Limits: John Barth's "Click" and the Remediation of Hypertext,' *Contemporary Literature*, 46 (2): 275-310.
- Strauss, A. (1978) *Negotiations: Varieties, contexts, processes, and social order*, San Francisco: Jossey-Bass.
- Strauss, A. (1993) *Continual Permutations of Action*, New York: Walter de Gruyter.
- Thomas, J. (1984) 'Some Aspects of Negotiated Order, Loose Coupling and Mesostructure in Maximum Security Prisons', *Symbolic Interaction*, 7(2): 213-31.
- Williams, J. Patrick, and Heith Copes (2005) 'How Edge Are You?' Constructing Authentic Identities and Subcultural Boundaries in a Straightedge Internet Forum,' *Symbolic Interaction*, 28:67-89.
- Zhao, S. (2005) 'The Digital Self: Through the Looking Glass of Telecopresent Others', *Symbolic Interaction*, 28(3): 387-405.
- Zhang Yongqing (2011) 'Reflecting on Online Literature,' *Social Sciences in China*. 32 (1): 182-190.

ICSSAM-959
Poetic Analysis of the Postmodern Poster Designer - Visual Poet - Gunter Rambow

Ying-Yu Hsu^a Dr. Li-Hsun Peng^{b*}

^a Graduate School of Design, National Yunlin University of Science & Technology
ying6yu@gmail.com

^{b*} Department of Creative Design, National Yunlin University of Science & Technology
lihsun@gmail.com

Abstract

Postmodern refers to an era of liberal and with many possibilities of free expression. Until now, people have more opportunities to get information from diverse sources. Poster is one of the earliest communication tools, which is still very popular and has been widely used in our modern society. The contemporary of creative posters evolved constantly, and most of them have the similar goal to catch people's eyes and attention. Therefore, being visually stand out from most of the visual creative works is the great challenge for most of the poster designers. In this research, we are investigating a Postmodern poster designer – Gunter Rambow, from his works offers people a possible way to understand the indefinable Postmodern design. By analyzing this unique design style of a visual poet – Gunter Rambow, we will explore how he transformed the signs he collected into visual symbols concretely. From his poster works, people perceive the unique poetic beauty from the visual perspective. This research by using the Visual Literacy as the main methodology, we will then analyze the degrees of the information and signs, in hope to offers alternative viewpoints convey to the audiences.

Keywords: Postmodernism, Visual poet, Gunter Rambow, Poster design, Visual Literacy.

1. Introduction

1.1 Research Background & Motivation

Since I have a strong interest in poetry, I choose it as my graduation work topic in my solo exhibition. The content of my works consisted of layout design of self-selection poetry, related products design, and display design. By this experience, I was triggered off my interests in the relationship between both visual and poetry. Design is a process of problem solving, and the main point that we are discussing in this research is if we can keep the image containing the sense of freedom as well as rhythm when a poet creates a poem, but also

conveying things specifically. In Europe, there is a kind of designer, who emphasizes their personal value of art, and communicates the information with the audiences, combining these two goals smoothly. In this research, we are going to talk about Gunter Rambow, one of the “Visual Poet” who is popular during the 60s-90s.

1.2 Research Question

We listed four research questions based on the above research Background & motivations:

1. Analyze the Visual Poet - Gunter Rambow’s work and try to define him in the Postmodern design?
2. Explore how could Gunter Rambow make his work be appreciated and stand out in the time changing?
3. Discuss besides of the poetic feature, if there are other specialties in Gunter Rambow’s work?
4. Apply to the Visual Literature theory to discuss if his poster works could convey information without words.

1.3 Research Goal

By this research, we look forward to find out how a poster could convey the messages to the audiences by the designer’s own experiences, so the audiences could get the information and decode it. In the other hand, we try to figure out how the designer could communicate with the audiences lively as well as specifically by his highly free way to design his works and present his personal value of art as the basis. Last but not least, we will understand how people could know one of the multidimensional Postmodern by this primary investigation of Gunter Rambow.

1.4 Limitations

In this research, we focused on the 60s to 90s, the “visual poet division”, during more than a century poster design history. We will discuss the cases of this division, analyze this special style of poster design, and try to find out how it could remain his value during the time changing.

2. Literatures

2.1 Postmodernism

Douglas Kellner (1996:10) said: “...strictly speaking, we don’t have an only one theory of Postmodern, but we have lots of diverse theories.” Postmodern is one of the most important cultural thought, which covered a wide range, such as architecture, philosophy, literature and design, all of them discuss their own definition of Postmodern. The origin of Postmodernism is from the Western, and it was spread to the world by globalization. Owing

to the distinct features in the different field of this developing postmodernism, we can't define a clearly position and even have some conflicts when we are defining it. The Postmodern characters of "decenterment" and "Indeterminacy" broaden the possibility to discuss it. The start of Postmodernism differs from people, but the most common saying is 1970.

1960 is the beginning of Postmodern, and the "Visual Poet" that this research is going to talk about will start form the 60s to 90s as the primary study of Postmodern.

2.2 The definition of poster

"Poster is an important tool of conveying information, for "post" means "declaration", "bulletin", and "post on the pillar." That's why it was called "poster"(Chen, Wen-Yin, 1997). There are so many ways to communicate all the information to the audiences, and poster is the most widely use. As the quickly changes in technology, it have more and more different ways to convey things with people. Poster stands out from all the new kinds of media which catches the hearts and eyes of the audiences represent the importance of it. The most crucial and difficult mission for poster designer is to attract people's eye and convey information at the same time.

2.3 The expression of poetic features and imagery

2.3.1 Poetic features

According to the survey, a 18th Italian scholar Giambattista Vico(1987:222) mentioned: "Poet in Greek represents creator. Writing a poem is a create activity. By the research of early stage of human culture, Vico generalized an early stage developing form, which is poetic thinking. This poetic thinking referred to interpreting things by the own imagination of the poet. Lin, Xue-ling(2007:1) regarded the feature of poetic thinking is the author measured things by his/her own thought, and transferred his/her subjective emotions into objective things, making the objective things become the carries of subjective emotions. The transferring way of mixing the emotions and objects matches with what Chien, Cheng-chen(1999:141, 328) had mentioned about "imagery." Thinking is the way how a poet understands the world, and the imagery contains "look at" and "look through", while "look at" shows the attributions of the object, "look through" is the visual existence of the object. People always "look at" the object, and then "look through" the object, which shows a little bit of the deep meaning of philosophy.

In conclusion, Poet uses his/her own experiences to feel everything and to talk with the world. Poets apply his/her unique perspective and the special way of talking to create and combine the objects and what they feel. The same objects could be very distinct because of the different experiences of the audiences (poets). A standard process of reading a poem, which

Chien, Cheng-chen mentioned about is “look at” what the poem wants to express literally, and “look through” what the deep meaning the poet really want to say. This poetic feature could apply to visual communication field as well as poster design, and we will analyze how the designer conveys information by this poetic way in this research.

2.3.2 The representation of imagery

“Imagery is an art look which made by the emotional process of how a subjective person creates an objective thing.....imagery represents what it is.”(Chien, Cheng-chen, 2010) When it comes to imagery, Chien, Cheng-chen (2012) used an example from a movie: In the script, the line “From now on, she lives for a boring rest of life.” “Boring” is easy to say, but a director must use visual imagery to present to the audiences. In the creating process, the poet and the poster designer does the same thing, which is transform what they think by their personal experiences into those imageries to the audiences.

2.4 Visual Poet

“From 60s to 90s, poster designs in Europe are full of the flow and the freedom.....it got strong artistry, these graphic designers formed the core power, and were defined as “Visual Poet” style (Wang, Shou-zhi, 2000: 345).” In Europe, no matter in the poster or graphic design field, they cared much about the combination of art and design, for design id how the designers express their value of art. In this research, we will take one of the “Visual Poet” – Gunter Rambow as example, and discuss as well as analyze him further more.

2.4.1 Gunter Rambow

Gunter Rambow is one of the most influential design masters of “Visual Poet”, who was born in Germen 1938. Gunter Rambow, Japanese designer Shigeo Fukuda (1932-2009), and American designer Seymour Chwast (1931-) are regarded as the top 3 designers in the world. Chen, Feng-Juan (2004:55) mentioned: “Gunter Rambow always design everything based on photography.....many things which didn’t exist in the real world turn to be very powerful in his works.....it contained “freedom” and “poetic feeling” in his works.” In the deisgn process of Gunter Rambow, he always applies surrealism styles to combine to irrelevant things together, and create the poetic metaphors. Chien, Cheng-chen (1989:54) referred to that: “Due to the metaphor and transformation of “language of poetry “, the “complications” prolong the life expectancy of literature.” We can thus tell the similar elements of the design style of Gunter Rambow and the essence of poetry. Therefore, the visual conveying features of Gunter Rambow become the typical “Visual Poet Style.”

2.5 Visual Literacy

When talked about the saying John Berger, Chen, Yu-Ping (2012:22) mentioned: “The evolution of human language started from visual identity, then went to dialogue, reading, and writing.....it was more frequent to us visual literacy than any other way of learning.”

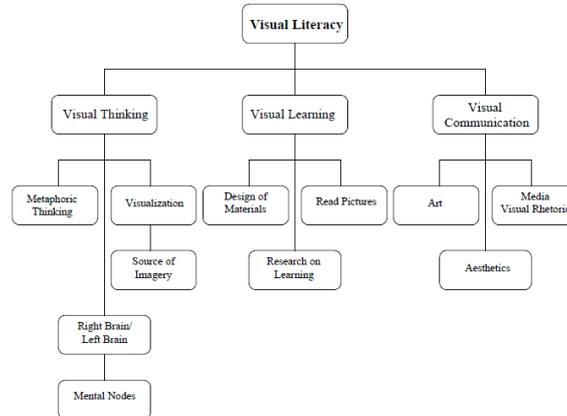


Image1: the Learning Relation Diagram of Visual Literacy

Data source: Brizee (2003)

3. Research methods, steps, and analyses

3.1 The methodology in this research

3.1.1 Phenomenography

We applied Phenomenography, which developed in 1970, as our main methodology in this research. The term “Phenomenography” was composed by Greek words “phainonmenon” and “graphein”. Marton et al. mentioned: “Phenomenography is a qualitative research method, and is to analyze things by observe the phenomenon.”

Phenomenography is the derivatives of phenomenology. Peng, Li-Hsun et al. (2011) mentioned: “Phenomenography is the way to study the variations, the difference between variation and divergence is variation needs to be experience and understand. By this methodology, we will focus on the following 2 topics:

(1) Analyze the serial posters in the audiences’ point of view: Clarify the design feature of “Visual Poet”, and discuss what are the reasons made the special design style. Apply the Phenomenography to analyze how the “Visual Poet” combined the poetic features into his own works, and how could him stand out from the never-ending changing era.

(2) Discuss how Gunter Rambow could use the unique surrealism feature to keep his work high aesthetic as well as highly visual attraction. By this research, we will then analyze the poetic principle of the “Visual Poet”, furthermore, to discuss how he could achieve the aim of poster in a practical way.

3.2 Application of research theories

3.2.1 Aesthetically formal principle

The aesthetically formal principle contained the beauty of order, repeat, gradient, balance, rhythm, proportion, contrast, harmony (Hsiu-Hsiung, Wang, 1990; Yong-Fu, Qiu). In this research, we compared those works which applied aesthetically formal principle to discuss if they could keep highly artistic quality by using it.

3.2.2 Visual Literacy

John Berger (2006:681) said: “Seeing comes before words”, this sentence represented human are visual animal. When we receive words and images, we will keep decoding it in our brains, and the visual symbols will usually convey faster and will stay in our mind longer.

In our daily life, human are surrounded by lots of information, and we trained our Visual Literacy ability constantly through the process of receiving and seeing. Brizee(2003) divided the training process of Visual Literacy into visual thinking, visual learning, and visual communication. In this high speed transmission of information era, everybody could not escape to learn Visual Literacy.

4. Case studies of poster design and visual poet

4.1 Analyze the poster works of visual poet

4.1.1 The artistry of visual poet’s works

In chapter2 we talked about literatures, and we found out the features of visual poet are composed of artistry, freedom, and the rhythm of poetry. Some of his works didn’t use any words, and thus led him to a high value way to create a poster. Poster became an art object instead of a tool of communication, and it can be stored in art gallery and museum. Ying-Lin, Chang (1993:102) regarded poster is not a most efficient communication tool, but is a medium that can keep its function as well as artistry. From all of the high-tech media competition, poster is a best choice for designers to show what they got. Therefore, designers could present their sense of art by applying poster as a good way to speak out.

4.1.2 Compare the aesthetically formal principle and the works of visual poet

In chapter3, we applied the aesthetically formal principle to analyze the poster works of Gunter Rambow as following:

(1) The beauty of repeat: Use the same or similar images or colors to construct the regular or irregular repetitive arrangement, so that it could generate a vivid and fresh visual beauty. In image 4.1, it is one of the advertising posters of “S.Fischer Verlag” publisher; the series of the works used no words but vigorous images to impress the audiences.

In the middle of the poster was a book, and there were lots of people around the book. We could guess if the people were the readers or the author who alive again by the book. No

matter how, the poster did impressed the audiences, and it conveyed the usability and the sanctity of it, all of these represent its success.



Image 4.1 : Gunter Rambow poster design

Data source: <http://www.vision1.cn/people/designer/200611/20061103235309.html>

(2) The beauty of contrast: Compare two units, and generate the strong visual vibration. In image 4.2, it applied chiaroscuro to design this poster. Ying-Lin, Chang mentioned: “Chiaroscuro is one of the most important aesthetically formal principles, and it built up a three-dimensional space as well as a focal point. In image 4.2, Gunter Rambow put a book in the middle; make space by using the contract of chiaroscuro of the book and of the background. The red bottom color and white word message stood out from the black and white book and background.



Image 4.2 : Gunter Rambow poster design

Date source: <http://www.vision1.cn/people/designer/200611/20061103235309.html>

4.1.3 The poster works of visual poet and surrealism works

The surrealism works are usually build up with fantasy, strange, and dream-like circumstances, and it composed of many unrelated things together into a surreal illusion.

In the Gunter Rambow’s work image 4.3, he conveyed the spirit of the publisher directly by using a metaphor of book and knowledge, the full light window represented the wisdom light that could lead us to the knowledge palace.



Image 4.3: Gunter Rambow designed for “S.Fischer Verlag” publisher

Data source: <http://www.vision1.cn/people/designer/200611/20061103235309.html>

4.1.4 The relationship between the non-words posters of Visual Poet and Visual Literacy

There is a special feature of Gunter Rambow’s works, which applied for non-words but images to convey the information. In the works 4.4 to 4-9, Gunter Rambow designed the advertising posters for “S.Fischer Verlag” publisher, and the works impressed the audiences by its strong visual images but without any words. The words is indispensable to the audiences, by taking off all the words bravely, the audiences could focus on what is the most important message the designer wants to show us.

Whai-En, Chen (2008: 27-28) suggested that, there are two kinds of western language, the first one is based on speaking; the second one is images. Therefore, poster design applied both kinds of the language; the high-level designer could use only the image language to emphasize the key point of the work by eliminating what is unnecessary.

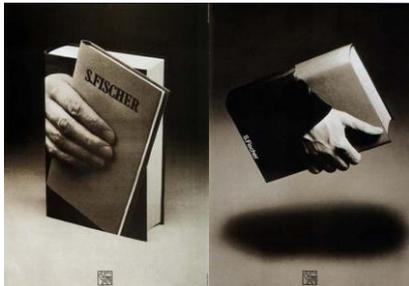


Image4.4 (left), Image 4.5 (right): Gunter Rambow designed for “S.Fischer Verlag” publisher

Data source: <http://www.vision1.cn/people/designer/200611/20061103235309.html>



Image4.6 (left), Image4.7 (right): Gunter Rambow designed for “S.Fischer Verlag” publisher

Data source: <http://www.vision1.cn/people/designer/200611/20061103235309.htm>

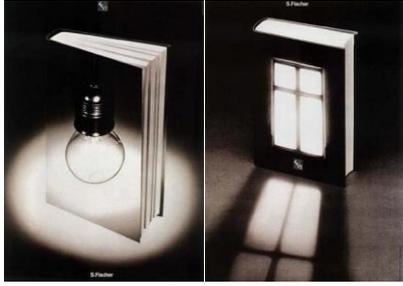


Image4.8 (left), Image4.9 (right): Gunter Rambow designed for “S.Fischer Verlag” publisher
Data source: <http://www.vision1.cn/people/designer/200611/20061103235309.html>

5. Conclusion

The way we learn Postmodern is like the blind people touch an elephant; everyone grabs the different part of it, but all of them are Postmodern. By analyzing the works of Gunter Rambow, we understand a small part of the ambiguous Postmodern design, and regarding it as one possible way to know it.

After discussing in the fourth chapter, we realized that, when designers try their best to design posters, it will become an art work like poetry and painting. Owing to the high value of art, Gunter Rambow thus becomes a classic that keeps his position during the change of time.

We verified the success of the visual presentation which applied the aesthetically formal principle through analyzing Gunter Rambow’s work. The reason why the aesthetically formal principle is the golden rule for people who seek for beauty is because every works which applied to the principle could always keep the sense of beauty in the visual art history.

Owing to that Gunter Rambow could visualize the poetic features into his works freely; he thus got the title of “Visual Poet”. If a poster designer regards his work as an art work instead of a tool of marketing, the result will be a big difference, and Visual Poet – Gunter Rambow proved the possible way how the posters could be design into art.

By the designing his works in the surrealism way, he built a strange atmosphere in the images. In the unreal, miraculous images, designer’s concepts become concrete in the audiences mind, and it could not only convey the imagination of poetic beauty, but also communication the messages successfully.

Therefore, we suggest a different way for designers: taking Gunter Rambow’s example, and learn the attitude when he’s creating works, designing every works as they are an art work, so that the works could stand out and be appreciated forever.

6. References

1. Peng, L., Chen, Y, 2011. *Taiwan's new fabric design – a cultural phenomenon*. 5.
2. M. Nagamachi, 2002. *Kansei engineering as a powerful consumer-oriented technology for product development*, Applied Ergonomics, vol. 33, 289-294.
3. M. Nagamachi, 1989. *Kansei Engineering*. Kaibundo Publication Company, Tokyo. 4.
Wang, Shou-Zhi, 2000. *A History of Modern Graphic Design 1800-1998*. Taipei: Artbook: 345.
5. Wang, Lien-Yeh, 2009. *Le Surréalisme--Traveler in Dream, Unconscious and Realistic Illusionism*. Journal of Art Form, 4-29.
6. Language educational source of Junior High, 2010. *The Definition, Explanation, School, Origin of Imagery*. <http://www.ruiwen.com/news/53556.htm>
7. Fong, Ki-Teun, 2012. *A Study of the Stage Aesthetics of Orlando from Postmodernism-Using 2009 Taiwan's Edition as an example*. National Digital Library of Theses and Dissertations in Taiwan. <http://ndltd.ncl.edu.tw/cgi-bin/g32/gswweb.cgi/login?o=dnclcdr&s=id=%22100NTUA0737006%22.&searchmode=basic>
8. National Taiwan University Online Lecture, 1998. *The style of 20 century*. http://vr.theatre.ntu.edu.tw/hlee/course/th6_520/sty_20c/painting/surrealism.htm
9. Juan, Lu-Yin, Kuo, Chen-Chia, Chen, Si-Cong, Lee, Pei-Ling, Guan, Shing-Sheng, 2006. *Design Methodologies*. Taipei: OpenTech Publish. 3, 5, 13, 14, 43, 140, 159.
10. Lin, Xue-ling, 2007. *The Analyzing Results of Poetry Courses Design Oriented in "Enlightening the Poetic Thinking."* The First Thinking and Creating Academic Conference of National University of Tainan. 1-3.
<http://140.133.6.3/dspace/handle/987654321/7519>
11. Lin, Rui-Lin, Zheng, You-Chao, 2007. *Infusing Idiomatically Visual Imagery Creation with The application of Aesthetically Formal Principle*. Chaoyang Journal of Humanities and Social Sciences 5(2). 95-118.
12. Chen, Wen-Yin, 1997. *Interpretation of Design*. Taipei: Asiapac.
13. Chen, Yu-ping, 2012. *Research on the use of Taiwan cultural elements in bicycle visual decal design*. National Digital Library of Theses and Dissertations in Taiwan. <http://ndltd.ncl.edu.tw/cgi-bin/g32/gswweb.cgi/login?o=dnclcdr&s=id=%22100YUNT5787003%22.&searchmode=basic>
14. Chen, Feng-Chuan, 2004. *The Application of Empathy and Isomorphism in the Poster Design – A Case Study Based on the Poster of Culture*. National Digital Library of Theses and Dissertations in Taiwan. <http://ndltd.ncl.edu.tw/cgi-bin/g32/gswweb.cgi/ccd=8P1iZk/record?r1=1&h1=1>
15. Whai-En Chen, 2008. *Iconography and Iconology: The Meanings and Interpretations of Visual Arts*. Taiwan: And Publish. 27-28.

16. Chen, Tao-Yuan, 2010. *The Application and Research of the Construction of Fractal Images in Poster Design*.
<http://ndltd.ncl.edu.tw/cgi-bin/gs32/gswweb.cgi/login?o=dnclcdr&s=id=%22099NTNU5619026%22.&searchmode=basic>
17. Chien, Cheng-Chen, 1999. *Poetic Mind and Poetic study*. Taipei: Bookman. 141, 328.
18. Chien, Cheng-Chen, 1989. *Language and Literature Space*. Taipei: Hang Publish. 54.
19. Chien, Cheng-Chen, 2012. *Interview Script of Prof. Chien, Cheng-Chen*.
<http://ccsun.nchu.edu.tw/~ccchien/>
20. Taipei Fine Arts Museum, 1993. *Introduction to Poster Design*. Taipei: Editor Publish. 119.

Society & Social Science IV

AV Room

13:10-14:40

Friday, May 9

Session Chair: *Prof. Prisana Mutchima*

ICSSAM-661

Status of Women in India

Raghunath Prasad Saket *University of Delhi*

Gajendra Singh *University of Delhi*

ICSSAM-673

Human Development Policy; the Impact on Peasant Family Parenting on Sexual Responsibility Communication, Uttaradit Province

Phasuk Kaewcharoenta *Naresuan University*

Patcharin Sirasoonthorn *Naresuan University*

Jak Panchupet *Naresuan University*

Prawat Tantipiwattanasakool *Medical Physician Advisory Level Diploma of the Thai Board of Psychiatry*

ICSSAM-680

The Impacts and Pressures of Socio-cultural Changes from Modernization and Capitalism: A Case Destructive Culture of the Boat Racing in Nan, Thailand

Rattanaporn Thongkiew *Naresuan University*

Patcharin Sirasoonthorn *Naresuan University*

ICSSAM-780

Historical Sociological Study on School Excursions and the Sustained Promotion of Tourism

Akimasa Suganuma *Keio University*

ICSSAM-877

Development of Poor Household Food Security through Institutional Strengthening and Social Capital at Jeneponto District

Sitti Bulkis *University of Hasanuddin*

Imam Mujahidin *University of Hasanuddin*

Rahmawaty A. Nadja *University of Hasanuddin*

Rahmadanih *University of Hasanuddin*

ISEPSS-2112

The Study of the Life Satisfaction of the Older Adults in the Use of Computer Application

Chen-Chi Wei

Minghsin University of Science and Technology

Cheng-Yi Huang

Minghsin University of Science and Technology

ICSSAM-661
Status of Women in India

First A. Raghunath Prasad Saket

University of Delhi

Email- raghunathjnu@gmail.com

Second B. Gajendra Singh

University of Delhi

Email- equality.gs@gmail.com, southafricags@gmail.com

Abstract

Women constitute half of total population but fact related to their development and their participation in different walk of life is shocking. India is so-called largest democratic country in the world but in terms of gender inequality it lagged behind even to Nepal (one of the monarch neighbouring country of India). Manu's Code of law related to women and religious sanction to those codes are causative factor to downfall of women in India. Constitution of India has brought some positive changes related to representation and empowerment of women. But Manu's code of law comes in direct conflict with the constitutional mandate of equality to all and results into the violation of fundamental rights of women in India.

Index Terms- Caste system, Human Development Report (HDR), Inequality, Political participation, Representation, United Nations Human Development Report (UNDP), and Women.

I. Introduction

With 1.2 billion Populations, India is much heterogeneous country in the world. 1.2 billion Population is divided into 6743 castes and sub-castes groups, of which 2399 castes belong to other backward castes (Mandal Commission, 1991). Caste is the major factor that affects all walks of life of Indians. In Caste system Brahmins are the gainer and remaining caste people are looser. Ex-Untouchables/ Shudras are worst suffer of castes system. Base of the Castes system in India is Manu's Code of Law (Manusmriti). Women as a whole across castes are worst suffer of Manu's code of law as it denied all basic and fundamental rights to women including the right to education (Deshpande, 2012). This paper is divided into 4 parts.

First part of it presents selected Manu's codes that restricted women and consequently resulted into the downfall of their position. Second part presents constitutional provisions to protect and safeguard the interest of women. Third part presents present status of women in contemporary India. And last part presents conclusion of paper.

II. Part-1 Manu's code of law and Women

Manu, the first law maker in India made codes to govern the behaviour of individual and society. Here I mention some selected quotes of Manu's Code of Law to show the relationship between the Code's instructions and suffering/ misery of women in India, as quoted in Olivelle, 2006¹

Manu's code of law regarding independence of women and their duties towards husband:

- (a) Even in their own homes, a female- whether she is a child, a young woman, or an old lady- should never carry out any task independently. As a child, she must remain under her father's control; as a young woman, under her husband's and when her husband is dead, under her sons'. She must never seek to live independently. She must never want to separate herself from her father, husband, or sons; for by separating herself from them, a woman brings disgrace on both families.
- (b) A good woman should always worship her husband like a god. For women, there is no independent sacrifice, vow or fast; a woman will be exalted in heaven by the mere fact that she has obediently served her husband. A good woman, desiring to go to the same world as her husband, should never do anything displeasing to the man who took her hand, whether he is alive or dead.

Manu's code of law regarding the character of women and guarding the wife:

- (a) Drinking, associating with bad people, living away from the husband, travel, sleep, and staying in the houses of others – these are the six things that corrupt women. They pay no attention of beauty, they pay no heed to age; whether he is handsome or ugly, and they make love to him with the single thought, “he is a man.” Lechery, fickleness of mind and hard-heartedness are innate in them; even when they are carefully guarded in this world, therefore, they become hostile towards their husbands.

Manu's code of law regarding the Selection of bride and marriage-

- (a) A wise man must not marry a girl who has no brother or whose father is unknown.
- (b) A man who takes a girl after she has reached puberty shall not pay a bride-old, for the father has lost his ownership of her by frustrating her menses.
- (c) A 30 year old man should marry a charming girl of 12 years, or a 18-years old, a girl of 8 years –sooner, if his fulfilling the law would suffer.

¹ For detail see Patrick Olivelle, 2006, *Manu's Code of Law: A Critical edition and translation of the Manava Dharmasastra*, Oxford University Press, New Delhi.

A husband marries a wife given to him by gods, not from his own desire. He should always support that good woman, thereby doing what is pleasing to the gods.

Manu's code of law as regard to Son belongs to whom:

- (a) It is acknowledged that a son belongs to the husband; but scripture is divided with respect to the rise – some argue for the man who fathered the child, others for the “owner of the field.”
- (b) Between the seed and the womb, the seed is considered dominant for the offspring of all creatures is marked by the characteristics of the seed (Olivelle, 2006).

Above mentioned Manu's codes related to women were guiding principles in society and were being followed for centuries. These codes reduced to position of women in society from a human being to a commodity.

III. Part- 2 Indian Constitution and Women

The Constitution is the first document that provides equal opportunities to all citizens, including women. Before the implementation of the constitution, equal opportunity was limited to elite who are few in number. The soul of Indian Constitution is to create and develop equality, liberty and fraternity among all citizens.

Article 15 of the Constitution says: “The State shall not discriminate any citizen on grounds of religion, race, caste, sex and place of birth or any of them.” Further, the same Article in Sub-article (3) lays down that “Nothing in this Article shall prevent the State from making special provisions for women and children.”

Para IV of the Constitution, dealing with the Directive Principles of State Policy, states that the State shall ensure health and economic interests of women and other deprived groups of society. Articles 39, 42 and 44 refer to certain principles to be taken into account by the State in policy formation which increase the health and economic welfare of women and other deprived groups. Thus, the Constitution provides equal opportunities to all citizens irrespective of their religion, race, caste, or gender. Furthermore, it instructs the State that health and economic interests of women and other unprivileged groups of society must be ensured (Constitution of India, 2005)

IV. Part-3 Present Status of Women

Before 1990s the aim of development was to increase national income and per capita income, but since 1990s it has shifted from increase in income to increase in well-being of people after the release of Human Development Report by the UNDP. Thus, I have taken three parameters of developments: 1. Education, 2. Health and 3.

Income, as the same parameters were used by the UNDP to prepare human development index. Apart from these three parameters I have used 2 additional parameters. Thus, I have used 5 parameters namely, 1. Education, 2. Health, 3. Income, 4. Representation of women in Politics and, 5. Representation of women in Public administration, to assess the current status of women empowerment in India.

1. Education - Education is the core criterion for development. Human development report uses literacy rate to measure educational standards of people. According to Census 1901, female literacy rate was 0.6 percent as against 9.8 percent of men. It increased to 65 percent for women and 82 percent for men as per 2011 Census reports.

2. Health - The HDR uses mortality rate to measure the health of the nation. Similar to the HDR, in this paper we have also used the infant mortality and child mortality as indicators of health.

(a) Infant mortality rate: The IMR, that indicates the rate of deaths of infants less than one year, was 44 for boys and 39 for girls as per NFHS report for 2005-06. (b) Child mortality rate: The CMR, that covers the rate of deaths of children between 1 and 5 years, was 9 and 12.4 for boys and girls respectively for same period².

3. Economic criteria - Generally, women are engaged in households' activities like fuel collection, cooking, caring the children etc which come under the category of non-economic activities. Some economic activities are also considered masculine (like army, driving the vehicles, ploughing the field in rural India and many others) and women are excluded from those activities. Thus, this results in lower employment rate for women as compared to men.

In India, women also get lower wage rate for same work as compared to their male counterparts³. Thus, less gainful employment opportunity coupled with lower wage rate result in less earning for women as compared to men.

Recently, Human development report 2013, for the year 2012 has been released by the UNDP. As per that report India's position is 132 in gender inequality which is worse than Pakistan (123), Bhutan (92), Nepal (102) and even Bangladesh (111)⁴.

² NFHS, 2005-06, Ch. 7, pp. 184

³Detail may be seen in Ravi Shrivastavs and Richa Singh, Rural Wages during the 1990s: A Re-estimation, Economic and Political weekly, Vol. XLI, No. 38, September 23, 2006.

⁴ For detail see, UNDP, Human Development report/ gender inequality, 2013, pp. 18

4. *Political participation of women-* Political participation of women can broadly be categories into three categories. A. Representation of women in Lok Sabha, B. Representation of women in Rajya Sabha and, C. Representation of women in Union Cabinet. (A). *Representation of women in Lok Sabha-* The first Lok Sabha (1952) had only a paltry 4.4 percent representation of women. For the first time in Indian history, representation of women in 15th ongoing Lok Sabha has crossed double digit (ongoing Lok Sabha has 59 women, 11 percent women members, out of 543 members in the house). (B). *Representation of women in Rajya Sabha-* in 1952 there were 16 (7 percent) women lawmaker out of 219 total members in Upper house of the parliament. It has increased to 26 (10 percent) in 2011 out of 245 total members in the house. (C) *Representation of women in the Union Cabinet-* In 1985, there was only one woman Cabinet Minister out of the 15 Cabinet Ministers. At present there are only three women cabinet ministers namely, Kumarisailja, Smt. Chandresh Kumari Kathoch and Girija Vyas.

5. *Representation of women in administration-* The final result for 2010 civil services exam was declared by the UPSC in 2011-12 and out of 921; total selected candidates' only 203 (22 percent) women were selected.

Women constitute nearly half of the population. However the facts related to their representation in the top rung of democratic institutions, which are seen as foundation of women empowerment (such as the Lok Sabha, the Rajya Sabha, the cabinet ministers) are shocking. Their representation in these institutions should be seen with respect to restrictions imposed upon them by the Manu's Code of law. Representation of women in these democratic institutions has become possible through constitutional provisions.

Similar to abysmal representation of women in politics, 99 percent illiteracy among them in 1901 indicates restrictions on them from acquiring knowledge. Further continuing disparity in the level of male-female literacy rate shows the influence of those codes in contemporary India too. But achievement in literacy rate from 0.6 percent in 1901 to 65 percent in 2011 for female has become possible due to constitutional provisions and govt. declaration of universal education to all.

V. Part- 4 Concluding Remarks

Till the beginning of the 19th century, Manu's Code of Law was influential in society and women were excluded from almost every sphere. Thus, high degree of illiteracy, high incidence of child marriages, frequent cases of Sati system, meagre participation of women in academics, administration, and politics till the beginning of the 20th century are the result of Manu's Code of Law and its effect of forceful exclusion of women from all spheres.

However, male-female differences (lower literacy rate, higher child mortality rate, lower employment and wage rate, lower representation in politics, lower participation in academics and administration,) in contemporary India are the result of continuing influence of Manu's code of Law. At present, traditional Manu's Codes of Law directly comes in conflict with constitutional rules and results in the violation of fundamental and human rights of women.

References

1. Bakshi P.M., The Constitution of India, 6th Ed. Universal Law Publishing Company, Delhi, India, 2005, Part-III and IV, pp. 26-27 and 85-90.
2. Census of India 2011, Primary Census Abstract Highlight, Office of Registrar General, New Delhi India, 2013, Ch. 3, pp. 46-52.
3. Deshpande Ashwini, The Grammar of Caste-overlapping Identities: Caste and Gender, 1st Ed. New Delhi, India, Oxford University Press, 2011, Ch. 4, pp. 107-108.
4. Mandal Commission Report 1980, New Delhi, India, Akalank Publications, 1991, Ch-1, pp. 6-7.
5. National Family Health Survey (NFHS-3), Report 2005-06, September, 2007, Mumbai, India, Ch. 7 pp. 184.
6. Olivelle Patrick, Manu's Code of Law: A Critical edition and translation of the Manava Dharmasastra, 1st Ed. Oxford University Press, New Delhi, 2006, Ch. 3, pp. 108, Ch. 5, pp. 146-47, Ch. 9, pp. 190-191 and pp. 194-195.
7. Shrivastava Ravi and Singh Richa, Rural Wages during the 1990s: A Re-estimation, Economic and Political weekly, Vol. XLI, No. 38, September 23, 2006, pp. 4053-4062.
8. UNDP, Human Development Report, 2013, pp. 18.



First A. Raghunath Prasad Saket, Date of Birth: 15/05/1980

Educational Background- MA in Economics 2002 APS University Rewa MP, India

M. Phil in Social Sciences 2003 DAVV Indore, Dr. BR Ambedkar Institute of Social Sciences, Mhow., India

Ph. D. About to complete from Jawaharlal Nehru University, New Delhi, India, did Field work on Caste and Economic Discrimination in India, 2008.

At present he is working as Assistant Professor in the Department of Economics, Satyawati College, University of Delhi, Delhi- 110052. Email- raghunathjnu@gmail.com

Publications- Saket Raghunath Prasad, “Dr. Ambedkar’s view on Social Justice: Challenges,” in Dr. Ambedkar and social justice A national and Global Perspective, 2013, World Focus, Vol. XXXIV, No. 4, pp. 29-31

Karakoti Sudhakar and Saket Raghunath Prasad “Caste oppression, Economic Discrimination and poverty among Scheduled Castes in India,” in Exclusion and Discrimination: Concepts, Perspectives and Challenges, 1st Ed. New Delhi, India, 2010, pp. 81-98.



Second B. Gajendra Singh, Date of Birth- 15/05/1971

Educational Background- MA in History from CCS University Meerut, India, 1996

M. Phil and Ph. D. in History from University of Delhi, India in 2003 and 2011 respectively.

At present he is working as Assistant Professor in the Department of History, Satyawati College, University of Delhi, Delhi- 110052. Email- equality.gs@gmail.com, southafricags@gmail.com

Publications:

Singh Gajendra, “Culture of Common people,” in Culture in Indian sub-continent, 2nd Ed. University of Delhi, 2013 pp. 60- 81

Singh Gajendra, “Use and Importance of e-resources in Education of ancient Indian History, ICOASL, Manila, Philippines, 2013

Membership- Indian History Congress and International Youth Hostel.

ICSSAM-673

Human Development Policy; the Impact on Peasant Family Parenting on Sexual Responsibility Communication, Uttaradit Province

Phasuk Kaewcharoenta

Ph.D. candidate, Faculty of social sciences, Naresuan University, Thailand.

phasuk_k@hotmail.com

Patcharin Sirasoonthorn

Associate Prof. Dr. of social sciences Naresuan University, Thailand.

Jak Panchupet

Associate Prof. Dr. of Political Science Naresuan University, Thailand.

Abstract

This research is used grounded theory, interactive approach, and symbolic interaction theory as her pioneer guidance and appointed teenage moms as the “person in between”. The causal, factors, perception and meaning on communication of sexuality responsibility of agricultural parents and teenagers were investigated. In addition, the data was collected qualitatively among the target group; teenage mothers, husbands, parents, students and local people in Lublae district in Uttaradit Province, Thailand. This allowed exact inferences and interpretation to theoretical foundational development. The author found that: Human development policy on free paid 12 years of education policy was impact on Parenting about sexual responsibility communication from peasant family. The education is the first **parents’** goal **on** child rearing. It was declared as a mean of life achievement. In fact, graduation of each child was symbolized the successful parents. It referred to an ability of parents to fulfill social expectation of rural community. Therefore, the education was applied as the tool for development and creation for opportunities. This social value was perceived and accepted among parents. The reproduction of this information has been long exhibited and perceived by parents through the media, law, public policy, and traditions. **Goal** of life in **the meaning** of parents remained those appeared in traditional period. Most parents supported their child to follow the government educational policies. By this, they expected that their children would be able to receive better opportunities which led to the better work, better future and a solid professional income. In short, **the meaning** of parents’ role was up on the achievement of their Childs’ education. Moreover, roles of fathers and mothers, definition of sexual relations responsibilities, family relationships, discipline and responsibility, awareness of the future risk, awareness and understanding of the physical and emotional changes of puberty, recognition of their potential to act preach about sex were crucial. The factors that affected

their social expectations included values and attitudes of society towards the sexuality of teenagers, patterns and how to handle sexuality in Thai society. The author suggested that more expectation role of parents and a better sexual communication at all level needed to be developed. For an effective care of the teenage moms; society, healthcare systems and mass communication of sexual responsibility should be highlighted.

Key words: sexual responsibility communication, Peasant family, parenting

* Ph.D. candidate, Faculty of social sciences, Naresuan University, Thailand.

** Associate Prof. Dr. of social sciences Naresuan University, Thailand.

*** Associate Prof. Dr. of Political Science Naresuan University, Thailand.

**** Medical Physician Advisory Level Diploma of the Thai Board of Psychiatry

Emphasis:

Thai parents share their social value and attitude towards sex topic that it gives a negative image and offensive when speaking in public or with children or younger people. In fact, acceptability from externalities and sexual preferences with parent roles in communicating sex topic with teenagers are likely to be ignored, especially in father's role. It has shown that fathers seem to be less involved in a child's life, especially when children are becoming teenagers. Nevertheless, the mother's role in sex topic with a son is less likely to be common as well (Wilson., Dalberth, Koo and Gard, 2010, 2004).

Speaking in terms of social environment, this is now a risk factor in the society which may express more chances for teenagers to have unsafe sex. Moreover, it is found that sexual behavior in secondary school students when to have sex at the first time is in some case at the age of less than 10 years old. This is an unprecedentedly social crisis in Thai society.

With more than 5 years experience of researcher in working to solve sex issues in teenager in Lablae district, Utaradit. It is found that essential family factors in which leading to risky behavior are originated from miscommunication between parents and their teenage children. Many surveys have shown that most of parents "never" talk about sex topic with their children. More importantly, they never teach their children of what to do after having sex, particularly in how to avoid having unwanted pregnancy by using condom. This also includes the fact of positive communications about sex topic between them are rarely used.

As a result, it demonstrates that the reason of sex topic's conversations between parents and children who are in secondary school in Utaradit is because parents do not have time to talk with children which leads to lack of closeness and trustworthiness within the family. Consequently, this draws teenagers to want to try and take a risk. Not only that, parents think

it is to point the way to the villain. And, it is not yet a right time to talk which parents themselves are not confident to start. In addition, they feel embarrassed to teach children on how to control their sexual emotion and passion. There are only fewer parents who are willing to explain their children in the topics of birth control, social crisis, social manner, and relationship with an opposite sex friend. While some parents digest information on parents' roles in sex topic communication with their children, many of them also realize its importance of sexual health, relationship with an opposite sex friend, denial of sexual activities, and goals in life (Phasuk Kaewchareonta and others, 2012). From this, it supports the point that nowadays the communication of sex topic is very limited which cannot be applied into good practices to implement safe sex. It signals implicitly that the communication is developed from a denial mindset towards having sex in teenagers such as saying in a textbook that a student's role is to study hard in a period of virginity. This is irrelevant with the actual teenager's behavior that carries an attitude of having sex is normal. However, they do not notice that it affects the status of health, economic, and social (Phasuk Kaewchareonta and others, 2012).

Sexual Responsibility concept is a concept that develops from an anti-HIV organization (Tarshi, 2010; The International Planned Parenthood Federation (IPPF), 2010). It is not only try to empower and develop life's abilities and skills, it also does not refuse the idea of having sex in teenagers. It is believed that there should be a decision making about having sex and not having sex based on responsibilities to expected outcomes to yourself and your partner in the near future. This is not limited to only sanitation or scientific approached, it intends to focus on a better perception and recognition of its outcomes till its effects as well. In addition, it aims to ensure an appropriate life management (Michael R. M., Ches. M.S., 2013) The mechanisms are setting goals in life, analyzing the aftermath effects, having self-esteem, and living safe sex life. These are challenges to parent's role, especially low income parents because accessing information and technology and education are limited. Also, they a limited box of ideas of living their life under the social values which is conservative that having sex in teenagers is a taboo.

Communicating about sex reflects the values of Thai society and the theory of Symbolic Interaction by George Herbert Mead. He said that it is natural for people in a society to act based from a group or social expectation. This is applied to the sexual communication whether it will be practiced or not. Thus, it can explain that parents as members of the society are a vital key to interact physically, verbally, and symbolically about sex topic to their children. Parents are the ones who choose to communicate based on the society expectation and expected expectation within the society. It expresses internalities from social interpretation and prediction towards oneself that a communication will be practiced or not.

There are many researches about how to communication about sex to teenagers in the field, most of them only focus in sex education, life's skills developments and family relationship leading to domestic recognition of sex denial. However, there is not yet a research done by using symbolic interactionism concept to explain communication within the family of low income parents in Thai society. In fact, its value perception and acceptance are the ones to concern from Thai parents leading to avoiding sex topic conversation or choosing to share only bias opinions.

As these conditions of problems, it has made researcher quest for better suggestions that primary education should teach sex topic communication and roles of Thai parents. This is to build a precise understanding of this social phenomenon leading to solutions of teenage pregnancy and the trend of having sex at the early age.

Purpose:

This research aims to analyze the impact on peasant family parenting on sexual responsibility communication in Uttaradit province Thailand

Method:

It is applied from Grounded Theory developed from two social scientists which are Barney G. Glaser and Anselm L. Strauss in mid 1960s by using the study of Social Phenomenology based on Alfred Schultz (1899-1959). The study consists of qualitative research. This research is also collaborated under the process of rooted theory research in which it collects raw data by interviews adapted from symbolic interactionism of George Herbert Mead, 1894-1931. The interviews are done by three target persons which are guaranteed by experts. To find the precise answers of the tool the three target persons have similar qualities. Then, those data are collected again by in-depth interviews with 6 families who have a pregnant child as a secondary school student, mother, and father. The section is also done by non-participated observation in order to analyze and evaluate the coding to categorize and interpret information and at the same time compare them with the hypothesis and explain by theories.

research resulted

The main factors, perception, and meaning of sexual responsibilities communication between parents and teenagers as secondary school students affected on behavior and methods of Sexual Responsibility with teenagers include on important factors are

1. Sexual responsibilities communication meaning of parents on the phenomenon in society perception

This study analysis on **perception** and **meaning** of 12 people parents with a teenage daughter pregnant by In-depth interview on the phenomenon of social overall with sex responsibilities concept.

1.1 Life goal

Education is the first **parents** goal on **child** rearing because the study is a meaning of development and creation for opportunities in the future that parents perceived through the media, law, public policy, and traditions. **Goal** of life on **the meaning** of my parents are support child to get the government policies, create education opportunities which led to the opportunity of work due to a solid professional income and great family on appropriate times.

1.2 The results of analysis expected to arise from sexual intercourse

Parents recognize that current adolescent sexual risk behaviors increased from **pornography** that can be easily accessed. **The effect** of sex in adolescents has led to pregnancy problems and abortion that reported from television continuously. Low income parents means, **The sexual problem** of teenagers in a social are the behavior imitation and contrary with the values **and Thai sex culture**. The meaning of parents role on the sex communication is the prevention of sexual relations before marry.

1.3 The perception of the self value and the others

The parents perceived themselves less valuable and low power bargaining in the relative compared with other social classes that evaluation criteria from other income and social status. The perceived on self value meaning and others are through on the role and function of male, female that are different function in family, men's authority is the head of the family while the girls married is the obey to accept the decision from heads of the family.

1.4 The sexual safer sex live plan

The society of men a chance to mate than women including on sexual intercourse with not them wife. Provides the meaning of life is to have a couple planning sexual safely

The findings concluded that parents perceived social meanings of sexual responsibilities communication charge of responsible on the role of parents. The support on education leading to reduce the gap of social status and create career opportunities, income, family and sexual status under tradition accepted gender's roles in society, family and sex in marriage and having children in the marriage too.

2. The sexual responsibilities communication meaning of parents on community phenomenon perceive

2.1 Life goal

The community accepted on parents role and support attended with the policy of the government. The education system is mean to create opportunities for a better life. The decentralization policy increases the level of community education management. The parents

role is the meaning of who served to children opportunity support to study on the highest levels, create a good future and working hard to earn money is the role of parents who can't refuse too.

2.2 The results of analysis expected to arise from sexual intercourse

The parents knowed about the incidence of teens sex in the community are increasing and lack of family supervision are the cause of the problem. The motivating key factors are pornography can be easily accessed. Giving meaning to anticipated results from sexual intercourse of teenagers is that pregnancy affecting on the end of education and leading up on their own social opportunities in the future, while sexually transmitted diseases are meaning as a sexual risk behaviors. The HIV / AIDS is importance affect on health but do not affect on the education.

2.3 The perception of the self-value and the others

The relationship of the people in the community has been similar value to living together as an equal equality. The external factors of life such as house property car is also aim to promote social creation and social opportunities are the value along with the creation of the value has been accepted by the community in the moral honesty and generosity in the community. The perceived meaning on value of self and others in the community of low income parents are recognized on society, roles, status and relationships with others in the community

2.4 The sexual safer sex live plan

Both of men and women in community have the opportunity to choose a mate when ready for both age qualifications, occupational status but accept the male role who not married have sex with another woman on the condition the coupling fault moral of the community. While the female value celibacy and sex in the marriage. Provides the meaning of life is to have a couple planning sexual safely. Condom use with anyone other not husband or wife

The findings concluded that , low income parents perceived meanings of sexual responsibilities communication is the role of parents to support child to receive education. At the same time, the community recognized the educational policy allowing on teenage pregnancy back to school again, then the community is accepted congress married of teenagers is not obstacle on education and can be accept sexual intercourse in marriage and children in the marriage too.

3. The identity of parents (I) on sexual responsibilities communication with adolescents child.

The role of father and mother on socialization which were caused by the experience that affecting through the perception of meaning and sex with a different role

3.1 Father role

The most of powerful in the family. Sexual responsibilities communication on the father role is the communication that the roles and responsibilities of the female and male. The most of importance is education and gender role of the daughter and the son. The father role on sexual responsibilities communication is the education system that child can learn from the school system And learn from you in acting to teach life skills to children

3.2 Mother role

Be responsible for neatness in the house, household food, teaching children good behavior, care and facilitate to everyone in the family to get happiness and includes roles in the money for the family. Sexual responsibilities communication is the most important goal in the future is the education to create social opportunities, Mothers believe the education system can make learning to teenagers about anything in particular sex and life skills about sex too. Meanwhile, The mother role of the socialization focuses on daughter perceived about sex roles, take care family member, responsibility assignment on house duty, the attitude and belief in the virgin of lady and build on self-esteem. The socialization on the son of mother role is a priority to education, gratitude on the religious condition before marriage. The prevention of pregnancy and sexual life safely was found that the teaching about condoms and the safe sex is very low.

4. Perception of parents role on social expectations. "Me" Sexual responsibilities communication with adolescents

The parents perceived the social expectations on the parents role with a good parents on the creation of learning and society behavior, included the thought and decide to create on social acceptance. Parents can perceived behavior or expression outcast and providing value in a negative way, such as, to talk about sex in public was interpreted as a behavior engages in erotic or obsessed about sex, lack of perceived social manner. The father role is also in the field of behavior expression, such as relationship with especially his daughter not touch the body, because that is the values contrary of society, such as, a hug or sexuality teaching. Talking about sex on a matter of sexual orientation can do in specific groups such as close friends only too.

The perception of society's expectations on the parents role understanding to assess the appropriateness of aging child perceive sex in each phase such as body care, gender roles, including target life and control directed behavior under adoption of cultural tradition society.

Sexual responsibilities communication could not communicate with child because contrary traditional of good young girls also featured on the virgin and have sex supposed on husband in marriage only. The preventing pregnancy communication and safe sex by condom use is meaning that concentrate on sex, social reject then low income parents avoid and refused to communicate with them child.

5. The impact on peasant family parenting on sexual responsibility communication in Uttaradit province Thailand

The responsibilities communication of low income parents behavior described on sexual responsibilities framework as follows

5.1 Life goal

The education of child is the first Importance of low income parents life goal so that the communication are both on verbal communication, body language or symbol aims to child recognize on importance of education for the future as well as having a good stability in life income and the chance of a good family

The positive verbal communication is:

"Study hard be a good child"

"Keep going, I'll cheer you up"

"Learn to passive, I have money to send"

"you are the apple of our eye."

"Are you tired?"

"Now you're pretty up."

"Proud of you."

Body language positive communication :

To embrace, touch, listen care closer

The positive symbol:

For example, in the community of good conduct and inspire

The negative verbal communication is:

"Why don't you do something same the others."

"Why bad children born you Rice consumption why I don't killed you since the unborn"

"Never do anything nice."

"People can do and what you are not."

"A day, keep out the house If you don't study hard, go into the garden and I'll buy the buffalo to raise."

Body language negative communication :

walked away, scowling, condemnation, screaming, loudly, scolded, nonchalantly.

The negative symbol:

Out regulations prohibited

5.2 The results of analysis expected to arise from sexual intercourse

Perceptions of parents on image should be expressed in social role of parents is the role of prevention and control. Communication on the effect of pregnancy is a point that low income parents not communicate with analytical thinking but use of verbal language and body language including the expression of symbols in the prevention of sex.

The negative verbal communication is:

"If pregnant. Don't let me see again."

"Love each other more than their parents?"

"Wants to have a husband? Take your husband not to learn."

"No good but dress who told to dress like this."

Body language negative communication :

walked away, scowling, condemnation, screaming, loudly, scolded, nonchalantly

The negative symbol:

Out regulations prohibited

5.3 The perception of the self-value and the others

Perception of their role in communication to create a sense of self-esteem and the other. The parents attention to the women role Includes the who accepted by society, such as the feminine, leadership but the communication issues to understanding and respect the others include value providing very little. The communication is a focus on childs can survive from current events, such as the study of self - care in daily life.

The positive verbal communication is:

"I'm good at you."

"Now pretty up."

"Proud of you."

Body language positive communication :

To embrace, touch, listen care closer

The positive symbol:

For example, in the community of good conduct and inspire

The negative verbal communication is:

"Have there been any good ? Never do anything nice."

"Behave yourself. Do housework is not clean."

"Don't take my money you get the money from your friend."

Body language negative communication :

walked away, scowling, condemnation, screaming, loudly, scolded, nonchalantly

The negative symbol:

Out regulations prohibited

5.4 The sexual safer sex live plan

Perception of the role of parents in expectation of society found the society that teenage sexual behavior more and more. The parents role as the expectation of society to prevent adolescents sexual behavior indicate on Lady role , leadership and responsibility for education is important. The Sexual communication is express on acceptance **adoption of** sexual intercourse which is most social reject. The communication for safe life planning is denied sexual intercourse of teenagers including rejection risk behaviors too. The adolescents sexual intercourse experienced group. The parents will give priority to prevent pregnancy in order to study go to the target of life but they are lack of supervision seriously because sex in marriage community acceptance. The parents' role can only guiding but not the decision that instead on state unwilling problems.

The positive verbal communication is:

"You learned first. control the birth before I you pregnancy you 'llbe to stop learning."

"I don't know what to do, just say don't have child and take condoms but don't use ."

" just one more week to nearly end.on 2.class you attention to learn and test after birth you went to school will rise. 3 class and not to repeat again I say but you are never listen! "

The negative verbal communication is:

"Go to the man? How to graduate?"

"You don't argue, don't you know"

"Late to the man?"

Body language negative communication :

walked away, scowling, condemnation, screaming, loudly, scolded, nonchalantly

The negative symbol:

Out regulations prohibited, condom

The study was found that **the methods** and low income parents behavior on sexual responsibilities communication on the assessment of social expectations towards the role of parents which expect parents use roles in controlling, monitoring, tracking, customer behavior of teenagers to meet the expectations of society, such as The admission in educational institutions according to the government's policy, behavior and conduct to social acceptance, control and monitor the prevent behavior risk. The difference in each family in communication both positive negative body language and sign language The parents of discrimination in the society expected to occur on the role of parents.

conclusion

The study on causes, factors, methods and processes of communication in sex topic in which it is the responsibilities between low in-come parents and teenagers affecting on sexual Responsibility communication behavior and methods by symbolic interactionism theory as the guideline study was found that The context society and community was importance on the sex awareness, needs expectations the parents role, The important of the target gold raising teenagers and expressive behavior of parents on socialization to achieve the goal in the future. The parenting behavior are different communication in each family that is the low-income parents role on selected for control and track to teenagers lifestyle that corresponds to the society and community expectation on role and behavior under the frame of traditional cultural values of their own communities.

Rejection of society about sexual infidelity included the goal raising teenagers in the education system to a better future as recognition of parents who make role in sexual communication restricted only the importance of education and to deny communication planning safe sex. At the same time the perception from society expression good parents limitation on communication about sex or don't acceptance sex in adolescents that is a guiding behavior of parents to refuse the communication and understanding with the requirements of the sex of the teenagers also Impact on communication behavior both spoken language, body language, and use of symbols have rejected to anti sex communication for both the positive and negative communication too.

The study Discussion

The result indicated that sexual responsibilities communication with low income parent with that are factors from social system, it is important that affect perception Definition and communication behaviors McLeroy et al. 1988 (Winch.P 2012), describes the influence of social risk behaviors of people in society under the theory Social ecology (Social Ecological Model) describe the phenomenon as follows are.

The interaction of people in the society are many levels that influence the expression of behavior according to perception and the importance of on perception the relation on many levels that occur both from self (Intrapersonal) perception from interaction with the social people (Interpersonal) with the enterprise (Organizational) and community (Community), as well as perceived in the government's policy (Public Policy), which can be explain the phenomenon of sexual responsibilities communication of low income parents in society as follows

Thai society expect to the parents role is a good pattern parents under the trust values and attitudes that are accepted in society Including celibacy lady, grateful and support to the most

importance on education systems. The target of public sector on human resources development as the common goals of society in developing countries. The affect on low income parents perception and the role of parents were expectations for raise social status in the future so that the education as the main focus on the importance and role expectation in society duty of the parents

The symbolic interaction theory explained the expression of individual in the meaning of the process of social importance on the identity. "I" and behavior expressed according to the expectations of the society. "Me.". This theory such no described on the view point of social policy conditions, especially studies that examined the target in raising children and the socialization of the parents.

The study shows that the symbolic interaction theory of George Herbert Mead (George, Herbert Mead 1894-1931) can't explain social phenomena to cover the policy factors that lead to the behavior of people in the society and its application in solving the problem of communication about sex in charge of low-income parents with teenagers at the present. which want to design policies to create changes in the structure of society (Gregson.J, et al 2001)

suggestion

To explain the phenomenon, the role of parents in the socialization of sexual responsibilities communication that is responsible for the theory of social ecology (Social Ecological Model). it was found that the influence of social perception and behavior, affecting on the expression of their parents which might be said that the change process is realized. The decision to drive the role of parents in the communication about sex that responsibility to design to create social acceptance of the role of parents in the communication about sex, responsible Including the creation of new meaning to the role of parents in the sexual socialization to accept and comply with the problems at present.

References

The Social-Ecological Model: A Framework for Prevention From

<http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html>

Gregson.J, Foerster.S, Orr.R, Jones.L, Benedict.J, Clarke.B, Hersey.J, Lewis.J and Zotz.K. (2001). System, Environmental, and Policy Changes: Using the Social-Ecological Model as a Framework for Evaluating Nutrition Education and Social Marketing Programs with Low-Income Audiences. Journal of Nutrition Education Volume 33 Supplement 1
Franoeur and Noonan (Associate Editors). (2004). The Continuum Complete International Encyclopedia of Sexuality. USA: The Continuum International

Publishing Group Inc.HAGEN, "Population and Economic Growth," Am. Econ. Rev., June1959, 49, 310-2 7.

Giedd.J.N. (2004). Structural Magnetic Resonance Imaging of the Adolescent Brain. Annals New York Academy of Sciences.1021:77-85.

George H.M.(1967). Mild, Self, and Society. The University of Chicago Press,ltd,London

The International Planned Parenthood Federation (IPPF), 2010. IPPF Framework for Comprehensive Sexuality Education (CSE). retrieved 15 June 2003 from

<http://www.ippf.org/NR/rdonlyres/CE7711F7-C0F0-4AF5-A2D5-1E1876C24928/0/Sexuality.pdf> Updated January, 2010

Wilson.E.K., Dalberth.B.T., Koo.H.P and Gard.J.C. (2010). Parents' Perspectives on Talking to Preteenage Children about sex. *Perspectives on Sexual and reproductive healthg.42(1):56-63*

Winch.P (2012). Ecological models and multilevel interventions. The Johns Hopkins University

World Health Organization. (2010). Teenage Pregnancies Cause Many Health, Social Problems. retrieved 15 May 2009 from

<http://www.who.int/mediacentre/multimedia/podcasts/2009/teenage-pregnancy-20090213/en/> 13 February 2010

ICSSAM-680

The Impacts and Pressures of Socio-cultural Changes from Modernization and Capitalism: A Case Destructive Culture of the Boat Racing in Nan, Thailand

Rattanaporn Thongkiew*

Naresuan University, Thailand

nuna3777@gmail.com

Patcharin Sirasoonthorn

patcharins76@gmail.com

The corresponding author: Rattanaporn Thongkiew

Abstract

This article had two objectives. First, it aimed to understand the history of the traditional boat racing in Nan, Thailand. Second, it investigated the problematic root of contemporary boat racing and lifestyle of local residents. The author initially applied documentary research and together she adopted a survey research for overview analysis during the boat racing process.

She used qualitative research from 9 case studies. 3 focus groups interviewed were carried on with 44 participants. She applied both participant and non-participant observations within 6 competitions. Semi-structured interview guidelines were adopted to investigate 3 groups of social actors namely boat leaders, crews and cheer leaders. The data was later analyzed by using narrative analysis and content analysis.

The author found that: 1) boat racing of Nan was a folk custom which has existed more than 200 years. The Race Boat showed authentic head-prow and tail of Great Naga. The ancestors of these local residents believed that Great Naga was a supernatural power god who could give sufficient rain for a period of time. Therefore, the villagers needed to took Great Naga race boat on the river for worshipfulness when they confronted droughty period. Nowadays, the Race helped not only to preserve the cultural unique, but also to increase the spiritual engagement, cheerfulness and cooperative network among villages and stakeholders. 2) The Race became popular among locals residents as much as among those tourists. It involved large number of people, organizations, and various kind of illegal and immoral activities such as gambling, conflicts, and alcohol consuming. A strong emphasis on modernization and capitalism of the state government repetitively pushed the race into the intensive tourism policy.

This alteration led to a critical situation. It provided dramatic changes to characteristics of the boats as well as its goal. Consequently, the expressive symbolic function to a material reward was replaced by related organizations. Some races boats were transformed to reduce the size of the boat, some ancient images were replaced by the new design that later became a mass popularity feature, such as a smaller head-prow, tail and slim body. To enable the boats to move faster, the villagers spent lump sum of budgets to prepare their race boat. This study found that the estimation of total budget were over 266,660 \$U.S. Each individual village spent approximately 26,000 \$U.S. in 2008. Consequently, many boat racing teams from poor villages were disappointed. They have been discouraged and upset from their defeated. Worst still, the competition generated conflicts among involving stakeholders.

The author highlighted this situation as destructive culture by all stakeholders who were proprietorship of their community culture. The increasing community frustration and pressures from surrounding socio-cultural oppression of the aggressive competition provided tensions in community. Consequentially, the dramatic changes in terms of definition, goal and management process brought 4 major impacts, including the loose of traditional race boat designation, the reduction sense of belonging and the community strength. These not merely employed conflicted among actors but destroying spiritual cooperative network of local villagers. Without rethinking about the existing forms of traditional boat racing, Thai creative culture was rarely happened.

Keyword: Impact and pressures ,Destructive Culture, Boat Racing.

Introduction

Nan Province is located in the north part of Thailand. The local residents have been involved in the traditional boat racing for more than 200 years. (Committee of Nan Unique,2006; Nan Province,1997; Rachain Kurbkum,2006; Yuthaporn Naksuk,2009; Sanguan Choksukawat,1962). Nowadays, the traditional boat racing takes place every year during September and October or November depending on a level of water in Nan River. Many people are happy participated in the boat racing and related activities. In the past, the community had an ancient's imagination of the relationship between the legendary Great Naga and the Great Naga boat. The floating of the boat on the water represented the image of the Naga. As showed in the ancient document: "the overall effect of the decorative pieces is impressive, and from a distance the boat looks indeed like a Naga swimming in the river".(Richard B.Davis,1984)

During the last decade, the boat racing became popular among locals residents and tourists. However, this cultural relativity became recently a critical situation such as too competition and increasing conflict among race boat teams and organizer teams. Furthermore, the author found from the preliminary study that various forms of conflicts of interest, competitiveness, and the emergence of destructive values have become common. These critical situation have been increasingly serious which displayed the result of destructive culture emerged from the boat racing too serious competition (Rattanaorn Thongkiew, 2009-2010).

Objectives

This article had two objectives. First, it aimed to understand the history of the traditional boat racing in Nan, Thailand. Second, it investigated the problematic root of contemporary boat racing and lifestyle of local residents.

Research Methodology

The author first applied documentary research and survey research for overview analysis during the boat racing process. Then, she used qualitative research for investigated depth information. These included 9 cases in-depth interviewed and 3 focus groups of key informants. 44 individual participants from 44 villages which had boat racing teams in Nan province were interviewed and observed. The author applied both the participant and non-participant observations within 6 fields of boat racing competition. The investigation was carried on to reveal the situation and key persons who were involving the racing process. Finally, the author applied semi-structured interview guidelines with 40 cases in 2 social actors namely the boat leaders and cheer boat leaders. 40 cases in social actor namely the crews whose those teams participated in the race were also interviewed. The data was later analyzed by using narrative analysis and content analysis.

Result

The study found that;

1. The boat racing of Nan was a folk custom which has existed more than 200 years. The Race showed authentic head-prow and tail of Great Naga. Their ancestors believed that Great Naga was a supernatural power god who could give sufficient rain for a period of time. Therefore, the villagers needed to took Great Naga race boat on the river for worshipfulness when they confronted droughty period. Nowadays, the Race becomes not only the symbol of their preservation of the cultural unique, but also the empowerment mechanism of spiritual engagement, cheerfulness and cooperative network among villages and stakeholders.

2. Due to the boat racing became popular among locals residents as much as those among tourists, this alteration led to a critical situation. It involved large number of people, organizations, and various kind of illegal and immoral activities such as gambling, conflicts, and alcohol consuming.

3.The rooted of confliction were changing the goal of boat racing from a more expressive symbolic function to a serious competition which focusing on a material reward placed by related organizations. In order to be the winner, some race boats were using various techniques. These included 3 methods:

3.1 Transforming the traditional boat shape to the new design in order to reduce the size of the boat such as a small head-prow, a smaller tail and slim body of the Great Naga boat to enable the boats to move faster. The new design was later became a mass popularity feature. This change provided new form of boat racing which in turn led to new values and social relation of involving actors.

3.2 Hiring expensive professional outside coaches instead of local expert in order to win the race.

3.3 Spending more budgets to prepare their race boat. This study found that the estimation of total budget were over 266,660 \$U.S. Each individual village spent approximately 4,309 \$U.S.to 26,000 \$U.S. in 2008. Consequently, increasing debt and conflicts of interest were common.

Discussion and Conclusion

This study showed that this folk custom has been indicated 3 dimensions of relativity of local residents. It included a strong sense of history, cultural relativity in lifestyle and sufficient economy. Furthermore, this study showed that the dramatic changes in terms of definition, goal and management process brought 4 major impacts. These included socio-cultural changes, economic and health impacts. These impacts were reflecting to involving actors, including the loose of traditional race boat design, reducing the sense of belonging and the strength of community. In contrast to, the new design appeared in few teams, such changes have been significantly increased. This influenced the value as well as attitude of others boat team who wanted to be the winner. The author highlighted this situation as destructive culture. By this, stakeholders who were proprietorship of their community culture were blind to the situation and not recognizing negative impacts.

A strong emphasis on modernization and capitalism of the state government repetitively pushed the race into the intensive tourism policy. This provided the dramatic changes to characteristics of the boats as well as its goal. Consequently, the expressive symbolic function to a material reward was replaced by related organizations. Some race boats were transformed to reduce the size of the boat, some ancient images were replaced by the new design that later became a mass popularity feature, such as a smaller head-prow, tail and slim body. To enable the boats to move faster, the villagers spent lump sum of budgets to prepare their race boat. Consequently, many boat racing teams from poor villages were disappointed. They have been discouraged and upset from their defeated. Worst still, the competition led to conflicts and debts among involving stakeholders.

Suggestion from Research

The author highlighted this situation as destructive culture created by all stakeholders who were proprietorship of their community culture. The situation increases community frustration and pressures from surrounding socio-cultural oppression of the aggressive competition provided tensions in community. Consequentially, the dramatic changes in terms of definition, goal and management process brought 4 major impacts, including the loose of traditional race boat designation, the reduction sense of belonging and the community strength. These not merely employed conflicted among actors but destroying spiritual cooperative network of local villagers. Without rethinking about the existing forms of traditional boat racing, Thai creative culture was rarely happened.

References

- Committee of Nan Unique.2006.*Nan Uniqueness in Brief*.October:111.
- Nan Local Government Municipalitation Office.2004.*The reports of the tradition Boat racing in Nan,Thailand*.August.
- Nan Provincial Administration Organization.2007.*The legend of Nan Tradition Boat racing*,May: 8.
- Nan province.1997.*The report of history of rule in Nan, December*:57-58
- Rachain Kurbkum. 2006. *Boat Racing of Nan More Value*, July:3-4.
- Rattanaporn Thongkiew.2009, 2010. *The report of problem management of the boat racing in Nan Province, Thailand*. The document report, The faculty of Social Science, Naresuan University.
- Rattanaporn Thongkiew.2010.*The report of the situation of the boat racing in Nan Province, Thailand*. The document report, The faculty of Social Science, Naresuan University.
- 2010.*The report of synthesis the situation of the boat racing in Nan Province, Thailand*. The document report, The faculty of Social Science, Naresuan University.

- , Patcharin Sirasoonthorn.2010. *“Changing Meanings of Boat Racing in Nan Province and Their Implications for Thai’s Creative Economy”* The 4th **Asian Rural Sociology Association** Conference Legazpi City, Philippines.
- ,2012.*The report of the boat racing in Nan Province, Thailand:the community innovation for creative social development.* The document report, The faculty of Social Science,Naresuan University.
- Richard B.Davis.1984.*Muang Metaphysics, A Study of Northern Thai Myth and Ritual* :208.
- Sangaun Chorksukhawat.1962.*The Traditional and The cultural of the North, Bangkok.*
- Yuthana Naksuk.2552.*The History of Maung Nan Boat Racing from Ducument, Legend and narrative.* MaxxPrint, Chiangmai

ICSSAM-780
**Historical Sociological Study on School Excursions and the Sustained
Promotion of Tourism**

Akimasa Suganuma

Keio University Graduate School of Media and Governance, Japan

Email: akimasa.suga@gmail.com

Abstract

This paper analyzes the formative process of tourist destinations, focusing on Kyoto and Nara which are regarded as Japan's most exemplary tourist cities. Such analyses show the valuable role that school excursions, conducted within the framework of the Japanese curriculum, play in promoting local tourism from a long-term perspective. As pointed out in this paper, a major reason why Kyoto and Nara have developed to become major tourist areas today is due to the continuous efforts made to attract school excursions. As part of Japan's post-war educational reforms, middle schools throughout Japan enforced school excursions, as a school activity falling under Japan's compulsory school curriculum. For both social and economic reasons in the post-war period, Kyoto and Nara were chosen as destinations for many of Japan's school excursions. These cities, which had never been more than a single regional area in the pre-war period, began to lay down their foundations as tourist destinations, accepting between 500,000~1,000,000 students annually from 1952 onwards. Furthermore, enticing school excursions resulted in nationwide advertising of the region via the students. In addition, many of the students have revisited the area again since becoming adults, therefore leading to the sustained promotion of tourism. If one adopts a long-term outlook, one can likely understand that this is an effective means of revitalizing a regional economy in a sustained way, as exemplified by Kyoto and Nara.

Keyword: School excursions, Regional economy, Tourism, Kyoto and Nara

1. Introduction

Developed countries have entered a post-industrial phase in which they face challenges such as the deindustrialization of secondary industries, population concentration in urban centers and an aging population. In Japan as well, economic disparity between regions is clearly increasing, and the vitalization of regional economies is becoming a critical issue. In particular, the 2011 Great East Japan Earthquake exposed the conditions of regional areas, making it clear that peripheral areas outside urban centers have obviously been dilapidated and that a phenomenon that could be described as poverty existed even in Japan.

The promotion of tourism has received attention as one effective means for vitalizing regional economies. In recent years, activities to utilize Japan's regional cultural resources and register them as world heritage sites have flourished. However, although attracting tourists using world heritage sites brings temporary financial gains to the regional economy, it has been reported that this would not lead to sustainable promotion (Arai 2008). Securing tourists and providing stable employment related to tourism is no easy task (Lacher and Oh 2011).

We conduct a historical sociological analysis on attracting school excursions and the formative processes of tourist destinations in Kyoto and Nara, using statistics and historical sources from pre- and post-war periods. We demonstrate the role played by attracting school excursions in providing sustainable promotion of tourism. This theme is also related to the countries of Southeast Asia, which have become destinations for Japanese school excursions in recent years.

2. Main Body

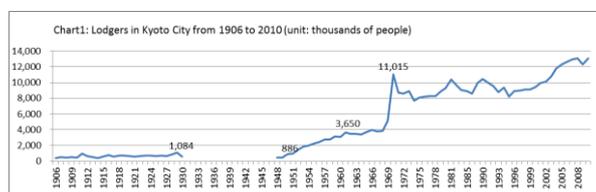
2.1. Pre-War Kyoto and Nara

Kyoto and Nara are two of Japan's principal tourist destinations. The former attracts approximately 50 million visitors annually, while the latter attracts approximately 35 million tourists. However, prior to World War II, these were not areas that attracted many domestic and foreign tourists year-round as they do today. Both areas were main religious centers where the head temples for a number of Buddhist sects are situated, but Kyoto's economy was concentrated on textiles while Nara's economy centered on agriculture and forestry, and tourism was not a major industry in either city.

Kyoto can be considered to have been a tourist destination in the pre-war period as the city had many traditional inns prior to the Meiji period, with the number of such establishments already climbing to approximately 700 in 1912. However, this was because Kyoto was an entertainment district for merchants in the vicinity of Osaka, and the city attracted commercial visitors for fabric from across the country, with raw silk, silk goods and cotton fabrics comprising Japan's main exports prior to World War II. If we examine the capacity of traditional inns in the city of Kyoto, we find that these were small-scale establishments, with the average capacity of a single inn in 1949 at approximately 24 guests. More than half of these establishments had less than 4 workers, while 70% had less than 10. Thus, these inns could not have held the numbers of tourists that is expected at present (Kyoto City Tourist Association 1958, Sugino, K. 2008).

Of course, this is not to say that there were no travelers. Many pilgrims visited the two cities, which possess the central temples for a number of Buddhist sects. In 1911, Kyoto held two religious events: the annual memorial for the passing of Hōnen (founder of the Japanese Pure Land sect of Buddhism), and the 650th annual memorial service for the passing of Shinran (founder of the True Pure Land sect of Buddhism). Approximately 1 million visitors lodged within the city, more than twice the normal number of annual visitors. However, it is difficult to use the presence of such pilgrims as evidence for these two areas as Japan’s principal tourist destinations.

Chart 1 shows the change in the total number of lodgers in Kyoto city from 1906 to 2010. In order to minimize the effects of pre-war and post-war statistical methods, we examine lodgers rather than visitors, allowing us to confirm a major difference in city lodgers between the pre- and post-war periods. In the pre-war period, the average number of lodgers is 640,000 per year. In 1950, 5 years after Japan’s defeat, the number of visitors climbed to 890,000, surpassing pre-war levels. In the economic expansion of the late 1950s, the number of lodgers climbed to 3 million, and in the late 1960s this number drastically rose to over 8 million. The city of Nara shows a similar trend. While the total number of lodgers is lower than Kyoto due to the lower number of inns, the number of lodgers surpassed 800,000 by the mid-1960s, reaching over 1 million between the late 1960s to the early 1970s (Nara City 1970, 1975).



Source: Sugino 2008; “Trends in Kyoto Tourism”, Kyoto City Cultural Tourist Association, 1960; “Annual Survey of Kyoto City Tourism”, Kyoto City Industrial Tourist Association, 2001-2011.

In addition to statistics, the social and cultural background provides reasons to think that Kyoto and Nara formed tourist destinations after the war. Currently, visitors to the two cities consist not only of Buddhist pilgrims, but also tourists who view the architecture and treasures of the shrines and temples as cultural sites. Before the war, such travels were viewed as high culture and had not yet been popularized; in addition, the practice of viewing cultural sites was limited to specialists and dilettantes and had not permeated into the general public. For example, Nara’s Yakushi-dera and Tōshōdai-ji are famous for their architecture and Buddhist icons, which have been designated as national treasures, but ethnographer Tsuneichi Miyamoto, who lived in Nara before the war, recalled that “*When you visited a temple such as Yakushi-dera or Todai-ji, they would bring out a key and say, “go see it as*

you please". There were no visitors to the temples in those days, so you could sit in front of the Buddha for half a day if you liked." (Miyamoto 1975). Before the war, it was common to visit a temple and find no one there.

How did these two areas form as tourist destinations? Where do we find the main cause for the increase in lodgers after the war, the sudden increase in lodgers after 1970 and their continued maintenance? The key to solving this question is found in school excursions that were conducted across the country.

2.2 Kyoto and Nara as Destinations for School excursions

First, we will briefly explain school excursions. Before the war, this was an educational excursion conducted during long school vacations on a voluntary basis in upper secondary and higher education, which were not compulsory courses of education. These trips were not determined by the school curriculum, but were conducted by schools that independently chose trip objectives such as physical training, observing plants or researching history, selected a destination, and then conducted the trip with permission of the head of the municipal government. Because there were no limits on travel schedules or expenditures, such trips were most often conducted with groups of twenty or thirty students from the affluent social background. However, educational reforms following Japan's defeat completely changed the features of these school excursions. During the educational reform process starting in 1947, school instructors previously employed in upper secondary education were assigned to newly-compulsory junior high schools. As a result, school excursions were planned in the compulsory curriculum and carried out with the participation of all students. Although excursions were not a formal event in the curriculum, in the early 1950s all junior high schools across the country conducted school excursions (Japan School Excursion Society 1981, National Institute for Educational Research 1974). School excursions continue into the present day, with nearly all students in the final year of junior high school participating, traveling as a school.

In the post-war period, school excursions were conducted at nearly all junior high schools and high schools in the country. As shown in the table 1, Kyoto was the most popular destination for school excursions, while Nara was third. Source: MEXT Education Division 1954.

Table 1 : Number of Visiting Students by Destination in 1953
(unit: thousands of people)

Distination	Total	Junior high school	High school
Kyoto	659	362	296
Tokyo	572	340	231
Nara	514	304	209
Kamakura	312	243	69
Nikko	311	197	114
Osaka	278	164	114
Ise	193	58	135
Hakone	165	106	59
Beppu	162	123	38
Fukuoka	81	73	8

There are a number of reasons to explain why these two regions were chosen as destinations. First, they allow seeing a number of sights in a short span of time. At the time, Japan was still a developing nation and most children did not have an opportunity to leave the region in which they were born and raised during their entire lives. Thus, giving students a chance to see many sights during school excursions became a criterion for choosing the destination. While most urban centers had been reduced to ashes during the war, Kyoto and Nara were largely free from damage, leaving a large number of temples and shrines. There were no other regions in which so many shrines and temples were concentrated as they were in Kyoto and Nara, the main religious centers of the nation. Second, both Kyoto and Nara had lodging facilities. With the increase in the number of school excursion participants, over 2300 students could travel from a single school. The only destinations with the facilities to accommodate groups of this scale outside of urban centers and hot spring towns such as Itō and Atami were Kyoto, which had many traditional inns as a result of the fabric trade, and Nara, which served as the religious center of the country.

Thus, great numbers of students began to flow into these two areas that had been chosen as destinations for the school excursions in the early 1950s. In Japan before the period of rapid economic growth, teachers were highly conscious that school excursions comprised one of the few opportunities for most students to travel, and the flood of students on excursions into the two areas continued unabated (Ishikawa 1979).

In 1955, the principal of a Tokyo public high school responded to students wishing to visit the Tohoku region by stating that “there’s little to see relative to the amount of time spent for train travel, while the Kansai region offers many sights to see” (Matsumoto 1955). As a result, as shown in the table 2, anywhere from 500,000 to over 1 million students visited Kyoto and Nara each year.

Table2 : Changes in the Number of Students on School excursions to Kyoto and Nara (unit: thousands of people)

	Nara	Kyoto
1953	514	659
1958	721	1,078
1966	763	1,142
1967	715	1,070
1968	789	1,181
1970	627	1,687

Note: There was no data in the source for numbers of students on school excursions to Kyoto during 1966, 1967 and 1968, so we estimated values using the rate of increase in Nara.

Source: “Trends in Kyoto Tourism”, MEXT Education Division 1954; “Annual Survey of Kyoto City Tourism” 1959~1969; “Nara City Statistics”, Nara City 1970, 1975.

In this manner, large numbers of students on school excursions visited Kyoto and Nara during the post-war period, cities which had heretofore not been developed as tourist destinations. Until the mid-1960s, over 30% of group tourists to Kyoto were comprised of school excursions and students on daylong field trips from neighboring prefectures. Even in Kyoto, which saw post-war increases in day-trip tourism from neighboring prefectures, the number of lodgers in the city before 1960 did not go over 3 million. Then, approximately 1 million students visited the city each year on school excursions, and 80% lodged within the city. In Nara, 70% of lodgers were students on school excursions. As we will see in the following section, these continual visits from school excursions led to the promotion of tourism in both regions.

2.3 School excursions and the Promotion of tourism

First, the two cities, which were not developed as tourist destinations, prepared tourism infrastructure as a response to the sudden influx of school excursions. One example can be seen in road infrastructure. In 1951, 2.2% of national roads in Kyoto Prefecture were paved,

while the remaining 98% were dusty gravel roads (Kyoto Prefecture 1970). Since school excursion groups used large buses to move about the various temples, the prefecture took measures to solve the poor travel environment, improving 50% of main roads in the city by 1956 and paving the remaining 46%. Nara also improved roads, preparing 80% of roads by 1963. Unlike Kyoto, Nara's temples were not concentrated within the city. For this reason, roads were newly built and improved to fit with newly opened tourist routes for school excursion groups (Nara Prefecture Tourism Division 1964). The coming of school excursions also led to the improvement of lodging facilities. While both Kyoto and Nara had traditional inns since before the war, nearly all were small-scale establishments that could not accommodate large groups. These inns did not have the capacity for groups that consist of hundreds of students traveling from one school, and there were many reports in the 1950s according to which students stayed in rooms so small it was difficult for them to lie down, inns did not have sufficient bedding, and inns could not provide food for the large numbers of lodgers. Over a period of five years beginning in 1951, the number of inns in Kyoto City increased 49% to 1271, and the total capacity of all inns in the city increased by 60% from 1949 to 1957 (Kyoto City Tourist Association 1958). In addition, most of the infrastructure for tourist destinations, such as parking for large buses, public toilets, trash cans, increases in visitor centers and operation of a public city bus service, were put in place by the late 1960s, which saw a drastic increase in lodgers.

Second, students visiting the cities on school excursions obtained the practice of sightseeing through travel, and many revisited their destinations years later after becoming adults. As a result of continuing to attract school excursions, the cities created "prospective tourists". The next tables 3 and 4 show that most tourists in Kyoto in 1973 were in their 20s or 30s, were attracted to Kyoto and had planned their trip for a long time. It should be noted here that these tourists in their 20s and 30s were the same generation that had taken part in school excursions after the war. The same survey shows that while 4% of tourists used a travel agency, 23.7% reported walking around the city on their own using a guidebook. We can interpret this to mean that tourists wished to view the city on their own rather than as part of a group. In other words, young people who visited Kyoto and Nara in the past as part of a school excursion were charmed by the areas they had seen, and after gaining economic flexibility, they enjoyed individual travels to the areas. One person from Miyagi who visited both areas on school excursions in 1956 did not recall much about the many temples he visited, but recalled that "it was mysterious to feel that I wanted to see Kyoto and Nara again later" (Ozaki 2004).

Table 4: Reasons Tourists Visited Kyoto in 1973 sample=782

Recommended by people	10.3
Decided on their own	70.3
Unknown	19
Decided suddnly	31.5
Planned for a long time	60.3
Unkown	8.2
Money to spare	4.9
Time to spare	21.7
Good season	24.1
Attracted to Kyoto	39.1
For family	9.7
For work	4.8
Other	19.4

Table3: Ages of Visitors to Kyoto City by Percentage in 1973 sample=3543

	Total	men	women
Under 20 years old	14.25	11.4	17.1
Over 20 years old	45.25	44.8	45.7
Over 30 years old	15.35	17.3	13.4
Over 40 years old	11.65	12.6	10.7
Over 50 years old	7.7	7.4	8
Over 60 years old	4	4.6	3.4
Unknown	1.8	1.9	1.7

Source: “Annual Survey of Kyoto City Tourism” 1973.

As shown above, continually attracting school excursions led to the promotion of tourism in both regions through the installation of tourism infrastructure and the creation of “prospective tourists”. History shows that attracting school excursions connected to sustainable promotion of tourism, with both areas becoming principal tourist destinations in Japan. Even now, the cities continue to attract school excursions and create “prospective tourists”.

3. Conclusion

This paper indicates that although it has been assumed that school excursions do little for the promotion of tourism as students have little money to spend, over the long term they are an effective means for the sustained promotion of tourism in an area. Attracting school excursions does not make an immediate contribution to the local economy and does not create employment, but it is an effective investment in future tourism that requires little capital in comparison to the creation of tourism facilities or registration of cultural sites. If we assume that temporary increases in tourists is not a solution for regional promotion, gradual increases in tourists who visit the area many times, as we see in the cases of tourists in Kyoto and Nara, may be one solution. Attracting school excursions does not apply only to Japan domestically. Many of Japan’s junior high schools and high schools are conducting school excursions to the countries of Southeast Asia. Attracting these students in a sustained manner will increase “prospective tourists” to these countries.

4. Funding

The author received financial support by Institute for the Culture of Travel in 2009 and Japan Society for the Promotion of Science from 2010 to 2012. This paper is a part of the results obtained therefrom.

5. Reference

- Hiroaki Ozaki. My school excursion, School Excursion, Japan, 2004 (4): 3.
- Hiroyoshi Ishikawa. The post-war history of leisure activity, 1ed, Tokyoshoseki, Japan, 1979.
- Japan School Excursion Society. The history of school excursions, 1ed, Japan School Excursion Society, pp.80-81.
- Kuniaki Sugino. Explanation for Research of Kyoto Tourism, 1ed, Bunrikaku, Japan, 2008, pp.43,48,64,98.
- Kyoto City Tourist Association. Tourism of Kyoto for 10 years, 1ed, Kyoto City Tourist Association, Japan, 1958.
- Kyoto Prefecture. Kyoto Prefecture for one century, 1ed, Kyoto, Japan, 1970.
- MEXT Education Division. The survey of school excursions of junior high schools and high schools. Gyousei, Japan, 1954, 3(2): 23-28.
- Naoki Arai. Study of World Heritage registration and sustainable tourism spot making, Research for Local Government, Japan, 2008, 11(2): 39-55.
- Nara Prefecture Tourism Division. The report of tourism development, Japan, 1964, pp.15-21.
- National Institute for Educational Research. One hundred year's history of modern Japanese education vol.1 Policy of education (1), Bunshoudou, Japan, 1974, pp.687.
- R.Geoffrey Lacher and Chi-Ok Oh. Is Tourism a Low-Income Industry? Evidence from Three Coastal Regions, Journal of Travel Research, 2012, (51).
- Shigeru Matsumoto. The excursion of our school, Kyouiku jihou, Japan, 1955, (95): 20.
- Tsuneichi Miyamoto. My map of Japan vol.14 Kyoto, Doyukan, Japan, 1975, pp.59.

ICSSAM-877

Development of Poor Household Food Security through Institutional Strengthening and Social Capital at Jeneponto District

Sitti Bulkis^{*}, Imam Mujahidin, Rahmawaty A. Nadja and Rahmadanih

Department of Socio-economics of Agriculture, Faculty of Agriculture,

University of Hasanuddin

* ukisdaud29@gmail.com

Household as an aggregate element of food security is a social system that interacts with its environment, such as fulfillment of household food needs. However, in reality household interaction with domestic environment not always ensure the household food security. Various factors affected the fulfillment of household food security among others is the difference of agro-ecosystem types of lowlands and highlands.

This research aims to: 1) Analyze the development of social capital and local institution in the poor household food security improvement program; (b) Formulate the form and pattern for education/training household to improve poor household food security.

The result shows the connection between social capital and food security which identified on the research locations in the form of mutual assistance of giving or borrowing food, and exchanged of food among neighbors or families; relatively high level of trust in the society or between society and the government (particularly extension officers, head of the village and community leaders); household food security level both at the lowlands and highlands show not food secure with Food Diversification Score of 4; the problems of food insecurity are in the aspects of availability, accessibility, and food consumption these are due to limited production capital (small land, and lack of knowledge of tools usage) and low understanding of food and nutrition.

Therefore the household requirement to improve food security are productive business development program and increase society knowledge about food and nutrition; food security development program can be done through strengthening/development of institution (economic small business groups, farmers groups including women farmers group).

The suitable institutional strengthening are: (1) Institutional support model; (2) Development of human resource capacity to improve the household food security.

Keywords: Household food security, social capital and institution.

Development of poor household food security through institutional strengthening and social capital at Jeneponto District

Introduction

There are three fundamental issues related to food, namely food availability, food accessibility and food distribution. Food is a strategic commodity, because it becomes a basic human need. Food is not only important strategically and economically, but also in terms of defense and security, social and political.

Experiences have shown that the resilience and peace of a country are determined a lot by the availability of food. Human's need of food is very basic stuff, because food consumption is one of the main requirements of supporting life. The food regarded now as part of the implementation of human rights shall be guaranteed by the state.

Problems faced in implementation of program food insecurity and hunger reduction are: 1) they ignore frequently the independence and capacity building of the beneficiaries themselves, 2) they do not fit to the aspirations and conditions of the people, and 3) they are not integrated with social capital or local social energy (human resource, institutional, and social networks).

This condition reflects the lack of capacity of oneself and local institutional capacity in the network in : (1) solving the problems that exist in our own strength, and (2) implementing national development programs in general, and the development of food security in particular. So that it becomes a necessity to study and look for the factors that affect the success and failure of food security programs and other forms (models) food program.

Research purposes

- 1) reviewing the development of social capital and local institutions in the improvement of household food security program
- 2) formulating models and patterns of institutional strengthening education / counseling poor households to improve household food security

Research methods

Research design was a cross sectional study. Research carried out within a period of 6 months, starting in June until November, 2013, in Jeneponto district, South Sulawesi province.

Jeneponto was chosen with the consideration that in the province of South Sulawesi, the highest population of poor citizens is Jeneponto. The selected districts are Rumbia sub-district (representing the highland) and Arungkeke sub-district (representing lowland). From each sub-district selected two villages, they are Rumbia village and Tompo Bulu

village represented Rumbia sub-district while arungkeke village and Pajalau village represented Arungkeke sub-district.

In each village were selected 30 local institutional members (farmer groups) as respondents. The informants who became the source of information are the chairman and some local officials institutional and are also informants from government boards, they are: food security board and counseling board, agriculture board, district and sub-district offices. Data and information were collected by interview.

Data were analyzed with descriptive qualitative method related to the institutional and social capital while the level of household food security scores calculated through diversification approach as follows:

No	Types of food	Measure of consumption (UK)	Score
1.	Staple food	500 gram	Score 0 if $CA \leq \frac{1}{2} CU$ Score 1 if $CA \geq \frac{1}{2} - 1 CU$ Score 2 if $CA \geq 1 CU$
2.	Side dishes	200 gram	
3.	Vegetables	150 gram	
4.	Fruits	200 gram	
5.	Milk	200 ml	

Information: KA: (Actual Consumption)

CU: (Consumption Unit)

Category level of food security:

- Households Regarded to be food secure households if the score $SDP \geq 5$
- Household regarded food insecure if the score $SDP < 5$

Results and Discussion

1. The level of household food security

Consumption variability can be explained that although food consumption by households is quite various, but yet it does not necessarily meet the food consumption score (SDP) as a whole. On average, by observing the type and amount of food consumed by households in the two typology regions, then the SDP can be seen in table 1.

Table 1. Average household food consumption score

No	Types Of consumption	Highland				Lowland			
		Rumbia		Tompo Bulu		Arungkeke		Pajalau	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
		Cap/day	score	Cap/day	score	Cap/day	score	Cap/day	Score
1	Staple food (gr)	545,60	2	599,87	2	550,75	2	523,11	2
2	Side dishes (gr)	86,72	0	97,35	0	155,60	1	125,47	1
3	Vegetables (g)	170,40	2	165,15	2	130,85	1	132,12	1
4	Fruits (g)	67,80	0	87,06	0	31,23	0	43,15	0
5	Milk (ml)	15,10	0	3,50	0	6,75	0	9,75	0
	Score total		4		4		4		4

Table 1 it is showed that generally the average food consumption scores obtained by the respondents at four regions in to two relatively equal typology (score = 4). By referencing to the approach of diversification in food consumption according to Hardinsyah in Bulkis (2004), then on average, the food security of poor households in both typology in Jeneponto is at the level of "food insecurity" (food insecure). However, when we observe more deeply to every household food consumption, it turned out that there are 20.10% of households in the highlands at the level of "food secure" while households in the lowlands are as many as 34.68% of households are at the level of "food secure". The low percentage of household "food secure" associated with low household income that ranges between Rp. 200.000; - Rp. 500.000;

2. Local institutional

The local institutional is "an organization that is in the area of Jeneponto", which are parts of the institution. Organizations in the area (community organization) consist of youth clubs, youth groups of farmers, farmer groups / Gapoktan, women farmers, and spiritual groups.

Among all social organizations, two important organizations chosen by the respondents are spiritual group and farmer group. As for the reason for the importance of organizations' farmers' group ', is, in addition to enhance a sense of community among farmers as well as a media to get funding or other assistance farming from the government. While the reasons put spiritual group as an organization is important because it can improve the spiritual group of religious knowledge.

Table 2. Institutional types and benefits of local / social organization known by the respondents in Jeneponto, 2013

No.	Types of institutional	Highland		Lowland		Benefit
		Rumbia	Tompo Bulu	Arungkeke	Pajala u	
1.	Farmer group	√	√	√	√	1. add to the knowledge management of farming / fishing
2.	Group of fisherman			√	√	
3.	Group of women farmer				√	
4.	Women group	√	√	√	√	2. facilitate access resources from institutions / organizations, such as government
5.	Spiritual group	√	√	√	√	add to the understanding of religion
6.	Arisan group			√	√	collect assets
7.	Business group			√		develop productive business capabilities

Involvement of local communities in a variety of institutional / social organization both as members and officials showed some benefits, as seen above. involvement in various institutions / organizations through collective action from local communities resulting value "mutual cooperation" and "mutual help" either in the process of production, consumption and stronger social activities among members of the social group.

3. Social capital in the development of food security

Development of food security in Jeneponto can not currently say maximum. first by looking at the average food consumption score in all four villages were still less than five or still classified at the level of "not food secure". however, members of the farmer / fisherman has implemented social capital owned. One form of social capital possessed implementation in

order to enhance the availability and consumption of food is to do the collective action in agricultural production activities (Table 9)

Table 3. Mutual cooperation in production process, 2013

No	Perception	Highland				Lowland			
		Rumbia		Tompo Bulu		Arungkeke		Pajalau	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
1	Intensity								
	Always	10	33,33	10	33,33	11	36,67	16	53,33
	Sometimes	20	66,67	16	53,33	16	53,33	10	33,33
	Not	0	0,00	4	13,33	3	10,00	4	13,33
	Total	30	100,00	30	100,00	30	100,00	30	100,00
2	whom								
	Neighbors	6	20,00	5	16,67	4	13,33	6	20,00
	Relatives	6	20,00	7	23,33	6	20,00	3	10,00
	Group members	4	13,33	0	0,00	0	0,00	5	16,67
	Three of them	14	46,67	18	60,00	9	30,00	16	53,33
	Total	30	100,00	30	100,00	30	100,00	30	100,00
3	in the working								
	Processing	4	13,33	3	10,00	4	13,33	4	13,33
	Maintenance	0	0,00	0	0,00	0	0,00	0	0,00
	Harvest	20	66,67	20	66,67	18	60,00	15	50,00
	Mutual help	6	20,00	7	23,33	8	26,67	11	36,67
	Total	30	100,00	30	100,00	30	100,00	30	100,00

In addition, the food exchange system is still a culture in four villages also in the two typologies in Jeneponto. However, exchanging of food in this case "is not as pure as" the barter system in general. More food exchange interpreted as "giving food to each other". Although this activity seems simple but it can also contribute to the providing of food in the household, especially for households in desperate need of a particular food (table 4)

Table 4. Exchanging of food in 2013

No.	Perception	Highland				Lowland			
		Rumbia		Tompo Bulu		Arungkeke		Pajalau	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
1	Intensity	18	60,00	15	50,00	16	53,33	18	60,00
	Always	12	40,00	15	50,00	14	46,67	9	30,00
	Sometimes	0	0,00	0	0,00	0	0,00	3	10,00
	Not	0	0,00	0	0,00	0	0,00	0	0,00
	Total	30	100,00	30	100,00	30	100,00	30	100,00
2	whom								
	Neighbors	13	43,33	14	46,67	13	43,33	12	40,00
	Relatives	5	16,67	0	0,00	0	0,00	2	6,67
	Group members	4	13,33	0	0,00	0	0,00	4	13,33
	Three of them	8	26,67	16	53,33	17	56,67	12	40,00
	Total	30	100,00	30	100,00	30	100,00	30	100,00

The habit of giving food to each other done frequently for the fruits commodity and vegetables and tubers crops. As for the barter system which "sometimes" done by people in the region, especially in the village of Rumbia and Tompo Bulu is by exchanging the cocoa harvest with rice at the grocery store. However, both of these commodities are already in the fived price before in barter.

Both give each other food and barter systems are useful in contributing to the food security of poor households. It means that, those activities can improve food consumption of poor household members in the region.

Patterns of education / training in order to improve household food security of households

To determine the pattern of education / training in order to improve household food security of households, it is necessary to understand the problems and needs of the development of food security.

A. The problem of food security development

According to the indicators of food security problems and needs in the development of food security can be examined from the aspect of food availability, accessibility and consumption of food.

a. Food availability

Household food availability derived from household production and purchasing food materials. On local research that is in Rumbia village and in the village Tompo Bulu

representing Rumbia sub-district, arungkeke village and pajalau village representing Arungkeke sub-districts generally have a good farm fields and gardens, but with broad relatively narrow (less than 0.25 ha) with the system rain-fed irrigation, so that the need for food (including food staples: rice) is insufficient. For households that do not have a garden and yard, food, vegetables and fruits are obtained by purchasing, by a neighbors or relatives.

b. Accessibility of food

This research showed that the accessibility of food physically varies on two research areas (highland and lowland). The highland area, food accessibility is relatively "low" because of further distances (the average more than 3 km) from market compared to the lowland area (the average is less than 2 km). As in rural areas in Indonesia, on the research locations, within 1 week the activity in the market takes place 2 times. But sometimes there are also street vendors selling fish.

Economic accessibility to food is determined by the level of household income. Based on the type of work as farmers and fishermen with the mastery of the resources of venture capital is relatively small (the average farmer has a relatively narrow area and fishermen's status as a mustard picker), household income ranges between Rp. 200,000; - Rp. 500,000; per month. With a relatively low income levels, low purchasing power of food also causes no variation in food purchasing.

c. Consumption of food

Low levels of household food consumption happened due to the low available resources to provide food (narrowness of land resources and purchasing power of food) and also an understanding of food and nutrition is also "low" (75% of respondents have never participated food and nutrition counseling).

Patterns in the education and construction needed in the development of food security of poor households

Based on institutional benefits in feel and relatively strong social capital as well as the food security problems of the education pattern required for the development of household food security are: (1) developing economic efforts and (2) improving understanding of food. Developing capacity in business (economics) and improving understanding of nutrition and food with institutional strengthening strategies in the developing the availability, accessibility and consumption of food. The models for the institutional strengthening of capital that can be done are: (1) capital institutional support, (2) human resources capacity development model group members.

Conclusions and suggestions

Conclusion

1. The level of household food security in the community both lowland and highland show "insecure food" conditions (score of diversification: SDP) is 4.
2. Social capital that has to do with food security identified on the study site is still the presence of (1) mutual help in the process of food production, (2) mutual exchange and provides food between neighbors and relatives. The strength of social capital happened because of community involvement in various institutions / organizations.
3. Household food security problems lies on the aspect of availability, accessibility and consumption of food, this happened because of capital production (narrow land, and control of the tool is not good), low income and low understanding of food and nutrition.
4. The need of food security development can be done through strengthening / developing institutional (economic business groups and farmer groups as well as groups of women farmers). The models for the institutional strengthening according to the needs of the community are: (1) model of institutional support, (2) model of capacity building of human resources in improving the food security of poor households.

SUGGESTIONS

1. Improvement or development of household food security requires attention by various parties or groups through policies, programs and activities to increase production, economic development efforts (especially poor households) to increase the availability of food.
2. Increasing intensity of food and nutrition education especially in remote areas to improve the public's understanding of food and nutrition.
3. Efforts to improve the food security (1 and 2) can be done by means of empowerment through mentoring institutional (business groups, farmers' groups and women farmers).

REFERENCES

- (1) BPS, 2011. *Survey Sosial Ekonomi Nasional*, BPS Jakarta.
- (2) FAO. 1998. *Guidelines For National Food Insecurity and Vulnerability Information and Mapping Systems (Fivims): Background and Principles*. Committee On World Food Security. Rome.
- (3) Farida Rahmawati, 2012. *Potensi Pangan Lokal menuju Ketahanan Pangan Lokal*.
- (4) Fukuyama, Francis (1999), "Social Capital and Civil Society" paper presented at the IMF, Conference on Second Generation Reforms, The Institute of Public Policy,

- George Mason Gittinger, P. J., Leslie, J. Hoisington, C. 1987. *Food Policy: Integrating Supply, Distribution, and Consumption*. The Johns Hopkins University Press. Baltimore and London.
- (5) Gujral, Sunder dan Pant, Ira, 1988. *Household Food System*. The University of Illinois. USA.
- (6) Hardinsyah, Dodik Briawan, Siti Madanijah, Cesilia Meti Dwiriani, Sumali M. Atmojo dan Yayat Heryanto. 1998. *Kelembagaan Untuk Pemantapan Ketahanan Pangan*. Laporan. Pusat Studi Kebijakan Pangan dan Gizi. LP-IPB.
- (7) Huntington, Samuel P. (1991), *The Third Wave: Democratization in the Late Twentieth Century*, Oklahoma City: University of Oklahoma Press
- (8) Norman Uphoff, 1986. *Local Institutional Development: An Analytical Sourcebook With Cases*, Cornell University, Kumarian Press.
- (9) Oktavio Nugrayasa, 2013. *Pola Pangan Harapan Sebagai Pengganti Ketergantungan Pada Beras*.
- (10) Putnam, Robert D. (1993), *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton: Princeton University Press
- (11) Sitti Bulkis dkk, 2004 – 2012. *Ketahanan Pangan Rumah tangga Pada Berbagai Tipe Agroekosistem*” (laporan-laporan penelitian), LP2M UNHAS, Makassar.
- (12) Sitti Bulkis, 2012. *Ketahanan Pangan Rumah tangga Perdesaan*. Arus Timur.
- (13) Suharjo. 1996. *Pengertian dan Kerangka Pikir Ketahanan Pangan Rumah tangga*. Makalah pada Lokakarya Ketahanan Pangan Rumah tangga. Yogyakarta. Kerjasama Biro Perencanaan Departemen Pertanian dengan Unicef.
- (14) Timothy R.F. dan Mc Caston, M.K. 1998. *The Household Livelihood Security Concept*. CARE USA.

ISEPSS-2112

The Study of the Life Satisfaction of the Older Adults in the Use of Computer Application

Chen-Chi Wei¹, Cheng-Yi Huang²

1. Department of Senior Citizen Service Management, Minghsin University of Science and Technology

lwp01cw@gmail.com

2. Institute of Service Industries and Management, Minghsin University of Science and Technology

wp01cw@gmail.com

Abstract

2011 CEPD statistics showed that the population aged over 65 in Taiwan was more than 11% of the total population, indicating population structure in Taiwan is gradually aging. During the digital age, the computer's ability to the older adult might make their life more abundant, increase social relationships, and enhance their life satisfaction. The purposes of this study were, the first, to explore the relationship between the computer application ability and life satisfaction for the elderly. Second, to explore how the concept of computer information products and the using environment affected the computer application ability. Finally, to explore how the personal background variables affected the ability of elderly computer applications. The study used questionnaires to collect information. The 142 interviewees were participants of the computer courses in the Learning Center of the Taipei City around the 2013, April. Data was organized by the SPSS14.0 software in terms of reliability and validity analysis, descriptive statistics, Pearson correlation and regression analysis. The results were summarized as the following conclusion:

1. The older adults were more likely to learn the ability of working orientation computer application ability.
2. In the concept of computer information products, “easy-to-use visual function” and “using experiences” were more likely to increase their life satisfaction.
3. In the using environment, the software environment was more likely affect their life satisfaction.
4. Computer application ability, health status and computer using environment were the most influential factors toward the life satisfaction.

Keywords: the elderly, the older adults, computer application ability, life satisfaction

Psychology III

Room B

14:50~16:20

Friday, May 9

Session Chair: *Prof. Mah Ngee Lee*

ICSSAM-549

The Relationship between Youth's Civic Attitudes and Competence Skills

Mah Ngee, Lee *Universiti Tunku Abdul Rahman*

Ser Zian, Tan *Universiti Tunku Abdul Rahman*

Pei Lee, Gan *Universiti Tunku Abdul Rahman*

ICSSAM- 624

How Adaptive Behavior Influences Academic Achievement among Elementary School Students

Tiara Carina *Udayana University*

Komang Try Damayanti *Udayana University*

Putu Ayu Novia Viorica *Udayana University*

Supriyadi *Udayana University*

ICSSAM- 697

Do Perceptions of Teacher's Conditional Regard Negatively Predict Effort and Interest in Physical Education Lessons?

Wai Cheong Eugene Chew *Nanyang Technological University*

Boon San Coral Lim *Nanyang Technological University*

Ser Hong Tan *Nanyang Technological University*

ICSSAM- 725

Trait Predictors of Body Shape Concerns among Young Adults in US and China

Tao Sun *University of Vermont*

Shengdong Lin *Xiamen University*

Jane Kolodinsky *University of Vermont*

ICSSAM- 755

Mapping the Intellectual Structure of Emotion Management

Yuan-Duen Lee *Chang Jung Christian University*

Shih-Hao Chen *Chang Jung Christian University*

Jen-Hwa Kuo *Chang Jung Christian University*

ISEPSS- 2098

Do We Tip People for Just Doing Their Job? The Effect of Showing Gratitude on Tipping Behavior

Yevvon Yi-Chi Chang

Tunghai University

Ting-Yu Kuo

Tunghai University

Wen-Bin Chiou

National Sun Yat-Sen University

ICSSAM-549

The Relationship between Youth's Civic Attitudes and Competence Skills

Mah Ngee Lee, Ser Zian Tan, Pei Lee Gan

Universiti Tunku Abdul Rahman, Malaysia

leemn@utar.edu.my

Abstract

Much attention has been given on the importance of the development of civic attitudes and competence skills of youth in Malaysia. This paper presents a study of 525 secondary and university students on their perception of civic attitudes and competence skills. Using cross-sectional survey method, this study examined the correlations between civic attitudes and competence skills and whether there are gender differences on their civic attitudes and competence skills. Results showed that overall the mean scores of the Civic Attitude ($M = 3.45$, $SD = .34$) and Competence Skills ($M = 3.52$, $SD = .32$) are moderate. Results show that Civic Attitude is strongly and significantly correlated with Competence Skills where $r(523) = .71$ at $p < .01$. The results reveal no gender difference in both Civic Attitudes and Competence Skills; however there is significant gender difference in the subscales of Political Awareness and Social Justice. The mean scores in Political Awareness is significantly higher for male participants ($M = 3.38$, $SD = .62$) than female participants ($M = 3.20$, $SD = .55$) where $t(523) = 3.38$ at $p < .001$. The mean scores in Social Justice is slightly significantly higher for male participants ($M = 3.48$, $SD = .45$) than female participants ($M = 3.38$, $SD = .38$) where $t(523) = 2.90$ at $p < .01$. The author concludes that while content standards are readily exist to articulate the academic development of students, it is important to make civic and competence development an explicit training and educational goal to shape youth's early commitment to civic involvement and develop their competencies.

Keywords: civic attitudes, competence skills, youth, gender difference

1. Introduction

How can young people be given the skills and competencies needed to thrive and flourish in today's world? Much attention has been given on the importance of the development of civic attitudes and competence skills of youth in Malaysia. To thrive in the fast-paced and highly competitive global economy, Malaysia needs to instill values and strength of character in our youths to face the future with confidence. Youths need to develop skills and character traits such as initiatives, risk taking, strength of character and mind that may be linked to active citizenship and thereby contributes to civil society.

However, many parents and school administrators tend to emphasize too much on academic achievement as a measure to being successful in school. Thus, personality developments for students through extra-curricular/ social activities are often neglected [1]. What is needed is an integrative approach to education in promoting optimal healthy, civically active youth and a cohesive, socially just society [2].

High rates of boredom, alienation, and disconnection from meaningful challenges are not signs of pathology, but rather signs of deficiency in positive development [3]. The many cases of youths being at risk such as school drop-outs, teenage pregnancy, drug use, suicide and violence might be due to absence of engagement in positive life trajectory. Findings from a study conducted by Gottfredson, Gerstenblith, Soule, Womer and Lu [4]) show that after-school programs that provide youth with positive development and skill-building activities help in reducing delinquent behavior, rebellious behavior and drug use. Therefore, good character building is vital for youths to make meaningful contributions to the maintenance and perpetuation of civil society and democracy [2].

2. Positive Youth Development Framework

The role of building positive youths does not merely lie on the environment itself. As a core element of positive development, youths must acquire the ability to demonstrate initiative. Larson [3] supports the argument that initiative is necessary for agency and for independent actions by adults. Theory and research suggest that positive youth development (PYD) and the strengths that are present in youth would help youth acquire a broad range of competencies and to demonstrate a full complement of connections to self, others, and the larger community [3, Lerner [5].

LeBlanc, Talbot and Craig [6] and Lerner and colleagues [7] discuss positive youth development in the context of the six Cs of developmental outcomes: Competence, Confidence, Character, social Connection, and Caring or compassion, and Contribution to community. LeBlanc, Talbot and Craig [6] further expounded that an effective assets-based perspective include questions that reflect the strengths youth possess, such as engagement in one's community, degree of closeness to others, and degree of sharing and helping behavior. Their evaluations supported the importance of interpersonal relationship and life skill development [6,7].

3. Developing Civic Attitudes and Competence Skills

Research has documented that organized youth activities support the development of sophisticated cognitive and social responses. Lee's [8] study emphasizes the strength-based model of positive youth development.

Specifically, the study investigated youth participation ($N = 428$) in the Youth Expedition Projects (YEP) in Singapore and their positive developmental outcomes as a result of the expedition experience. The study employed a mixed-method design to capture youths' learning experiences, using before and after-expedition surveys as well as focus group interviews. Results indicated moderately high mean scores for Civic Attitudes and Competence Skills total ($M = 3.66$, $SD = .29$) for participants as a result of the expedition experience. Through qualitative data analysis, the participants felt that they had made a difference (83.9%), developed positive interpersonal relationships, confidence (66%) and belief in future (74.6%).

Yates and Youniss [9] found that youth who were involved in faith-based programs may promote their sense of civic and political orientations. In addition, Yates and Youniss found that youth who participate in service activities are likely to promote their sense of moral identity and their ability to reflect on political and social issues [9]. Hunter and Brisbin [10] expound that mandatory community service does not seem to change youth's attitudes about the people they serve or about political issues. However, youths who participate voluntarily in service-learning have been found to be more willing to listen to others' points of view, to value racial diversity, and to believe in the importance of helping the less fortunate ones, as well as to believe in team work rather than working individually.

Morrissey and Werner-Wilson [11] found that communities that have opportunities available for youths and youths' attitudes toward the community and family were predictive of activity involvement. Researchers such as Benard [12] and Larson [3] have identified community resources and opportunities as factors that contribute to positive development in youth.

Constantine and Benard [13] posited that individuals can create environments that promote positive development and successful learning for young people, such as through adventure learning, service learning or community service. Particular attention has been given to the power of belief systems that facilitate civic participation, civic engagement, and civic contribution.

Therefore, this study undertakes to examine the relationship between youth's civic attitudes and competence skills as a result of their meaningful participation in their campus/school activities and whether there is any gender difference in their civic attitudes and competence skills measure.

4. Methodology

Using cross-sectional survey design and purposive sampling, a total of 525 secondary and university students were surveyed on their perception of civic attitudes and competence skills to measure the positive outcomes as a result of youth's meaningful participation in their campus/school activities.

The Civic Attitudes and Skills Questionnaire (CASQ), developed by Moely, McFarland, Miron, Mercer and Ilustre [14] yields scores on six scales which measure civic action, political awareness, leadership skills, social justice attitudes, diversity attitudes, and interpersonal and problem-solving skills. Reliability for the total scale yielded a cronbach alpha value of .88 for the pre-test and .89 for the post-test by Khoo, Lim and Liao [15]. The result was better than the internal consistencies range from .69 to .88 reported by Moely et al. [14] on the psychometric properties and correlates of the Civic Attitudes and Skills Measure. In this study, Civic Attitudes refer to subscales Civic Action (eight items), Political Awareness (six items), Social Justice Attitude (eight items), and Diversity Attitude (five items). Competence Skills refer to subscales Interpersonal and Problem-Solving Skills (twelve items), Leadership Skills (five items), and Sensitivity (twelve items). Each respondent indicated his/her responses on a 5-point Likert scale (5 = strongly agree to 1 = strongly disagree). Higher mean scores of Civic Attitudes and Competence Skills indicate higher levels of civic attitudes and competence skills of the respondents.

5. Findings and Discussion of Civic Attitudes and Competence Skills

Results showed that overall the mean scores of the Civic Attitude ($M = 3.45$, $SD = .34$) and Competence Skills ($M = 3.52$, $SD = .32$) were above the mid-point of 3.00. This indicates a slightly above moderate level of civic attitudes and competence skills among the respondents. In other words, as a result of meaningful participation in their campus/school activities, generally the participants seemed to achieve moderately higher level of civic attitudes such as civic action, social justice, and diversity attitude. As a whole, the respondents also seemed to show moderately higher level of competence skills such as interpersonal, problem-solving, and sensitivity. Among the subscales in Competence Skills, the respondents appeared to obtain the highest mean scores for Interpersonal and Problem-Solving Skills ($M = 3.70$, $SD = .41$) as a whole. The result suggests that the respondents seemed to gain more in terms of personal and problem-solving skills as a result of their meaningful participation in the campus/school activities.

Table 1 Correlations of Civic Attitudes and Competence Skills (N=525)

Measures	1	2	3	4	5	6	7	8	9
1. Civic Attitudes	-								
2. Civic Action	.76**	-							
3. Political Awareness	.73**	.40**	-						
4. Social Justice	.71**	.29**	.36**	-					
5. Diversity Attitudes	.60**	.31**	.23**	.43**	-				
6. Competence Skills	.71**	.56**	.51**	.50**	.42**	-			
7. Interpersonal and Problem-Solving Skills	.65**	.58**	.47**	.40**	.32**	.86**	-		
8. Leadership Skills	.53**	.43**	.35**	.37**	.32**	.70**	.45**	-	
9. Sensitivity	.54**	.33**	.39**	.45**	.38**	.83**	.48**	.45**	-

Note: Scales are bold-faced. Civic Attitudes consists of Civic Action, Political Awareness, Social Justice, and Diversity Attitudes subscales. Competence Skills consists of Interpersonal & Problem-Solving Skills, Leadership Skills and Sensitivity subscales. ** $p < .01$

Pearson correlation analysis was employed to exam the correlations coefficients of Civic Attitudes and Competence Skills. Results show that Civic Attitude is strongly and significantly correlated with Competence Skills where $r(523) = .71$ at $p < .01$ (Table 1). Thus, it appears that civic attitudes of the students were related to their competence skills.

Table 2 Comparison of Civic Attitudes and Competence Skills by Gender (N=525)

Measures	Gender				t-value	df	p-value
	Male (n = 188)		Female (n = 337)				
	M	SD	M	SD			
CIVIC ATTITUDES	3.49	.41	3.44	.30	1.65	523	.09
Civic Action	3.63	.58	3.70	.47	-1.40	523	.16
Political Awareness	3.38	.62	3.20	.55	3.38	523	.001***
Social Justice	3.48	.45	3.38	.38	2.90	523	.01**
Diversity Attitude	3.40	.48	3.40	.38	-.02	523	.98
COMPETENCE SKILLS	3.53	.39	3.51	.28	.76	522	.45
Interpersonal and Problem-Solving Skills	3.69	.46	3.70	.37	-.11	523	.91
Leadership Skills	3.27	.57	3.20	.41	1.61	522	.11
Sensitivity	3.48	.43	3.45	.31	1.01	523	.31

Note: Scales are bold-faced. Civic Attitudes consists of Civic Action, Political Awareness, Social Justice, and Diversity Attitudes subscales. Competence Skills consists of Interpersonal & Problem-Solving Skills, Leadership Skills and Sensitivity subscales. ** $p < .01$, *** $p < .001$.

The independent samples *t*-test was conducted to compare the means for the civic attitudes and competence skills measures between respondents of different gender as in Table 2. Results show that there were no significant differences in the mean scores between male and female respondents at the .05 level for the mean scores, except Political Awareness and Social Justice subscales.

The results indicate that Civic Attitudes and Competence Skills and gender were statistically independent variables. In other words, the results suggest that both male and female respondents do not differ in their intention to participate in community service and their attitude towards social and cultural differences. Both male and female do not differ in their achievement of interpersonal, problem-solving, and leadership skills as well as sensitivity to others. However, the means scores in Political Awareness was significantly but slightly higher for male respondents ($M = 3.38$, $SD = .62$) than female respondents ($M = 3.20$, $SD = .55$) where $t(523)$ at $p < .001$. The means scores in Social Justice was significantly and slightly higher for male respondents ($M = 3.48$, $SD = .48$) than female respondents ($M = 3.38$, $SD = .38$) where $t(523)$ at $p < .01$.

The results seem to suggest that male respondents were slightly more aware of political issues than female respondents. The results also seem to suggest that male respondents were slightly more concern about social issues such as poverty, illiteracy, public policy and social injustice than female respondents. In this study, Craddock [16] reported over the past three decades males have found to be more knowledgeable about or interested in politics than females.

The findings are somewhat consistent with the findings of Switzer, Switzer, Stukas, and Baker [17] that females were more interested in the social aspects such as showing concern for others and for personal growth (as reflected in the mean scores of civic action, interpersonal and sensitivity subscales).

From the various studies reviewed, youth's meaningful involvement in social/ after-school activities is a pedagogy that exposes youth to types of learning experiences that may foster positive outcome as in heightened civic attitudes [18, 14], increased political activism [14], and bonded social relationships (McKinney, 2002; 14). Kohut, Parker, Keeter, Doherty, and Dimock [20] report that youth today are more interested in staying abreast of national affairs and politics than the young people of the previous generation. The findings are also consistent with Theokas and Bloch [21] who report that there is a relationship between youth's volunteerism and several individual variables linked to the Cs of PYD, namely, doing better in school (Competence), feeling more positive about the self (Confidence), avoidance of drug-use (Character), and likelihood of being socially responsible (Contribution).

6. Conclusion

Very limited studies have explored positive outcomes as in civic attitudes and competence skills as a result of meaningful participation in campus/school activities from the positive youth development framework (positive psychology perspective) particularly in Malaysia.

Thus, in an effort to fill in the gaps in the literature, the study seeks to identify the quantitative analysis of the relationship between youth's civic attitudes and competence skills and to identify whether there is gender difference in the civic attitudes and competence skills as a result of their perceived meaningful participation experience.

In line with current education curriculum with its emphasis on character development, this study may add significance to the importance of extracurricular/ after-school programmes in youth development. The study may give preventionists the asset-based language needed to mirror youth's civic attitudes and competency through meaningful participation. Future researchers, educators or health practitioners may study positive development in youth or develop preventive intervention programmes in order to build capacity, skills and competency in youth.

References

- [1] Harun, M.T. ,& Salamudin, N. Cultivating personality development through outdoor education programme: the Malaysia experience. *Procedia Social and Behavioral Sciences*, 2010, 9, pp.228-234.
- [2] Lerner, R.M., Alberts, A.E., & Bobek, D.L. Thriving youth, flourishing civil society: How positive youth development strengthens democracy and social justice. *A Report for the Carl Bertelsmann-Prize*, 2007, pp. 1-14.
- [3] Larson , R.W. Towards a psychology of positive youth development. *American Psychologist*, 2000, 55(1), pp.170-183.
- [4] Gottfredson, D.C., Gerstenblith, S.A., Soule, D.A., Womer, S.C., and Lu, S. Do after school program reduce delinquency? *Preventive Science*, 2004, 5(4), pp.253-266.
- [5] Lerner, R.M. *Concepts and theories of human development*. (3rd ed.). Mahwah, NJ: Lawrence Erlbaum, 2002
- [6] LeBlanc, J.C., Talbot, P.J. & Craig, W.M. Psychological health in youth: An international perspective. In M. Ungar (Ed.), *Handbook for working with children and youth; Pathway to resilience cross cultures and context* . California: Sage Publications, Inc., 2005, pp.165-188.
- [7] Lerner, R.M., Almergi, J.B., Theokas, C & Lerner, J.V. Positive youth development: A view of issues. *Journal of Early Adolescence*, 2005, 25(1), pp.10-16.
- [8] Lee, M.N. *Resilience and positive youth development in youth: Overseas community service-learning experience*. Unpublished Doctoral Dissertation, Nanyang Technological University, Singapore, 2007.
- [9] Yates M., and Youniss, J. Community service and political-moral identity in adolescents. *Journal of Research on Adolescence*, 1996, 6 (3), pp. 271-284.

- [10] Hunter, S and Brisbin Jr., R.A. The impact of service-learning on democratic and civic values. *Political Science and Politics*, 2000, 30, pp. 623-626.
- [11] Morrissey, K.M. & Werner-Wilson, R.J.. The relationship between out-of-school activities and positive youth development: An investigation of the influences of communities and family. *Adolescence*, 2005, 40(157), pp.67-80
- [12] Benard, B. The foundation of the resiliency framework: From research to practice. 2002 Available online:<http://www.resiliency.com>
- [13] Constantine, N. A. & Benard, B. California healthy kids survey resilience assessment module: Technical report. *Center for Research on Adolescent Health and Development*. Berkeley, CA: Public Health Institute, 2001. Available online: <http://crahd.phi.org/projects/HKRAtech.PDF>
- [14] Moely,B.E., McFarland, M.,Miron, D., Mercer, S.H., Ilustre,V. Changes in college students' attitudes and intentions for civic involvement as a function of service-learning experiences. *Michigan Journal of Community Service Learning*, 2002, 9(1), pp.18-26.
- [15] Khoo, A., Lim, K.M., & Liau, A. *The SIF/YEP study: A summary of findings*. Unpublished report, National Youth Council, Singapore, 2004.
- [16] Craddock, A.W. *Differences in gender and civic education in Ukraine*. Paper presented for the European Consortium of Political Research General Conference, Budapest, Hungary, September 8-10, 2005.
- [17] Switzer, C.L., Switzer, G.E., Stukas, A.A. & Baker, C.E. Medical student motivations to volunteer: Gender differences and comparisons to other volunteers. In J.R. Ferrari, and J.G. Chapman (Eds.), *Educating students to make a difference: Community-based service learning* New York: The Haworth Press, 1999, pp. 53- 64).
- [18] Astin, A.W. & Sax, L.J. How undergraduates are affected by serviceparticipation. *Journal of College Student Development*, 1998, 39(2), 251-263.
- [19] McKinney, K.G. Engagement in community service among college students: Is it affected by significant attachment relationships? *Journal of Adolescence*, 2002, 25(1), pp.139-154.
- [20] Kohut, A., Parker, K., Keeter, S., Doherty, C., & Dimock, M. *How young people view their ives, future and politics: A portrait of "generation next"*. Washington, DC. The Pew Research Centre for People and the Press, 2007.
- [21] Theokas, C., and Bloch, M. Teens as volunteers. Research-to-Results Fact Sheet. Washington, D.C. *Child Trends*, 2006

ICSSAM- 624

How Adaptive Behavior Influences Academic Achievement among Elementary School Students

Tiara Carina, Putu Ayu Novia Viorica, Komang Try Damayanti, Supriyadi

Psychology Study Program, Faculty of Medicine, Udayana University

tiaracarina@yahoo.com

Abstract

Adaptive behavior is the performance of an individual in daily activities pertaining to personal and social functioning (Markusic, 2012). Adaptable individuals are capable of integrating new information, able to understand risks and opportunities, and also able to choose actions and behaviors that serve not merely their own interests but those of others. If the whole criterias are completed, an individual will be knowledgeable and responsible. Preparing children to be knowledgeable and responsible adults in the future is the goal of education. Education itself is a structured and prepared effort to change and develop wanted behaviors (Wahyuningsih, 2004). How students achieve educational goal reflects on their academic achievement. Academic achievement is ability and knowledge of an individual in one or more study area (Webster's New International Dictionary in Liana, 2013). Therefore, the researchers assume that there is a correlation between adaptive behavior and academic achievement among elementary school students.

This research is a correlational quantitative study. The criterias of the subject are the elementary school students in Bali both boys and girls who their age are between 6 to 12 years old. The sampling method is stratified random sampling. The data collection method uses Vineland Adaptive Behavior Scale and study report of the students in odd semester. The data analysis method is Regression Analysis by using the computer program SPSS version 17.0.

The results of this study is expected to provide an overview of adaptive behavior contribution to academic achievement among elementary school students, so that school could pay attention of increasing adaptive behavior to increase student's academic achievement.

Keywords : Adaptive Behavior, Academic Achievement, Elementary School Students

1. Introduction

Adaptive behavior is the performance of an individual in daily activities pertaining to personal and social functioning (Markusic, 2012). Adaptable individuals are capable of integrating new information, able to understand risks and opportunities, and also able to choose actions and behaviors that serve not merely their own interests but those of others. If the whole criterias are completed, an individual will be knowledgeable and responsible.

Preparing children to be knowledgeable and responsible adults in the future is the goal of education. Education itself is a structured and prepared effort to change and develop wanted behaviors (Wahyuningsih, 2004). How students achieve educational goal reflects on their academic achievement. Academic achievement is ability and knowledge of an individual in one or more study area (Webster's New International Dictionary in Liana, 2013). It can be concluded that education is individual's ability in studying. The goal of education is reached if students have high academic achievement. Students with high academic achievement has indication of well knowledgeable (Hamdu & Agustina, 2011).

Therefore, the researchers assume that there is a correlation between adaptive behavior and academic achievement among elementary school students.

Adaptive Behavior

Adaptive Behavior is a person typical performance in their daily activity that pertaining social and personal skills (Markusic, 2012). In Vineland Adaptive Behavior Scale, adaptive behavior can be measured by social and personal skills. This test is classified into 4 main adaptive indicators, such as:

- a. Communication, divided into: receptive (a person's ability to understand, listen, and follow the instruction), expressive (a person's ability to talk, start a conversation, interactively talk, express the complex idea), and written (a person's ability to read and write).
- b. Skills in daily life, divided into: personal (a person's ability to eat, dress, and health care), domestic (a person's ability to do the house hold task) and community (a person's ability to use their time, money, telephone).
- c. Socialization, divided into: interpersonal relationship (a person's ability to interact with other people), playing and leisure time (a person's ability to use time effectively), and coping skill (a person's ability to control drive, respon and follow the task).
- d. d. Motion, divided into: gross motor skills (a person's ability to sit, walk, run) and fine motor skills (a person's ability to manipulate objects, draw and use scissors).

Academic Achievement

Assessment of student learning outcomes to determine how far the student has reached the goal of learning is called as a learning achievement or academic achievement. According to Winkle (1997), learning process experienced by students produces changes in the field of knowledge and understanding, in the field of value, attitude and skill. The change is appear in the learning or academic achievement of students toward the questions, issues or tasks assigned by the teacher. Student's academic achievement determines the progress that has been achieved in studying.

To achieve high learning achievement, there is some factors that must be considered. According to Suryabrata (1998) dan Shertzer & Stone (dalam Winkle, 1997), the outline of the factors that influence studying, learning and student academic can be classified into two parts, internal factors and external factors.

- a. Internal factors
 - 1) Physiological factors, the factors related to health and sensory, consist of the body health and the sensory.
 - 2) Psychological factors, consist of intelligence, attitude, adaptive behavior and motivation.
- b. External factors, is everything out of the self, that influences learning achievement. Such as:
 - 1) Family factors, consist of social and economic status, parents education, parents caring and situation on relationship with family.
 - 2) School environment factors, consist of school facility, teacher and student competence, curriculum and learning method.
- c. Environment factors
 - 1) Social culture
 - 2) Participant in education

2. Main Body

2.1 Method

Independent variable of this research is adaptive behavior and the dependent variable is academic achievement. Adaptive behavior is defined as the performance of an individual in daily activities pertaining to personal and social functioning. Academic achievement is defined as ability and knowledge of an individual in one or more study area.

The target population of this research is elementary school students. The method of sampling used is stratified random sampling. The criteria of the subject are the elementary school students in Bali both boys and girls whose age is between 6 to 12 years old. This research uses 54 samples in Bali. Samples are asked some questions from Vineland Adaptive Behavior Scale that has been standardized and collect their study report in odd semester.

Data is collected by measuring adaptive behavior from Vineland Adaptive Behavior Scale and study report of the students in odd semester. The Vineland Adaptive Behavior Scale (Vineland, Sparrow, Balla & Cicchetti in Anastasi & Urbina, 1997) are well-known and widely used internationally, as an instrument to measure the level of adaptive functioning in children and adolescents. The aspects of adaptive behavior are divided into four which are communication, skills in daily life, socialization and motion. The questions are asked to the students by the researchers in an interview.

Validity and reliability are two very important things to the quality of research instruments. Therefore, prior to conducting the real research, the instruments of the research must be proven valid and reliable first. Validity is perceived as how far a test can measure the measurable attributes (Azwar, 2010). Valid instruments are thus defined as the measurement tools used to measure the desired ones. This research uses content validity. Content validity is a type of validity estimated by a test to the content of the test by the means of rational analysis or professional judgement (Azwar, 2003). Reliability according to has some aspects such as consistency, predictability, and accuracy. also stated that reliability is a mean to measure the same objects repeatedly, with similar instruments, in order to obtain similar results. Thus it can be concluded that reliability is patched down into three words; stability, dependability, predictability (Santoso, 2003).

The data obtained from the interview and study report will be analyzed using the mean of SPSS 17.0, with regression test as the main operation. The result of this research we assume will point out that adaptive behavior influences academic achievement among elementary school students.

2.2 Results

Normality test is processed with SPSS program version 17.0 for windows by using One Sample Kolmogorov-Smirnov Test. The result is as follows: for the Vineland Social Maturity score, $p = 0.200$ so the $p > 0.05$ thus the distribution of the data is normal. And for the study report score, $p = 0.200$ so the $p > 0.05$ thus the distribution of the data is also normal.

Linearity test is processed with program SPSS version 17.0 for windows by using Means Test. The result is as follows: $p = 0.032$ so $p < 0.05$ thus the variables of this research have linear correlation.

Due to the normality of the data, the appropriate method is using parametric statistic, Linear Regression Analysis. The result is as follows: $p = 0.000$ thus $p < 0.05$. It means there is significant correlation between adaptive behavior and academic achievement. Effective contribution = 0.472. It means that adaptive behavior influences academic achievement as 47,2%. Beta coefficient = 0.687. It means correlation level between adaptive behavior and academic achievement is 0.687. The conclusion is there is correlation between adaptive behavior and academic achievement among elementary students in Bali.

2.3 Discussion

According to Poerwodarminto (in Ratnawati, 1996) achievement is result of individual's achievement. However academic achievement is achievement of an individual that is recorded in a study report. Academic achievement is influenced by some factors which consist of physiological and psychological factor. Adaptive behavior is one of the important psychological factor. Adaptive behavior is ability to adapt with environment's norms and standards (Rahayu, 2010). Individuals who adapt well in environment will also adapt well in study process, hence they will show high academic achievement in school.

The previous research supports this finding. The result of Browing & Herbert research in 1974 (in Rochyadi, 2005) shows that there is positive correlation between adaptive behavior and intelligence. Student with higher adaptive behavior will also has higher intellectual function. A study from Chicago-based group CASEL, the Collaborative for Academic, Social, and Emotional Learning (in Thomas, 2007) shows that when emotional and social skill is taught at school, the social climate and academic achievement is increased. Another research shows that schools reach success in academic when they have clear system in promoting the importance of emotional and social skills (Elias, 1997).

From the effective contribution = 0.472, means that adaptive behavior contribution to academic achievement is 43,3%. Students with higher adaptive behavior will reach higher academic achievement and vice versa.

The conclusion is there is correlation between adaptive behavior and academic achievement. Researchers hope that this research result can give information to students, teachers, and parents about how adaptive behavior influences academic achievement.

Researchers suggest to teachers and parents to give more attention in teaching social and personal skills to children, so that their academic achievement can be increased. For next researchers that will do the similar research, it is better to notice other variables that influence adaptive behavior and academic achievement therefore this topic can be deepened by adding different point of view to make the research richer. It is also suggested that other researchers use different research place, sampling method, and more subject number and criterias.

3. References

- Anastasi, A., & Urbina, S. (1997). *Tes Psikologi*. New Jersey: Prentice Hall, Inc.
- Azwar. (2003). *Sikap Manusia: Teori dan Pengukurannya*. Yogyakarta: Pustaka Pelajar.
- Azwar. (2010). *Reliabilitas dan Validitas*. Yogyakarta: Pustaka Pelajar.
- Elias, M. J., & dkk. (1997). *Promoting Social and Emotional Learning*. Washington: ASCD.
- Hamdu, G., & Agustina, L. (2011). Pengaruh Motivasi Belajar Siswa Terhadap Prestasi Belajar IPA di Sekolah Dasar. *Jurnal Penelitian Pendidikan*, 81-86.
- Liana, L. (2013). Pengukuran Korelasi Achievement Motive, Affiliation Motive, dan Power Motive dengan Kinerja Mahasiswa Menggunakan SPSS. *Dinamika Teknik*.
- Makusic, M. (2012, Februari 14). *The Vineland Adaptive Behavior Scale and Special Needs Students*. Dipetik Desember 1, 2013, dari <http://www.brighteducation.com/special-ed-law/13506-the-vineland-adaptive-behavior-scale/>
- Rahayu, E. (2006). Hubungan Antara Nilai Mata Pelajaran Kemampuan Merawat Diri dengan Perilaku Adaptif pada Siswa Sekolah Luar Biasa Bagian C. *Psikodimensia*, 127-138.
- Rahayu, E. (2010). Perilaku Adaptif Tunagrahita Dewasa Ditinjau dari Klasifikasi Tunagrahita. *Penelitian, Semarang : Universitas Katolik Soegijapranata*. (unpublished)
- Ratnawati, M., & Sinambela, F. (1996). Hubungan antara Persepsi Anak terhadap Suasana Keluarga, Citra Diri, dan Motif Berprestasi dengan Prestasi Belajar pada Siswa Kelas V SD Ta'Miriyah Surabaya. *Jurnal Anima*.
- Santoso, S. (2003). *Masalah Statistik dengan SPSS versi 11.5*. Jakarta: PT Elex Media Komputindo.
- Suryabrata, S. (1998). *Psikologi Pendidikan*. Jakarta: PT Raja Grafindo Persada.
- Thomas. (2007). *To Increase Student Achievement Should We Focus on Social Skills?* Dipetik 12 7, 2013, dari Open Education: <http://www.openeducation.net/2007/12/26/to-increase-student-achievement-should-we-focus-on-social-skills/>

Wahyuningsih, A. S. (2004). *Hubungan Antara Kecerdasan Emosional dengan Prestasi Belajar pada Siswa Kelas II SMU Lab School Jakarta Timur*. Skripsi. Jakarta: Universitas Persada Indonesia Y.A.I. (unpublished)

Winkle, W. (1997). *Psikologi Pendidikan dan Evaluasi Belajar*. Jakarta: Gramedia.

ICSSAM- 697

Do Perceptions of Teacher's Conditional Regard Negatively Predict Effort and Interest in Physical Education Lessons?

Wai Cheong Eugene Chew

Nanyang Technological University

Boon San Coral Lim

Nanyang Technological University

Ser Hong Tan

Nanyang Technological University

Abstract

Conditional regard has been investigated recently as a parenting practice that predicts forms of emotional regulation that were associated with non-optimal human functioning. There is a lack of research on the use of such practices in the teaching context. We examined the proposition, based on self-determination theory (SDT), that students' perceptions of their teachers adopting practices of conditional negative regard (CNR) and conditional positive regard (CPR) are negatively associated with their experiences of effort and interest/enjoyment in physical education lessons via controlled regulation, and positive and negative affect as mediators. Structural equation modeling analysis with manifest variables ($N = 406$), yielded a good fit of the model to the data, with multiple R^2 of .46 for effort and .54 for interest/enjoyment. All parameter estimates of the direct effects of CNR and CPR on the outcome variables were non-significant except for the direct effect of CPR on effort.

However, parameter estimates of the direct effects from CPR to positive affect, effort, and enjoyment/interest were positive instead of negative as expected. Also, the total indirect effects of CPR on effort, as well as on interest/enjoyment, were positive (.221 and .219 respectively). On the other hand, the total indirect effect of CNR on effort and that on interest/enjoyment were negative (-.178 and -.235 respectively). Together with the results that both specific indirect effects of CPR on effort, and on interest/enjoyment, via positive affect, were positive and significant, these findings suggest new revelations concerning predictions from students' perceptions of CPR. A secondary aim of the study was to test the SDT-based hypothesis that the outcomes arising from students' perceptions of CNR and CPR depend on their causality orientations (autonomy and controlled orientations).

Using sequential regression on each of the criterion variables in turn, results of the analyses of three-way interaction with either CNR or CPR as the predictor, and autonomy orientation and controlled orientation as moderators, did not support the hypothesis.

Keywords: conditional regard, self-determination theory, causality orientations, physical education

ICSSAM- 725

Trait Predictors of Body Shape Concerns among Young Adults in US and China

Tao Sun

Department of Community Development and Applied Economics
University of Vermont, Burlington, Vermont, USA

tsun@uvm.edu

Shengdong Lin

School of Journalism and Communication
Xiamen University, China

lin.shengdong@gmail.com

Jane Kolodinsky

Department of Community Development and Applied Economics
University of Vermont, Burlington, Vermont, USA

Jane.Kolodinsky@uvm.edu

Abstract

Purpose

This paper seeks to examine hierarchical trait predictors of body shape concerns among college students in the US and China. It investigates whether the constructs of self-esteem, need to belong, need for body resources, mediate the impacts of Big Five personality traits on body shape concerns.

Method

Among the 541 samples collected in China ($n = 265$) and US ($n = 276$), structural equation modeling was conducted on the hierarchical relationships among Big Five personality traits (neuroticism, conscientiousness, introversion, agreeableness, openness to experience), self-esteem, need to belong, need for body resources, and body shape concerns. Separate models were run among Chinese and US samples, as well combined samples. We developed our hierarchical models based on the work of Allport (1961), who proposed three levels of personality traits: cardinal (exogenous), central (mediating) and surface traits (endogenous). In our study, the surface trait (body shape concerns) represents a disposition to act within specific situational contexts that result from the effects of cardinal traits (Big Five factors) and central traits (self-esteem, need to belong and need for body resources).

Findings

For the combined samples, the fit statistics for the model turned out to be good ($\chi^2 = 37.009$, $df = 11$, $NFI = .951$, $CFI = .963$, $RMSEA = 0.066$, probability level = .00). The model explained 15% of the variance in body shape concerns. For the US samples, the fit statistics were also acceptable ($\chi^2 = 28.233$, $df = 11$, $NFI = .937$, $CFI = .957$, $RMSEA = 0.075$, probability level = .003). For the Chinese samples, the original model did not fit the data well ($\chi^2 = 39.728$, $df = 11$, $NFI = .892$, $CFI = .911$, $RMSEA = 0.099$, probability level = .000), until self-esteem and its associated relationships were removed from the model ($\chi^2 = 10.562$, $df = 8$, $NFI = .961$, $CFI = .989$, $RMSEA = 0.035$, probability level = .228).

Research limitations/implications

Our analyses were based on the data collected among college students. Future models need to be run among samples of more general adult samples in the two countries.

Practical implications

Understanding motivational predictors of body shape concerns in a cross-cultural context will help global intervention campaigns targeted at those with body image issues.

Originality/value

The study represents an effort to examine the hierarchical trait antecedents of body shape concerns both in the US and in China. By simultaneously modeling the cardinal, central, and surface traits, this study should further our understanding of individual difference mechanisms underlying body shape concerns in a cross-cultural context.

ICSSAM- 755
Mapping the Intellectual Structure of Emotion Management

Yuan-Duen Lee

Chang Jung Christian University
e-mail: ydlee@mail.cjcu.edu.tw

Shih-Hao Chen

Chang Jung Christian University
e-mail:ericchen101016@yahoo.com.tw

Jen-Hwa Kuo

Chang Jung Christian University
e-mail: dynaopto@gmail.com

Abstract

This paper adopt scientometrics to analyse many articles's citation data and realize the paradigm shift of emotion management of health. Emotion management is an important issue of organizational psychology practice. By analyzing 95,996 citations of 1,758 articles published in SSCI and SCI journals in the emotion management field from year 2003 to year 2012, this study maps the intellectual structure of emotion management of health studies and find the development of emotion management of health. After executing keyword analysis and tag cloud analysis, “emotion”, “management”, “social”, “health”, “quality”, “research, and “education” are the emerging topics in the security and privacy of health field. The contribution of this study is to provide important insights and implications of emotion management of health. The results of the mapping can provide a valuable tool for researchers to access the literature in this area.

Index Terms—Emotion Management, Bibliometrics, Tag Cloud

I. Introduction

The topic of emotions in the workplace has gained much considerable attention in recent decades [1]. A lack of theoretical clarity regarding the stream of research is that of emotional management. The knowledge system of each discipline is a part of a more general knowledge system as well. It plays a basic role in storage and knowledge spread in various disciplines,

journals, articles, books and monographs [2]. In the formal exchange of the three ways (journals, articles, books and monographs), journal articles produce the most useful information because of their timeline as well as the evaluation of the scholars.

This study uses Bibliometrics and Tag Cloud Analysis to understand the evolution to introduced emotion management research from 2003 to 2012. This study, in a more objective way, uses Invisible Network of Knowledge (INK) to research the application of the smart structures of emotion management field.

This study defines INK as a set of interrelated invisible node. Each node provides a specific purpose for emotion management research and any other fields of research. With the quotation and co-citation analysis, this mode can explore the smart structures existing in any field, define its knowledge network, and further depict the process of its knowledge diffusion.

The aim of this study is to provide emotion management researchers with a unique map to better understand emotion management related publications and to provide a systematic and objective mapping of different themes and concepts in the development of emotion management field. This study also attempts to help identify the linkage among different publications and confirm their status and positions in their contribution to the development of emotion management field. The principal methods used are citation and Tag Cloud Analysis.

Therefore, this study is trying to reach the following research purposes by applying Invisible Network of Knowledge (INK):

- 1) To establish the most important and the most influential scholars, journals, books and articles in Emotion management study with an objective analysis of the citation.
- 2) To provide important insights and impact on current and future research paradigms with the analysis of invisible network of knowledge in Emotion management research, as well as the relative research of scholars and practitioners in the management level.

II. Studies of Academic Literature

There are a number of techniques that can be used to study a body of literature. Most frequent is the simple literature review where a highly subjective approach is used to structure the earlier work. Objective and quantitative techniques have recently become popular with more databases available online for use. These techniques adopt author citations, co-citations, and systematic review [3] to examine the invisible knowledge network in the communication process by means of written and published works of a given field. These techniques are attractive because they are objective and unobtrusive [4].

Several studies have used the bibliometric techniques to study the literature of management research. [5] -[8]. To the best of our knowledge, no similar study has been conducted on the current research of emotion management. Therefore this study aims to fill a gap in emotion management literature by applying citation and Tag cloud analysis to a representative sample of recent research on emotion management collected by the Science Citation Index and Social Sciences Citation Index.

III. Methodology

A. Research Method

Search “emotion” and "management" related journals in SCI and SSCI journals fields. Instead, the entire databases of SCI and SSCI from 2003 to 2012 served as the universe for analysis. The SCI and SSCI are widely used databases, which include citations published in over 8000 world's leading scholarly journals. While there are arguments that other online databases might also be used for such analysis, using SCI and SSCI provided the most comprehensive and the most accepted databases of emotion management publications. In order to collect the data, we used “key word” method which utilizes the SCI and SSCI databases key word search in article’s title and abstract. Using “emotion management” as key word, this study collected 1,758 journal articles which further cited 95,996 publications as references. The cited references in these papers included both books and journal articles. Bibliometrics and tag cloud are applied to the study.

B. Bibliometric

Citation analysis method is mainly used to analyze the reference phenomenon or objects of journals, papers, authors, and to explore the relationship between the sources of literature and citation. It can help researchers understand the current state of development of certain disciplines, the literature usage characteristics in the disciplines, correlation within the literatures between disciplines and the future trends of research through citation analysis.

C. Tag Cloud

In addition to the advantage of visual creativity and easy-to-use, Tag cloud can be used to assess cluster focus, and is beneficial to the content promotion. It is a good navigation tool to the traditional text based information retrieval system. Tag cloud can also support browsing unexpected discovery, and can be used as a visual summary of the database content.

The tag cloud carries on the preliminary inquisition, pondered from the social network angle, uses the populace wisdom, a little at a time mounts up, or may innovate the theory and the real diagnosis, provides a new thinking direction. The tag cloud is the common display mode for the search results in folksonomy-based websites, presenting tag sizes according to the frequency and the popularity of the key words. In other words, the tag cloud is one kind the sole glossary, demonstrated by the different color size font, encircles the shape with the succinct sole vision to present the subject index the network application way, may let human one see the popular tag, each tag all is a directional same subject group linking, simultaneously also is one kind of survey tool.

IV. Results

A. Citation Analysis

To identify the key publications and scholars that have laid down the ground work of emotion management research, citation data were tabulated for each of the 1,758 source documents and 95,996 references using the Excel package. The citation analysis produced interesting background statistics, as shown in the following tables. Table 1 lists the most cited journals in emotion management area in the decade years, among which Journal of Personality and Social Psychology, Journal of Applied Psychology, Academy of Management Review, Psychological Bulletin, and Pain are the top five most cited journals. The ranking of Journal of Personality and Social Psychology is higher than many prestigious management journals, which indicates Journal of Personality and Social Psychology has proved itself is the most influential journal among emotion management research of this ten years. The general pattern of the most cited journals shows that emotion management research features psychology and medical specific journals.

TABLE1 THE MOST FREQUENTLY CITED JOURNALS: 2003-2012

Journal	Total Citation
Journal of Personality and Social Psychology	2505
Journal of Applied Psychology	856
Academy of Management Review	720
Psychological Bulletin	707
Pain	624
Academy of Management Journal	616
Archives of General Psychiatry	558
American Journal of Psychiatry	543
Journal of Consulting and Clinical Psychology	539
Administrative Science Quarterly	497
American Psychologist	480
British Journal of Psychiatry	469
Personality and Individual Differences	454
Personality and Social Psychology Bulletin	443
Human Relations	416
Journal of Psychosomatic Research	392
Psychosomatic Medicine	380
Diabetes Care	373
Jama-Journal of the American Medical Association	362
Social Science & Medicine	344
Cognition & Emotion	333
Psychological Review	308
Schizophrenia Bulletin	300
British Medical Journal	290
Child Development	290

The most influential documents with the most citation and the most influential scholars were then identified by their total counts of citation within the selected journal articles. Table 2 and Table 3 list publications including both books and journal articles. As shown in Table 2, the most cited emotion management publication between 2003 and 2007 (the first five years). It was noted that the majority of the highly cited documents were actually books, Hochschild's book *The Managed Heart: Commercialization of Human Feeling*, followed by Lazarus's book *Stress Appraisal and Coping*, and Baron's paper *The Moderator-Mediator Variable Distinction in Social Psychological Research-Conceptual Strategic, and Statistical Considerations* (see Table 2).

TABLE 2 HIGHLY CITED DOCUMENTS: 2003-2007

Full Citation Index For Document	Total citation
Hochschild A.R., 1983, <i>Managed Heart</i>	56
Lazarus RS, 1984, <i>Stress Appraisal and Coping</i>	31
Baron RM, 1986, <i>J Pers Soc Psychol</i> , V51, P1173	27
Hochschild AR, 1979, <i>Am J Sociol</i> , V85, P551	24
Glaser B.G., 1967, <i>Discovery Grounded Theory</i>	23
Watson D, 1988, <i>J Pers Soc Psychol</i> , V54, P1063	19
Goleman D., 1995, <i>Emotional Intelligen</i>	17
Lazarus R. S., 1991, <i>Emotion Adaptation</i>	16
Ashforth BE, 1995, <i>Hum Relat</i> , V48, P97	15
Butzlaff RL, 1998, <i>Arch Gen Psychiat</i> , V55, P547	14
Fineman S., 1993, <i>Emotion Org</i>	14
Hogarty GE, 1986, <i>Arch Gen Psychiat</i> , V43, P633	14
Leidner R., 1993, <i>FAST FOOD FAST TALK</i>	14
Mayer J. D., 1997, <i>EMOTIONAL DEV EMOTIO</i> , P3	14
RAFAELI A, 1987, <i>ACAD MANAGE REV</i> , V12, P23	14
Aiken L. S., 1991, <i>MULTIPLE REGRESSION</i>	13
ASHFORTH BE, 1993, <i>ACAD MANAGE REV</i> , V18, P88	13
MCFARLANE WR, 1995, <i>ARCH GEN PSYCHIAT</i> , V52, P679	13
VANMAANEN J, 1989, <i>RES ORGAN BEHAV</i> , V11, P43	13
WHARTON AS, 1993, <i>WORK OCCUPATION</i> , V20, P205	13

For the second five years (2008-2012), the most cited emotion management publications were the same as in the first five years. The third most cited was Hochschild's book *The Managed Heart: Commercialization of Human Feeling*, followed by Baron's paper *The Moderator Mediator Variable Distinction in Social Psychological - Research - Conceptual Strategic, and Statistical Considerations* and Lazarus's book *Stress Appraisal and Coping* (See Table 3).

TABLE 3 HIGHLY CITED DOCUMENTS: 2008-2012

Full Citation Index For Document	Total Citations
Hochschild A.R., 1983, Managed Heart	110
Baron RM, 1986, J Pers Soc Psychol, V51, P1173	62
Lazarus RS, 1984, Stress Appraisal and Coping	61
Goleman D., 1995, Emotional Inatelligen	41
Mayer J. D., 1997, Emotional Dev Emotio, P3	41
Salovey P., 1990, Imagination Cognitio, V9, P185	40
Glaser B.G., 1967, DISCOVERY GROUNDED T	39
Watson D, 1988, J Pers Soc Psychol, V54, P1063	39
Lazarus R. S., 1991, EMOTION ADAPTATION	36
Fredrickson BL, 2001, Am Psychol, V56, P218	34
Hochschild AR, 1979, Am J Sociol, V85, P551	34
Ashforth BE, 1993, Acad Manage Rev, V18, P88	33
Goffman E., 1959, Presentation Self Ev	33
Aiken L. S., 1991, Multiple Regression	32
Morris JA, 1996, ACAD MANAGE REV, V21, P986	29
Podsakoff PM, 2003, J APPL PSYCHOL, V88, P879	29
Weiss HM, 1996, RES ORGAN BEHAV, V18, P1	27
ASHFORTH BE, 1995, HUM RELAT, V48, P97	26
FORNELL C, 1981, J MARKETING RES, V18, P39	25
Goleman D., 1998, WORKING EMOTIONAL IN	25

B. Tag Cloud Analysis

In this study, the Science Citation Index (SCI) and Social Sciences Citation Index (SSCI) were used for analysis. The SCI and SSCI are widely used databases, which include citations published in over 8000 world's leading scholarly journals. While there are arguments that other online databases might also be used for such analysis, using SCI and SSCI provided the most comprehensive and the most accepted database of emotion management publications.

Unlike other prior studies, the data used in this study were not drawn from journals chosen by peer researchers [9]. Instead, the entire databases of SCI and SSCI from 2003 to 2012 served as the universe for analysis. In order to collect the data, we used “key word” method which utilizes the SCI and SSCI databases key word search in article’s title and abstract. Using “emotion management” as key word, this study collected 1,758 journal articles which further cited 95,996 publications as references.

Table 4: keyword analysis of comparison chart from 2002 to 2011: showing top 30 possible words

Key words	2003-2007	2008-2012	Difference
emotion	149	459	+310
management	72	203	+131
pain	46	55	+9
stress	37	62	+25
coping	34	50	+16
family	29	35	+6
disorder	27	52	+25
social	25	92	+67
work	24	55	+31
chronic	23	29	+6
anger	22	46	+24
care	22	38	+16
psychosocial	22	16	-6
schizophrenia	22	17	-5
cognitive	21	58	+37
health	21	59	+38
intervention	21	25	+4
therapy	20	38	+18
quality	19	44	+25
behavior	18	64	+46
life	18	36	+18
organizational	17	36	+19
anxiety	17	22	+5
control	17	na	na
intelligence	17	68	+51
treatment	16	28	+12
depression	15	43	+28
communication	15	47	+32
risk	15	38	+23
affective	14	na	na

In the stage 2, there is a tag cloud of the 30 most popular title analysis in the selected number possible words analysis(see Figure 5, Figure 6 and Table 5). The largest tag in stage 2 analysis is "emotional" (167→366), other large tags are the words "management" (109→191), "study" (27→86) and "effect" (39→86) are also dominant. The rest should be noted that the words "behavior" (20→66), and "role" (22→61).



Figure 5 Tag clouds in title of Emotion Management(2003-2007)



Figure 6 Tag clouds in title of Emotion Management(2003-2007)

Table 5: title analysis of comparison chart from 2002 to 2011: showing top 30 possible words

Key word	2003-2007	2008-2012	Difference
emotional	167	366	199
management	109	191	82
patients	62	94	32
pain	41	61	20
effect	39	86	47
coping	34	45	11
disorder	33	45	12
family	33	na	na
work	33	48	15
doi	30	na	na
social	29	69	40
stress	29	na	na
intervention	28	40	12
study	27	86	59
schizophrenia	26	na	na
health	25	40	15
anger	24	48	24
personality	24	na	na
treatment	23	40	17
life	22	39	17
role	22	61	39
care	21	na	na
training	21	na	na
behavior	20	66	46
control	20	na	na
experiences	20	45	25
model	20	45	25
responses	20	na	na
psychosocial	19	na	na
research	19	na	na

V. Conclusion

The past decade years have seen extensive research on emotion management. This study investigates emotion management research using citation and co-citation data published in SCI and SSCI between 2003 and 2012.

The mapping of the intellectual structure of emotion management studies indicates that emotion management has somehow created its own literature and that it has gained the reputation as a legitimate academic field, with emotion management specific journals gaining the status required for an independent research field, such as *Journal of Personality and Social Psychology*, *Journal of Applied Psychology*, *Academy of Management Review*, *Psychological Bulletin*, and *Pain*. Given that the emotion management is still young and our analysis has shown that it has an evolving structure, it is believed that emotion management publication outlets will gain more popularity and prestige that is required to become a more prominent academic field when we learn more about current paradigms and the key research themes in emotion management studies, how they relate, and what they stand for. With more scholars and more resources contributing to the emotion management area, a better academic environment conducive for research ideas' cross-fertilizing will be formed and emotion management, as a field, will gain more momentum for further development.

While this study provides important insights on organizational psychology research, there are limitations associated with use of citation and co-citation analysis to identify influential authors or group research topics. The citation dataset we collected from SCI and SSCI only provided information on the first author for each document (while it is not impossible to dig out information about other authors, the cost of doing so will make citation analysis less attractive), implying that our citation analysis unduly overestimate the influence of the first author in any given document, and their co-authors, which may be equally significant and influential, are thus undervalued by this method. Further, the use of factor analysis to group authors into sub-fields only brings out major research themes, which thus somehow neglects small research themes or other nursing leadership themes. In order to overcome these problems, further studies should be done by, for example, analyzing each document manually or choosing different databases for comparison.

VI. References

- [1] D. H. Kluemper, T. DeGroot, and S. Choi, "Emotion Management Ability: Predicting Task Performance, Citizenship, and Deviance," *Journal of Management*, vol. 39, no. 4, pp. 878-905, 2013.
- [2] P. R. Chandy, and T. G. F. Williams, "The impact of journal and authors on international business research: A citation analysis of JIBS articles," *Journal of International Business Studies*, vol. 25, no. 4, pp. 715-728, 1994.
- [3] B. M. Compain, "The digital: facing a crisis or creating a myth?" MIT Press, 2001.
- [4] E. Garfield, *Citation Indexing: Its Theory and Application in Science, Technology, and Humanities*, New York: Wiley, 1979.

- [5] A. R. Ramos-Rodriguez, and J. Ruiz-Navarro, "Changes in the intellectual structure of strategic management research: A bibliometric study of the strategic management journal, 1980-2000," *Strategic Management Journal*, vol. 25, pp. 981-1004, 2004.
- [6] F. J. Acedo, and J. C. Casillas, "Current paradigms in the international management field: An author co-citation analysis," *International Business Review*, vol. 14, pp. 619-639, 2005.
- [7] Z. Ma, and K. H. Yu, "Research paradigms of contemporary knowledge management studies: 1998-2007," *Journal of Knowledge Management*, vol. 14, no. 2, pp. 175-189, 2010.
- [8] F. J. Hu, and J.H. Kuo, "Mapping the Intellectual Structure of Supply Chain Management," *IACSIT International Journal of Engineering and Technology*, Vol. 5, No. 2, pp. 300-305, 2013.
- [9] K. A. Walstrom and L. Leonard, "Citation classics from the information systems literature," *Information and Management*, vol. 38, pp. 59-72, Dec. 2000.

ISEPSS- 2098

Do We Tip People for Just Doing Their Job? The Effect of Showing Gratitude on Tipping Behavior

Yevvon Yi-Chi Chang^{a*}, Wen-Bin Chiou^b, Ting-Yu Kuo^c

^{a, c} Department of Hospitality Management, Tunghai University, Taiwan

^{*}ychanguk@yahoo.com

^b The Institution of Education, National Sun Yat-Sen University, Taiwan

g01660001@thu.edu.tw

ABSTRACT

The act of tipping is a commonly adopted and highly widespread custom in many countries and remains vital to the livelihood of service providers. Compensation associated with tipping is not trivial; in the United States, within the foodservice industry alone, tipping accounts for approximately \$42 billion annually (Azar, 2008). Tipping is not customary in Taiwan (Chang, 2006) while it is common in Jiudian. Few studies on tipping have been done in the Jiudian sector and the factors that influence Taiwanese to tip are less known. Hence, the aim of this study is attempt to investigate the perceptions of consumers in Taiwan where the tipping behavior is not common practice.

Keywords: Tipping Behavior, Showing Gratitude, Jiudian Culture

INTRODUCTION

Tipping is the main source of income for millions and therefore is closely related to overall compensation in the service industry (Azar, 2007a). Empirical studies, however, show that where to tip is under a psychological utility consideration (Azar, 2007b). Moreover, tipping is the result of feeling generous and the reason is because consumers often feel empathy for service attendants who serve them, and want to show their gratitude by leaving them tips (Azar, 2003).

Gratitude is a critical human social element that offers an emotional basis for reciprocal transactions (Palmatier, Jarvis, Bechkoff and Kardes, 2009). In other words, gratitude serves as a fundamental component in theories about consumers' relationships and reciprocal behaviors across various disciplines (Bartlett and DeSteno, 2006). Tipping allows tippers to reciprocate and show gratitude, or to express compassion or empathy, improving their self-image and increasing their utility (Azar, 2005).

LITERATURE REVIEW

Tipping Behavior

Tipping is a unique behavior, as it involves voluntary payments for service that has already been provided by the time the tip is given. Tipping is a custom that can be described in several different ways. As opposed to the common wisdom that tipping is a single phenomenon, Azar (2007c) argued that some tipping occasions is very different from that of others. For example, Azar (2007c) categorized the different forms of voluntary tipping to six main groups: (a) Tips that are given after the service is rendered to induce good service, for example tipping waiters which called it “reward-tipping”; (b) Tips that are given as the price of the service, for example tipping skycaps which referred to it as “price-tipping”; (c) Tips that are given before the service is rendered to induce good service, for example tipping the hotel concierge in advance, which denoted as “tipping-in-advance”; (d) Tips that are given before the service is rendered as bribery, for example when tipping a maître d’ to get a table when consumers with reservations are waiting in line. This form of tipping is referred to as “bribery-tipping”; (e) Holiday-tipping: these are tips that are given once a year to service attendants who serve the consumer during the year, such as the newspaper boy or the building doorman; and, (f) Gift-tipping: tips that are non-monetary, for example giving chocolates to nurses who took good care of a patient.

Showing Gratitude

Once tipping becomes the social norm in a certain situation, people may suffer guilty feelings that disobeying the norm may cause social pressure from other consumer and service attendances, while a positive utility may derive from social pressure (Azar, 2005). The social pressure of tipping is an issue that many people struggle with and can cause consumers to be more generous when tipping. A research on tipping indicates that consumers derive utility not only from obeying the norm but also from tipping above the norm because of psychological reasons such as willingness to feel generous, to show gratitude, and to help service providers who depend on tips as a major source of income (Azar and Tobol, 2008).

People generally follow several different types of social norm and have incorporated them into their daily lives. People often feel empathy and compassion for service attendants who earn low wages and want to reciprocate and to show gratitude for good service. (Azar, 2004, 2005). By tipping, they reinforce their own self-image as good-hearted people and, therefore, increase their utility. People are likely to be more concerned about reciprocating and showing gratitude to someone they feel close to (Azar, 2005). This reason for tipping creates a cyclical mechanism that reinforces the establishment of tipping where it starts: people start to tip certain workers, the employers of these workers reduce their wages, people feel more

obligated to tip because they know that the worker depends on tips to complement his wages, more people tip and possibly each tip becomes higher, and so on (Azar, 2007c). While there is no definitive answer, many are thought to tip in order to bolster self-esteem and prevent shameful feelings. Others, however, oppose this view, and argue that social norms exist for various reasons, but not because they improve efficiency or welfare (Elster, 1989; Azar, 2009).

Some even believe that tipping generously is a way to show off in front of others. Videbeck (2004, : 39) posited “the most widely supported theory states that people tip simply to avoid the considerable stigma that accompanies 'stiffing' (not leaving a tip)—a kind of selfish economic agent with feelings”. People want to feel generous and do not want to feel “cheap” (Azar, 2004). In other words, if a consumer is trying to impress a group of people or a person, then they might tip a larger percentage than average (Bodvarsson Luksetich, and McDermott, 2003). Tipping generously therefore improves tippers’ self-esteem, encouraging them to tip even more than the norm. In addition to the internal positive feeling from being generous, tippers often want to impress others, perhaps other consumers at the table or even the service attendances. Tipping generously is a way to impress others that the tipper has the appreciated quality of generosity.

Jiudian Culture

Nightclub, called “Jiudian” or “Li Rong Yuan” in Taiwan, is a place where consumers can negotiate business, host the important visitors, drink some alcoholics and have pleasure as well as entertainments in VIP rooms. For Jiudian, there are three key persons: receptionist (job responsibility: acceptance, booking and room arrangement, arranging and taking responsibility for Miss Lady), waiters (job responsibility: delivering towels to consumers and taking food and beverages to rooms, cleaning tables), and Miss Lady (job responsibility: chatting, drinking, playing games with consumers, accompanying consumers to the greatest extent if they need); each of above three persons contributes to the overall satisfaction with the experiences, leading to consumers’ satisfaction in Jiudian. In Taiwan society, there are tens of thousands of Jiudian such as Nightclub, Li Rong Yuan, KTV, and Massage, which represent multiple meanings, including but not limited to, fulfilling psychological and physiological needs, being deemed as conspicuous consumption, a way for pleasure, and also, a cultivation of interpersonal relationships (楊文山, 2001).

There are some differences in Jiudian between early period and now. The former is simple, only provides tea instead of alcoholic drinks because people who live in the agricultural age seeks for simple leisure only. Hence, the Tearoom came out to represent the Jiudian in that period. However, with the evolution and needs of the society, Jiudian transforms to be

oriented for business, social interaction, and also includes sexual transaction in privacy (高宣揚, 2002).

According to a survey of Taiwan Society Change (samples of this survey including 976 participants who are 18 year-old), up to 35.9% of men said they had been to nightclubs, and 18.6% said that they had a sexual transaction in nightclubs based on this survey, indicating that Jiudian is necessary to exist for businessman to negotiate business, for man who live in low class unable to marry, for man who can't satisfied in marital sex, and for man who's on a business trip temporarily free of social control (瞿海源1992). Therefore, It is common for a man to go to Jiudian, no matter for business or for fun. It is an existing social phenomenon.

METHOD

Research Procedure

In order to understanding the relationship between show gratitude and tipping behavior in Jiudian, a two-phase study is designed to explore the identification, classification, and application of tipping behavior in Jiudian industry. First, interview sessions are supplemented to understand Jiudian industry to appropriately represent attribution of Jiudian culture. Second, quantitative measures have been utilized to explore the reasons for tipping in Jiudian.

Research Hypotheses

Several studies tried to examine whether tipping is a norm that increases social welfare. Azar (2005) addressed that tipping is likely to increase social welfare. The reason that tipping can increase social welfare is that tipping encourages the service attendances to improve the service they provide. As a result, tipping allows tippers to reciprocate and show gratitude, or to express compassion or empathy, improving their self-image and increasing their utility. Therefore, the relationship between show gratitude and tipping behavior has been hypothesized as follow:

Hypothesis 1: Tipping behavior has an effect on showing gratitude.

Hypothesis 2: Consumers with different purposes do influence the effect between showing gratitude and tipping behavior.

Data Collection

The self-administrated questionnaire was employed to investigate the effect of tipping behavior and showing gratitude in Jiudian industry. The scale of showing gratitude was been adopted and modified from Becker, Bradley and Zantow (2012) and prior studies (Lynn, 2009; Lynn, 2008). In addition, this study employed scales of behavioral intention developed by Whaley, Douglas, and O'Neill (2014). All items were measured on a five-point Likert

scale. By a snow-ball sampling approach during March to April, 2014 and the data was processed with the statistical package SPSS 20.0.

REFERENCE

Chinese Reference

- 高宣揚 (2002)。流行文化社會學。台北:揚智文化。
- 楊文山 (2001)。臺北市市民對色情產業及性交易的認知與態度量化調查研究期末報告。台北市政府。
- 瞿海源 (1992)。臺灣地區社會變遷基本調查計畫執行狀況與展望。科學發展月刊, 20(12), 1671-1677。

Foreign References

- Azar, O. H. (2003). The implications of tipping for economics and management. *International Journal of Social Economics*, 30(10), 1084-1094.
- Azar, O. H. (2004a). What sustains social norms and how they evolve?: The case of tipping. *Journal of Economic Behavior & Organization*, 54(1), 49-64.
- Azar, O. H. (2005). Who do we tip and why? An empirical investigation. *Applied Economics*, 37(16), 1871-1879.
- Azar, O. H. (2007a). Do people tip strategically, to improve future service? Theory and evidence. *Canadian Journal of Economics*, 40(2), 515-527.
- Azar, O. H. (2007b). The Social Norm of Tipping: A Review1. *Journal of Applied Social Psychology*, 37(2), 380-402.
- Azar, O. H. (2007c). Why pay extra? Tipping and the importance of social norms and feelings in economic theory. *The Journal of Socio-Economics*, 36(2), 250-265.
- Azar, O. H. (2008). The effect of external incentives on profit and firm provided incentives strategy. *Journal of Socio-Economics*, 37(1), 149-156.
- Azar, O. H. (2009). Incentives and service quality in the restaurant industry: the tipping-service puzzle. *Applied Economics*, 41(15), 1917-1927.
- Azar, O. H., and Tobol, Y. (2008). Tipping as a strategic investment in service quality: an optimal control analysis of repeated interactions in the service industry. *Southern Economic Journal*, 75(1), 246-260.
- Bartlett, M. Y., and DeSteno, D. (2006). Gratitude and pro-social behavior: helping when it costs you. *Association for Psychological Science*, 17(4), 319-325.
- Becker, C., Bradley, G. T., and Zantow, K. (2012). The underlying dimensions of tipping behavior: An exploration, confirmation, and predictive model. *International Journal of Hospitality Management*, 31(1), 247-256.
- Bodvarsson, Ö. B., Luksetich, W. A., and McDermott, S. (2003). Why do diners tip: rule-of-thumb or valuation of service? *Applied Economics*, 35(15), 1659-1665.

- Chang, J. C. (2006). Customer satisfaction with tour leaders' performance: A study of Taiwan's package tours. *Asia Pacific Journal of Tourism Research*, 11(1), 97-116.
- Elster, J. (1989). Social norms and economic theory. *Journal of Economic Perspectives*, 3(4), 99-117.
- Lynn, M. (2008). Personality effects on tipping attitudes, self-reported behaviors and customs: A multi-level inquiry. *Personality and Individual Differences*, 44(4), 989-999.
- Lynn, M. (2009). Individual differences in self-attributed motives for tipping: Antecedents, consequences, and implications. *International Journal of Hospitality Management*, 28(3), 432-438.
- Palmatier, R. W., Jarvis, C. B., Bechhoff, J. R., and Kardes, F. R. (2009). The role of customer gratitude in relationship marketing. *Journal of Marketing*, 73(5), 1-8.
- Videbeck, S. (2004-05). The economics and etiquette of tipping. *Policy*, 20(4), 38-41.
- Whaley, J. E., Douglas, A. C., and O'Neill, M. A. (2014). What's in a tip? The creation and refinement of a restaurant-tippingmotivations scale: A consumer perspective. *International Journal of Hospitality Management*, 37, 121-130.

Education V

Room C

14:50~16:20

Friday, May 9

Session Chair: *Prof. Qiao Yu Warren Cai*

ICSSAM-442

Factors Influencing the Implementation of Student-centered Learning in Malaysian Polytechnics: A Structural Equation Modeling Approach

Nik Azida Binti Abd Ghani *Ungku Omar Polytechnic*
Tengku Ahmad Badrul Shah *Ungku Omar Polytechnic*
bin Raja Hussin
Muhamad Rumzi Bin Mamat *Ministry of Education Malaysia*
Tengku, MA *Universiti Sains Malaysia*

ICSSAM-787

New Methods in Teaching Tones of Mandarin and Cantonese to CSL Learners

Yuen Chun-wah *Hong Kong Polytechnic University*
Zeng Jie *Hong Kong Polytechnic University*

ICSSAM-500

The Study of Constructing the Assessment Indicators of Digital Chinese Materials for Adults

Qiao Yu Warren Cai *National Taichung University of Education*
Ying Chi Amy Chen *Tatung Institute of Technology*

ICSSAM- 608

The Development of Early Character Education Model through Integrated Mother's School Program, Non-formal Early Childhood Education in Rural Area

Puji Yanti Fauziah *Yogyakarta State University*

ICSSAM- 797

Serious Games and Knowledge Management

Sandra Bertezene *LYON 1 University*
David Vallat *LYON 1 University*
Caroline Bayart *LYON 1 University*

ICSSAM- 507

**The Pedagogical Content Knowledge of Math Teachers of State Universities & Colleges
in Region III (Philippines)**

Robert Valdez Marcos

Tarlac State University

ICSSAM-442

Factors Influencing the Implementation of Student-centered Learning in Malaysian Polytechnics: A Structural Equation Modeling Approach

Nik Azida binti Abd Ghani

Department of Commerce, Ungku Omar Polytechnic
Jalan Raja Musa Mahadi, 31400 Ipoh, Perak, Malaysia
nikazida5@yahoo.com

Tengku Ahmad Badrul Shah bin Raja Hussin

Department of General Studies, Ungku Omar Polytechnic
Jalan Raja Musa Mahadi, 31400 Ipoh, Perak, Malaysia
tabs2104@yahoo.com

Muhamad Rumzi bin Mamat

Department of Polytechnic Education, Ministry of Education Malaysia
rumzi33@gmail.com

Tengku, MA, Assoc. Prof.

Department of Community Medicine, Universiti Sains Malaysia

The corresponding author: Nik Azida binti Abd Ghani

Abstract

Outcome-based education, which emphasizes active participation of students in learning, has been implemented in Malaysian Polytechnics since 2010, particularly in responding to the requirements of Malaysian Qualification Framework and the need to produce graduates with knowledge, skills and attitude that meet the industry needs. This study was mainly aimed to develop a structural equation model based on the relationship between perceived readiness of students towards student-centered learning (SCL), administrative support, problems faced and implementation of SCL among Malaysian polytechnic lecturers. The instrument used in this survey was adapted and modified from a readiness assessment tool. Structural equation modeling illustrates the measurement model of each construct under study i.e. implementation of SCL (measured using a total of 17 items), perceived students' readiness towards SCL and administrative support (each measured using 5 items). Confirmatory factor analysis model illustrates significant positive relationships among perceived readiness of student, implementation of SCL and administrative support ($r = .47, .34$ and $.30$) which suggest the absence of multicollinearity.

Proposed structural equation model shows that perceived readiness of students and administrative support were significant predictors of the implementation of SCL (regression weight of .36 and .20 respectively). Suggestions and recommendations are also presented to increase the implementation of SCL.

Keywords: Malaysian Polytechnics, Student-Centered Learning, Outcome-Based Education, Measurement Model, Structural Equation Modeling

1. Introduction

Outcome-based education has been implemented in Malaysian polytechnics in 2010, particularly in responding to the requirements of Malaysian Qualification Framework and the need to produce graduates with knowledge, skills and attitude that meet the industry needs. The vision of the Department of Polytechnic Education, which governs the Malaysian polytechnics, is breaking boundaries for the creation of transformative and creative learning environment for an innovation-led economy and to be Malaysia's number one provider of innovative human capital through transformational education and training for the global workforce by the year 2015.

2. Literature Review

2.1 Outcome-Based Education

Outcome-based education (OBE) is a student-centered approach and emphasize on what students should know, understand, demonstrate and become [1]. To ensure that each student may achieve the maximum potential, adequate time and assistance should also be provided [2]. Multiple instructional and assessment strategies should also be provided to meet the diverse needs of students [2].

2.2 Student-Centered Learning

Teacher-centered approach is primarily concerned with the transmission of knowledge or content, more than on student processing [3]. It has been a concern to encourage lecturers in higher education institutions to shift from teacher-centered form of learning towards more student-centered approaches [4]. Student-centered learning (SCL) describes ways of thinking about learning and teaching that emphasize student responsibility for such activities as planning learning, interacting with teachers and other students, researching, and assessing learning [5].

2.3 Perceived Readiness of Students

Perceived readiness of students refers to the readiness of students towards SCL as perceived by the lecturers. It may be difficult to implement SCL if students are not ready towards SCL. In a student-centered approach, the diversity of characteristics of students is considered [3]. Many researchers found that students' active involvement in the learning process enhances learning [6].

2.4 Administrative Support

To ensure successful implementation of OBE, administrators, educators, parents, lecturers and students must be involved [2]. In Malaysia, the focus on outcome-based education serves national goals because of the links with national higher education strategies [1]. Students should be given adequate time and assistance so that each student can reach the maximum potential [2].

2.4 Problems Faced in Implementing SCL

Factors that may hinder the implementation of SCL in the teaching and learning includes time constraint, resources such as textbooks, size of classes and examination assessment requirement [7]. In this particular study, factors such as time and financial constraints, excessive workload, lack of skills or knowledge in SCL were examined.

3. Research Methodology

3.1 Instrument

The instrument used in this survey was adapted and modified from a readiness assessment tool proposed by Mercado [8]. This questionnaire consisted of brief demographic data and items to measure the following constructs: (1) implementation of SCL was measured using a total of 17 items, (2) perception of lecturers on students' readiness towards SCL was measured using 5 items and (3) administrative support was measured using 5 items.

3.2 Respondents

This study was conducted in 6 polytechnics located in the states of Perak, Terengganu, Kelantan, Kedah, Johor and Sabah. A total of 609 lecturers participated in the online survey which was uploaded for a period of 7 months i.e. from April to October 2012.

4. Analysis of Results

Data gathered were analyzed using the computer-assisted Statistical Program for Social Science (SPSS) for Windows version 19.0 and Amos 18.0. Statistical analyses carried out include reliability tests, confirmatory factor analysis, correlations and regression.

4.1 Factor Loadings of Items

To test the factor loadings of items in each of the 3 scales (perceived readiness of students towards SCL, implementation of SCL and administrative support), measurement models were constructed using structural equation modeling technique using AMOS 18.0. Figure 1 illustrates the factor loadings for the 5 items of perceived readiness of students towards SCL. The factor loadings of the items were found to be satisfactory except for item 5 (Although I have implemented a variety of methods, students still do not want to actively engage in the learning process). This item (with the lowest loading of 0.20) was excluded and the analysis was run again. The new measurement model revealed factor loadings values that ranged between 0.59 and 0.84.

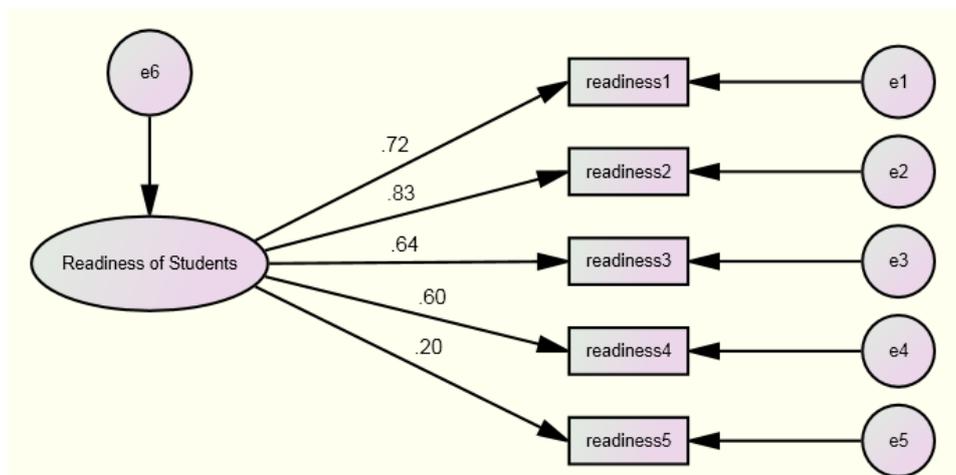


Figure 1. Measurement Model for Perceived Readiness of Students Scale

Figure 2 shows that the factor loadings for the items in the implementation of SCL scale were found to be satisfactory except for item 5 (I am flexible in dealing with students' needs (due dates, absences, make-up assessments)) which has a factor loading of 0.21. Hence, the item was excluded from the analysis to ensure higher reliability of the scales.

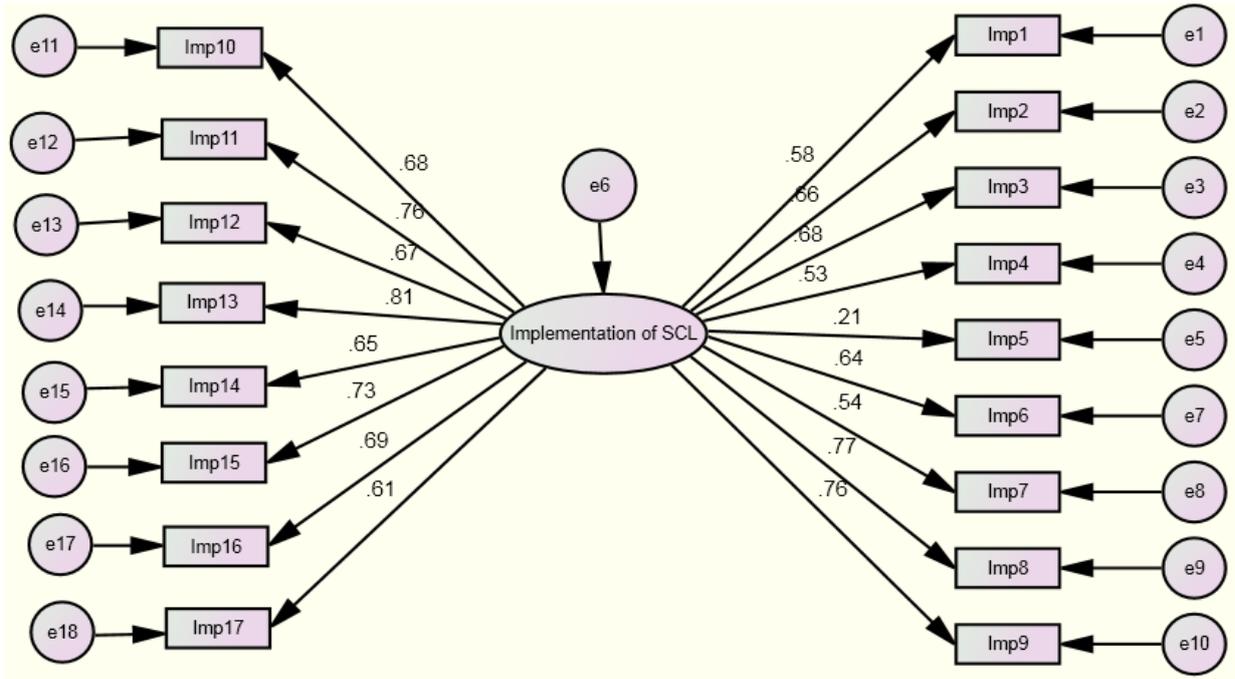


Figure 2. Measurement Model for Implementation of SCL Scale

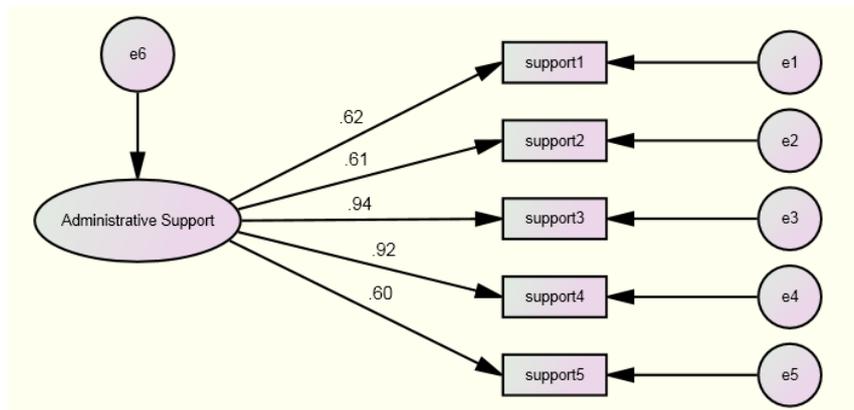


Figure 3. Measurement Model for Administrative Support Scale

Figure 3 shows that the factor loadings for each item in the administrative support scale were found to be satisfactory and hence, no item was excluded from the analysis.

4.2 Reliability Tests

To further prove the overall consistency of the scales, reliability tests were run. The Cronbach alpha values of 0.785, 0.930 and 0.868 reveal that all the scales have high reliability.

4.3 Correlation

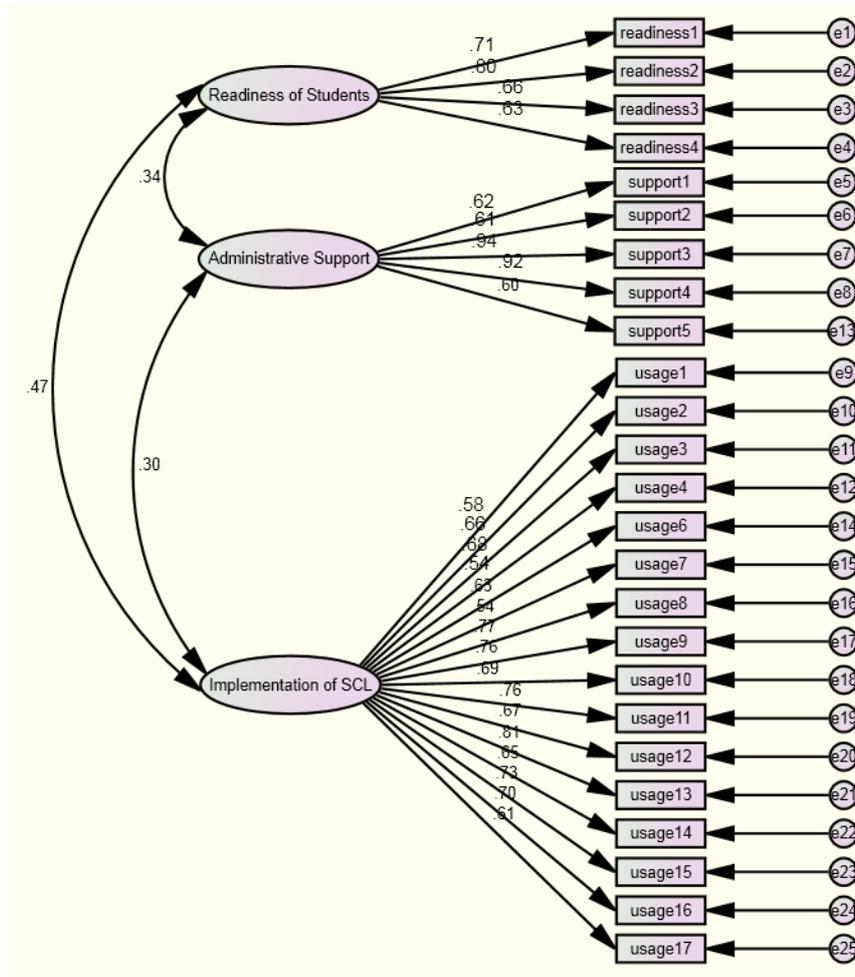


Figure 4. Confirmatory Factor Analysis

Confirmatory factor analysis was carried out using AMOS, as depicted in Figure 4. The curved arrows reflect the correlated relationship between the constructs. It can be concluded that all of the constructs have significant relationships with one another. Perceived readiness of students towards SCL has positive relationships with administrative support ($r = 0.34$) and implementation of SCL ($r = 0.47$). Likewise, administrative support has positive relationship with implementation of SCL ($r = 0.30$). Since the coefficients of each correlation do not exceed 0.90, as stated by Hair et al. [9], it can be concluded that multicollinearity does not exist, i.e. the dimensions are significantly related but are distinct from one another.

4.4 Structural Equation Model

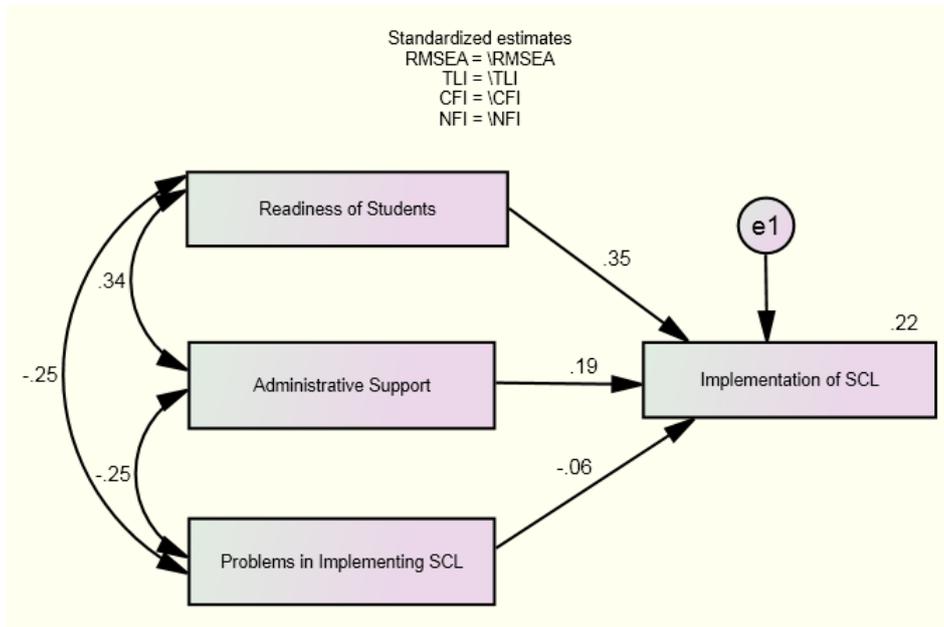


Figure 5. Initial Structural Equation Model

To study the effects of perceived readiness of students towards SCL, administrative support and problems in implementing SCL on the implementation of SCL, an initial structural equation model was constructed as shown in Figure 5. Perceived readiness of students and administrative support were considered as significant predictors to implementation of SCL (a regression weight of 0.35 and 0.19 respectively). Problems in implementing SCL had a non-significant negative effect on the implementation of SCL (a regression weight of -0.06) and therefore, the path is considered for deletion as in Figure 6. The fit index of RMSEA was 0.044 (lower than 0.08 indicated by Browne and Cudeck [10] as a reasonable error of approximation). The Tucker-Lewis coefficient (TLI), comparative fit index (CFI) and Bentler-Bonett (NFI) are of .975, 0.996 and 0.992 respectively. The values of fit indices of close to 1 indicate a very good fit [11, 12].

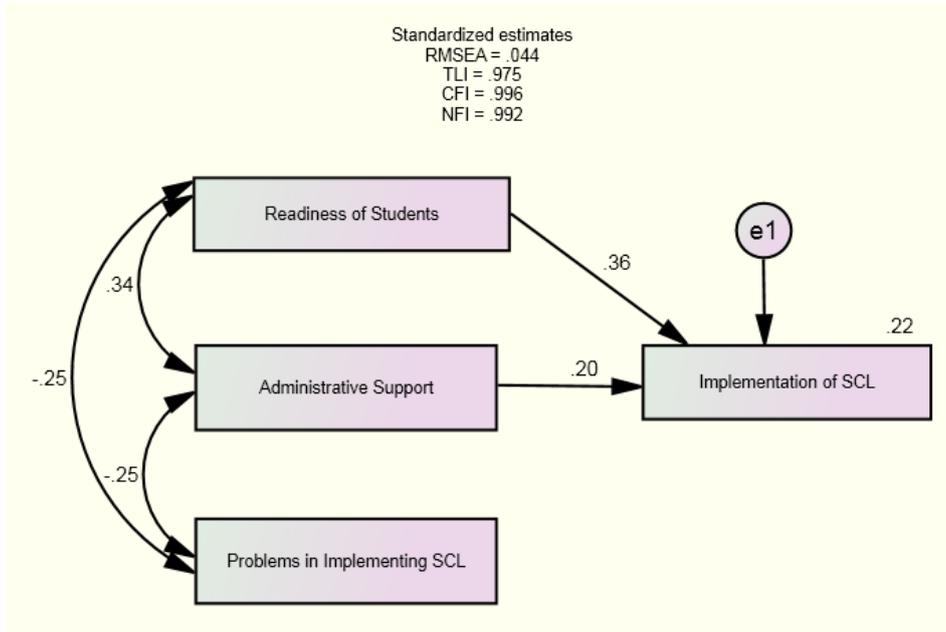


Figure 6. Proposed Structural Equation Model

5. Discussion and Suggestions

The proposed structural equation model reveals that both perceived readiness of students and administrative support are significant predictors of implementation of SCL. When lecturers perceive that students are ready towards SCL and administrative support is high, the lecturers will highly implement SCL. Therefore, to increase the implementation of SCL in teaching and learning, students should be given training and knowledge on SCL. Students' awareness in the importance and significance of SCL may improve their readiness towards SCL. The administrative support should also be improved to increase the implementation of SCL among lecturers. On the other hand, actions should be taken to solve or reduce the problems faced by lecturers in implementing SCL.

6. Conclusion

This study proposed a structural equation model that may be used in understanding the relationship between the constructs examined in this study. Steps should be taken to increase the implementation of SCL by reducing the problems faced in implementing SCL, increasing the students' readiness towards SCL and increasing the administrative support toward SCL.

7. References

- [1] Zakaria Sabarudin & Wan Fadziilah Wan Yusoff. (2010). Outcome-based education in a private HIL: Perceptions of students. *Advances in Management*, 3(3): 48 – 51.
- [2] Acharya, C. (2003). Outcome-based education (OBE): A new paradigm for learning. *CDTLink*, 7(3).

- [3] Harkema, S. J. M. & Schout, H. (2008). Incorporating student-centered learning in innovation and entrepreneurship education. *European Journal of Education*, 43 (4): 513 – 526.
- [4] Kember, D. (2009). Promoting student-centered forms of learning across an entire university. *High Education*, 58: 1 – 13. doi: 10.1007/s10734-008-9177-6.
- [5] Cannon, R. & Newble, D. (2000). *A guide to improving teaching methods: a handbook for teachers in university and colleges*. London: Kogan Page.
- [6] Smart, K. L. & Csapo, N. (2007). Learning by doing: Engaging students through learner-centered activities. *Business Communication Quarterly*, December 2007: 451 – 457.
- [7] Gladys, S., Zacharia, N., Gracious, Z. & Nicholas, Z. (2012). The Challenges of Implementing Student-Centered Instruction in the Teaching and Learning of Secondary School Mathematics in a Selected District in Zimbabwe. *International Journal of Current Research*, 4 (5), pp. 145-155.
- [8] Mercado, C. A. (2008). Readiness assessment tool for an elearning environment implementation. *Special Issue of the International Journal of the Computer, the Internet and Management*, 16 (SP3): 18.1-18.11.
- [9] Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2006). *Multivariate Data Analysis*. New Jersey: Prentice Hall International, Inc.
- [10] Browne, M. W. & Cudeck, R. (1993). Alternative Ways of Assessing Model Fit. In Bollen, K. A. & Long, J. S. (eds.) *Testing Structural Equation Models*, pp. 136-162. Newsbury Park, CA: Sage.
- [11] Bentler, P. M. & Bonett, D. C. (1980). Significance Tests and Goodness of Fit in the Analysis of Covariance Structures. *Psychological Bulletin*, 88 (3): 588-606.
- [12] Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin*, 107 (2): 238-246.

ICSSAM-787
**New Methods in Teaching Tones of Mandarin and Cantonese to CSL
Learners**

YUEN Chun-wah , ZENG Jie
Hong Kong Polytechnic University
ctdavid@polyu.edu.hk

ZENG Jie
Hong Kong Polytechnic University
jie.zeng@polyu.edu.hk

Abstract

Chinese is classified as tonal language. As part of the Chinese phonetic structures, tone is one of the major components of the Chinese language. Contrastively, English is an intonation language. Due to the absence of tones in English language, most Chinese as Second Language (CSL) learners with English as first language have no concept to the tones of the Chinese language. They have difficulties in acquiring the tones and speak Chinese with foreign accent. By application and modification of Chao Yuen Ren's "scale of five pitch levels", the authors have succeed in teaching the identification of tones in Mandarin Chinese and Cantonese in the Chinese tonal class for CSL students in the Hong Kong Polytechnic University.

The authors have modified the tonal signs of Mandarin and Cantonese base on the actual pronunciations. It helps students in relating the tones and the tonal signs. Moreover, students who take both Mandarin and Cantonese classes are able to differ each types of the tones and recognize the special features of the 5 tones of Chinese by using the tone pitch graph and gestures of the register level tone marking method. By combining the methods above and the Chinese two-word vocabulary pronunciation practices, CSL students can easily link the word tones and vocabulary tones together, thus enhancing the mastering of Chinese tones and intonation and developing Chinese language perception.

Keywords:teaching Chinese as second language; scale of five pitch levels; modification of tonal signs; contrastive analysis of tones in Mandarin and Cantonese

ICSSAM-500

The Study of Constructing the Assessment Indicators of Digital Chinese Materials for Adults

Cai, Qiao Yu

Mater Program of TCSL, Dept. of Language and Literacy Education, National Taichung University of Education, Taiwan
iku1212@hotmail.com

Chen, Ying Chi

Dept. of Social Work and Service Management, Tatung Institute of Technology, Taiwan
amyeyes@gmail.com

Abstract

With the development of technology and the formation of global village, a trend has become obvious that adults adopt the digital Chinese learning materials as the way of acquiring Chinese. Various digital Chinese learning materials can be easily found through internet search engines. However, methods to evaluate the quality of those materials never exist. The purpose of this research is to construct the indicators of digital Chinese learning materials for adults. The first step of this research is to generalize the rules from the literature review and then to structure the standards of digital Chinese learning materials. Three times of Delphi and AHP system are adopted to construct the indicators and to convert these indicators to numerical values that can be processed and compared over the entire range of these elements.

A priority is derived for each element of the hierarchy. Based on the related literature and the method of Delphi, four main indicators, nine sub-indicators and sixty items have been generalized, and then will be made use of evaluating quality of websites regarding the digital Chinese learning for adult learners.

Keywords: Digital Chinese materials for adults, Assessment indicators, Teaching Chinese as a second language to adults

1. Introduction

Technology has changed the way we learn. With rapid economic development in China, the number of people learning Chinese is increasing (Hsin, 1995; Wang, 1998; Song, 2004; Chinese Hot Topic Report, 2005; Chang, 2005; AP Chinese Corner, 2005).

To assist adults who are learning Chinese, Chinese learning materials should consider different adult learning styles. Based on a report from the American Council on the Teaching of Foreign Languages (ACTFL), approximately 39% of teachers in Taiwan are interested in acquiring Chinese learning-related materials (Lai, 2011). Consequently, the development of digital and interactive Chinese learning materials has become widespread in Taiwan (Zhou, Chen, & Tian, 2010). However, online digital Chinese learning materials currently only include written materials that have been converted into digital formats, and little consideration is exerted to improve these digital materials. Digital learning courses are not benefitting from the positive aspects of digital learning (Zeng, Wu, & Ji, 2007). Chen (2011) suggested that most digital learning materials are designed for traditional students and that the materials are not designed to consider adult learning needs and limitations. These digital Chinese learning courses are inadequately designed to cater to different adult learning styles with respect to their content, presentation and interactivity. Thus, although most digital learning materials represent an improvement over traditional teaching materials, some limitations still remain that need to be resolved. If we can identify these limitations, the problems can be solved. An important step in designing high-quality digital Chinese learning materials is constructing assessment indicators for the materials.

The purposes of this study are the following:

- 1.1 Draw on the relevant literature to construct assessment indicators for digital Chinese learning materials for adults.
- 1.2 Use the Delphi method and statistical analysis to provide suggestions for digital Chinese learning materials.

2. Literature Review

With the development of new technologies, digital learning curricula and teaching materials have grown more diverse. However, effective digital materials should be based on the theory of cognitive loading, which focuses on learning processes (Mayer, 2001; Mayer & Moreno, 2003).

Cognitive load theory (CLT) was developed by R.E. Mayer. Mayer found that the cognitive structure is composed of working memory and long-term memory. Working memory focuses on dealing with messages and storing short-term memories. However, long-term memory is responsible for storing schemas. When learners encounter familiar events, schemas help them to understand the messages that are received in relation to those events. If a learner encounters complex and unfamiliar information for which no schema is available, the working memory is activated (Kirschner, 2002; Chandler & Sweller, 1991).

When learners have accumulated sufficient schemas, they can easily and quickly absorb and receive new information. If learners have an insufficient number of schemas, a suitable learning material should reduce the burden of the working memory and cognitive loading.

Working memory consists of inner loading and outer loading (Mayer & Moreno, 1998). The design of learning materials is part of outer loading. If a material designer is able to reduce outer loading, a learner's working memory load will be reduced so that more meaningful information can take its place. Similarly, if the information presented by the learning material is based on learners' schemas, inner loading will decrease as well. The meaning of content is based on interactions among several types of information. Thus, if content is well-designed, the materials' designers should consider how to better display digital materials to reduce the outer loading of learners. Digital Chinese learning materials for adults should consider the schemas and cognitive structures of adult learners. If digital Chinese materials only focus on presentation without considering cognitive structures, the advantage of designing digital learning materials will be decreased.

Digital materials provide an interactive learning method for learners and lecturers (Florida Gulf Coast University, FGCU, 2009). While digital materials provide traditional face-to-face learning materials with a digital format, they also require a near-face-to-face learning environment to assist learners with building schemas. For building schemas, Chapelle (2001) suggested that digital materials need to express the context; thus, interactive learning opportunities and activities are required. Moreover, a system of evaluation for assessing adult learning achievements is necessary. All of these dimensions should be considered. The universities of Penn State, Lincoln and Cheyney are examples of institutions that have created departments of distance learning. These universities collaborated with the AT&T Foundation to construct the Innovation in Distance Education (IDE) plan, which consists of five steps.

First, an outline of the learning targets and context of the course are constructed. Second, a set of interactive systems are built. Third, evaluation and assessment methods are designed. Fourth, the teaching medium is selected. Finally, the service system is generated. These five steps represent an effective principle for designing digital courses. In 2002, Michigan Virtual University created Online Instructional Design (OID) standards, which included technical, manipulation, evaluation and material design standards. In 2003, the American Society for Training and Development (ASTD) also suggested four dimensions of online design, including interface, accommodation, software quality and course design (ASTD 2003). The Taiwan e-Learning and Digital Archives Program (TELDAP) also identified 5 dimensions for online design, including introductory guides, material design, technical skills, context standards and introductory guides. These dimensions emphasize the importance of guiding

and tracking learner’s achievements. Material design focuses on teaching targets and evaluation methods. Technical skills considers the outcome of the interface and the suitable ways in which the design can be manipulated. Context standards ensure that accurate information is provided in the material content. Thus, to construct the most effective digital materials, computer designers, materials designers and lecturers should be involved.

This paper also considers psychological factors in adults and characteristics of digital learning and the Chinese language. The structures of the assessment indicators are shown in Figure 1.

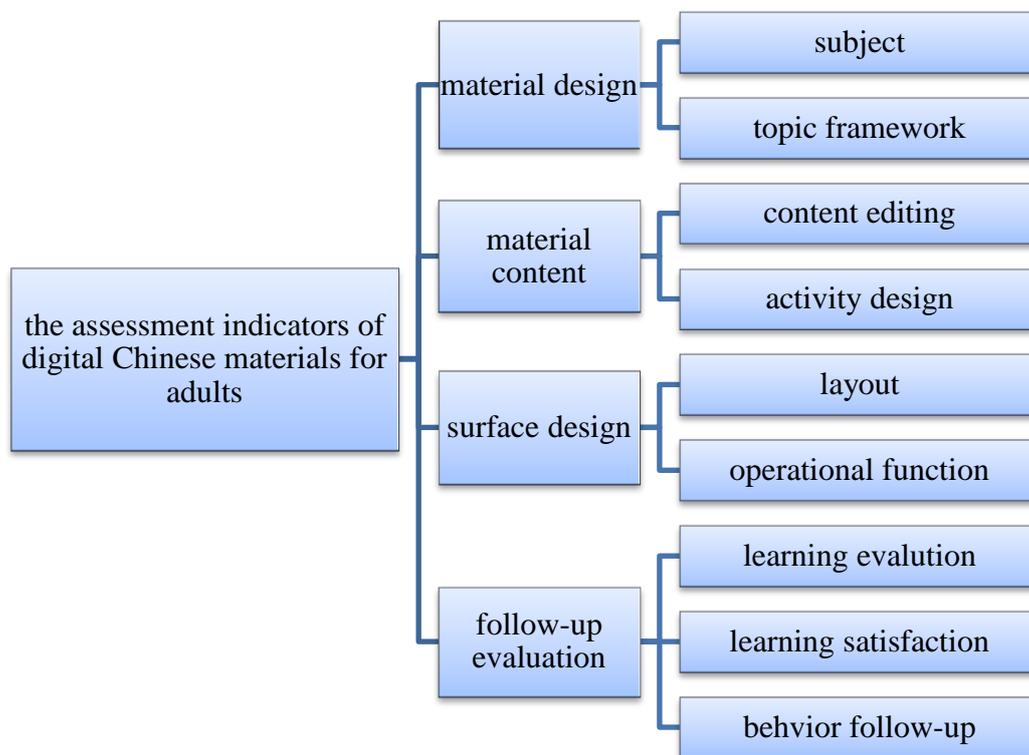


Figure1. The structures of the assessment indicators Source: Drawn by this study

3. Method

After the structures of the assessment indicators are constructed, the 3-times Delphi survey is carried out, and then the indicators are completed on the basis of the results.

3.1 Procedure

After literature review, the 4 dimensions of the indicators are decided initially: material design, material content, surface design and follow-up evaluation. the last advices and statistic results are shown while each Delphi survey is carried out for experts who are invited to examine each indicators to compare any differences with others’ advices.

If advices of one or two experts were different from the that of 8 or 9 experts, the experts are asked for offer personal reasons for reference to decide whether indicators will be revised or not. After the 3-times Delphi survey are completed, conclusions and suggestions are proposed on the basis of the results for providing referrals while developing digital Chinese materials for adults.

3.2 Participants

In this study, 10 experts who study intensively in the field of teaching Chinese as a second/foreign language and focus on Chinese language teaching, second language acquisition in adulthood and computer education are invited to examine each indicators for 3 times to achieve a common consensus in each indicators and make sure each indicators which is fine to evaluate the quality of digital Chinese materials for adults.

3.3 Instrument

On the basis of cognitive load theory of multimedia, second language acquisition in adulthood and adult learning, the initial structures of the indicators are constructed, and then evaluate the property and importance of each indicators through 3-times Delphi survey.

In the first Delphi survey, advices of experts are collected, archived and analyzed as a referral for the second Delphi method. Introduction, proper noun definition, guidance description and indicators on the initial questionnaire survey. Four dimensions, including material design, material content, surface design and follow-up evaluation, 2-3 criterions in each dimension, 4-8 indicators in each standard, totally 58 indicators.

In the second Delphi method, the questionnaire content is revised on the basis of the first results. Each advices and statistic results in the first Delphi are shown to experts for referral while the second Delphi survey is carried out.

In the third Delphi survey do the same method with the procedure in the second Delphi survey.

3.4 Data analysis

In the first survey, experts are asked to examine applicability, property and importance of each indicator description, to write advices down for indicators which are considered as being improper. In qualitative part, indicators description are revised or deleted according to advices offered by experts; in quantitative part, indicators property are main indicators, secondary indicators and reference indicators, and 5-point Likert scale for evaluating indicators importance, 5 points mean very important, 4 points mean important, 3 points mean

ordinary, 2 points mean not important and 1 point means not very important. After data analysis, qualitative and quantitative results are shown for experts to understand others' advices as reference while the next survey is carried out.

In the standard of revising or deleting indicators, indicators are retained in the condition of being agreed the applicable proportion of 75% (Linstone & Turoff, 1975; Murry & Hammons, 1995). According to this standard, the formula in this study is that if 10 experts agree an indicator as being applicable, the applicability is $10/10 \times 100\% = 100\%$; 9 of 10 experts agree an indicator as being applicable, one considers it should be deleted, the applicability is $10 - 1/10 \times 100\% = 90\%$; 8 of 10 experts agree an indicator as being applicable, one considers it should be deleted, another considers agree it is applicable but its description should be revised, the applicability is $10 - 1 - .5/10 \times 100\% = 85\%$, and so on. We decide whether indicators description should be revised or not according to experts' advices and discussions.

In the evaluation of indicators property, the first quartile (Q1), third quartile (Q3) and the mode (Mo) are decided as the assessed standard. The quartile is for understanding survey data dispersed situation. Firstly, data based on the numerical size of the order, to find the first quartile and third quartile values, and then calculate the deviation between the two quartiles, namely Quartile Deviation, QD. The higher the deviation is, the worse the consistency of experts is. For understanding the consistency of experts' advices, the QD are being used as a standard to evaluate indicators property. QD is less than 0.6, which means that high consistency; between .6-1.0, representation consistency; greater than 1.0 indicates a low consistency (Faherty, 1979; Raskin, 1994). Another evaluation standard is mode (Mo). The advantage of Mo is not influenced by extremes easily, so Mo is used instead of mean (M) in this study. Mo value is 3, means as main indicator, Mo value is 2, means as secondary indicator, Mo value is 1, means as reference indicator.

In the evaluation of indicators importance, mean (M) is greater than or equals 4.5, means very important; greater than or equals 3.5, means important, greater than or equals 2.5, means somewhat important; greater than or equals 1.5, means not import; less than 1.5, means not very important. Another evaluation standard is standard deviation (SD), means the less SD value is, the higher consistency of experts is.

4. Results and discussions

4.1 Material design

Through 3-times Delphi survey, according to table1, “A-1-1~5” in “subject” are agreed as main indicators, totally 5 items, and common consensus of experts are of high consistency; “A-1-6~7”, the 2 indicators are agreed as secondary indicators, and common consensus of experts are of high consistency. “A-2-1~6” in “topic framework” are agreed as main indicators, totally 6 items, and common consensus of experts are of high consistency.

In the results of indicators importance, “A-1-1~2” and “A-1-4” in “subject” are agreed as very important, others are important. “A-2-1~3” and “A-2-5~6” in “topic framework” are agreed as very importance, and “A-2-4” are important.

Table1. Applicability, property and importance of indicators in material design

Creterions	Indicators		Applicability	Property		Importance	
			%	Mo	QD	M	SD
Subject	A-1-1	Webpages are shown clearly who is applicable to study, which foreign languages are provided as assisted languages, etc.	100%	3	0	4.50	1.02
	A-1-2	Webpages are shown clearly the Chinese material is for adult learners who is which Chinese level, such as zero, basic, intermediate, advanced, etc.	100%	3	0	4.70	.64
	A-1-3	Pre-study tests are provided to understand adult learners' real Chinese level.	100%	3	.5	4.30	.46
	A-1-4	Webpages are shown clearly the features of the Chinese material clearly, such as for listening, oral, reading, writing, business, travel, news, technology and so on.	100%	3	0	4.50	.67
	A-1-5	Webpages are shown Chinese learning objectives of cognitive, affective and psychomotor domains.	100%	3	.5	4.20	.75
	A-1-6	Webpages are shown clearly total learning hours and learning hours in each unit.	100%	2	.5	3.70	1.27
	A-1-7	Webpages are shown clearly description of background knowledge and computer literacy before using the digital Chinese material to learn.	100%	2	.5	3.90	.94
Topic framework	A-2-1	The topics are applicable to characteristics and needs of adult learning Chinese.	100%	3	0	4.80	.60
	A-2-2	The topics are able to motivate adults to learn Chinese.	100%	3	0	4.70	.90
	A-2-3	The topics are related to adult learners' life, work, family, etc.	100%	3	.37 5	4.80	.40
	A-2-4	The topics are consistent with its features.	100%	3	.5	4.10	.83
	A-2-5	Vocabularies, sentences, grammars, practice of listening, speaking, reading, writing, translating, typing are listed clearly in each unit page, so that adult learners know what they should learn before getting into studying.	100%	3	0	4.60	.66
	A-2-6	The difficulty of the units is listed clearly, so that adult learners are able to choose which units are applicable for selves to study Chinese.	100%	3	.5	4.50	.67

Source: Analyzed by this study

4.2 Material content

According to table2, “B-1-1~6” and “B-1-8~9” in “content editing” are agreed as main indicators, totally 8 items, “B-1-7” is agreed as a secondary indicator, and common consensus of experts are of high consistency. “B-2-2~6” in “activity design” are agreed as main indicators, ,totally 5 items, “B-2-1” is agreed as a secondary indicator, and common consensus of experts are of high consistency.

In the result of indicators importance, “B-1-1~3” and “B-1-6” in “content editing” are agreed as very important, others are important. “B-2-3~5” in “activity design” are agreed as very important, others are important.

Table2 Applicability, property and importance of indicators in material content

Criteria	Indicators		Applicability	Property		Importance	
			%	Mo	QD	M	SD
Content editing	B-1-1	Contents are applicable to the subjects, meet adult learners needs and are consistent with the topic framework.	100%	3	0	4.70	.90
	B-1-2	The difficulty and quality of Chinese language points in each unit content are shown clearly and applicable to study	100%	3	0	4.70	.64
	B-1-3	Contents are practical	100%	3	0	4.70	.46
	B-1-4	Contents are interesting	100%	3	.5	4.00	.63
	B-1-5	The proportion of new and old Chinese language points are appropriate in each unit content.	100%	3	.5	4.20	1.25
	B-1-6	Chinese language points in each unit content are shown clearly and example sentences are provided.	100%	3	0	5.00	.00
	B-1-7	Often mistakes in learning Chinese are compared and example sentences are provided.	100%	2	.5	4.40	.49
	B-1-8	Explanations of cross-cultural similarities and differences or related websites which are applicable to adult learners are offered.	100%	3	.5	4.10	.94
	B-1-9	The more difficult part of the materials can be provided diverse learning opportunities for questions or more times.	100%	3	.375	4.40	.66
Activity design	B-2-1	Game activities are designed to learn Chinese.	100%	2	.5	4.30	.64
	B-2-2	Learning schedule and activity description are provided before clicking into studying Chinese.	100%	3	.5	4.20	1.25
	B-2-3	Activity design is from simple to the complex, deep based on principles of programmed instruction.	100%	3	0	4.70	.90
	B-2-4	Exercises and answers are provided to examine correctness by selves immediately.	100%	3	0	4.60	.49
	B-2-5	Issues such as global warming, shopping which are applicable to each unit content to be provided to discuss in Chinese.	100%	3	.5	4.50	.67
	B-2-6	Hyperlinks of Chinese learning websites which are related to each activity design are provided.	100%	3	.5	3.90	1.22

Source: Analyzed by this study

4.3 Surface design

According to table3, “C-1-1”, “C-1-3~4” and “C-1-6~8” in ‘layout’ are agreed as main indicators, totally 6 items, “C-1-2” and “C-1-5” are agreed as secondary indicators, and common consensus of experts are of high consistency. “C-2-1~8” in “operational function” are agreed as main indicators, totally 8 items, and common consensus of experts are of high consistency except “C-2-2” as common consensus of experts are of moderate consistency.

In the result of indicators importance, “C-1-1”, “C-1-3” and “C-1-8” in “layout” are agreed as very important, others are important. “C-2-3~7” in “operational function” are agreed as very important, others are important.

Table3 Applicability, property and importance of indicators in surface design

Criteria	Indicators		Applicability	Property		Importance	
			%	Mo	QD	M	SD
Layout	C-1-1	Color contrast and font are shown clearly, and icons on webpages are simple and consistent.	100%	3	.5	4.60	.49
	C-1-2	Chinese language points in each unit must be labeled with icons.	100%	2	.375	4.10	.54
	C-1-3	Pictures with words and sounds are applicable to material contents.	100%	3	0	4.70	.64
	C-1-4	Animation and videos are applicable to material contents.	100%	3	.375	4.40	.92
	C-1-5	Icons or buttons are able to be shown finished and unfinished learning parts, such as font color is changes while learned.	100%	2	.5	4.30	.64
	C-1-6	Layout of Chinese, foreign languages, Hanyu pinyin, phonetic symbols are applicable.	100%	3	0	4.40	.92
	C-1-7	Size of animation, videos, pictures with words and material contents are applicable on a page.	100%	3	.5	4.10	.83
	C-1-8	Learning navigation are provided to guide the best path to learn Chinese.	100%	3	0	4.60	.66
Operational function	C-2-1	Hyperlinks between unit table and learning contents are provided.	100%	3	.5	4.30	.90
	C-2-2	Instructions for using the digital materials to learn Chinese can be downloaded.	100%	3	.875	3.80	1.25
	C-2-3	The speed of loading in learning Chinese is normal.	100%	3	.5	4.50	.67
	C-2-4	Adult learners can choose learning paths, progress, time flexibly according to self-learning status.	100%	3	.375	4.50	.5
	C-2-5	Email address, message board, forum, etc. are provided for adult learners to ask questions while learning Chinese.	100%	3	0	4.80	.40
	C-2-6	Surface of operational function is shown clearly.	100%	3	0	4.60	.92
	C-2-7	Any operational functions are easy to use.	100%	3	0	4.70	.46
	C-2-8	In-class teachers have an administrator account and password to announce hot news, edit material contents, etc. immediately.	100%	3	.5	4.30	.90

Source: Analyzed by this study

4.4 Follow-up evaluation

According to table4, “D-1-1~4” in ‘learning evaluation’ are agreed as main indicators, totally 4 items, and common consensus of experts are of high consistency. “D-2-2~3” and “D-2-6” in “learning satisfaction” are agreed as main indicators, and common consensus of experts are of high consistency except “D-2-3” is moderate consistency, “D-2-1” and “D-2-5” are agreed as secondary indicators, and former is high consistency but latter is moderate consistency. “D-2-4” is agreed as a reference indicator and common consensus of experts are of moderate consistency.

in “operational function” are agreed as main indicators, totally 8 items, and common consensus of experts are of high consistency except “C-2-2” as common consensus of experts are of moderate consistency. “D-3-1~4” in “behavior follow-up” are agree as main indicators, totally 4 items, “D-3-5~6” are agreed as secondary indicators, totally 2 items, and common consensus of experts are of high consistency.

In the result of indicators importance, “D-1-1~4” in “learning evaluation” are agreed as very important, “D-2-1~6” are agreed as important. “D-3-4” in “behavior follow-up” is agreed as very important, “D-3-1~3” are important and “D-3-5~6” are somewhat important.

Table4. Applicability, property and importance of indicators in follow-up evaluation

Criteria	Indicators		Applicability	Property		Importance	
			%	Mo	QD	M	SD
Learning evaluation	D-1-1	Tests are consistent with learning objectives and material contents.	100%	3	0	4.60	.92
	D-1-2	Question types of listening, speaking, reading, writing, translating, typing are provided to evaluate adult learners' Chinese level.	100%	3	0	4.50	.81
	D-1-3	Scores answers and correctness are shown clearly after completing tests online.	100%	3	0	4.60	.66
	D-1-4	Advanced tests for adult learners who get better scores and Try again tests for adult learners who get worse scores are provided.	100%	3	.375	4.50	.67
Learning satisfaction	D-2-1	A satisfaction survey on the topic framework of a material is provided online.	100%	2	0	3.60	1.02
	D-2-2	A satisfaction survey on the material contents is provided online.	100%	3	.5	4.30	1.00
	D-2-3	A satisfaction survey on the activity design of a material is provide online.	100%	3	.875	4.10	1.04
	D-2-4	A satisfaction survey on the layout of a material is provided online.	100%	1	.875	3.70	1.10
	D-2-5	A satisfaction survey on the operational function of a material is provided online.	100%	2	.75	3.80	.98
	D-2-6	A satisfaction survey on the learning evaluations of a material is provided online.	100%	3	.5	4.10	.94
Behavior follow-up	D-3-1	Record the time, frequency, reuse of users' logging in the website.	100%	3	.5	4.30	1.00
	D-3-2	Record how much time users spend studying, frequency and reuse of studying.	100%	3	.5	4.40	.80
	D-3-3	Record how much time users spend in Q & A, how many questions posted by users.	100%	3	.5	4.00	.77
	D-3-4	Record how much time users spend testing, frequency and reuse of testing.	100%	3	.375	4.50	.67
	D-3-5	Survey whether users recommend others the material to study and why, and the results are shown clearly.	100%	2	0	3.40	.66
	D-3-6	Provide permanent account number and password, or open learning platform for students to view textbooks are updated anytime, anywhere, has the resources to continue learning pipeline .	100%	2	.375	3.40	.92

Source: Analyzed by this study

5. The construction of the assessment indicators of digital Chinese materials for adults

5.1 Material design

After 3-times Delphi survey, “A-1-1~5” in “subject” are main indicators, totally 5 items, “A-1-6~7” are secondary indicators, totally 2 items. All indicators in “subject” are applicable and from important to very important. “A-2-1~3” and “A-2-5~6” in “topic framework” are main indicators, totally 5 items, “A-2-4” is a secondary indicator. All indicators are applicable and from import to very important.

5.2 Material content

“B-1-1~3”, “B-1-6” and “B-1-9” in “content editing” are main indicators, totally 5 items, “B-1-4~5” and “B-1-7~8” are secondary indicators. All indicators in “content editing” are applicable and from important to very important. “B-2-2~4” in “activity design” are main indicators, totally 3 items, “B-2-1” and “B-2-5~6” are secondary indicators. All indicators in “activity design” are applicable and from important to very important.

5.3 Surface design

“C-1-1”, “C-1-3~6” and “C-1-8” in “layout” are main indicators, totally 6 items, “C-1-2” and “C-1-7” are secondary indicators, totally 2 items. All indicators in “layout” are applicable and from important to very important. “C-2-1~8” in “operational function” are main indicators, applicable and from important to very important, totally 8 items.

5.4 Follow-up evaluation

“D-1-1~4” in “learning evaluation” are main indicators, applicable and from important to very important, totally 4 items. “D-2-1~3” and “D-2-6” in “learning satisfaction” are main indicators, totally 4 items, “D-2-4~5” are secondary indicators, totally 2 items. All indicators in “learning satisfaction” are applicable and from important to very important. “D-3-1~2” and “D-3-4” in “behavior follow-up” are main indicators, totally 3 items, “D-3-3” and “D-3-6” are secondary indicators, totally 2 items, “D-3-5” is a reference indicator. All indicators in “behavior follow-up” are applicable and from somewhat important.

According the results, the 4 dimensions, 9 criteria and 60 indicators of the assessment of indicators of digital Chinese materials for adults have been constructed.

5.5 The development of the checklist for digital Chinese materials for adults

For applying the indicators constructed by the study to examine the quality of digital Chinese materials for adults, the checklist and its use instruction are developed.

In “material design” dimension, there are 7 indicators in “subject”, of which 5 indicators are necessity and 2 indicators are selective; there are 6 indicators in “topic framework”, of which 5 indicators are necessity and 1 indicator is selective. In “material content”, there are 9 indicators in “content editing”, of which 5 indicators are necessity and 4 indicators are selective; there are 6 indicators in “activity design”, of which 3 indicators are necessity and 3 indicators are selective. In “surface design”, there are 8 indicators in “layout”, of which 6 indicators are necessity and 2 indicators are selective; there are 8 indicators in “operational function” and all are necessity. In “ follow-up evaluation”, there are 4 indicators in “learning evaluation” and all are necessity; there are 6 indicators in “learning satisfaction”, of which 4 indicators are necessity and 2 indicators are selective; there are 6 indicators in “behavior follow-up”, of which 3 indicators are necessity and 3 indicators are selective.

In grading, “A” stands for excellence, “B” stands for achieving the standards, “C” stands for failing to the standard and “N/A” stands for there is no any corresponding items to evaluate between materials and indicators. Grading materials, which is graded as “A” in a certain indicator which is selective, gets 3 points, or which is necessity, gets 6 points. Grading materials, which is graded as “B” in a certain indicator which is selective, gets 2 points, or which is necessity, gets 4 points. Grading materials, which is graded as “C” in a certain indicator which is necessity or selective, gets 1 point, and grading materials, which is graded as “N/A” in a certain indicator which is necessity or selective, gets no point.

6. Conclusions and suggestions

6.1 Conclusions

For achieving the purpose of the study, 4 dimensions, including material design, material content, surface design and follow-up evaluation, 9 criteria, including subject and topic framework of material design, content editing and activity design of material content, layout and operational function of surface design, and learning evaluation, learning satisfaction and behavior follow-up of follow-up evaluation, and totally 60 indicators have been constructed after literature review and Delphi surveys.

In the dimension of material design, including 2 criteria of subject and topic framework. The former has 5 necessity indicators and 2 selective indicators, the latter has 5 necessity indicators and 1 indicator.

In the dimension of material content, including 2 criteria of content editing and activity design. The former has 5 necessity indicators and 4 selective indicators, the latter has 3 necessity indicators and 3 selective indicators.

In the dimension of surface design, including 2 criteria of layout and operational function. The former has 6 necessity indicators and 2 selective indicators, the latter has 8 necessity indicators.

In the dimension of follow-up evaluation, including 3 criteria of learning evaluation, learning satisfaction and behavior follow-up. The first criterion has 4 necessity indicators, the second criterion has 4 necessity indicators and 2 selective indicators, the third criterion has 3 necessity indicators and 3 selective indicators.

6.2 Suggestions

6.2.1 Developing or revising digital Chinese materials for adults based on the indicators of the checklist

The indicators of the checklist based cognitive load theory of multimedia, teaching Chinese a second/ foreign language, second language acquisition in adulthood, adult learning and computer education have been constructed via 3-times Delphi survey for one year, so the indicators with validity worth being a reference for developing or revising digital Chinese materials for adults.

6.2.2 Examining the quality of digital Chinese materials for adults based on the indicators of the checklist

The so-called must first sharpen one's tools, so the teachers and editors may be able to compile or choose a good digital Chinese materials for adults on the basis of the indicators of the checklist.

6.2.3 Also inviting experienced teachers and publishers of teaching Chinese as a second/ foreign language to join in examining the indicators in the further study

Besides the theories, the advices of the experienced teachers and publishers are important while developing a digital Chinese material for adults, so that different views can be adopted. The 10 experts who is studying in the field of teaching Chinese as a second/ foreign language are invited to examine the indicators in the first year study, the experienced teachers and publishers of teaching Chinese as a second/ foreign language will be also invited to join in examining the indicators in the further study.

6.2.4 Keeping study on constructing and examining the quality and applicability of the indicators

With the development of technology and the formation of global village, a trend has become obvious that adults adopt the digital Chinese learning materials as the way of acquiring Chinese. Various digital Chinese learning materials can be easily found through internet

search engines. However, methods to evaluate the quality of those materials never exist. Although the indicators of digital Chinese materials for adults have been constructed initially in this study, it seems that the indicators are not applicable to evaluate the quality of digital Chinese materials for children and adolescents. On the basis of the research method, therefore, the construction of the assessment indicators of digital Chinese materials for different learners will be carried out.

References

- AP Chinese Corner (2005). *American College Board thanked the generous help Taiwan government U.S. \$ 300,000 to assist the project will be the development of AP Chinese*. Retrieved September 16, 2007, from http://163.29.16.20/la1/education/ap_edu2005.htm.
- Wang, Shu Mei (1998). *Chinese materials online and the teacher role*. Retrieved September 15, 2007, from http://www.sinica.edu.tw/~cdp/project/02/2_2.htm.
- Song, Ru Shan (2004). *New perspective: foreigners learn Chinese, the world's fever*. Retrieved September 15, 2007, from <http://www.ccv.ne.jp/home/tohou/a124.htm>.
- Zhou, Zhong Tian, Chen, Li Fen, & Tian, Xin Kai (2010). *The report of abroad to ACTFL*. Retrieved November 13, 2011, from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.ntnu.edu.tw%2Fperson%2Fvisit%2F99058.pdf&ei=UwX_TpOxIsL0mAXp19FE&usg=AFQjCNHIBCFFE1z2vg3TWvg2NJmx5OYWRw&sig2=ko2QtnEd-sxwz5QG1IbOqA.
- Hsin, Shi Chang (1995). Integrating technology into teaching Chinese as a second language. *Chinese World*, 78, 1-8.
- Chang, Fu Mei (2005). *Opening remarks of the 4th Conference on global Chinese language education*. Retrieved September 16, 2007, from <http://edu.ocac.gov.tw/icice2005/ICICE2005/html/news.htm> °
- Chen, Ying Chi (2011). *The study of digital English learning materials for adults: Construction and further implication of assessment indicators* ° Unpublished doctoral dissertation, PhD program of adult and continuing education, National Chung Cheng University, China Yi, Taiwan.
- Zeng, Yi Lan, Wu, Si Qian, & Ji, Hui Qing (2007). *Internet Chinese language reading textbook and the interactive analysis*. Retrieved November 13, 2011, from <http://media.huayuworld.org/discuss/academy/netedu05/html/paper/sw60.pdf>.
- Chinese Hot Topic Report (July 24, 2005), United Daily News, A9 Edition.
- Cai, Qiao Yu (2005). Feasibility and problems of e-learning for elders. *Adult and Lifelong Education Bimonthly*, 10, 42-51.

- Cai, Qiao Yu (2008a). *Theoretical Model Building for Adult TCSL Knowledge and Teaching Effectiveness*. Unpublished doctoral dissertation, PhD program of adult and continuing education, National Chung Cheng University, China Yi, Taiwan.
- Cai, Qiao Yu (2008b). *Discussion on the strengths and limitations of using e-CSL materials for foreign adult learners in the characteristics of adult learners' perspectives*. Paper presented at 2008 International Conference on Material Compilation of Chinese as a second/ foreign language, Kaohsiung, Taiwan.
- Lai, Bi Ji (2011). *2010 Annual Meeting of the National Association of Foreign Language Teaching Report*. Retrieved November 13, from http://open.nat.gov.tw/OpenFront/report_download.jsp?sysId=C10000282&fileNo=001.
- American Society for Training and Development (2003). *Training projects for 2003: Results of an ASTD/DDI poll*. Retrieved December 29, 2009, from http://s3.amazonaws.com/zanran_storage/www.americanpressinstitute.org/ContentPages/77324.pdf
- Chandler, P., & Sweller, J. (1991). Cognitive load theory and the format of instruction. *Cognition and Instruction*, 8, 293-332.
- Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.
- Faherty, V. (1979). Continuing social work education: Results of a Delphi Survey. *Journal of Education for Social Work*, 15(1), 12-19.
- Florida Gulf Coast University (2009). *Distance Learning*. Retrieved January 2, 2009, from <http://itech.fgcu.edu/distance/>
- Linstone, H. A., & Turoff, M. (1975). *The Delphi method: Techniques and applications*. Reading, M. A.: Addison-Wesley.
- Mayer, R. E. (2001). *Multimedia learning*. New York: Cambridge University Press.
- Mayer, R. E., & Moreno, R. (1998). A split-attention effect in multimedia learning: Evidence for dual processing systems in working memory. *Journal of Educational Psychology*, 90(2), 312-320.
- Mayer, R.E. & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43-52
- Michigan Virtual University (2002). *Instructional design for quality online course*. Retrieved December 20, 2009, from <http://standards.mivu.org/>
- Murry J. W., & Hammons, J. O. (1995). "Delphi: A versatile methodology for conducting qualitative research. *The Review of Higher Education*, 18(4), 423-436.
- Raskin, M. S. (1994). The Delphi study in field instruction revisited: Expert consensus on issues and research priorities. *Journal of Social Work Education*, 30, 75-89.
- Taba, H. (1962). *Curriculum development: Theory and practice*. New York: Harcourt, Brace & World Inc.

ICSSAM- 608

The Development of Early Character Education Model through Integrated Mother's School Program, Non-formal Early Childhood Education in Rural Area

Puji Yanti Fauziah

Nonformal Education Program Faculty of Education
Yogyakarta State University, Yogyakarta, Indonesia

pujiyantif@gmail.com

A. Introduction

A development of excellent and competitive human resources with character will be more effective if it is started earlier, integrated and continuous. Early childhood education is one of programs rapidly growing and become one of strategies to develop good quality of human resource. The programs are kindergarten, playing group, baby day care and similar nonformal early childhood education (PAUD) programs conducted in POSYANDU (integrated service center), Bina Keluarga Balita (BKB), and PAUD SPS which are initiated by government recently "One Village One PAUD". Pajangan district is 33.5 hectare in large and 39.6 inhabitant/km² in population density. It is divided in 3 villages; Sendangsari, Tridadi and Guwosari. Pajangan has 28 kindergartens, 33 SPS/KB and 1 Alquran education school. The local education communities are IGTK and HIMPAUDI.

PAUD programs which are recently discussed commonly in scientific forums by many practitioners mostly focus only on children as main subject and 'slightly' neglect the education for parents as intermediary subject that actually has contribution in introducing the character education early on as well because family is the first and main preceptor in character building.

According to the code no. 22 the year 2003 article 13, education consists of formal, informal and nonformal. If we look on the length of children spending time at school, only about 2-6 hours (30%) they are in PAUD service and the rest in 18 hours (70%), they spend their times in family and society, so that the education in the family becomes an important thing affecting their life. Early childhood education which is part of study in nonformal education has a big opportunity to improve education in society especially the parent who is the intermediary subject. The parent is human capital in the education because they are the stakeholder who will be the consumer of education institution and in the term of nonformal education, they have strategic values in the success of the childhood education programs. The parent as the first and main preceptor has a great strategic role in character building. At this

time, there is no PAUD institution like kindergarten or playing group making educating program for parents to make it as a special program that can be a bridge between the parents and school intensively, integratedly and continuously. Mostly PAUD institutions still focus on the subject of main activities of the children at school.

One of philosophical base of national education is long life learning paradigm orienting on the development of student potencial. This implicates that learning can be held in nonformal, formal or informal education institution. In line with the philosophical base of national education, there are some strategic pillars developed by government which are:

A. Equal education is widely given to people to access education in formal, nonformal, and informal way as Indonesia geographically is very wide.

B. Long-life learning paradigm centered upon the student gives chance widely through formal, informal and nonformal way with no limit of time, places or ages.

C. Learning has some insight meanings; acculturation, empowerment, moral and character building. In terms of early childhood education, the moral and character building can never be separated from the role of mother as the first and main preceptor being PAUD intermediary subject. It has not got an adequate attention yet. For instance it is about mother's health and the understanding in growth of children as well.

D. Character education program initiated by national ministry of education brings a great expectation about the change in constructive and substantive paradigm about education. We say it constructive because building character human needs creativity and critical thinking. It will be trend setter for the society. The process of the character building is not a kind of process shortly done. It needs times, strategies, costs and integrated systems supporting character in to a school culture and family culture.

The stages of education and the character building at least pass 4 stages Lickona (Marzuki, 2011) which are; knowing, reasoning, feeling and acting. First stage is knowing. In this stage, children are given the understanding about good and bad attitude and norms existed in the society. The second is reasoning. We give them consciousness of doing something. Then in the next stage, feeling, we feel the impact of what they are doing good thing at school or home. The last stage is acting, when children take an action as a result of knowledge, understanding and feeling so that it can be internalized in to their character.

Early childhood education is one of strategic programs that much developed. Wortham (2005) states that parent and nursemaid as information sources for children have to get involved in the identification of needs of early childhood education because children spent most of their time at home. UNESCO (2001) defines early childhood education as a life period from birth until age 8 year is a decisive time in children brain development. This year is an early foundation in learning stages. Concerned with parenting, parenting is attitudes of parent in

educating, caring, protecting and socializing value and knowledge to children. One of well-known theories about parenting style is Diana Baumrind's theory. Baumrind (Herien: 2011) explains 3 parenting styles:

A. Democrating parenting style

It has some characteristics: (1) There is cooperation between parent and children, (2) there is an acknowledgement of the right of the children, (3) there are flexible guidelines, rules and controls from parent, (4) parent still listen to demand, question, opinion and contribution from children, (5) giving sensible and realistic expectation.

B. Permissive parenting style

It is marked with the following marking: (1) Domination at children, (2) Parent give freedom to their children to do what they want, (3) Parent only make a little demand or hardly ever give guidance, (4) less attention and control from parent, (5) no control of punishment and order. This kind of style applies limitless freedom.

C. Authoritative parenting style

This parenting style is marked by: (1) dominant paternal power; (2) control to tight behavior and attitude; (3) child will be punished by if they are not obeying rules; (4) parent seldom give praise.

Method

This research used the research and development approach (R & D) (Borg: 1983). This method was selected because the researchers intended to develop learning model used empirically and regularly through mother's regular social gathering format which then developed to be "Sekolah Ibu" with the more systematic materials. Model made is a learning model concept which will be adjusted appropriately to the characteristics of the local inhabitant.

The focus of this research is on the development action of early childhood character education model through integrated program "Sekolah Ibu" of Nonformal PAUD. Borg and Gall States that the educational and development research is a process used to develop and validate educational product (1979:626). The product from such education of Borg And Gall is not only limited to object – material objects like textbook, teaching film and other but also included in developing a process and procedure like learning method in organizing or making teaching plan.

In general, the activities of research and development consist of two main steps, which are: exploration study and literature review. Exploration study aims to map the problems existing at the field and also the supporting resources in terms of local potency from cultural aspects,

economic aspects, natural resources and human resource concerning to developmental process of growth of early childhood. Second, compiling conceptual training model based theoretical and empirical study validated by relevant practitioner and expert.

According to Borg and Gall (1979: 626) the steps which must be conducted in research and development are:

(1) Checking and collecting information, (2) designing component prototype to develop, (3) Developing first prototype, (4) conducting limited trial to the first model, (5) revising the first model (6) Conducting field test-drive, (7) Conducting the product revision (8) operational field test, (9) Conducting final revision (10) Conducting dissemination and spreading to the others.

Findings

In second year of research doing, from first step to the fourth step, it is conducted limited testing to the first model. There are some change occurred related to the first design that is about intensity of implementation and school materials of Sekolah Ibu.

1. Study of “Sekolah Ibu” Model

Parenting concept or conventional parenting existed in society especially in rural area emphasizes concept that parenting the children is the task of mother. Pajangan as one of subdistrict having strong culture is used as a development testing of “sekolah Ibu” model with an eye to bring an idea to empower the participation of mother and school consecutively. Ki Hajar Dewantara has taught a three concept of education which are, school, family and society. This research reasserts about the importance of parents role in parenting, caring, educating and accompanying children. Governments focus on increasing the number of PAUD and give less attention to parent as the intermediatory subject that has very important influence.

According to Mcdermott (2008 7), it is important to comprehend the pattern of parenting in cultural and social life context. In such a way that in this context, the researcher attempt to comprehend about habits and needs of society related to “Sekolah Ibu” in rural area. Epstein in Mcdermott (2008:5) states that to entangle the parent in some activities at school, to educate the children, we have to pay attention to several things:

A. Parenting. The Main objective of “Sekolah Ibu” is to improve the concern and parent involvement in children education, so that the first steps in parenting is to comprehend the family background, culture and purpose of the family. The profile of parent is important in order to comprehend deeper about parent and assess the embraced value.

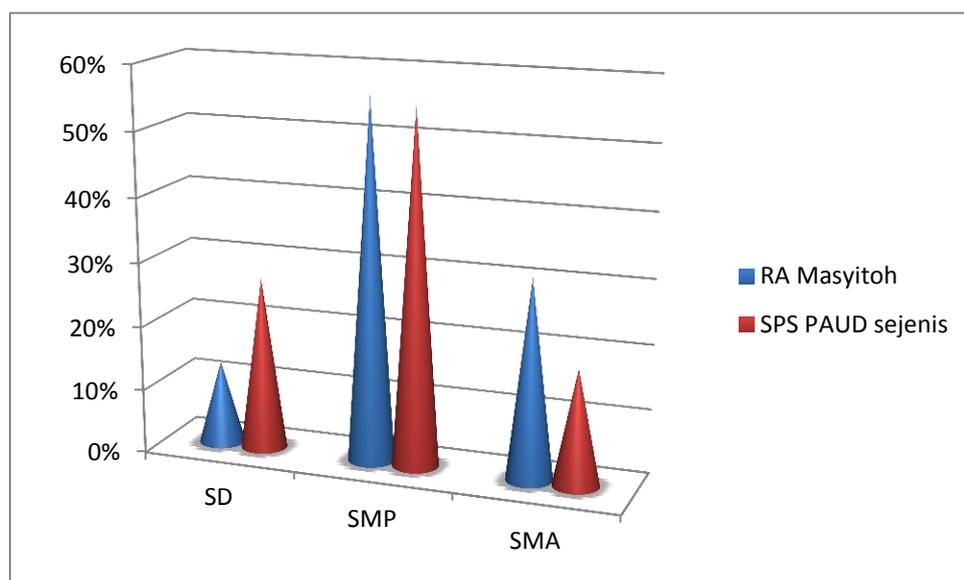
B. Communicating. Making a good communication between parent and school is still rather difficult. It is stated by the institution especially in kindergarten. However in case of SPS PAUD, the communication between parent and school gets better since in everyday learning, parents are always waiting for their children. In the trial step, it is seen that good

communications gives effect to the implementation of “Sekolah Ibu”. Beside of holding “Sekolah Ibu”, one thing that is difficult to do is to discuss the children growth to parent which is used to conduct only in the early and end of study.

C. Learning At home. Parent ability in stimulating children at home becomes an important factor for optimum children growth attainment. All this time, parent only deliver the education on the part of institute, especially about the children ability in calistung . “Sekolah Ibu” has a great role to bring over the parents that they have to stimulate not only cognitive ability of children but whole growth aspects, especially on character building, in this case independence as the children guide.

D. Collaborating with community groups. The first step of the model test is collaboration between the researcher and the leaders of the society. A stakeholder that is HIMPAUDI district Pajangan also collaborates with the researcher. The collaboration is really important since it effects to the institution greatly as well as the society. Sekolah Ibu is a new program in rural area which the participants of this program are the mothers.

The indicators on the implementation test of Sekolah Ibu are accord with the design at the second year. The participants of the test are the mothers joined *Sekolah Ibu* which can be seen on the chart:

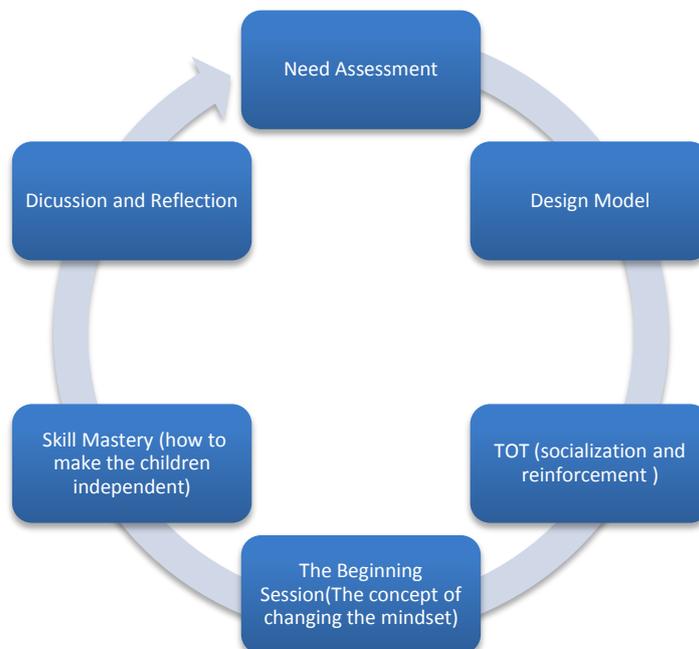


Mostly, the participants of *Sekolah Ibu* are Junior High School graduates. Most of them work as housewives and casual labours. It affects the level of participation of Sekolah Ibu. The lack of literacy of the participants makes the researcher cancel the pre-test and the post-test to avoid the formal style as at school. The researcher attempts to get closer with the participants and applies some other indicators in the process of learning that are commitment, participation, and learning independence (Knowles).

Sekolah Ibu is adopted from parenting program which held in cities, but the form is conformed for rural areas. The researcher compiles some steps in the implementation of the limited test in Sekolah Ibu. The steps are:

- a. A training for the organizer of early childhood education institutes, the educators, and the parents. The purposes of the training are to make the participants being familiar with Sekolah Ibu and to give them a good understanding about the importance of Sekolah Ibu and its advantage for institutes as well as the participants as parents.
- b. An extending of conceptual matters in the beginning of the session. It aims to change the perception and paradigm of parents about the concept of educating children.
- c. A training of skill in the next mid-sessions. The material gives the skill of understanding songs, the media of learning, the bright children's daily kart and the techniques in standing with children's habit, and the way of stimulating children so that they will learn by the achievement sheet.
- d. The discussion in the third meeting. In this meeting there are some discussion about the problems of parents and the solution. Then, the reflection and evaluation about the way of parenting are also discussed so the participants will improve their understanding about parenting.

The Development of Model of Sekolah Ibu as explained before is still tested in a limited test to two institutes that are Kindergarten and SPS PAUD. The test held concern on some consideration such as the basic social, education, and economical condition of the participants, the readiness of the educators, and the well-held program. In short, it can be described as follows:



Picture 1 Model testing path

The Development of Model of *Sekolah Ibu* increases the skill and the knowledge of both mother and children. It can be seen from the existence of increasing in the participation, the rise of awareness and commitment of parents, and the development of children independence evaluated through the children achievement sheet. The evaluation shows that there is a 65% improvement of parents who can develop the children independence. The running of *Sekolah Ibu* is executed based on the model design with some technical changes.

2. The Module of *Sekolah Ibu*

The module of *Sekolah Ibu* is especially made for the organizers, educators, and institutes who want to hold a mother school. There are some steps in the curriculum of *Sekolah Ibu*. The first step is about the change of parent perception. In the early meetings there are more explanation about concept of character building including the definition and the importance itself, the function and the strategy of character building. The second step is about material related to the skill training through some approaches such as using smart card, inuring, telling stories, singing a song, and giving reward. The third step is implementation at home. Finally, the last step is reflection and discussion about various constraints faced in implementation of independence at children.

The module has been validated by the expert and got suggestions. Some of them are: more various pictures in developing multiculturalism, more communicative sentences, distinction thing between one idea to another, the font style and size. The module consists of more concrete materials so that it can be used as guidance for the participants.

Conclusion and Suggestion

The type of this research is Research and Development. The second year focused on implementation and limited test of *Sekolah Ibu* model. Based on the explanation before it can be concluded that:

1. There is no significant change in the limited test at the second year but the intensity of execution which caused by technical constraint. The improvement is on the quantity of execution. From once in a month, it becomes once in a week. It gives positive impact as well as negative impact.
2. The execution steps of *Sekolah Ibu* consist of need assessment, implementation of model, training of trainer *Sekolah Ibu*, conceptual materials in the beginning, tips and steps of parenting to develop children's independence in the mid sessions, discussion and reflection at the end.
3. In substance, the material of curriculum *Sekolah Ibu* based on the validated result and FGD is already appropriate. However, it needs some improvement in layouting to make the module more communicative. Then, more various pictures are necessary since it is assumed that the module can be used by many people from different background.

4. The participation of parents and early childhood education institutes are improved since the parent is already aware on the importance of their roles, especially mother, in educating the children. Awareness and commitment are important outputs for the existence of Sekolah Ibu.

From the findings, the development of model of *Sekolah Ibu* is one of the ways to increase the participation of people especially parents to educate children at their golden age. Character education, in the term of independence, is a basic skill which must be possessed. Parents, especially mother, has a big role in educating children. Through model of Sekolah Ibu, the researcher hopes that the output of Sekolah Ibu will turn to be a smart mother and affects to the character and intelligence of the children.

Bibliography

- Berk, L.E (2003). *Child development*, sixth edition, USA, Illinois State University
- Borg and Gall (1979). *Educational Research an introduction*. New York: Longman Inc.
- Dewantara, S. B. (1989). *100 Tahun Ki Hajar Dewantara Bapak Pendidikan*. Jakarta : Pustaka Kartini.
- Harkonen, U. (without year) *Defining Early Childhood Education Through Systems Theory*. Finland : University Of Joensuu <http://sokl.joensuu.fi/harkonen/verkot/Defining%20early-Article.pdf>. (Accessed on 13 March 2010).
- Djalal, F. (2004). *Arah Kebijakan Nasional Pendidikan Anak Usia Dini (Jalur Pendidikan Non Formal)*. Presented at National Seminar and Disamination Jakarta State University.
- Hurlock, E. (1999) . *Perkembangan Anak*. Volume 2. Jakarta: Erlangga.
- Knowles, M.S. (1980). *The Modern Practice of Adult Education*. Chicago: Follet Publishing Company.
- Kirkpatrick, D. L. (1994). *Evaluating Training Program the Four Levels*. San Fransisco: Koehler Publishers.

ICSSAM- 797
Serious Games and Knowledge Management

Sandra Bertezene

LYON 1 University

sandra.bertezene@univ-lyon1.fr

David Vallat

LYON 1 University

david.vallat@univ-lyon1.fr

Caroline Bayart

LYON 1 University

caroline.bayard@univ-lyon1.fr

ABSTRACT

The purpose of this article is to show that serious games contribute to training knowledge workers in an organizational learning process. From this perspective, we analyze organization theory, which allows us to position serious games as a technology. Then we attempt to understand how this technology promotes the acquisition of knowledge. After this we explain the research method used in the field (participant observation and investigation using questionnaires among students enrolled in a Business Administration degree who had taken part in a serious game). The final part of this article analyzes the main results: interactions (between students, between students and teachers) as well as teacher involvement lead to the initial construction of a community of practice and a subculture, and encourage organizational learning. Then we highlight the start of an internalization process through Learning by Doing. This is due to the interest aroused by the serious game, the perceived effects of play and attitudes towards this technology. Finally, the qualitative results produced by our observations in the field show the relevance of serious games since they set the stage for double-loop learning.

ICSSAM- 507
**The Pedagogical Content Knowledge of Math Teachers of State
Universities & Colleges in Region III (Philippines)**

Robert V. Marcos, Ph. D.

Tarlac State University
robertmarcos98yahoo.com

ABSTRACT

This qualitative research determined the Pedagogical Content Knowledge (PCK) of math teachers in selected state universities in Region III. Anchored on a theory on Mathematical Knowledge for Teaching, teachers in Region III State Universities and Colleges were assessed on their Pedagogical Content Knowledge (PCK), with its three components; Knowledge of Content and Curriculum (KCC), Knowledge of Content and Students (KCS), and, Knowledge of Content and Teaching (KCT).

The findings showed the teachers to have **satisfactory** PCK, specifically; **very satisfactory** KCC, **satisfactory** KCS, and **satisfactory** KCT. Findings, analyses and recommendations call for planning and conduct of forums and training activities to uplift the PCK of the mathematics teachers from **satisfactory** to **very satisfactory** level.

This paper presents explanations/contextualization on the PCK level of the teachers vis-à-vis the respondents demographics, and, actual insights on the actual teaching and learning of algebra problem solving.

Background of the Study

Mathematics deals with logic and quantitative assessments of almost everything found in the vast universe. Solving problems in real world situations is at the hilt of mathematics learning objectives.

Mathematical problem solving is better learned that taught. The teacher has to facilitate mathematics learning to the students starting with making students understand the fundamental mathematical/algebraic formulas and operations. The insights of Richard Rusczyk (2011) hit a major math misconception when he pronounced that true mathematics is not a process of memorizing formulas and applying them to problems tailor-made for those formulas.

More than ever, it is falling on schools and teachers to improve the employability skills of students. In response to this demand, mathematics requirements need to be strengthened in the schools.

The basic question on mathematics instruction remains simple. What are expected of a good teacher? To answer this, the content knowledge and pedagogical knowledge are of paramount and equal importance to teaching. Before anyone can be said to be an expert teacher, the teacher must possess proficiency on the subject matter, since no one can impart something one does not have. Mere knowledge of content, and, certainly not just knowledge of general pedagogy are expected of teachers. It requires what [Shulman](#) (1986) calls Mathematical Knowledge for Teaching (MKT).

MKT has two components, the Subject Matter Knowledge (SMK) and the Pedagogical Content Knowledge (PCK), (Hill & Ball; Hill, Rowan, & Ball, 2005).

Subject Matter Knowledge (SMK) of teachers is manifested in how problems are solved in front of the students. SMK intertwines with teachers' PCK while undertaking pedagogy. Specifically, knowledge of content is an integral component of each of PCK's sub domains, namely: Knowledge of Content and Curriculum (KCC); Knowledge of Content and Students (KCS); and, Knowledge of Content and Teaching (KCT) (Manizade, 2006).

Statement of the Problem

This study assessed the Pedagogical Content Knowledge (PCK) of math teachers in selected state universities in Region III.

Specifically:

1. It sought to assess the Pedagogical Content Knowledge's
 - 1.1 Knowledge of Content and Curriculum,
 - 1.2 Knowledge of Content and Students, and
 - 1.3 Knowledge of Content and Teaching.
2. Identify the implications of the findings to math education.

Methodology

This study used the qualitative research design to describe the Pedagogical Content Knowledge of the teachers in handling Math 1/College Algebra topics. The qualitative approach developed by Glaser and Strauss (2009) is the grounded theory, where, the research begins with the raising of generative questions which help to guide the research. According to them, as the researcher begins to gather data, core theoretical concept(s) are identified, tentative linkages are developed between the theoretical core concepts and the data, and later on, the researcher is more engaged in substantiation and summary.

The 30 respondents of this study (chosen through purposive sampling to ensure their diversity), were mathematics teachers who were handling Math 1/College Algebra from the selected state universities in Region III during the first semester of the school year 2012-2013. Eight teacher participants come from each of the following universities; Bulacan State University (BuSU), Nueva Ecija University of Science and Technology (NEUST), and Tarlac State University (TSU), while six come from Bataan Peninsula State University (BPSU).

The proponent developed a questionnaire based on the format and style instrument by Manizade (2006). It has two parts, the first determined the following information on the teacher respondents such as, age, educational attainment, academic rank and years of experience in teaching math subjects. Part II was a set of open ended questions following each of the fifteen math problems. Three problems each were formulated on Polynomials (Problems 1, 2 &3), Linear Equations (Problems 4, 5 and 6), Rational Expressions (Problems 7, 8 and 9), Radical Expressions (Problems 10, 11 and 12), and, Quadratic Equations (Problems 13, 14 and 15). These learning units in Math 1/College Algebra are common in the respondent SUCs.

The open ended questions adapted from Manizade's (2006) PCK assessment instrument, with modifications to conform to local setting. These are: (i) "What are some of the important mathematical ideas needed to solve this problem correctly?" for KCC; (ii) "What underlying mathematical misconception(s) or misunderstanding(s) might lead the student to commit error in solving this problem? How might the student have developed the misconception(s)?", and, (iii) "If there are misconceptions identified, what further questions are you going to ask to clarify them?" for KCS; and, (iv) "What instructional strategy would you suggest/recommend to address the student's misconception(s)?" for KCT.

This study undertook measures to approximate validity and reliability in consonance with prescriptions on qualitative studies. As a take-off, the syllabi of instruction in the different school respondents were analyzed. A table of specifications was also used to ensure the item distribution of the different topics in Algebra. Critiquing of colleagues was vital in the preparation of the research instrument. Subsequent enhancements were incorporated in the research instrument integrating some recommendations, before it was administered at Central Luzon State University (CLSU) for pilot testing.

During the visits to some of the respondents, the proponent was able to observe the teachers conduct classes in their classroom. These observation sessions gave the proponent the opportunity to verify their responses to the items on the research instrument. In addition, the researcher's casual conversations with the respondents were helpful for better comprehension of their responses. These unstructured interviews likewise provided the proponent with insights on why some respondents answered (or did not answer) the way they did.

Each response of the teacher respondents was compared to the listed deemed responses in the Teacher's PCK Assessment Guide also developed by the research proponent.

All responses were assessed using the following scheme:

<u>Assessment</u>	<u>Description</u>
Very Satisfactory (VS)	Response encompassed most of the identified deemed responses in the assessment guide.

Satisfactory (S) Response was an acceptable answer to the question.

Needs Improvement (NI) Response was an obvious mathematical misconception, or the response was irrelevant to the question, or, no response was given.

The following was used to summarize the knowledge level assessment:

<u>Combination of Assessments</u>	<u>Assesment in the Learning Unit</u>
At least 2 Very Satisfactory	VS
1 Satisfactory & 2 Need Improvement	NI
3 Need Improvement	NI
Any other Combination	S

Results

Based on the performances of the teacher respondents on KCC, KCS and KCT, their PCK is assessed as **satisfactory**.

Table 1
Distribution of Respondents' Level of Knowledge of Content and Curriculum

Knowledge Level	Polynomials	Linear Equations	Rational Expressions	Radical Expressions	Quadratic Equations	Mean
Very Satisfactory (VS)	20	14	17	13	16	16
Satisfactory (S)	10	14	11	15	11	12
Needs Improvement (NI)	0	2	2	2	3	2
Total	30	30	30	30	30	30

- **Polynomials**

The table shows that 20 teacher participants gave the mathematical ideas needed to solve Problem 1 correctly: knowledge of special products' formulas, kinds and properties of

polynomials, rules on multiplying signed numbers and laws of exponents for multiplication, commutative and distributive laws of multiplication, grouping similar terms. The mathematical ideas given by the teachers are evident and strong indicators that they have **very satisfactory** knowledge of the important mathematical ideas needed to answer Problem 1 correctly.

Figure 1 contains the response of teacher respondent 24 to the KCC question who was described to have satisfactory content knowledge on special products.

Based on what you know as the classroom teacher:

(i) What are some of the important mathematical ideas needed to solve this problem correctly?

- *Associative property of multiplication which can be used to multiply any two factors at a time without affecting the product.*
- *Commutative property of multiplication which can be used to multiply any two factors in any order without affecting the product.*
- *Laws of exponent*
- *Multiplication of signed numbers*

Figure 1
Satisfactory Content and Curriculum Knowledge on Special Products

Another example of a **satisfactory** knowledge of content in Problem 3 is shown in Figure 2.

Figure 2 shows a satisfactory response (respondent 12) to Problem 3 on polynomials.

Based on what you know as the classroom teacher:

(i) What are some of the important mathematical ideas needed to solve this problem correctly?

Understanding on how to represent mathematical phrase to symbol.

Writing the correct equation ^{will be able to} to lead the correct solutions.

Formula for finding area and perimeter

Figure 2
Satisfactory Content and Curriculum Knowledge on Problem 3

The response “Understanding on how to represent mathematical phrase to symbol”, and “Writing the correct equation to lead the correct solution” qualify for the first deemed response, “Converting worded statements into algebraic expressions/mathematical statements/Creating algebraic terms/equations based on word problems”. The third response, “Formula for finding area and perimeter” corresponds to “Applying formula to determine Area and Perimeter of Plane Figures (i.e. rectangle)”. Since the response satisfies two of the relevant, identified mathematical ideas in the assessment guide, **Satisfactory (S)** is given this item.

- Linear Equations

The **VS** responses included most of the mathematical concepts deemed important for the solutions to problems 4, 5 and 6. These are: converting worded statements into algebraic expressions/mathematical statements; creating algebraic terms/equations based on word problems; demonstrating steps in solving system of linear equations; demonstrating proficiency on distance, rate and time problems (problem 4); comprehending solution fundamentals of number/money problems (problem 5 & 6).

- Rational Expressions

Majority of the responses take in nearly all the mathematical ideas deemed important for the problems involving rational expressions. While a few responses were assessed **needs improvement** or **NI** (3 responses), a sizeable number were considered **satisfactory** (S) answers. The responses were contrasted with the following deemed necessary mathematical concepts for solving problems on rational expressions: converting worded statements into algebraic expressions/mathematical statements (problems 8 & 9); creating algebraic terms/equations based on word problems (problems 8 & 9); applying steps in solving equations involving rational expressions/ demonstrating proficiency on the use of Least Common Denominator/Least Common Multiple; factoring; demonstrating proficiency on motion/distance, rate and time problems (problem 8); demonstrating proficiency on work/pipe problems (problem 9); and, interpreting the results/permissibility of values(problem 9).

- Radical Expressions

The KCC question succeeding the problems involving radical equations elicited more **satisfactory** answers.

The typical satisfactory response to the KCC question for problems 10, 11, and 12 is similar to that given by respondent 28 as shown below. The responses commonly contained any one of the following: converting worded statements into algebraic expressions/mathematical statements (problem 12); creating algebraic terms/equations based on word problems (problem 12); factoring; demonstrating proficiency on dealing with equations involving radicals/extraneous roots; applying permissibility of values under radicals/extraneous roots; applying properties of real numbers/the real number system; and, understanding inequalities and its principles/ trichotomy principles (problem 10).

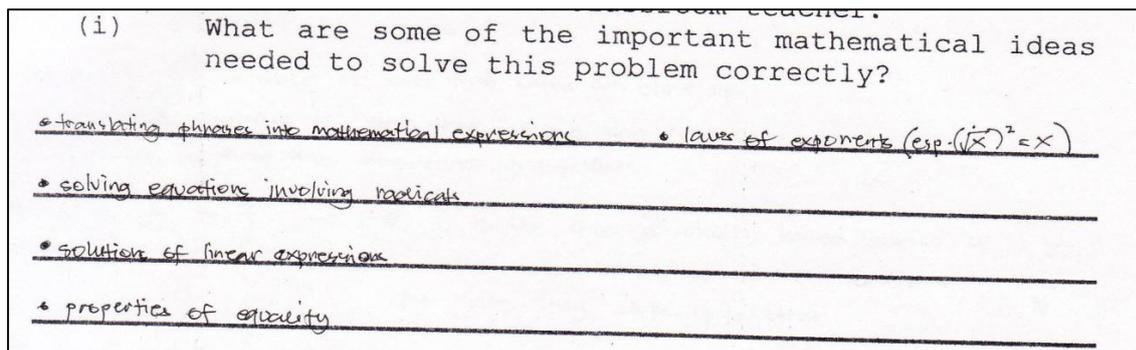


Figure 3
Very Satisfactory Response to Problem 12

Figure 3 features the response of the second teacher participant to the KCC question for problem 12. The assessment given is **very satisfactory** (VS).

- Quadratic Equations

In solving problems on quadratic equations, the following are the identified important mathematical concepts: converting worded statements into algebraic expressions/mathematical statements; creating algebraic terms/equations based on word problems; demonstrating proficiency in formulating and solving quadratic equations/quadratic formula; factoring/determining LCM; demonstrating proficiency in illustrating the situation in the problem/creating data table (problem 14 & 15); applying the Pythagorean Theorem (problem 14); and, demonstrating proficiency on motion/work problems (problem 13).

Table 2
Distribution of Respondents' Level of
Knowledge of Content and Students

Knowledge Level	Polynomial s	Linear Equation s	Rational Expression s	Radical Expression s	Quadratic Equation s	Mean
Very Satisfactory (VS)	5	4	4	1	4	4
Satisfactory (S)	23	20	21	24	17	21
Needs Improvement (NI)	2	6	5	5	9	5
Total	30	30	30	30	30	30

Specific descriptions on this knowledge per learning unit are described as follows:

- Polynomials

On polynomials, five teachers showed **very satisfactory** knowledge of content and students. In answer to the first question in Problem 1 (multiplication of binomial factors) they said that one misconception/misunderstanding committed by the students is the order of multiplying the binomial factors. Some students have the tendency to multiply the factors in the order they appear in the problem. The FOIL method is also used for this purpose. The students develop this misconception by not applying the associative and commutative laws of multiplication and not examining the forms of the binomials (sum and difference of two terms). In the interview conducted to some of these teachers, when this kind of misunderstanding is identified, they ask the students to rearrange the factors and note similarities and differences (emphasis of commutative and associative laws of multiplication). When this is done, the students can easily realize that product of these binomial factors can be determined by using special product formulas. They also added that noted errors committed by the students on multiplication of terms with like and unlike signs are caused by “carelessness” and “hurried” actions to finish the task.

On Problem 2 (factoring a polynomial), the reasons and explanations given by one respondent is shown in the following figure.

(ii) What underlying mathematical misconception(s) or misunderstanding(s) might lead the student to commit error in solving this problem? How might the student have developed the misconception(s)?

• Most students don't know what to do in factoring?

• Other students are always confused with the factorization of x^2-1 . They tend to write $x^2-1 = (x-1)^2$ which is incorrect!

• Also, some are careless with their algebra, e.g., $-x+1$ ~~is~~ ^{is also written as:} $-(x+1)$

(iii) If there are misconceptions identified, what further questions are you going to ask to clarify them?

• ~~Let~~ Let them ask for themselves, ^{Is there a common factor?} If ~~the~~ ^{the} given is a binomial, is it type 1, 2 or 3. If it is among the 3 types, check the exponents to know what type it belongs. Is the given is a trinomial, is it type 4 or 5? If the given consists of more than 3 terms, do we need to grouping or other technique?

Figure 4

Respondent's Very Satisfactory Knowledge of Factoring and Students.

In the interview conducted to some respondents, misunderstanding/ misconception about special products and factoring can be traced to the students' inability to recognize the reverse relationship of these two concepts. A deficient knowledge on one causes a deficiency on the other. When this misunderstanding happens, they probed what the students think about by asking questions like: "Is there a common factor?", "is it a trinomial?" "Does the given problem consist of more than three terms?", "Do we need grouping or other techniques?" They say that, in addition to these thought-provoking questions, they present some more examples to clarify the learners' thoughts.

Figure 4 shows the 4th respondent's take on the same. The "None" responses given in the figure elicited an assessment of **Needs Improvement (NI)**.

(ii) What underlying mathematical misconception(s) or misunderstanding(s) might lead the student to commit error in solving this problem? How might the student have developed the misconception(s)?

None

(iii) If there are misconceptions identified, what further questions are you going to ask to clarify them?

None

Figure 4

Sample of a Response Needing Improvement on Knowledge of Content and Students

This response may imply that the teacher makes no further questions to clarify misconceptions and misunderstanding of the learner when these mishaps on factoring occur. It can be said that this teacher may lack the “art of questioning” to clarify thoughts of the learner.

The following figure shows another VS response for problem 2.

(ii) What underlying mathematical misconception(s) or misunderstanding(s) might lead the student to commit error in solving this problem? How might the student have developed the misconception(s)?
<u>◦ There is only one way to find the solution</u>
<u>◦ Misconception on laws of exponent</u>
<u>◦ Misunderstanding on multiplication of signed numbers.</u>
<u>* Student might developed the misconception during their elementary or high school algebra.</u>
(iii) If there are misconceptions identified, what further questions are you going to ask to clarify them?
<u>◦ Ok class, do you know that there are different ways to find the solution to this problem?</u>
<u>◦ On Laws of exponent, how would you multiply $X \cdot X$? How about $X^2 \cdot X$?</u>
<u>◦ On multiplication of signed numbers, how would you simplify $(-3X)(-2)$? or $(X^2)(-2)$?</u>

Figure 5

Very Satisfactory Response (Problem 2)

The responses suggest that the teacher respondent is aware of the students' capacity or incapacity of the learners to solve problems in different ways. Such awareness may propel the teacher to ask further questions to probe their thinking.

• Linear Equations

According to majority of the respondents, identified misconceptions/misunderstanding on linear equations include the following: deficiency of students to comprehend the problem because of language issue/s; failure of students to establish the given data, the requirement/s of the problem, inability of students to represent these into variables, and inability of students to formulate linear equations; misconception/unfamiliarity of students on distance, rate and time/motion problems (problem 4); deficiency of students to perform algebraic operations and simplifying algebraic expressions/equations; and, failure to verify/check the results or inability to interpret the correctness of the result/s.

When some respondents were interviewed, they say that poor comprehension of the problem could be a cause of such misunderstanding as all mathematical problems are stated in the English language. The above misconceptions and misunderstanding are clarified by modeling

the problem through the use of tables and drawings (motion problem), and providing more examples in translating phrases and statements in mathematical symbols and vice versa.

In answer to question (iii), further questions asked to clarify the thoughts of the students include: asking the key terms in the problem; given data, requirements and the correctness of their algebraic representations of known and unknown quantities; correctness of the students' formulated equations; distance, rate and time/motion concepts (problem 4); algebraic operations and simplification of the equations; and on their interpretation of the results.

- Rational Expressions

The respondents gave any one or combination/s of the following responses for the question on misconception/misunderstanding on rational equations: deficiency of students to comprehend the problem because of language issue/s (problems 8 & 9); failure of students to establish the given data, the requirement/s of the problem, inability of students to represent these into variables, and inability of students to formulate the solution equation (problems 8 & 9); deficiency of students in performing operations on equations/expressions involving rationals; misconceptions of students in dealing with fractions; deficiency of students on factoring; misconceptions of students on Least Common Denominator/ Least Common Multiple; misconception/unfamiliarity of students on distance, rate and time/motion problems (problem 8).

Relative to the identified misconceptions, the respondents say that emphases be given on the key terms in the problem (problem 8 & 9); given data, requirements and the correctness of their algebraic representations of known and unknown quantities, on the correctness of their formulated equations(problem 8 & 9); solving equations involving fractions; recalling concepts on factoring; LCD/LCM; distance, rate and time/motion concept (problem 8).

- Radical Expressions

In the same light, the respondents showed satisfactory knowledge of content on radicals and what misunderstanding/misconceptions students hold on them.

The mathematical misconceptions/misunderstanding that prompted students to commit errors in solving problems on radicals were: identifying the permissible values of the variable in the radicand (Problem 10); getting the real roots and extraneous roots of the equation (Problem 11), eliminating the radical symbols (Problems 11 & 12), algebraic manipulations to find the solution (Problems 11 & 12). When some respondents were interviewed, they clarified that many students fail to choose some values which only satisfy the conditions of the problem. They include all values solved in the equation, and failed to check whether these are real roots or extraneous roots. On algebraic manipulations on radicals of the form $3\sqrt{x} - \sqrt{2a}$ the students knew that the radical symbol can be eliminated by squaring it as a single term $(3\sqrt{x} - \sqrt{2a})$, but when simplified, it is squared term by term. This practice of the students reveals their failure to apply a special product formula (square of a binomial). This

shows that incorrect mathematical knowledge on special products and combining similar terms may cause the misconception. In finding the roots of a radical equation, failure to check the obtained values against the conditions of the problem causes students to even consider the extraneous roots. They added that for the above misconceptions to be corrected, further questions about the algebraic operation employed must be asked to the students, and the correctness of the answers obtained must be checked at all times.

- Quadratic Equations

The responses for questions (ii) and (iii) on quadratic equations are no different from the previous topics. These responses merited the respondents' **satisfactory** knowledge on the contents on quadratic equations and what underlying misconceptions do students have for these.

Many respondents commented that misconceptions of students on work problem leading to a quadratic equation (Problem 12) originate from inability to represent the amount of work done at a given time. When the initial representation of the key variables is incorrect, the resulting equation representing the problem would eventually be incorrect. As before, the teachers said that failure to translate the word problem into equation was a result of poor comprehension. On Problem 14 (motion problem), underlying misconception can be traced on how the students comprehend the problem. Poor comprehension is revealed in failing to draw the figure corresponding problem and identifying given and unknown facts.

It can be seen in the responses of the teachers that much is revealed on their content knowledge and their students. When their characteristics were reviewed in relation to their given responses, the respondents who were described to have **very satisfactory** and **satisfactory** knowledge possessed appropriate and high educational degree, have spent at least five years of teaching, and hold permanent positions.

The teachers identified to **need improvement** in this craft were non-education graduates, or, have not specialized in mathematics. The study of Vale (2010) has found out that mathematics teachers who have not originally intended to be such, or "out of field" mathematics teachers, may undergo professional development programs to boost their mathematics teaching abilities. The study showcased successful development programs in enhancing "out of field" math teachers' Mathematical Knowledge for Teaching.

Furthermore, some teachers on this group were found to be close to retirement age and have been teaching for quite a long time. Some have no advance studies in the graduate level. These descriptions may point to the idea that they may have adequate knowledge of the content but insufficient knowledge of the students in terms of learning abilities, an inconclusive idea nevertheless. The study of Ding (2000), which maintained parallel contentions, showed that mathematics teachers may enhance their Pedagogical Content Knowledge by cultivating their mathematical sensitivity. She continued, this may be done starting with addressing the need to strengthen their skills on making instructional decisions

in dealing with students' errors and difficulties, and, analyzing how students respond to different classroom themes. One of the final arguments of the study states, teachers with strong mathematical knowledge base can flexibly activate and transfer their knowledge to their use of knowledge in the teaching contexts. Thus, these teachers may benefit from MKT development programs.

Table 3 shows the assessment of the individual responses of all the participants to the question corresponding KCT.

Table 3
Distribution of Respondents' Level of
Knowledge of Content and Teaching

Knowledge Level	Polynomials	Linear Equations	Rational Expressions	Radical Expressions	Quadratic Equations	Mean
Very Satisfactory (VS)	0	0	0	0	2	0
Satisfactory (S)	29	25	23	26	22	25
Needs Improvement (NI)	1	5	7	4	6	5
Total	30	30	30	30	30	30

- Polynomials

The **satisfactory** responses comprise the bulk of the responses to question (iv). One of the only two classified very satisfactory (VS) responses is shown in the following figure.

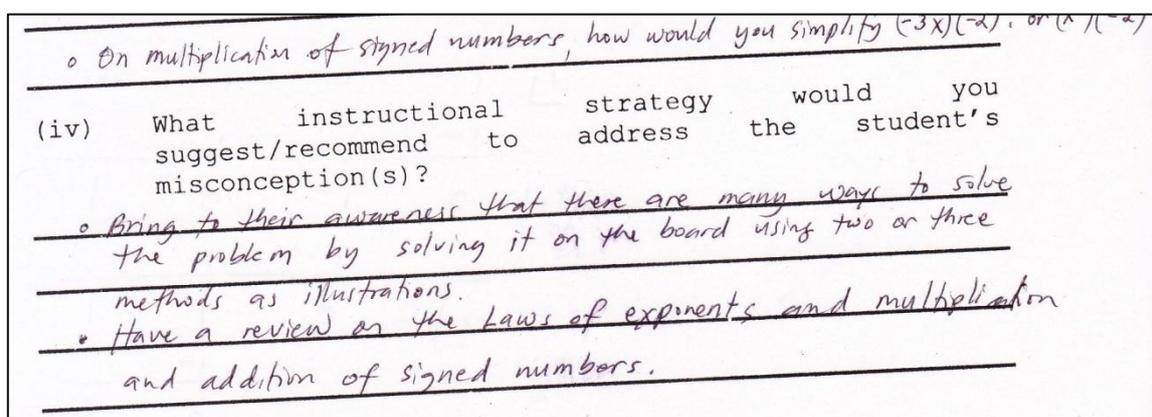


Figure 6

Very Satisfactory Response (Problem 1)

The respondent's responses likewise imply that the participant utilizes active learning on unlocking of difficulties to address the problem.

- Linear Equations

Common response was merely acceptable answers to the question corresponding to the Knowledge of Content and Teaching. The group of respondents having been assessed to have **satisfactory** KCT employed single strategy to teach linear equations. Majority of them mentioned lecture discussion in presenting solutions to problems on the specific learning unit. The next figure shows the 13th participant's response to question (iv) pertaining problem 4.

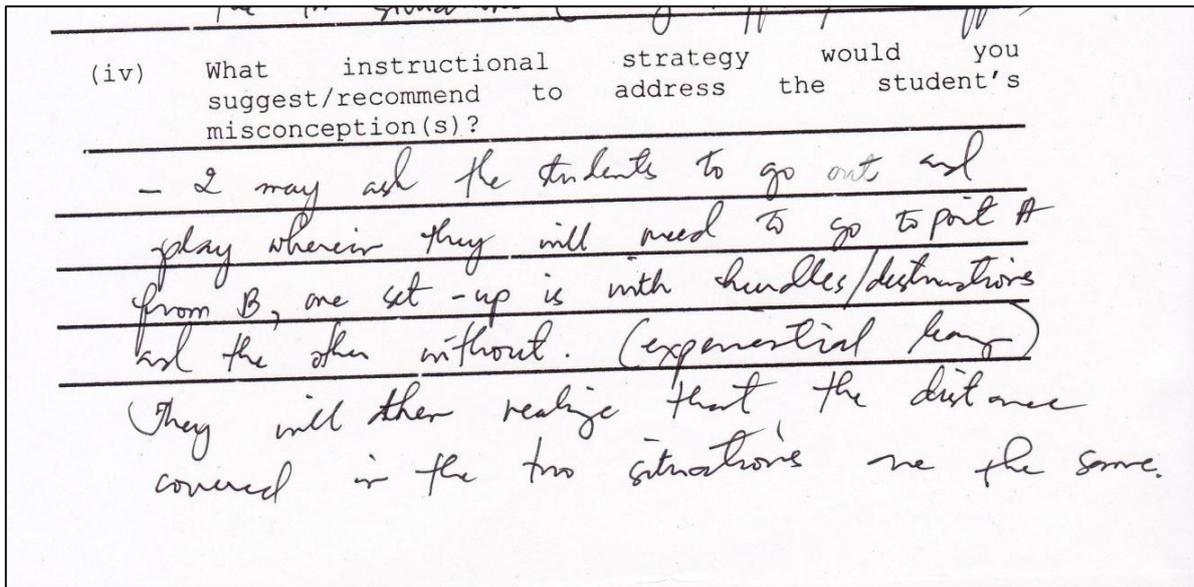


Figure 7

Satisfactory Response (Problem 4)

Figure 7 presents the view of the respondent on strengthening learning of students on solving linear equations, particularly on distance, time and rate problems. Among other considerations, the presented activity for the students may seem to be unrealistic taking into account the time allotment for the Algebra class (usually 3 hours split into the number of meetings scheduled within the week).

Despite the question whether the proposed activity cited is relevant to the level of college students the strategy presented was experiential learning which was assessed by the research proponent as **satisfactory** nonetheless.

The other strategies listed as pertinent ones to enhance learning on linear equations are as follows: active learning on unlocking of language difficulties to address problem/s on converting statements into algebraic expressions/mathematical statements/creating algebraic terms/equations based on word problems; lecture/discussion on number/money problems, reviewing the concepts of distance, rate and time/motion; cooperative/collaborative learning -

group dynamics/ drills/exercises; assignments on solving linear equations/factoring/creating illustration to visualize the situations in the word problems; or, applying other teaching strategies to reinforce students' learning on solving linear equations.

- Rational Expressions

Twenty-three teacher participants proved with their responses their **satisfactory** content knowledge and teaching.

The strategies listed in the PCK assessment guide for question (iv) for problems on rational expressions are the following: active learning on unlocking of language difficulties to address problem/s on converting statements into algebraic expressions/mathematical statements/creating algebraic terms/equations based on word problems; lecture/discussion on work/pipe problems, reviewing the concepts of LCD/LCM/distance, rate and time/motion; experiential learning - seatwork/board work; cooperative/ collaborative learning - group dynamics / drills/ exercises; assignments on solving equations involving fractions/factoring/creating illustration to visualize the situations in the word problems in relation to permissibility of computed values; or, applying other teaching strategies to reinforce students' learning on solving equations involving fractions.

- Radical Expressions

The respondents showed **satisfactory** knowledge of content and teaching.

The strategies listed as pertinent ones to enhance learning on radical expressions are as follows: active learning on unlocking of language difficulties to address problem/s on converting statements into algebraic expressions/mathematical statements/creating algebraic terms/equations based on word problems; lecture/discussion reviewing the real number system/reviewing the concepts of inequalities and its principles; experiential learning - Seatwork/ board work; cooperative/ collaborative learning/ group dynamics involving drills/exercises; assignments on solving equations involving radicals/ factoring/ permissibility of computed values/extraneous roots; or, applying other teaching strategies to reinforce students' learning on solving equations involving radicals.

- Quadratic Equations

For quadratic equations, learning may be strengthened using the following strategies: active learning on unlocking of language difficulties to address problem/s on converting statements into algebraic expressions/ mathematical statements/creating algebraic terms/equations based on word problems; lecture/ discussion reviewing the Pythagorean Theorem/Right triangles/concepts of distance, rate and time/motion; experiential learning - seatwork/board work; cooperative/ collaborative learning/group dynamics involving drills/exercises; assignments on solving quadratic equations/creating illustration to visualize the situations in the word problems in relation to permissibility of computed values; or, applying other teaching strategies to reinforce students' learning on solving quadratic equations.

The preponderance of satisfactory responses to the fourth PCK question posed after each of

the problems is very telling. The profile of the group of respondents who have satisfactory knowledge of content and teaching reveals their education to have reached post graduate studies, and in possession of more than five years of teaching experience in mathematics. The teachers needing improvement completed non-education degrees (BS Mathematics, BS in any engineering field and BS Chemistry). A number of teachers are close to retirement age and have relatively longer teaching experience. Some have no advance studies in the graduate level. These descriptions give the idea that their sufficient knowledge of the content is coupled with insufficient knowledge of pedagogy.

Implications of the Findings to Math Education

With these findings, trainings, re-tooling or development programs may be designed and implemented whether to strengthen further or to uplift the teachers' PCK.

The Knowledge of Content and Curriculum (KCC) of the mathematics teachers is generally **very satisfactory**. However, this assessment can only be attributed to the performance of the teacher respondents for the learning units on polynomials, linear equations, rational expressions and quadratic equations. In the case of the participants' KCC on radical expressions, it was found out to be at a **satisfactory** level only.

For all the learning units covered by the study, the Knowledge of Content and Students (KCS) and the Knowledge of Content and Teaching (KCT) of the mathematics teachers was determined to be both **satisfactory**.

These may encourage the implementation of an institutionalized set of training and development programs in the State Universities and Colleges to strengthen the KCC, KCS and KCT of the mathematics teachers.

Many options may be adopted by the administrators in order to assuage the issues highlighted by this study. One is the designing, planning and implementation of training and development programs with the objective of reinforcing the MKT of the math teachers as stipulated early on. These may be institutionalized through their Faculty Development Program and/or through their University Training Office.

The end result of the whole process of bringing MKT into the awareness of administrators and math teachers is the progress on the mathematics learning of students. As outlined by the paradigm of this research, with the mathematics teachers' improvement of their PCK, students may have a better opportunity to cultivate creative and critical thinking.

Conclusions

With the findings of the study, the following are the drawn conclusions of the study.

1. The Knowledge of Content and Curriculum of the mathematics teachers in the respondent SUCs is: **very satisfactory** on polynomials, linear equations, rational expressions and quadratic equations; and, **satisfactory** on radical expressions.

2. The Knowledge of Content and Students of the mathematics teachers in the respondent SUCs is **satisfactory** on all learning units.

3. The Knowledge of Content and Teaching of the mathematics teachers in the respondent SUCs is **satisfactory** on all learning units.

Recommendations

The study's findings lead to the following recommendations.

1. To strengthen the PCK performance of the mathematics teachers from **satisfactory** to **very satisfactory** level, State Universities and Colleges may institutionalize the conduct of training and development programs bringing to focus the awareness to, and reinforcement of teachers' Knowledge of Content and Curriculum (KCC), Knowledge of Content and Students (KCS), and, Knowledge of Content and Teaching (KCT).

The administration of the state universities may include in their development plans the institutionalization of designing, planning and implementation of training and development programs through their Faculty Development Program and/or by their University Training Office. In addition, to enhance their math teachers' PCK, teaching loads requiring lesser number of preparations may be assigned to them. This may likewise encourage specialization on specific math subjects.

BIBLIOGRAPHY

Ball, D., Hill, H., & Bass, H. (2005). Knowing mathematics for teaching: Who knows mathematics well enough to teach third grade, and how can we decide? *American Educator*, 29(3), 14-22, 43-46. Retrieved from AFT publications: http://www.aft.org/pubs-reports/american_educator/issues/fall2005/BallF05.pdf

Ball, D., Thames, M., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*, 59(5), 389-407.
doi:10.1177/0022487108324554 8 9

Glaser, Barney G & Strauss, Anselm L., 2009. *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago, Aldine Publishing Company.

http://www.google.com.ph/books?hl=tl&lr=&id=rtiNK68Xt08C&oi=fnd&pg=PA1&dq=glaser+and+strauss&ots=UUvVYnYIWN&sig=FSd3XoKy1urteT6K9etL4ir7jIQ&redir_esc=y#v=onepage&q=glaser%20and%20strauss&f=false. Accessed: 12/24/2011

Hill, H. & Ball, D. (2009). The curious-and crucial-case of mathematical knowledge for teaching. *Phi Delta Kappan*, 91(2), 68-71. Retrieved from Academic Search Premier.

Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9(1), 47-63. Retrieved February 25, 1998, from <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf> (march 4, 2012)

Manizade, Agida (2006) Designing measures for assessing teachers' pedagogical content knowledge of geometry and measurement at the middle school level. (Ph.D. dissertation, University of Virginia). <http://proquest.umi.com/pqdlink?did=1232395091&Fmt=14&VType=PQD&VInst=PROD&RQT=309&VName=PQD&TS=1322053703&clientId=79356> Accessed: 11/22/2011

Nielsen, L. S. (2009). The relationship between pedagogical content knowledge and mathematics teacher questioning strategies. *ProQuest Dissertations & Theses*. <http://gradworks.umi.com/33/58/3358249.html>. Accessed: 10/28/2011

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc. <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf> (March 4, 2012)

Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. doi:10.2307/1175860

Russell, J. A. et. al. (2005). *Assessing Mathematical Knowledge for Teaching: An Examination of the Learning Mathematics for Teaching Instrument*. <http://math4teaching.com/2010/08/04/> Accessed: 10/28/2011

Rusczyk, R. (2011) . What is Problem Solving?

<http://www.artofproblemsolving.com/Resources/articles.php?page=problemsolving>.

Accessed: 11/30/2011

Rowan, B. et. Al. (2001). Measuring Teachers' Pedagogical

Content Knowledge in Surveys: An Exploratory Study.

[http://www.sii.soe.umich.edu/documents/pck%20final%20report%20revised%20BR100901](http://www.sii.soe.umich.edu/documents/pck%20final%20report%20revised%20BR100901.pdf).

[pdf](http://www.sii.soe.umich.edu/documents/pck%20final%20report%20revised%20BR100901.pdf). Accessed: 10/28/2011.

Finance III

AV Room

14:50~16:20

Friday, May 9

Session Chair: *Prof. Jui-Jane Chang*

ICSSAM-689

Impact of Correlated Default Risk on Credit Derivatives

Jui-Jane Chang

Soochow University

Ting-Pin Wu

National Central University

Hung-Pin Tsai

Taishin Bank

ICSSAM-767

Family Firms, Incentive Compensation and Firm Innovation- Evidence of Taiwan's Semiconductor Industry

Hai-Chin Yu

Chung Yuan Christian University

Li-Wei Lai

Chung Yuan Christian University

ICSSAM- 788

Is Directors and Officers Insurance Is the Signal of Good Quality Firm or Shield of Bad Quality? Evidence from the Process of SEO

Huang, Po-Kai

Aletheia University

Lai, Yu-Feng

Aletheia University

ICSSAM-690

The Evidence of Excessive Risk Taking Behavior in Loss Situation

Tsai-yen Chung

Yuan Ze University

Ling-chi Cheng

Chung Yuan Christian University

ICSSAM-584

Corporate Social Responsibility and Financial Performance

Yu Shan Wang

*National Kaohsiung First University of Science and
Technology*

Yi-Jie Chen

*National Kaohsiung First University of Science and
Technology*

ICSSAM-616

Valuation of Spread and Basket Options with the Johnson Distribution Family

Ting-Pin Wu

National Central University

ICSSAM-995

Does The Announcement Of Brand Value Ranking Affect Share Price?

Sangho Lee

Korea Electric Power Corporation

Hyungseok Yoon

Korea Advanced Institute of Science and Technology

ICSSAM-689
Impact of Correlated Default Risk on Credit Derivatives

Jui-Jane Chang

Associate professor at the Department of Financial Engineering and Actuarial Mathematics,
Soochow University, Taiwan.
rayjanechang@gmail.com.

Ting-Pin Wu

Professor at the Department of Finance, National Central University, Taiwan.

Hung-Pin Tsai

Doctor and Researcher at the Department of Financial Engineering, Taishin Bank, Taiwan.

Abstract

The recent credit crisis revealed that credit spreads extremely increase during credit mess and are much greater than would be estimated by risk factors. Defaulting firms may weaken other firms and cause default clustering, and thus the default probability is downward estimated during credit crises. This paper proposes a method to quantify correlated default risk via a time-varying frailty factor, and further constructs credit models to depict default correlated risks upon the real credit conditions. Our empirical examination indicates that the correlated default risk is economically and statistically significant in valuing credit derivatives, even after controlling over one hundred economic risk factors.

Key words: correlated default risk, credit contagion, credit risk, frailty, CDX

ICSSAM-767

Family Firms, Incentive Compensation and Firm Innovation- Evidence of Taiwan's Semiconductor Industry

LI-WEI LAI

Dep. of Intl Business
Chung Yuan University
Chung-Li, 32023
Taiwan

E-mail: ftujrd@yahoo.com.tw

Hai-Chin Yu

Dep. of Intl Business
Chung Yuan University
Chung-Li, 32023
Taiwan

E-mail: haichin@cycu.edu.tw

Abstract

This paper examines the relationships among family-owned firms, compensation and firms' innovation. We measure a firm's innovation by a firm's number of patents and the citations of each patent. We measure CEO compensation by CEO salary, bonus, cash dividends, stock dividends, and stock options. Due to the family firms are the popular types of enterprises in Taiwan, and family firms have their specialties on incentive mechanisms based on less agency conflicts between managers and shareholders. We thus investigate the relationships between family firms and innovation after considering the incentive mechanisms of compensations.

Using Taiwanese listed firms over 2000-2011, with a total of 8,000 observations, we are able to examine if family-owned firms exhibit higher innovation after considering compensation incentive. Our sample observations are obtained from TEJ database. We also control for the firms' characteristics, such as age, sizes leverage, cash flow ration, capital expenditure ration, R&D ration and some event and year dummies. Our preliminary results show that family firms have lower innovation activities. However, after adding a compensation, incentive in the model, we find that family firms with better compensation package turns out to exhibit better innovation activities including patent numbers and citations. Results show that compensations are crucial, even for a family firm in the short- and long-term prospective. Our

results imply some useful information for decision maker who design the compensation packages for the Executives.

Keywords : Corporate Governance, Family Firms, Firm Innovation, Executive Compensation.

JEL Classifications : G32, G34, L25, M12, M14

ICSSAM-788

Is Directors and Officers Insurance Is the Signal of Good Quality Firm or Shield of Bad Quality? Evidence from the Process of SEO

Huang, Po-Kai

au4452@mail.au.edu.tw

Lai, Yu-Feng

chaosmors@hotmail.com

The corresponding author: Lai, Yu-Feng

Abstract

In 1997, East Asian financial crisis let investors be miserable, and lots of lawsuit claim over managers' false decisions. Statistics analysis from AIA pointed that, number of lawsuit that was filed by investors in Taiwan's was greatly increased, from nearly 10 in 2003 to 51 in 2007 (Sun, 2008). In policy side, Securities Investors and Futures Traders Protection Law was implement on January 1, 2003 in Taiwan. And The Securities and Futures Investors Protection Center was setup to provide consultation related to laws and regulations of securities and futures' trading, role of mediation in dispute arising from trading of securities and future, and services of class action.

With the growth of Investors' consciousness about their rights to investment interests, the importance of [directors and officers liability insurance](#) (D&O insurance) gradually noticed by companies. To prevent the loss in lawsuit claims, managers purchase insurance coverage to pay for that. But in study of Chalmers, Dann, and Harford (2002), the occurrence of moral hazards was found in IPO. Because of information asymmetry, managers of low quality IPO firms increasing D&O insurance coverage purchased before IPO to decrease the risk from lawsuit.

In this study, we want to test whether managers of low quality SEO firms will reveal opportunism by purchasing more insurance coverage around SEO to prevent the risk of lawsuit. Besides that, we want to test its signal role for high quality SEO firms. In study of Chen, Wang and Wu (2010), the linkage between D&O insurance and firm's breadth of ownership. That is, D&O insurers can increase value of the company and attract investors. Even investors know the firms more when firms conduct SEO, but there are still information asymmetry among SEO firms and investors, especially when firms need new money to fund their risky opportunities. For high and low quality SEO firms, they both have incentive to get

low cost money from stock market. For low quality firms, they have incentive to pretend themselves to be high quality firms by glorifying their investment opportunities. At the same time, they will purchase more insurance coverage to prevent the risk of probably lawsuits following SEO. But, if the insurance companies can judge the quality of SEO firms precisely, then the cost for low quality firms will be higher. And its shield role will not appear.

For high quality firms, we think they may use (higher) D&O insurance coverage as the signal to reveal themselves to be riskless for investors. In other words, we want to test whether D&O have the role in quality signal (for high quality firms) and quality decoration (for low quality firms). If D&O insurance coverage plays the role in decoration or both, then we think it cannot be the tool for investors to judge the quality of SEO firms. If it only plays signal role, then it not only means that D&O insurance cannot be the shield of low quality firms when they conduct the SEO, but also means that investor can judge the quality of SEO firms by that.

To verify D&O insurance's both roles in SEO, we use firms that listed on Taiwan Security Exchange (TSE) and Gre-Tai Securities Market (OTC) and conducted SEO between 2006 and 2013 as our sample. We divide SEO firms into 2 groups by the level of long-run performance following SEO, and test the existence of D&O coverage (also including change of that around SEO) by T-test and its relationship with long-run performance following SEO by OLS regression model. If D&O insurance plays signal role, then we expect the relationship to be positive in high long-run performance group. If it plays shield role, then we expect negative relationship in low long-run performance group.

Keyword: D&O Insurance, quality of firms, SEO, long-run performance, information Asymmetry

References

1. Sun, Bin-Hsun (2008, august 16), Commercial Times. Retrieved from http://reader.chinatimes.com/forum_26946.html
2. Chalmers, J., L. Y. Dann, and J. Harford, 2002, Managerial Opportunism? Evidence from Directors' and Officers' Insurance Purchases, *Journal of Finance* 57, 609-636.
3. Chen-Yu Wu, 2010, Directors' and Officers' Liability Insurance, Breadth of Ownership and Firm Performance, Unpublished master's thesis, Tunghai University.

ICSSAM-690

The Evidence of Excessive Risk Taking Behavior in Loss Situation

Tsai-yen Chung

Yuan Ze University, 135 Yuan Tung Rd, Chungli, Taiwan 320

tychung@yzu.edu.tw

Ling-chi Cheng

Chung Yuan Christian University, 200, Chung-Bei Rd., Chung-Li, Taiwan 320

lingchi@cycu.edu.tw

Abstract

The efficient market hypothesis (EMH) has long been the cornerstone of modern financial reporting. EMH is founded on the assumption of perfect and complete rational behavior. However, the existence of predictable long-horizon price drifts after the announcement of major corporate events cast serious doubt on the validity of the EMH. An alternative to the perfect and complete rational assumption is, of course, that there are serious biases in decision making process. In particular, the prospect theory hypothesizes that loss aversion induces decision makers to take too much risk. In this study, we provide evidence that the capital market is sluggish in responding to the announcements of downward earnings restatements, despite evidence of very negative impact on the announcement firms' future prospects. Our sample consists of 575 hand-collected downward earnings restatement firms over the period 1984-2006. In general, the downward drifts were as high as 27 % over a three-year period after the restatement announcements. To examine if the observed negative return drifts are due to misspecifications of the equilibrium price models, we use analysts' forecasts to corroborate the observed downward return drifts. We found that analysts were slow to recognize the serious consequences of the earnings restatements even two years after the announcements. Thus, our evidence is consistent with the reach empirical regularity of less than perfect and complete rationality in decision making process. In 2002, spectacular falls of major corporations such as Enron and WorldCom due to accounting scandals prompted the speedy enactment of the Sarbanse-Oxley Act (SOX). Article 5 of SOX severely limits analysts' risk taking behavior through incentive arrangements. When we broke down the sample period into 1984-2001 and 2002-2006, both sluggish response in capital market and analysts' forecasts disappear in the post SOX period. Our evidence points to support the prospect theory in both the decision making in mass (the capital market) and in individuals (analysts). Our study supports strict regulation to curb the natural biases in human decision making process in order to build a robust capital market.

Key Words: Prospect theory; Risk-taking behavior; Earnings restatement; Long-term stock performance

1. Introduction

The efficient market hypothesis (EMH), which is based on perfect rational decision making process, has been the cornerstone of modern finance. The appeal of this perspective lies in its simplicity and parsimony in describing both individual and collective aggregate market decision makings in an competitive environment. During the past three decades, beginning with DeBond and Thaler (1985), the EMH has come under academic scrutiny. One branch of this research concentrates on identifying circumstances where security price movements can be predicted with available information. The existence of long-horizon price drifts after the announcement of major corporate events would cast serious doubt on the validity of the EMH. In contrast, the prospect theory (Kahneman and Tversky, 1979) goes beyond suggesting that perfect rationality can be costly and that individual decision makers have limited information processing capabilities to suggest that there are very strong psychological biases built into the decision making process that make purely rational decision making virtually impossible. The main appeal of the biases in decision making is its empirical validity and richness. In the last few years, financial economists have grown more receptive to imperfect rational explanations. Hirshleifer (2001) argues that the purely rational paradigm will be subsumed by a broader psychological paradigm that includes full rationality as a significant special case.

It is well known that most people are generally risk averse, normally preferring a sure thing to a gamble of equal expected value, and a gamble of low variance over a riskier prospect. However, the prospect theory points out that there is an important exception to risk aversion: People are risk-seeking in the domain of losses (Bateman and Zeithaml, 1989). In other word, in the domain of losses, the utility curve becomes convex rather than concave in the domain of gains. Thus, decision makers are paying too high a premium to avoid losses.

Our study examines (1) the long-run stock performance and (2) analysts forecast behavior after announcements of earnings restatements due to accounting irregularities and fraudulent financial reporting. The motivation to examine the long-term stock performance and analysts forecast behavior subsequent to the earnings restatement is that often earnings restatements are followed by dire consequences. Palmrose et al. (2004) and Wu (2002) found that, on average, the stock price reacts negatively by about 10% during the two days surrounding accounting restatement announcements. Thus, investors seem to be aware of the severity of the event. In addition, restatement firms suffer severe credibility gap (Desai et al., 2004; Richardson et al., 2003); high probability of law suits (Palmrose and Scholz, 2003); management shuffling (Desai et al., 2004), difficulties in raising capital (Hribar and Jenkins,

2003), higher monitoring costs (Palmrose et al., 2004), and even bankruptcy (Palmrose et al., 2004). In fact, one may view the announcement of an accounting restatement as a clarifying event, a delayed reaction following earnings restatement provide strong evidence that both investors and analysts are paying too high a premium by taking excessive risk in a loss situation.

Based on a sample of 575 income-decreasing restatement firms during the period from 1984 through 2006, we document a significant (-26%) downward drift over the 36-month horizon following the earnings restatement announcements. To examine if the high profile accounting frauds such as Enron and WorldCom, among others, that took place in 2002 change the degree of biases, we divided our sample period into 1984-2001 and 2002-2006. We cut off our sample period in 2006 because of the crash of capital market in 2008, which may taint our results. Our results indicate that prior to 2002, there are pronounced downward long-term stock return drift as well as over-optimistic forecasts. However, these downward long-run stock returns and over optimistic forecasts disappeared after 2002. Therefore, our evidence indicates that there is a learning effect in investment decisions and forecast behavior in lessening the built-in biases.

The debate over the measurement of long-horizon stock performance is far from being settled (Mitchell and Stafford, 2000; Loughran and Ritter, 2000; Lyon et al., 1999). Are long-horizon post announcement drifts real or spurious? The EMH camp argues that long-horizon price drifts are caused by an inadequate asset pricing model, i.e., incomplete risk measures. We respond to this concern by forming various benchmark portfolios to account for several factors that have been found to have power to explain returns. These factors include size, the book value to market value of equity ratio and stock price momentum prior to the restatement announcement. We use bootstrapping to assess the statistical significance of our results. Our post earnings restatement announcement drift results are consistent across various benchmark portfolio formulation strategies. Thus, our methodology gives some reassurance that the post restatement long-term stock drifts are not spurious.

Our evidence of analysts forecast behavior indicates that not only analysts fail to fully revise their forecasts for earnings restatement firms around the time of restatement announcements but they also fail to incorporate the new information in their forecasts until one year after the restatement announcements. Thus, the built-in biases in decision making are exhibited in both individuals (financial analysts) and in aggregates (capital market). We also find an association between stock price underreaction and slow forecast revision. Together, these evidence provides support for the literature that argues for the long-term post announcement drifts.

Our paper links the growing literature in earnings restatements to a long line of post announcement price drift studies. The results of our study shed light on how earnings restatement information is transmitted to the capital market.

This paper is organized as follows: Section 2 discusses the sample and how we construct benchmark portfolios. Section 3 reports evidence on long-term abnormal returns after earnings restatement announcements. In Section 4 we consider financial analysts' forecast behavior following the earnings restatement announcements. In Section 6 we summarize the article.

2. Samples

A. Sample Selection

Our sources of earnings restatement firms include *The Wall Street Journal*, *DowJones News Retrieval Services*, and *Lexis-Nexis* databanks. Using extensive keyword searches over the period from January 1, 1984, through December 31, 2006, 1027 firms are identified as having restated their previously published or filed financial statements due to irregularities, fraud, or errors. In some cases, different sources disagree about the date of the same earnings restatement news. However, since we use monthly returns to examine the long-term stock performance of these firms and the report time gaps were within a one calendar-month window, we use the month in which the news appears in *The Wall Street Journal* databank as the month of announcement, i.e., $t=0$.

If a firm has multiple restatement news appearing during the sample period, we retain only the first earnings restatement announcement since it is sometimes quite difficult to determine if subsequent restatements are independent from previous ones or are simply amendments to them.

<Insert Table 1 here>

Panel A of Table 1 shows the attrition of the sample firms. First, to concentrate on the long-term effects of downward earnings restatements in our study, we eliminate 70 firms where restatement increased earnings. We also eliminate 127 firms because the amount of restatement could not be identified from either databank. Since our benchmark portfolio method (to be described latter) requires market capitalization value, we eliminate another 27 firms that lacked this data from either Compustat or CRSP databanks. Lastly, 228 firms are removed because they do not have at least 12 months' consecutive return data following the restatement due to delisting or suspension from trading or necessary data from Compustat.

Our sample consists of 575 firms that have had at least one downward earnings restatement during the sample period, although not all sample firms are used in all analyses because of return data availability in different periods. A major distinct feature of our sample from that of Hirschey et al. (2003) is that we focus on downward earnings restatement firms so that clearer implications can be inferred from our analyses.

In Panel B of Table 1, we present the number of sample firms according to announcement years. Other than one minor concentration of sample firms in 2000, our sample firms do not cluster in any specific year. Interestingly enough, after SOX, the number of restatement declined sharply. Panel C of Table 1 reports the reasons for the restatements, of which 340 are core-revenue or core-expense related. There are 196 restatements related to non-core revenues/expenses such as gains/losses on disposal of assets. We report the enforcement initiator for the restatement of the sample firms in Panel D. Although some news releases indicate that management volunteered the downward earnings restatements or fail to mention who initiated the restatements, there may be nagging suspicions that management could have been forced to restate earnings due to prior earnings manipulation (Callen et al., 2004).

Panel E of Table 1 reports sample firm size and restatement amount distributions. The mean (median) of sample size and restatement amount are \$1,888 (\$122) millions and negative \$114.5 (\$3) millions, respectively. The average size of our sample firms is comparable to Hirschey et al. (2003). Wu (2002) reports that the mean and median of restated earnings is -\$9.8 and -1.18 millions, respectively, which are considerably smaller than our sample mean and median. This is due to the fact that Wu (2002) also included earnings restatements that increase reported earnings.

<Insert Table 2 here>

Industry distribution of sample firms is presented in Table 2. About 13% (10%) of sample firms are concentrated in the business service industry (financial institutions industry). The remaining 76% of our earnings restatement firms are dispersed in various industries. This result indicates that industry membership should be controlled in examining analyst forecast behavior since analyst following may be biased by industry size.

B. Matching Samples

We construct two different types of benchmark portfolios. The first one is size matched and the other one is size and book value equity to market value equity ratio (BE/ME) matched. As in Byun and Rozeff (2003), book value of equity information is not available for some of the sample firms. Thus, although a size and BE/ME matched benchmark portfolio approach has the benefit of a closer match on firm characteristics, a disadvantage is that the power could

be reduced because of the smaller sample size. The benefit of larger sample size could be significant (Byun and Rozeff, 2003). We construct 10 size matched benchmark portfolios as follows. All the NYSE/AMEX firms on the CRSP file at time $t = -1$ are ranked by market value of equity and 10 breakpoints are determined according to the 10 deciles of market value. Each Nasdaq firm is assigned to the benchmark portfolio that contains its market value of equity at time $t = -1$. The resulting benchmark portfolios do not contain equal numbers of firms because Nasdaq firms tend to be smaller than exchange-listed firms. To construct size BE/ME benchmark portfolios, each of the 10 size matched benchmark portfolios is divided into five BE/ME quintiles. The individual firm BE/ME values are determined by dividing ME values at the end of the month prior to the earnings restatement announcement into the prior fiscal year's BE values. To eliminate benchmark contamination bias (Loughran and Ritter, 2000), earnings restatement sample firms are then eliminated from the benchmark portfolios. This results in 50 size-BE/ME benchmark portfolios.

3. Long-Term Abnormal Stock Return Evidence

A. Research Methods

The 12-, 24-, and 36-month buy-and-hold abnormal returns (BHARs) are calculated as

$$BHAR_i = \prod_{t=1}^T (1 + R_{it}) - \prod_{t=1}^T (1 + R_{bt}) \quad (1)$$

where R_{it} is the total rate of return of sample firm i in month t , R_{bt} is the average of the benchmark portfolio firms' returns in month t , and $T = 12, 24, \text{ or } 36$. We use value weighting for calculating average benchmark portfolio returns. After $BHAR_i$ is obtained for each of the N firms in a sample, we compute sample mean BHARs using either equal weights or value weights:

$$\overline{BHAR} = \sum_{i=1}^N w_i BHAR_i \quad (2)$$

where $w_i = 1/N$ for the equal-weighting case and $w_i =$ relative weight determined by market value of stock i at $t-1$ divided by the total market value of all stocks in the market index at time $t = -1$.

Again, the benchmark portfolio return is the value-weighted average return of the size or size-and-BE/ME portfolio that matches the sample firms.

To examine the significance levels of the mean BHARs, we use bootstrapping. We assume under the null hypothesis that both a given sample firm and its benchmark portfolio are jointly drawn from the same underlying universe. For each observation in our sample we

randomly draw one firm (pseudo sample firm) from the benchmark portfolio and then calculate the BHAR of the randomly sampled firm via equations (1).

The pseudo sample firms have the same characteristics of size or size and BE/ME as the sample firms. After completing this for each observation, we have one trial formed under the null hypothesis. Applying equation (2) to the pseudo sample firms BHARs (CARs) gives a single mean BHAR. We repeat these steps 5,000 times to obtain 5,000 mean BHARs (CARs). The p -value of the sample is then calculated as the fraction of the mean BHARs (CARs) of the pseudo firms that are larger in magnitude than the mean BHAR (CAR) of the sample being tested.

B. Long-term Stock Performance Subsequent to Earnings Restatement Announcement

Table 3 summarizes the stock performance of sample firms over various time horizons and weighting methods. In BHAR we delete the sample if it has missing returns in any month over the testing horizon. However, for benchmark portfolios, if the constituent's returns are missing subsequent to the portfolio formation, we substitute the missing observation with value-weighted market returns for the same period. Panel A presents the results based on size-matched benchmark portfolios. Note that as the time-horizon increases from 12 month to 36 months, the number of surviving earnings restatement firms decreases. For equal-weighting (value-weighting), mean BHAR is a negative 15% (7%) for the 12-month horizon, this mean abnormal return continues to decline by additional 5% (9%) during the second year after restatement announcements and then settles at -23% (27%) for 36 months. All BHARs are significant at conventional levels.

<Insert Table 3 here>

Panel B reports the results of size and BE/ME matched benchmark portfolio approach. In general, the pattern of BHARs over three time-horizons is similar to those of the size matched benchmark portfolio approach.

Since the equal-weighting approach measures the abnormal returns of a typical event whereas the value-weighting approach measures the aggregate wealth effects of the event, our results indicate that both equal and value weighting approaches provide strong evidence against efficient market hypothesis: first, the downward drift in stock prices of our sample earnings restatement firms continues for the three years examination period; second, the magnitude of the drifts over this period is staggering, about one-fifth to one-fourth of the stock value at the end of the month *after* the earnings restatement announcements is lost.

In Panel C of Table 3, we divide the sample period into two subperiods: the pre-SOX period 1984-2001 and the post-SOX period 2002-2006 and report the size-matched portfolio BHAR over 12-, 24, and 36 months following the announcements of earnings restatements. The difference in return behavior over these subperiods are stark. For the post-SOX subperiod, the BHARs are essentially zero, i.e., no delayed market reaction to the announcements of earnings restatements. The evidence indicates that the biases in investment decisions have been eliminated by the learning effect from the high-profile accounting frauds that shook up the investment community and the enraged general public which led to the speedy passage of the SOX. .

C. Abnormal Returns by Restatement Characteristics

In this section we investigate if the observed BHARs are tied to the restatement characteristics. We report equal-weighting BHARs only since they measure a typical effect of the event.

<Insert Table 4 here>

In Table 4, Panel A, the sample firms are divided into three groups depending on the restatement affecting core revenues/expenses, non-core items or unknown items. Since the core operating revenues/expenses play key roles in firm valuation, one would be interested to see if restatements involving core revenues/expenses are associated with more negative BHARs if the stock price fails to adjust to the announcement completely. Our results indicate that restatements involving core revenue items are associated with the more severe downward drifts than with the non-core items over the three BHAR horizons. The core revenues/expenses related restatement firms suffer on average -30% over the 36-month horizon. By contrast, the non-core revenues/expenses category has -13%. This evidence indicates that although the stock price fail to adjust fully to the implications of accounting irregularities or frauds, investors understand the differential implications between the core- vs. the non-core item restatements in firm valuation.

Panel B presents the post restatement announcement drifts grouped by the source that initiated restatement. For the 36-month horizon, the downward drifts of BHAR associated with auditor-enforced restatements are most severe (-41%), followed by those regulator-enforced restatements (-31%), and then by the group of management initiated (-19%). One can expect that if regulators enforce an earnings restatement, it can take long time to resolve the ensuing investigation, negotiation and settlements. Management initiated restatements appear to be a sign of integrity since management comes forward and corrects misrepresentations of previous financial statements. However, the 'initiation by management' mentioned in a corporate news release could really be a last-ditch effort to save face after

being investigated for possible fraud or irregularities by authorities. Therefore, it could take long time to resolve the issue as in the case of earnings restatements initiated by regulators. Finally, in Panel C, we present the relationship between the post earnings restatement announcement drifts and the restated amount. Our results show that for those restatements whose magnitudes of restatement as a percentage of total assets at the end of previous fiscal year are greater than the sample median are associated with more severe downward drifts. Over the 36-month horizon, large (small) restatements have -28% (-23%) equal-weighting BHARs.

Our results of the downward drifts following earnings restatement announcements is consistent with less than complete rational behavior assumption. Despite the unambiguous dire consequences following the accounting irregularities, capital market fail to fully adjust to the implications of the downward earnings restatements. However, capital market can distinguish the valuation effect of different types of earnings restatements, indicating that capital market is not completely irrational in investment decisions. Thus, by examining post restatement announcement drifts alone, the strong implications of EMH is called into question.

4. Analysts Forecast Behavior Following Earnings Restatements

The evidence in the previous section suggests that investors as an aggregate are underreacting to the news of downward earnings restatements. In this section we investigate if knowledgeable individuals also exhibit biases in decision making after they learned the fact about earnings restatements due to accounting irregularities. We study earnings forecasts behavior made by financial analysts, who are considered the most important financial information intermediaries and sophisticated accounting information users. If financial analysts are slow to incorporate the implications of ensuing consequences of earnings restatements, then we can make strong inference about the lack of complete rational behavior in decision making by individuals. Specifically, we should see downward revision in earnings forecasts by analysts around the announcement period. Moreover, we would expect to see systemic forecast errors after the earnings restatements. We also examine if the pattern of analyst forecasts around and following the earnings restatement announcements is consistent with the stock price behavior so that we may infer both capital market (aggregate) and individuals have similar biases in decision making process.

A. Earnings Forecast Revisions around the Time of Restatement Announcements

We begin our examination of analysts' forecast behavior for the sample firms by investigating earnings forecast revisions around the period when restatements were announced. To control potential bias in analyst forecasts, we form a subset from our original

sample by looking for cases where the sample firms have earnings forecasts available on I/B/E/S from $t = -1$ to $t = +1$. From our 57 original sample there are 143 firms that meet this analyst coverage requirement. We divide these sample firms into pre-SOX and post-SOX subperiods. To find a match for a given sample firm, we collect all firms that have the same three-digit SIC code as the sample firm from CRSP in the month prior to the restatement announcement. We then select the matching control firm by a rank-order procedure. All potential candidates are ranked by their similarity to the given sample firm in market capitalization, BE/ME, and one-year stock returns momentum ending at the end of the month prior to the earnings restatement announcement. Ranks are summed across all three categories and the firm with the lowest cumulative sum and the analyst coverage requirement is picked as the matching control firm for the given sample firm. If the firm with the lowest cumulative sum does not have the necessary analyst forecasts, we go down to the firm with next lowest cumulative sum until the analyst coverage requirement is met.

Rajan and Servaes (1997) point out that I/B/E/S's choice of analysts may be biased. The bias may be due to industry membership (a larger analyst following for industries with more firms because analysts typically specialize in particular industries), firm size (because small firms may not be deemed worthy of following), and price momentum (self-selection bias of analysts since they may choose firms about which they are optimistic; in addition, forecasts may be affected by prior stock performance). We compute the forecast revisions by subtracting earnings forecasts made in the month before the restatement announcement ($t = -1$) from those forecasts made in the month following the restatement announcement month ($t = 1$) for the first, the second and the third fiscal year EPS following the restatement announcement, all forecasts are scaled by the stock price at $t = -1$.

<Insert Table 5 here>

Forecast revisions are reported in Table 5. All earnings forecasts for three fiscal years following restatement announcements are revised downward significantly. The magnitudes of forecast revision are about between 1 to 2% of the share price before restatement announcement for restatements made before 2002, whereas the forecast revision for the post-SOX period are insignificant. If the average earnings capitalization factor is ten, a 1% forecast revision translates to about a 10% of earnings before the restatement announcement. Similar pattern is also observed for the match adjusted forecast revisions for both pre- and post-SOX periods. Thus, our evidence indicates that analysts are aware of the impacts of earnings restatements on future earnings for the pre-SOX period.

B. Analyst Earnings Forecast Errors for Downward Earnings Restatement Firms

To investigate whether analysts fully adjust for the implications of earnings restatements after the fact of accounting irregularities are known, we examine whether analysts are too optimistic about future earnings. Forecast error is determined by subtracting actual earnings from forecasted earnings scaled by the stock price at the time of the earnings forecast is made. Negative forecast errors indicates that analysts are too optimistic. We examine forecasts made within one year following earnings restatements and forecasts made between one and two years after earnings restatements. I/B/E/S provides forecasts made for periods up to three fiscal years into the future on a monthly basis. Since forecast accuracy improves as the forecast horizon shortens, we follow Rajan and Servaes (1997) and report forecast accuracy for different forecast windows, defined as the number of months between the time the forecast is made and the fiscal year end for which the forecast is made.

<Insert Table 6 here>

Table 6.1 presents the results of forecast errors of pre-SOX period. Panel A (B) contains the forecasts made within one (two) year of the earnings restatement announcement. Since the sample firms' prices decline sharply after earnings restatement, this procedure is biased against our alternative hypothesis of improvement in forecast accuracy over time. This follows because the improvement in forecast accuracy (as manifested by the smaller difference between actual earnings and forecast as the forecast window becomes shorter) can be partially offset by a larger deflator. Thus, the power of the test may be reduced. Our results indicate that analysts are systematically overoptimistic within one year after the earnings announcement. The forecast errors, however, do not improve as the window becomes shorter.

By comparing forecasts made within one year and between one and two years after earnings restatement announcement, we see forecast errors decrease sharply (decrease from as high as -12% to -6%). Similar pattern also observed for the matched firm adjusted forecast errors. Our sample evidence indicates that analysts only fully adjusted implications of earnings restatements as the result of accounting irregularities and frauds after one year after the announcement of restatements. Table 6.2 reports the forecast errors during the post-SOX sample period. The results indicate that analysts fully adjusted for the implications of earnings restatements. Thus, our analysis show that both the aggregate market and individuals are less than complete rational in decision making without a "wake-up call."

C. The Relationship between Stock Performance and Analyst Forecasts

To examine the relationship between stock performance and analyst forecast revisions during the period after the restatement announcement, we focus on a subgroup of sample firms that (1) are covered by analyst forecasts and (2) the time lags between restatement announcement and subsequent earnings announcement is at least eight months. This requirement gives us at

least six months between the month immediately following the restatement announcement ($t = 1$) and the month prior to subsequent earnings announcement. The change in forecast errors during this period is the difference between the forecast errors at $t = 1$ and one month prior to the earnings announcement, scaled by the price at the end of the month prior to the earnings restatement. A minimum six-month period requirement should give analysts enough time to assimilate the implications of earnings restatements. We use the same calendar time period for matching control firms. Since the matching control firm's earnings may not be announced in the same month, this procedure produces 'pseudo' earnings announcement for matching firms.

<Insert Table 7 here>

Panel A, Table 7 reports the forecast revisions and buy-and-hold returns for both sample firms and matching control firms that meet the data requirements as well as the buy-and-hold returns during this period. For the sample firms, the mean (median) of downward revisions was 0.8% (0.6%) of the share price at the end of one month prior to the earnings restatement. The mean (median) difference in forecast revision between these two groups of firms is negative 1.2% (0.9%), which is significant at 10% (1%) level. The mean (median) abnormal buy-and-hold returns over this period is negative 20.4% (12.05%).

If the capital market and analysts' forecasts display similar less than perfect rationality in decision making, then there should be a positive relationship between the match-adjusted forecast revision (MAFR) and the match-adjusted returns. Ikenberry and Ramnath (2002) show that in the OLS regression equation

$$MAAR_i = a + b * MAFR_i + e_i \quad (4)$$

the slope coefficient b should be positive and roughly equal to the average earnings capitalization factor (price/earnings ratio). However, our regression results, presented in Panel C of Table 7, indicate that although this "response coefficient" is positive and significant, its magnitude is smaller than the traditional average value, which is about ten. Clearly, individual and aggregate decision making do not appear in a lock step fashion.

6. Conclusion

This study examines the implication of prospect theory in a loss situation. Specifically, prospect theory predicts that decision makers exhibit an excessive risk-taking behavior when facing a loss situation. We examine both the long-term post earnings restatement announcement stock price drifts and analysts earnings forecast behavior.. Our study is based on 575 firms that decreased their previously reported accounting earnings due to irregularities,

frauds or errors. To address the concerns of methodology issues, we form two types of benchmark portfolios to account for known factors that may affect long-term stock returns. We compute 12-, 24-, and 36-month horizon post announcement buy-and-hold abnormal returns and 12-month cumulative abnormal returns. The results are quite consistent across different methods. The 36-month buy-and-hold abnormal returns is as high as negative 27% for restatements took place before 2002, the year in which many high profile restatement occurred. However, the capital market did not exhibit delay reaction to the earnings restatement during the post-SOX period. An examination of analysts forecast behavior also exhibits similar pattern. Thus, our evidence indicates that both capital market and individual decision makers are not completely rational in making decisions. Breakdowns of sample firms according to restatement characteristics indicate that restatements involving non-core items, enforced by regulators and larger restatement amounts in terms of percentage of total assets have the highest negative BHAR.

To find out what investors are reacting to, we examine the analyst forecasts around and subsequent to the earnings restatement announcement. Our results indicate that analysts revise their forecasts when the news of earnings restatements is released. Analyst forecast errors subsequent to the restatement announcements show that they correct their forecasts rather slowly. Finally, the magnitudes of underreaction are positively associated with analyst forecast errors. Thus, at least a portion of the underreaction observed in long-term stock returns of earnings restatement firms are related to the analysts' slow forecast adjustments.

We also perform additional tests and report the effects of firm size on the benchmark portfolio based BHAR and industry code, size, BE/ME, and price momentum matched control firm approach BHAR.

Our study links the growing literature in long-term stock price drifts to less than rational decision making hypothesis. Our study provides strong evidence of built-in biases in investment decisions. The practical implication of the result is that financial and information intermediaries should be more aware of this biases.

References

- Abarbanell, J. S. and Bernard, V. L. 1992. "Tests of Analysts' Overreaction/Underreaction to Earnings Information as an Explanation for Anomalous Stock Price Behavior." *Journal of Finance* 47, 1181-1207.
- Anderson, K. L. and Yohn, T. L. 2002. "The Effect of 10K Restatements on Firm Value, Information Asymmetries, and Investors' Reliance on Earnings." Georgetown University, George Emmett McDonough School of Business Working Paper.

- Bartov, E., Lindahl, F. W., and Ricks, W. E. 1998. "Stock Price Behavior Around Announcements of Write-offs." *Review of Accounting Studies* 3, 327-346.
- Barber, B. M., and Lyon, J. D. 1997. "Detecting long-run abnormal stock returns: The empirical power and specification of test statistics" *Journal of Financial Economics* 43, 341-372.
- Bateman, T. S., and C. T. Zeithaml, 1989. "The Psychological Context of Strategic Decision: A Model and Convergent Experimental Findings." *Strategic Management Journal* 10, 59-74
- Burks, J.J. 2011. "Are Investors Confused by Restatements after Sarbanes-Oxley?" *The Accounting Review* 86, 507-539.
- Byun, J., and Rozeff, M. 2003. "Long-run Performance after Stock Splits: 1927 to 1996" *The Journal of Finance* 58, 1063-1085.
- Callen, J.L., and M. Morel, 2002. "The Enron-Andersen Debacle: Do Equity Market React to Auditor Reputation?" University of Toronto, Rotman School of Management Working Paper.
- _____, Rubb, S., and Segal, D. 2004. "Revenue Manipulation and Restatements by Loss Firms" University of Toronto, Rotman School of Management Working Paper.
- Cohen, D., Dey, A., Lys, T., 2008. "Real and accrual based earnings management in the Pre and Post Sarbanes Oxley periods" *The Accounting Review* 83, 757-787.
- Cohen, D., and Zarowin, P. 2010. "Accrual-based and real earnings management activities around seasoned equity offerings" *Journal of Accounting and Economics* 50, 2-19.
- De Bondt, W. F. M. and Thaler, R. H. 1985. "Does the Stock Market Overreact?" *Journal of Finance* 40, 793-805.
- ____ and _____. 1990. "Do Security Analysts Overreact?" *American Economic Review* 80, 52-57.
- Desai, H., Krishnamurthy, S., and Venkataraman, K. 2004. "Do short sellers target firms with poor earnings quality?: Evidence from earnings restatements" Southern Methodist University, Working Paper.
- Dreman, D. N. and Berry, M. A. 1995. "Overreaction, Underreaction, and the Low-P/E Effect, *Financial Analysts Journal* 51, 21-30.
- Easterwood, J. C. and Nutt, S. R. 1999. "Inefficiency in Analysts' Earnings Forecasts: Systematic Misreaction or Systematic Optimism?" *Journal of Finance* 54, 1777-1797.
- Easton, P. D., and Harris, T.S. 1991. "Earnings as an Explanatory Variable for Returns" *Journal of Accounting Research* 29, 19-36.
- Erickson, M., Hanlon, M., and Maydew, L. 2002. "How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings." University of Chicago, Working paper.

- Fairfield, P. and Whisenant, J. S. 2001. "Using Fundamental Analysis to Assess Earnings Quality: Evidence from the Center for Financial Research and Analysis." *Journal of Accounting, Auditing & Finance* 16, 273-295.
- Griffin, P. A. , Grundfest, J. and Perino, M. A. 2000. "Stock Price Response to News of Securities Fraud Litigation: Market Efficiency and the Slow Diffusion of Costly Information." *Stanford Law and Economics Olin Working Paper No. 208.*
- Griffin, P. A. 2003. "A League of Their Own? Financial Analysts' Responses to Restatements and Corrective Disclosures." *Journal of Accounting, Auditing, & Finance, Forthcoming* 18, 479-518.
- Hirschey, M., Zoe-Vonna Palmrose and Susan Scholz, 2003. "Long-term Market Underreaction to Accounting Restatements" Working Paper.
- Hirshleifer, D., 2001. "Investor Psychology and Asset Pricing," *Journal of Finance* 56, 1553-1597
- Hribar, P. and Jenkins, N.T. 2003. "The effect of accounting restatements on earnings revisions and the estimated cost of capital." *Cornell University, Working Paper.*
- Ikenberry, D. L., and S. Ramnath, 2002. "Underreaction to Self-Selected News Events: The Case of Stock Splits" *The Review of Financial Studies* 15, No 2, 489-526.
- Jennings, R., LeClere, M. and Thompson, R. B. II 2001. "Goodwill Amortization and the Usefulness of Earnings." *Financial Analysts Journal* 57, 20-28.
- Jones, C. L. and Weingram, E. 1997. "The Effects of Insider Trading, Seasoned Equity Offerings, Corporate Announcements, Accounting Restatements, and SEC Enforcement Action 10b-5 Litigation Risk." *Stanford University, Graduate School of Business Working Paper Series.*
- Kahneman, D., and A. Tversky, 1979. "Prospect Theory: An Analysis of Decision Under Risk," *Econometrica* 47, 263-291
- Kinney, W., Palmrose, Z-V. and Scholz, S. 2003. "Auditor Independence and Non-audit Services: What do Restatements Suggest?" *University of Texas-Austin, Working paper.*
- Loughran, T., and Ritter, J. R 2000. "Uniformly Least Powerful Tests of Market Efficiency." *Journal of Financial Economics* 55, 361-389.
- _____ and _____. 1996. "Long-term Market Overreaction: The Effect of Low-priced Stocks." *Journal of Finance* 51, 1959-1970.
- Lyon, J., Barber, B.M., and Tsai, C. 1999. "Improved Methods for Tests of Long-Run Abnormal Stock Returns." *Journal of Finance* 65, 165-201.
- Mitchell, M.L., and Stafford, E. 2000. "Managerial Decisions and Long-Term Stock Price Performance" *Journal of Business* 73, 287-329.
- Rajan, R., and Servaes, H. 1997. "Analyst Following of Initial Public Offerings." *Journal of Finance* 52, 507-529.

- Ou, J. A., and S. H. Penman, 1989. "Financial Statement Analysis and the Prediction of Stock Returns," *Journal of Accounting and Economics* 11, 295-329.
- Palmrose, Z-V, Richardson, V. J., and Scholz, S. 2004. "Determinants of Market Reactions to Restatement Announcements." *Journal Accounting and Economics* 37, 59-89.
- Palmrose, Z-V., and Scholz, S. 2003. "The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements." *Contemporary Accounting Research*, 139-178.
- Press, E. G. and Dowdell, T. D. 2001. "Restatement of In-Process Research and Development Write-Offs: The Impact of SEC Scrutiny." Temple University, Department of Accounting Working Paper Series.
- Richardson, S. A., Tuna, A. I. and Wu, M. 2003. "Predicting Earnings Management: The Case of Earnings Restatements." University of Pennsylvania, Wharton Working Paper Series.
- Sloan, R. G., 1993. "Do Stock Prices Fully Reflect Information in Accruals and Cash Flows About Future Earnings?" *The Accounting Review* 71, 289-315.
- Womack, K., 1996. "Do Brokerage Analysts' Recommendations Have Investment Value?" *Journal of Finance* 51, 137-167.
- Wu, Min, 2002. "Earnings Restatements: A Capital Market Perspective" New York University, Ph. D Dissertation.

Table 1: Sample Description and Attrition

Panel A: sample description		
Description	Number	Total
Total identified number of earnings restatement announcements		1027
Less: observations without market capitalization value of equity	(27)	
Less: observations with upward earnings restatement	(70)	
Less: observations without earnings restated amount	(127)	
Less: observations without change in earnings	(45)	
	(183)	
Total		575

Panel B: restatements by year over 1984 to 2006			
Year	Number	Year	Number
1984	24	1996	23
1985	22	1997	37
1986	23	1998	40
1987	11	1999	49
1988	16	2000	55
1989	16	2001	45
1990	17	2002	41
1991	32	2003	7
1992	21	2004	14
1993	21	2005	11
1994	22	2006	16
1995	12	Total	575

Panel C: Reasons of Restatements	
Reasons	Number
Core Revenues and Cost/Expenses	340
Non Core Revenue and Cost/Expenses	196
Not Available	39
Total	575

Panel D: Enforcement of Restatements	
Enforcement	Number
Company Volunteered	134
Auditor Suggested	69
Regulator Enforced	97
Not Available	275
Total	575

Panel E: Quantitative Characteristics (\$mil)								
	Mean	Min	25%	Median	75%	Max	Std Dev	Number
Firm size	1,887.56	1.70	30.74	121.88	640.86	173,985.35	9,478.36	575
Restated Amount	-114.49	-38,700.00	-13.40	-2.82	-0.81	-0.01	1,661.39	575

Table 2: Restatements by 2-Digit SIC Code over 1984 to 2006

Industry Description	2-digit SIC	Number	Industry Description	2-digit SIC	Number
Metal Mining	10	3	Electric, Gas, Sanitary Serv	49	18
Coal Mining	12	2	Durable Goods-wholesale	50	13
Oil and Gas Extraction	13	11	Nondurable Goods-wholesale	51	10
Mining And Quarrying Of Nonmetallic Minerals, Except Fuels	14	1	Building Materials, Hardware, Garden Supply, & Mobile	52	1
Bldg Cnstr-Gen Contr, Op Bldr	15	6	General Merchandise Stores	53	4
Metal Mining	16	2	Food Stores	54	5
Construction Construction Special Trade Contractors	17	1	Apparel And Accessory Stores	56	2
Food and Kindred Products	20	9	Home Furniture & Equip Store	57	6
Textile Mill Products	22	1	Eating and Drinking Places	58	7
Apparel & Other Finished Pds	23	4	Miscellaneous Retail	59	11
Furniture And Fixtures	25	2	Depository Institutions	60	36
Paper & Allied Products	26	2	Nondepository Cedit Instn	61	11
Printing, Publishing & Allied	27	5	Security & Commodity Brokers	62	3
Chemicals & Allied Products	28	26	Insurance Carriers	63	18
Pete Refining & Related Inds	29	3	Insurance Agents, Brokers, and Service	64	2
Rubber and Miscellaneous Plastics Products	30	4	Real Estate	65	10
Stone, Clay, Glass, and Concrete Pproducts	32	1	Holding, Other Invest Offices	67	56
Primary Metal Industries	33	4	Hotels, Other Lodng Places	70	3
Fabr Metal, Ex Machy, Trans Eq	34	9	Personal Services	72	1
Indl, Comm Machy, Computer Eq	35	39	Business Services	73	77
Elctr, Oth Elec Eq, Ex Cmp	36	48	Auto Repair, Services, Parking	75	2
Transportation Equipment	37	10	Motion Pictures	78	3
Meas Instr, Photo Gds; Watches	38	19	Amusement and Recreational Services	79	2
Misc Manufacturing Industries	39	6	Health Services	80	18
Railroad Transortation	40	1	Social Services	83	1
Motor Freight Transportation and Warehousing	42	1	Engr, Acc, Resh, Mgmt, Rel Svcs	87	4
Water Transportation	44	2	Services, NEC	89	2
Transportation By Air	45	3	Administration Of Human Resource Programs	94	1
Pipelines, Except Natural Gas	46	1	Administration Of Environmental Quality And Housing Programs	95	1
Transportation Services	47	2			
Communications	48	19	Total		575

Table 3: Performance Measures in the 12 to 36-month Period after Restatement over the Period 1984 to 2006

Sample size is number. The mean buy-and-hold abnormal return is BHAR, and CAR is the mean cumulative abnormal return. All p -values are obtained using bootstrapping method with 5,000 replications. The p -value is the fraction of bootstrapped portfolios with values higher than the sample portfolio. Reference portfolios are 50 size and book equity/market equity (size/BE/ME) portfolio, or 10 size portfolios. Mean BHARs and CARs are found using either equal weighting (EW) or value weighting (VW).

Panel A: Size Matching Portfolio			
Period	Number	BHAR	p -value
12-month			
(1) EW	575	-0.146	<0.00
(2) VW	575	-0.074	<0.00
24-month			
(3) EW	472	-0.196	<0.00
(4) VW	472	-0.164	<0.00
36-months			
(5) EW	417	-0.229	<0.00
(6) VW	417	-0.272	<0.00
Panel B: Size-BE/ME Matching Portfolio			
12-month			
(1) EW	339	-0.118	<0.00
(2) VW	339	-0.076	<0.00
24-month			
(3) EW	284	-0.149	<0.00
(4) VW	284	-0.140	<0.00
36-month			
(5) EW	258	-0.194	<0.00
(6) VW	258	-0.252	<0.00
Panel C.1: Size Matching Portfolio for Subperiod 1984-2001			
12-month			
EW	486	-0.172	<0.00
24-month			
EW	392	-0.235	<0.00
36-month			
EW	340	-0.266	<0.00
Panel C.2: Size Matching Portfolio for Subperiod 2002-2006			
12-month			
EW	89	-0.008	<0.88
24-month			
EW	80	0.005	<0.94
36-month			
EW	77	-0.062	<0.56

Table 4: Univariate Tests on 12 to 36-Month Period Buy-and-Hold Abnormal Returns(BHARs) for Restatement Characteristic

Reason is the type of accounts affected by restatements. Magnitude of restated amount is the percentage of restated amount divided by book value of assets at the end of fiscal year prior the restatement announcement. *p*-values are in parentheses.

Panel A: by Reason						
	Number	12-month	Number	24-Month	Number	36-Month
Core Revenues and Cost/Exp.	340	-0.171 (0.00)	281	-0.210 (0.00)	249	-0.305 (0.00)
Non Core Revenues and Cost/Exp.	196	-0.101 (0.02)	158	-0.194 (0.00)	140	-0.128 (0.00)
Not Available	39	-0.159 (0.05)	33	-0.061 (0.75)	28	-0.051 (0.83)
Panel B: by Enforcement						
Regulator	97	-0.125 (0.02)	85	-0.216 (0.00)	81	-0.311 (0.00)
Manager	134	-0.155 (0.00)	111	-0.150 (0.04)	98	-0.190 (0.03)
Auditor	69	-0.170 (0.02)	56	-0.306 (0.00)	53	-0.407 (0.00)
Not Available	275	-0.144 (0.00)	220	-0.179 (0.00)	185	-0.162 (0.02)
Panel C: by Magnitude of Downward Restated Amount						
Above Median	276	-0.156 (0.00)	218	-0.235 (0.00)	188	-0.283 (0.00)
Below Median	299	-0.137 (0.00)	254	-0.171 (0.00)	229	-0.235 (0.00)

Table 5: Forecast Revisions for fiscal year after Restatements Announcement

Forecast revision is computed by subtracting analyst mean forecast made in the month prior to the earnings restatement announcement from the mean forecast made in the month following restatement announcement, scaled by the stock price at the end of the month prior to earnings restatement announcement. The matched firm adjusted forecast revision is the difference between sample firm's forecast revision and its matching control firm's forecast revision. *p*-values are in parentheses.

Panel A: Restatements by year over 1984-2001

1	-0.016 (0.01)	-0.013 (0.03)	115
2	-0.010 (0.00)	-0.010 (0.01)	84
3	-0.020 (0.06)	-0.016 (0.11)	7

Panel B: Restatements by year over 2002-2006

1	0.002 (0.27)	0.004 (0.22)	28
2	-0.002 (0.34)	-0.003 (0.26)	26
3	-0.001 (0.81)	-0.005 (0.46)	8

Table 6-1: Analyst Earnings Forecast Errors for Earnings Restatement Firms 1984-2001

The forecast error is computed as: $(\text{Actual earnings} - \text{Earnings forecasts}) / \text{Stock price at the time of the earnings forecast}$. I report forecast errors for forecast windows of 3 through 21 months in three-month intervals. Window is the number of months between the time the forecast is made and the fiscal year end for which the forecast is made. Matched firm adjusted forecast errors are computed by subtracting the forecast error of the firm with the same three-digit Standard Industrial Classification (SIC) code closest in size, BE/ME, and one year return momentum to the Earnings Restatement firms. *p*-values are in parentheses.

Window	Forecast Error	Matched Firm Adjusted Forecast Error	Number
Panel A: Forecasts Made Within One Year of Earnings Restatements			
3 months	-0.120 (0.00)	-0.089 (0.05)	137
6 months	-0.126 (0.00)	-0.105 (0.04)	126
9 months	-0.072 (0.00)	-0.049 (0.01)	116
12 months	-0.062 (0.00)	-0.020 (0.22)	107
15 months	0.010 (0.63)	-0.002 (0.23)	33
18 months	-0.024 (0.29)	-0.033 (0.99)	68
21 months	-0.039 (0.08)	-0.015 (0.83)	77
Panel B: Forecasts Made Between One and Two Years After Earnings Restatements			
3 months	-0.027 (0.00)	0.004 (0.53)	102
6 months	-0.0643 (0.00)	-0.056 (0.33)	96
9 months	-0.053 (0.00)	-0.009 (0.50)	97
12 months	-0.063 (0.01)	-0.039 (0.79)	89
15 months	-0.045 (0.54)	-0.027 (0.98)	37
18 months	-0.051 (0.18)	-0.032 (0.51)	62
21 months	-0.041 (0.23)	-0.026 (0.75)	67

Table 6-2: Analyst Earnings Forecast Errors for Earnings Restatement Firms**2002-2006**

The forecast error is computed as: $(\text{Actual earnings} - \text{Earnings forecasts}) / \text{Stock price at the time of the earnings forecast}$. I report forecast errors for forecast windows of 3 through 21 months in three-month intervals. Window is the number of months between the time the forecast is made and the fiscal year end for which the forecast is made. Matched firm adjusted forecast errors are computed by subtracting the forecast error of the firm with the same three-digit Standard Industrial Classification (SIC) code closest in size, BE/ME, and one year return momentum to the Earnings Restatement firms. *p*-values are in parentheses.

Window	Forecast Error	Matched Firm Adjusted Forecast Error	Number
Panel A: Forecasts Made Within One Year of Earnings Restatements			
3 months	-0.030 (0.08)	-0.015 (0.02)	39
6 months	-0.002 (0.00)	-0.006 (0.06)	42
9 months	-0.027 (0.01)	-0.020 (0.35)	34
12 months	-0.023 (0.16)	-0.029 (0.33)	36
15 months	-0.002 (0.36)	-0.018 (0.13)	10
18 months	0.011 (0.70)	-0.015 (0.06)	27
21 months	0.009 (0.94)	-0.011 (0.06)	27
Panel B: Forecasts Made Between One and Two Years After Earnings Restatements			
3 months	-0.021 (0.01)	-0.016 (0.24)	35
6 months	-0.098 (0.16)	-0.140 (0.08)	33
9 months	-0.005 (0.65)	-0.004 (0.42)	30
12 months	0.000 (0.45)	0.006 (0.85)	29
15 months	0.649 (0.99)	-0.021 (0.63)	9
18 months	0.053 (0.67)	0.001 (0.99)	23
21 months	-0.146 (0.70)	0.002 (0.83)	27

Table 7: The relation between post-restatement earnings forecast revisions and stock returns 1984-2006

Panel A reports changes in earnings forecasts for the next fiscal year from one month after the restatement announcement to one month prior to the earnings announcement as well as compounded returns over the same interval for sample and match firm. Only firms with at least six months between earnings restatement announcement and actual earnings announcement are included. Panel C reports regression evidence of the association between the two variables. The match-adjusted forecast revision (MAFR) represents the change in mean I/B/E/S earnings forecast for the sample firms relative to the change in forecast for the match firms over the same event interval. This measure is computed as:

$$\frac{F_{i,t+12\text{m}} - F_{i,t+6\text{m}}}{P_{i,t}} - \frac{F_{mi,t+12\text{m}} - F_{mi,t+6\text{m}}}{P_{mi,t}}$$

where i is sample firm i , mi is its match, $t+6\text{m}$ is the earnings announcement month, and $t+12\text{m}$ is the restatement month. P is the stock price at month-end prior to the restatement announcement. The match-adjusted abnormal return (MAAR) for sample firm i is computed as the compounded monthly return for that firm over the period from one month after the restatement announcement to one month prior to its annual earnings announcement, less the compounded return for its matching control firm over the same time period.

Panel A: Forecasts Revision			
	Number	Mean	Median
FY1			
Sample	171	-0.031	-0.006
Match	171	-0.014	0.001
Paired-difference	171	-0.019 ($p < 0.01$)	-0.003 ($p < 0.00$)
FY2			
Sample	124	-0.047	-0.026
Match	124	-0.023	-0.012
Paired-difference	124	-0.028 ($p < 0.00$)	-0.018 ($p < 0.00$)
FY3			
Sample	31	-0.073	-0.034
Match	31	-0.016	-0.014
Paired-difference	31	-0.077 ($p < 0.20$)	-0.039 ($p < 0.07$)
Panel B: Match Abnormal Return			
FY1			
Sample	171	-0.083	-0.114
Match	171	0.049	-0.005
Paired-difference (MAAR)	171	-0.123 ($p < 0.01$)	-0.098 ($p < 0.04$)
FY2			
Sample	124	0.063	-0.036
Match	124	0.149	0.022
Paired-difference (MAAR)	124	-0.045 ($p < 0.63$)	-0.029 ($p < 0.36$)
FY3			
Sample	31	0.050	-0.131
Match	31	0.412	0.203

Paired-difference (MAAR)	31	-0.349 ($p < 0.03$)	-0.314 ($p < 0.00$)
Panel C: Regression results			
$MAAR_t = a + bMAFR_t + e$			
a	b	R^2	
-0.06 ($t = -1.4; p = 0.16$)	1.04 ($t = 1.80; p = 0.07$)	2.18%	
$MAAR_t = a + bMAFR_t + e$			
a	b	R^2	
0.11 ($t = 1.05; p = 0.30$)	3.42 ($t = 2.73; p = 0.01$)	9.03%	
$MAAR_t = a + bMAFR_t + e$			
a	b	R^2	
-0.08 ($t = -0.44; p = 0.67$)	2.02 ($t = 2.23; p = 0.05$)	26.50%	

ICSSAM-584
Corporate Social Responsibility and Financial Performance

Yu-Shan Wang

Professor, Department of Money and Banking, National Kaohsiung First University of
Science and Technology, Taiwan

Email: yushan@nkfust.edu.tw

Yi-Jie Chen

National Kaohsiung First University of Science and Technology

Abstract

This paper examines how the U.S. capital market perceives corporate social responsibilities (CSRs) by examining the constituent companies of the Dow Jones Sustainability Index (DJSI) and explores whether the implementation of CSR policies and verification by independent organizations contribute to variances in financial performance. This paper also examines different events (i.e., nominations, inclusions, and awards) in the analysis of how much importance investors place on CSR. The results show that investors do not exhibit significant recognition of U.S. companies included in the DJSI. However, when CSR becomes common practice within a given industry, certification by independent third parties regarding CSR policies conveys actual benefits to corporate performance. In addition, this paper compares degrees of CSR recognition between investors in the U.S. and investors in Taiwan. This study uses the Awards of Excellence in Corporate Social Responsibility given by *Common Wealth Magazine* to assess whether investors form different expectations of CSR based on company size. The results indicate that Taiwanese investors are increasingly aware of CSRs and the awards received by mid-sized companies show significant impacts. Changes in share prices for mid-sized companies are slower than for large companies. This paper argues that CSR policies not only enhance reputation but also lead to good financial performance. Companies are encouraged to take an active attitude toward CSR by understanding the relevant costs.

Keywords: corporate social responsibility, financial performance, Taiwan, DJSI

JEL classification: G30, C32, C33

Acknowledgements

The author is grateful to the National Science Council of Taiwan for financial support through grant NSC 102-2410-H-327 -030 -.

ICSSAM-616
Valuation of Spread and Basket Options with the Johnson Distribution Family

Ting-Pin Wu
National Central University
wutingpin@gmail.com

Abstract

This paper adopts the unbounded-system distribution of the Johnson distribution family (1949) to approximate the basket/spread distribution and derive a versatile pricing model. The pricing model can price both basket and spread options, and thus the risks of issuing both options can be consistently and efficiently integrated and managed. The pricing model can instantly price basket/spread options (almost as short in time as the Black-Scholes (1973) model), and the results are shown to be quite accurate by comparing with the results of Monte Carlo simulation. The method for computing Greeks is also presented. We also provide numerical examples to demonstrate the implementation of our pricing model and show the economic intuitions of Greeks for basket and spread options and for an option portfolio consisting of both options.

Keywords: Basket Options; Spread Options; Martingale Pricing Method

ICSSAM-995

Does The Announcement Of Brand Value Ranking Affect Share Price?

Sangho Lee

KEPCO Economy Management Research Institute, Korea Electric Power Corporation
#512, Yeongdong-daero, Gangnam-gu, Seoul 135-791, KOREA

bsbmetal@kepcoco.kr

Hyungseok Yoon

Department of Management Science, Korea Advanced Institute of Science and Technology
KAIST 291 Daehak-ro, Yuseong-gu, Daejeon 305-701, KOREA

davidyoon@kaist.ac.kr

Abstract

Brands have become very important intangible assets which are translated into a higher firm value. This study examines the announcement effect of brand value ranking on firms' share price. By using the data from Interbrand which evaluates and estimates the brand value annually, the authors have conducted an event study.

Our key findings include: (1) the brand value ranking announcements show statistically and economically significant effect on the share price; (2) U.S market tends to react more sensitively to brand value announcements than Non-U.S Market; (3) increases in brand values are more likely to be reflected in firm value than are decreases in brand values, as the stock market in the short run rewards accumulated brand value growth more than it penalizes brand value decline.

Key Words: Brand Value, Certification Effect, Event Study

1 Introduction

Brand is capable of maintaining and creating earning for the firm over and above the earnings stemmed from tangible assets ([Lane & Jacobson, 1995](#)). Strong brand names increase customer loyalty, margins, and inelastic responses to price increases ([Keller, 2003a](#)). From investors' perspective, brand value plays a role in determining the stock prices of firms by affecting the perception of investors and financial analysts ([Simon & Sullivan, 1993](#)). However, despite the importance of brands for firm value, the empirical findings shedding the light on the relationship between brand value and firm value is very few ([Pahud de Mortanges & Van Riel, 2003](#)). The reason may be due to the fact that U.S. generally accepted accounting principles (GAAP) do not require firms to report brand value estimates in their financial statements, subsequently letting external organisms to provide brand value estimates.

One of the most reputable external organizations providing brand value estimates is Interbrand, Ltd., which publishes an annual survey of brand values on *FinancialWorld* (FW). Barth, Clement, Foster, & Kasznik ([1998](#)) found that brand value estimates estimated by Interbrand, Ltd., were proven to capture information relevant to investors and show reliability of reflecting the brand value estimates in share prices and returns. They also found that brand value estimates are significantly associated with advertising expense, brand operating margin, and brand market share. Previous studies reaffirm that brand value affects the perception of investors and financial analysts, and subsequently plays a role in determining the stock prices of firms at the macro level ([Simon & Sullivan, 1993](#)). In addition, there are many benefits from brand name: greater loyalty from customers, less vulnerability to competitive marketing

actions, less vulnerability to marketing crises, larger margins, more inelastic consumer response to price increases, etc ([Keller, 2003b](#))

Explaining the announcement effect of brand value on share price is important for at least three reasons. First, although it is generally claimed that brand is a corporate asset with an economic value that creates wealth for a firm's shareholders, the academic literature has not yet provided an empirical relationship between brand value and shareholder value ([Madden, Fehle, & Fournier, 2006](#)). Second, the view that brand names have economic value was popularized not by marketers, but by financiers (Aaker 1996; Morris 1996). In other words, it is worthwhile to adopt multidisciplinary approach in explaining the impact brand value on share price from both marketing and financial perspective. Third, unlike previous studies which merely found an association between brand value and firm value, this paper uses event study methodology which enables us to determine the direct causal impact and the magnitude of causal impact ([Madden, et al., 2006](#)).

The main contributions of this paper are two-fold. First, by assessing the impact of brand value announcement on stock prices, this study contributes to event study literature in interdisciplinary field (Fama et al. 1969; Zinkhan and Verbrugge , 2000; Madden and Fehle 2006). Second, unlike past studies which only used U.S data, this study used international data including the brands from Europe, Asia, and South America ([De Beijer, Dekimpe, Dutordoir, & Verbeeten, 2010](#)). In this paper, we explore empirically the effect of brand value announcement on share price. In specific, we examine the effect of brand value ranking change on share price across 500 companies over the 2005-2010 period. We also investigate factors which affect the change in brand ranking and share price.

The rest of the paper is structured as follows. In Section I, we provide the background on the Japanese spin-ins examined. In Section II, we describe the data and descriptive statistics of Japanese corporate spin-ins. In Section III and IV, we analyze and interpret the empirical results. Finally, Section V summarizes and concludes the major tenets of our arguments.

2 Background and Hypotheses

2.1 Event Study in Marketing

Fama et al. (1969) introduced the event study method to the field of economics and finance. The event study method measures excess returns of common stocks that results from specific event or announcement. The announcements include events such as stock splits, regulatory changes, changes in marketing strategy, or new product release. The basic assumption of this method is that capital market efficiency is semi-strong and there is information asymmetry between investors and information holders. In others words, market prices reflect all publicly-available information and investors with insider information are able to earn abnormal returns around the event date (Zinkhan and Verbrugge, 2000).

Although only small number of marketing literatures used the event study method, this method shed light on the relationship between marketing activities and overall firm performance (Fama et al. 1969). Agrawal and Kamakura (1995) assessed the impact of celebrity endorsement contracts on the firm's expected return with 110 celebrity endorsement contracts. They found that there is a positive relationship between celebrity endorsement announcements and stock returns. While the methodology used in past studies in finding the relationship between brand value estimates and firm performance was simultaneous equations, the current study adopts event study methodology to reveal a direct causal impact of brand value ranking announcements on stock prices.

2.2 Certification Effect

Certification effect is particularly important in high information asymmetry environments where insiders with information and external investors have different information sets concerning the value of the offering firm ([Megginson & Weiss, 1991](#)). This phenomenon is easily detectable in corporate credit rating changes and depends on the certification ability of rating agencies which stems from their reputational capital ([Bosch & Steffen, 2011](#)). While the downgrades of corporate credit rating affect stock and bond prices move negatively, most of the studies claim that the upgrades do not show significant effect on security prices (Dichev and Piotroki, 2001 ; Han et al., 2008). Credit rating measures the default risks of corporation and presumably because of their nature of deciding the likelihood of default, only the downgrade of credit rating changes show the impact on a firm's share value (Zaima and McCarthy 1988; Hite and Warga 1997 ; Richards and Deddouche 1999).

Unlike the credit ratings, increases in brand values are more likely to be reflected in firm value than are decreases in brand values, as the stock market in the short run rewards accumulated brand value growth more than it penalizes brand value decline (Kerin and Sethurman 1998). They claimed that a time-series analysis of changes in a firm's accumulated brand value will be needed to validate this view in long-term perspective. In addition, Madden, Fehle, and Fournier ([2006](#)) compared a stock portfolio of Interbrand-rated firms with a similar sample of nonrated firms and report that systematic equity risk is lower for the Interbrand portfolio. Accordingly, Morgan and Rego ([2009](#)) reaffirmed that there is an even strong systematic equity risk effect when stock markets move downside, thereby supporting their previous results. Thus, we argue that there exists fundamental difference in terms of certification effect between credit rating and brand value rating.

2.3 Brand Value

Brand value has close relationship with consumer choice and firm performance. Perceived brand value or quality is positively related to purchase likelihood and consumer intentions to purchase a brand (Steenkamp et al., 2003; Swait and Erdem 2007).

Table 1

Study	Key Findings
Brand Quality and Consumer choice	
Steenkamp, Batra, and Alden (2003)	Perceived brand quality is positively related to purchase likelihood.
Erdem, Swait, and Valenzuela (2006)	Across 7 countries, perceived brand quality has a strong positive impact on consumer intentions to purchase a brand.
Swait and Erdem (2007)	Perceived brand quality is a strong determinant of whether a brand is even in the consideration set of the customer.
Brand Quality and Marketing Initiatives	
Boulding, Kalra, and Staelin (1999)	Consumer perceptions of brand quality influence their evaluations of marketing actions of a firm. Specifically, higher the perceived brand quality, the greater will be the effectiveness of marketing actions.
Shaffer and Zhang (2002)	Price promotions are more beneficial for firms with higher perceived brand quality.
Srinivasan et al. (2009)	New product introductions are more valued by stock markets for products with higher perceived quality.
Brand Quality and Firm Performance	
Aaker and Jacobson (1994)	Changes in perceived brand quality are positively related to stock returns.
Mizik and Jacobson (2004)	Changes in perceived brand quality are positively related to stock returns.
Balachander and Stock (2009)	High quality brands are likely to yield higher profits by offering limited edition products.

More importantly, Aaker and Jacobson (1994) study the relationship between brand quality and stock returns using the EquiTrend brand quality measure. They found that changes in perceived quality have a significant and positive effect on yearly stock returns. With the sample of firms in the computer industry, Aaker and Jacobson (2001) found that changes in brand attitude are associated with contemporaneous changes in stock returns. Leone et al., (2006) find that a ‘branded house’ strategy with one corporate brand as an umbrella is associated with a higher firm value than a multiple-brand ‘house of brands’ strategy. Mizik and Jacobson (2008) develop and test a model that links several brand equity components (differentiation, relevance, quality, familiarity, and vitality) to firm value. They find evidence of both a direct link and an indirect link (through current earnings) between a number of brand equity measures and stock price performance. Based on the argument, hypotheses are mentioned hereinafter.

H1a: *Upgrade in brand value ranking will induce significant and positive CAR.*

H1b: *Downgrade in brand value ranking will induce significant and negative CAR.*

H2a: *Upgrade within brand value ranking quartile will bring significant and positive CAR.*

H2b: *Downgrade within brand value ranking quartile will bring significant and negative CAR.*

3 Data

Brand value changes are obtained from Interbrand, a UK-based consultancy firm. These are the brand value estimates of the world’s 100 most-valued brands published in BusinessWeek from 2005 to 2010. Both the share price of Interbrand listed companies and their respective

local stock market indices were obtained from DataStream which is a comprehensive on-line historical database service provided by Thomson Financial that encompasses a broad range of financial entities and instruments with global geographical coverage

In this study, the event study method using Cumulative Abnormal Return (CAR) was adopted in order to investigate the degree of CAR depending on the changes in brand value ranking. Interbrand's brand value announcement date was set as an event date. In addition, total of 600 samples were segmented into U.S and Non U.S firms in order to check sensitivity and market segmentation effect.

Before running CAR, data contamination was checked. 80 observations were removed, as they were part of 2008 financial crisis. In addition, 30 more observations were removed from the data set, as their share price was affected by other announcement such as M&A, Quarter Results, Earnings Report, etc.

4. Empirical Findings

The market model parameters are based upon approximately 12months of daily return observations beginning 250 days through to 45 days before the brand value ranking changes. To examine the influence of the brand value ranking on stock values of Interbrand listed firms, we calculated the CARs for 3-day window ($t=-1, +1$), 5-day window ($t=-2, +2$), 7-day window ($t=-3, +3$), and 2-day windows ($t=0, +1$), ($t=+1, 0$).

Table 2

Changes	Market	Event Window				
		CAR11	CAR22	CAR33	CAR01	CAR10
UP	ALL	0.819***	1.036***	0.910***	0.457***	0.701***
		(3.566)	(4.090)	(3.291)	(2.777)	(3.293)
	US	1.441***	1.432***	0.882*	0.899***	1.216***
		(3.210)	(3.046)	(1.724)	(2.999)	(2.914)
	NON-US	0.346*	0.734***	0.931***	0.121	0.309
		(1.665)	(2.773)	(3.161)	(0.696)	(1.600)
DOWN	ALL	-0.287	-0.800**	-0.511	-0.059	-0.113
		(-1.361)	(-2.423)	(-1.320)	(-0.312)	(-0.685)
	US	-0.234	-0.994**	-0.940*	0.129	-0.071
		(-0.844)	(-2.198)	(-1.766)	(0.518)	(-0.314)
	NON-US	-0.364	-0.516	0.116	-0.334	-0.176
		(-1.112)	(-1.086)	(0.213)	(-1.165)	(-0.721)

*note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*

Table 2 indicates that with regard to upgrades of brand value ranking, all event windows except $(t=0, +1)$, $(t=+1, 0)$ of Non-US firms are significant whether we separate U.S firms from the Non-U.S firms or not. We conclude that market reactions in U.S markets for upgrades are much stronger than those in Non-U.S markets.

For downgrades, all event windows except $(t=-2, +2)$ and $(t=-3, +3)$ are not significant whether the sample is U.S or Non-U.S. The result shows that increases in brand values are more likely to be reflected in firm value than are decreases in brand values.

Table 3

Quartile	Changes	Event Window				
		CAR11	CAR22	CAR33	CAR01	CAR10
1~25	UP	1.173***	1.447***	0.762	0.948***	1.173***
		(4.094)	(3.727)	(1.601)	(3.749)	(4.094)
	DOWN	-0.785**	-1.200***	-1.110**	-0.414	-0.785**
		(-2.178)	(-2.772)	(-2.143)	(-1.402)	(-2.178)
26~50	UP	0.937**	1.075**	0.734	0.437	0.937**
		(2.397)	(2.413)	(1.464)	(1.444)	(2.397)
	DOWN	0.262	-0.168	-0.191	0.341	0.262
		(0.580)	(-0.302)	(-0.279)	(0.921)	(0.580)
51~75	UP	1.074	1.662**	1.964***	0.588	1.074
		(1.592)	(2.445)	(2.765)	(1.327)	(1.592)
	DOWN	-0.778	-1.905*	-1.615	-0.304	-0.778
		(-1.433)	(-1.814)	(-1.355)	(-0.559)	(-1.433)
76~100	UP	0.121	0.082	-0.028	-0.071	0.121
		(0.450)	(0.207)	(-0.078)	(-0.327)	(0.450)
	DOWN	0.075	-0.077	0.673	0.100	0.075
		(0.244)	(-0.165)	(1.183)	(0.353)	(0.244)

*note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*

After dividing the sample into quartiles depending on their brand ranking, we've conducted CAR analysis. Table 3 indicates that except upper 50%, lower 50%, lower 25%, a significant CAR coefficients is shown when there's upgrade in brand ranking.

This result is consistent with the result on Table 1 that increases in brand values are more likely to be reflected in firm value than are decreases in brand values.

5. Conclusion

Our study of the relationship between brand value ranking announcement and share price contributes new insights to the emerging marketing–finance literature by illuminating a new way brands contribute to the financial performance of the firm.

From a theoretical perspective, the brand value ranking announcements showed statistically and economically significant effect on the share price which was consistent with existing studies. What differentiates this study from the past studies is that most of the authors have used data set limited to U.S market, but the current study made contributions in terms of adopting international data including Europe, Asia, and South America with their own respective indices (De Deijer et al., Working Paper).. Along with this approach, this study found that U.S market tends to react more sensitively to brand value announcements than Non-U.S Market.

Lastly, this study reaffirmed that increases in brand values are more likely to be reflected in firm value than are decreases in brand values, as the stock market in the short run rewards accumulated brand value growth more than it penalizes brand value decline.

References

- [1] Aaker, D. A., & Jacobson, R. (2001). The value relevance of brand attitude in high-technology markets. *Journal of Marketing Research*, 485-493.
- [2] Agrawal, J., & Kamakura, W. A. (1995). The economic worth of celebrity endorsers: An event study analysis. *The journal of marketing*, 56-62.
- [3] Barth, M. E., Clement, M. B., Foster, G., & Kasznik, R. (1998). Brand values and capital market valuation. *Review of accounting studies*, 3(1), 41-68.
- [4] Bosch, O., & Steffen, S. (2011). On syndicate composition, corporate structure and the certification effect of credit ratings. *Journal of Banking & Finance*, 35(2), 290-299.
- [5] Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *The journal of marketing*, 81-93.
- [6] De Beijer, D., Dekimpe, M., Dutordoir, M., & Verbeeten, F. (2010). The impact of brand value announcements on firm value: SSRN Working Paper Series. Retrieved from <http://ssrn.com/abstract/1344535>. Accessed on 27 October.
- [7] Dichev, I. D., & Piotroski, J. D. (2001). The Long Run Stock Returns Following Bond Ratings Changes. *The Journal of Finance*, 56(1), 173-203.
- [8] Fama, E., Fisher, L., Jensen, M., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, Vol. 10, February 1969, *STRATEGIC ISSUES IN FINANCE*, Keith Wand, ed., Butterworth Heinemann, 1993, *INVESTMENT MANAGEMENT: SOME READINGS*, J. Lorie, R. Brealey, eds., Praeger Publishers, 1972.
- [9] Han, S. H., Shin, Y. S., Reinhart, W., & Moore, W. T. (2009). Market Segmentation Effects in Corporate Credit Rating Changes: The Case of Emerging Markets. *Journal of Financial Services Research*, 35(2), 141-166.
- [10] Hite, G., & Warga, A. (1997). The effect of bond-rating changes on bond price performance. *Financial Analysts Journal*, 35-51.
- [11] Keller, K. L. (2003a). Brand synthesis: The multidimensionality of brand knowledge. *Journal of Consumer Research*, 29(4), 595-600.
- [12] Keller, K. L. (2003b). *Strategic brand management: Building, measuring, and managing brand equity* (Vol. 96): Prentice Hall Upper Saddle River, NJ.
- [13] Lane, V., & Jacobson, R. (1995). Stock market reactions to brand extension announcements: The effects of brand attitude and familiarity. *The Journal of Marketing*, 63-77.
- [14] Leone, R. P., Rao, V. R., Keller, K. L., Luo, A. M., McAlister, L., & Srivastava, R. (2006). Linking brand equity to customer equity. *Journal of Service Research*, 9(2), 125-138.
- [15] Madden, T. J., Fehle, F., & Fournier, S. (2006). Brands matter: an empirical demonstration of the creation of shareholder value through branding. *Journal of the Academy of Marketing Science*, 34(2), 224-235.
- [16] Megginson, W. L., & Weiss, K. A. (1991). Venture capitalist certification in initial public offerings. *Journal of finance*, 879-903.
- [17] Mizik, N., & Jacobson, R. (2003). Trading off between value creation and value appropriation: The financial implications of shifts in strategic emphasis. *Journal of Marketing*, 63-76.
- [18] Morgan, N. A., & Rego, L. L. (2009). Brand portfolio strategy and firm performance. *Journal of Marketing*, 73(1), 59-74.
- [19] Pahud de Mortanges, C., & Van Riel, A. (2003). Brand equity and shareholder value. *European management journal*, 21(4), 521-527.

- [20] Richards, A. J., & Deddouche, D. (1999). *Bank rating changes and bank stock returns--puzzling evidence from the emerging markets*: International Monetary Fund.
- [21] Simon, C. J., & Sullivan, M. W. (1993). The measurement and determinants of brand equity: a financial approach. *Marketing science*, 12(1), 28-52.
- [22] Steenkamp, J. B. E. M., & Gielens, K. (2003). Consumer and market drivers of the trial probability of new consumer packaged goods. *Journal of Consumer Research*, 30(3), 368-384.
- [23] Swait, J., & Erdem, T. (2007). Brand effects on choice and choice set formation under uncertainty. *Marketing Science*, 26(5), 679-697.
- [24] Zaima, J. K., & McCarthy, J. (1988). The impact of bond rating changes on common stocks and bonds: Tests of the wealth redistribution hypothesis. *Financial Review*, 23(4), 483-498.
- [25] Zinkhan, G. M., & Verbrugge, J. A. (2000). The Marketing/Finance Interface:: Two Divergent and Complementary Views of the Firm. *Journal of Business Research*, 50(2), 143-148.

Education VI

Room C

16:30-18:00

Friday, May 9

Session Chair: *Prof. John Clayton*

ISEPSS-2105

Homeschooling in China: Challenges and Opportunities

Karen M. Y. Lee

Hong Kong Institute of Education

ISEPSS-2106

Designing E-Learning Environments to Encourage Learner Autonomy: Creating a Framework for Development

John Clayton

Waikato Institute of Technology

Jun Iwata

Simanae University

Sarah-Jane Saravani

Waikato Institute of Technology

ISEPSS-2111

Character Education and Personal Social Guidance and Its Effect on Personal Social Competence

Diana Septi Purnama

State University of Yogyakarta

Abdul Malek Rahman

UPSI

ISEPSS-2113

Freedom and Equity of Access to Information: the Policy Change of IFLA, 2003-2013

Neng-Shan Lin

National Central Library

ISEPSS-1761

Do Hong Kong preschool children possess an adequate level of English vocabulary skills to enable them to read?

Kwok-Shing Wong

Hong Kong Institute of Education

Brian MacWhinney

Carnegie Mellon University

ISEPSS-1720

Special Educational Needs (SEN) Teachers' Experiences of Occupational Therapy School-based (OTSB) Collaborative Consultation in One Special School in a Scottish City: A Pilot Study

Hasrul Bin Hosshan

Sultan Idris Education Unversity

ISEPSS-2105

Homeschooling in China: Challenges and Opportunities

Karen Lee

Department of Social Sciences, Hong Kong Institute of Education
myklee@ied.edu.hk

Abstract

More and more Mainland Chinese parents are educating their children at home. It follows a controversial yet legal practice in many Western as well as some Asian societies including Australia, Britain, Canada, the United States, Taiwan, India and Indonesia. While their overseas counterparts adopted homeschooling largely for religious or ideological reasons, Mainland parents opted for this alternative form of education under a variety of concerns. On top of the list is their dissatisfaction with the rigid pedagogy of traditional schools, followed by a slow pace of lessons, lack of respect for children, their aversion to school life, and religious factors. The growing popularity of the practice also came amid continued revelations of rampant physical and sexual abuses on children in Chinese schools.

Yet, China's homeschooling is in legal limbo. While Chinese law does not ban the practice outright, the Compulsory Education Law, promulgated in 1986, mandates nine years of free education for all children aged six or above at registered schools (Sections 2 & 11). Under Section 5, the responsibility falls on parents or statutory guardians to ensure school-age children under their care go to school and complete the education requirements. Hence, homeschooling beyond kindergarten is in theory illegal. But lax law enforcement has allowed an increasing number of parents to exploit the loophole and teach their children at home or send them to home schools run by like-minded parents or private tutors.

The legality of homeschooling in China is open to debate. Its proponents argue that instead of flouting their legal obligations, homeschooling parents help their children learn quicker and happier albeit in a non-school setting. According to this view, homeschooling does not breach the law provided children are able to receive quality education within the authorized curriculum. Besides, a culture of corporal punishment among teachers also makes some parents question whether the school setting serves the best interest of their children.

Yet, homeschooling remains controversial in other aspects. First, uncertainties cloud the academic prospect of those who are educated at home. It is because in most cases, they are unable to obtain certificates issued by registered schools required for students preparing to sit national university entrance examinations.

Second, as a recent phenomenon, the efficacy of homeschooling is unproven in light of the fact that it remains untested, unregulated, and its practice varies among its adherents in China. Third, understanding and acceptance of homeschooling will remain marginal as long as it is confined to middle-to-upper class families with access to education and financial resources.

This paper seeks to shed light on the emerging practice of homeschooling in China amid a changing society. It argues that the challenges it faces can be solved with government initiatives and better communication and coordination among professional and community groups. If education is meant to serve the best interest of the child, homeschooling as an alternative should be explored and better facilitated.

ISEPSS-2106

Designing E-Learning Environments to Encourage Learner Autonomy: Creating a Framework for Development

John Clayton^{a*}, Jun Iwata^b Sarah-Jane Saravani^c

^a Waikato Institute of Technology, Tristram St, Hamilton, New Zealand

E-mail address: john.clayton@wintec.ac.nz

^bSimanae University, Enya 89-1, Izumo, Shimane, JAPAN

E-mail address: iwata.mct@gmail.com

Waikato Institute of Technology, Tristram St, Hamilton, New Zealand

E-mail address: sarah-jane.saravani@wintec.ac.nz

Abstract

Foreign language learning has been increasingly influenced by constructivist approaches to learning and teaching. These approaches, placing the learner at the centre of the teaching and learning experience, requires educationalists to critically review existing teaching strategies, techniques, methods and beliefs. For Japanese medical professionals English has become increasingly important. There is growing need for these professionals to understand and use English at conferences and/or workshops, to keep up to date with medical processes and procedures published in Western medical journals and there are ever increasing opportunities to communicate with other medical staff and patients in English. However, the curricula at medical schools in Japan are so extensive that the time allocated for English classes is usually very limited, which means those classes often do not have the depth or scope to improve the English communication skills of medical students to the level necessary for their future career.

This paper explores the development of a design framework that provides learners with the motivation and skills to access learning materials independent of time-tabled study. It outlines how the authors integrated a self-reflective framework and micro-credential / badge ecosystem in the learner centric courses created. It illustrates how this design framework was implemented in a medical terminology course.

Keywords: learner autonomy, learner centeredness, constructivism, micro-credentials

1. Overview

Over the last three decades foreign language teaching and learning has been influenced by new strategies, techniques and methods. Increasingly there has been a growing focus on learner-centeredness and learner autonomy (Aşık, 2010). While there are differing opinions on a finite definition of 'learner autonomy' (Macaskill & Taylor, 2010) there is general agreement a common theme underpinning 'learner centeredness' are new perspectives on the role of the learner and the teacher in the leaning process (Furtak, & Kunter, 2012). These new perspectives have been influenced and shaped by constructivist views of education.

Constructivists have significantly influenced the way education is conceptualised and delivered (Posner, Strike, Hewson, & Gertzog, 1982). It has been argued the separation between knowing and doing, described by the folk categories of 'know what' and 'know how' (Brown, Collins, & Duguid, 1989, p32) can no longer be sustained, A foundational premise

of constructivism is the concept that knowledge is actively constructed by the learner, not passively received from the environment they learn within (Driver, 1989). To put it simply it appears impossible to transfer ideas, facts, processes and concepts wholesale into students' heads and expect these to remain intact or unaltered (Treagust, Duit, & Fraser, 1996). In short, the transmission of learning materials to learners does not necessarily mean learning is occurring. This concept of tutor as broadcaster is illustrated in Figure 1 below (Clayton, 2007, p10).

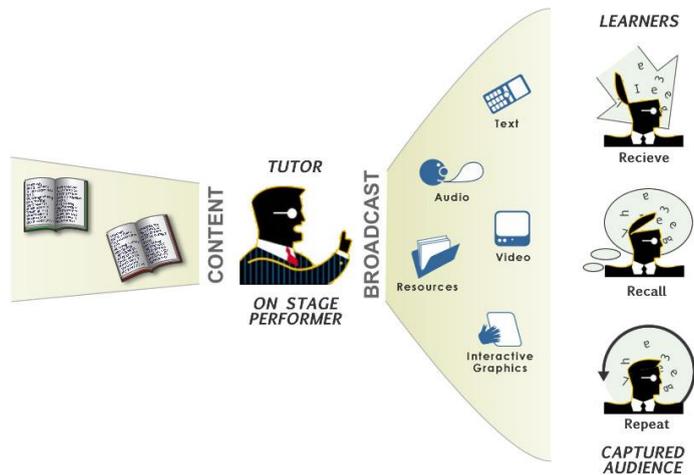


Figure 1. Tutor broadcaster.

Constructivists acknowledge learners hold views of the world and meanings for words that are intelligible, (coherent and internally consistent) plausible, (reconciled with the views currently held) and fruitful, (useful to the learner in making sense) (Duit, & Fraser, 1996). They argue that for learning to occur the learner must be reflect upon their existing views and current knowledge, evaluate these reflections in light of the context of their current learning activity, and decide, how they can reconstruct their views and knowledge incorporating the learning that has occurred (Gunstone, 1994). In short, the learner is at the centre of the learning process, tutors must actively encourage student engagement with content, they facilitate learning. This concept of tutor as facilitator is illustrated in Figure 2 below (Clayton, 2007, p11).

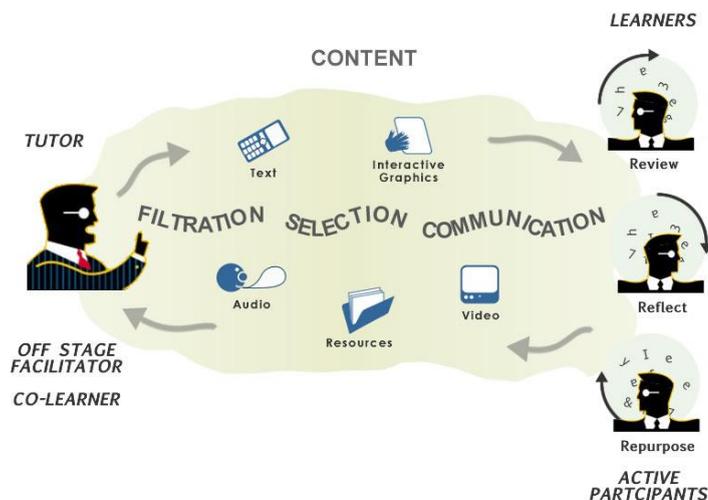


Figure 2. Tutor facilitator

Acceptance of these ideas have significantly influenced teaching and learning in English language learning (Oguz, 2013). Strategies, techniques and approaches have been rethought, focusing on learner autonomy, the ability of learners to independently identify and direct their learning, rather than the regimented accretion of knowledge (Macaskill & Taylor 2010). From this learner autonomy perspective, learning takes place as learners actively engage with ideas presented to them. Their existing knowledge frameworks mediate this engagement.

This means language learning is not simply the acquisition of correct responses, a repertoire of set behaviors (Duschl, 1998). This fundamental shift, from passive acceptance of knowledge to learner engagement and construction, means there is a need to create learning environments that are supportive of learner autonomy and centred on the learners identified needs.

2. The Context

A working knowledge of English has become increasingly important for medical professionals around the world. Increasingly English is the ‘common’ language used at conferences, symposiums, workshops and medical papers.

In the work-place there is growing need for them to communicate with other medical staff and patients in English (Telloyan, Iwata & Clayton 2008). However, the existing extensive curricula of medical schools in Japan mean English classes are usually scheduled only for the first 2 to 3 years of a 6-year-long programme of study. This limited exposure to English is insufficient to improve the English communication skills of students to the levels necessary for their future career. Therefore, language teachers at medical schools have been required to review their pedagogical approaches, strategically plan their English curricula, and organize how they should engage their learners to fully maximize the impact of the time allocated for English teaching (Iwata, Clayton, & Saravani, 2013).

In this modern digital age individuals constantly acquire skills, knowledge and capabilities in both formal and informal settings. Often this learning is facilitated through, and with, information and communication technologies (Clayton, Iwata, & Elliott, 2013). Since 2008 formal English language learning sessions at Shimane University has been supported by the Learning Management System (LMS) Moodle. While learners acknowledge the ‘blended-learning’ approach is effective and motivating for their English study (Iwata, Tamaki & Clayton, 2011), these courses have often been ‘course-bound’ and have not been used informally out of time-tabled sessions. It was decided the courses needed to be re-designed to suit students’ needs and align with learners’ current capabilities. This re-design was focused on:

- Helping learners identify and engage with the suitable level of information and in appropriate level of activities, and
- Encouraging learners to independently engage with the review materials identified and participate autonomously in practice activities.

It was anticipated this re-design would actively encourage learners to engage independently with course materials outside of the scheduled time-tabled courses.

3. The Design Framework

In e-Learning environments learners have more choice in the time they learn and the place the learning will occur. While tutors design digital content and activities to achieve identified objectives, the ultimate responsibility of achieving those outcomes is transferred from the instructor to the learner. In these more personalised environments learners need to be more

self-motivated and self-directed (Clayton, 2009). A fundamental criterion for the success of self-motivated and self-directed English language learning environments is the ability of learners to make the appropriate connections between their existing skills, knowledge and experience and expected skill, knowledge and behaviours. This is achieved through the creation of self-reflective frameworks (Clayton, 2012).

A digital portfolio can be regarded as the purposeful collection of a learner's work that can be structured to exhibit the learner's efforts and achievements over time (Kim, Ng, & Lim, 2010). In accreditation environments, digital portfolios can provide a space where learners' evidence of their competencies and achievements can be stored, systematically evaluated and displayed. In essence they allow learners to illustrate, to their peers, colleagues and other stakeholders, their progress, indicate their proficiency and acknowledge their achievements.

Micro-credentials (digital badges) are increasingly being used as valid indicators of accomplishment, skill, knowledge, or interest (Clayton, 2012). It was anticipated in the new English language learning environment created endorsed micro-credentials/badges would be used for motivational and rewarded purposes. Indeed, it is argued the ecosystem created would provide a broader picture of English language learning achievement by providing the infrastructure for individual learners to demonstrate their knowledge, skills and achievements through the display of endorsed micro-credential / badge collections.

4. The Sample Course

Medical Terminology is based upon fundamental medical terms which are frequently used and are keys to better understanding of up-to-date information about health-related issues, medical conditions, diseases, symptoms and treatments. The Moodle quiz functionality was used to create a self-reflective framework to enable learners to determine their current level of competency in medical terminology. Learners were asked to reflect on the target skills and then respond to the questions. A sample of 3 of the 10 questions is illustrated in Figure 3 below.

Question 4 Not answered Marked out of 1.00 Flag question Edit question	I can identify the common terms of the digestive system. Select one: <input type="radio"/> a. Strongly agree <input type="radio"/> b. Agree <input type="radio"/> c. Partially agree <input type="radio"/> d. Disagree
Question 5 Not answered Marked out of 1.00 Flag question Edit question	I can identify the common terms related to the urinary system. Select one: <input type="radio"/> a. Strongly agree <input type="radio"/> b. Agree <input type="radio"/> c. Partially agree <input type="radio"/> d. Disagree
Question 6 Not answered Marked out of 1.00 Flag question Edit question	I can identify the common terms related to the reproductive system. Select one: <input type="radio"/> a. Strongly agree <input type="radio"/> b. Agree <input type="radio"/> c. Partially agree <input type="radio"/> d. Disagree

Figure 3 Self-Reflective Framework

When the learner has responded to all the questions they are provided with specific advice on which module(s) to review and which competencies they need to develop. This is illustrated in Figure 4 below.

I have a good understanding about basic structures of medical terms, prexies, word roots and suffixes.

Select one:

- a. Strongly agree You can skip module 1 and try other modules.
- b. Agree
- c. Partially agree
- d. Disagree

I can recognize basic body parts.

Select one:

- a. Strongly agree
- b. Agree
- c. Partially agree I advise you try module 2 for review.
- d. Disagree

I can recognize basic names of the skeletal system.

Select one:

- a. Strongly agree
- b. Agree
- c. Partially agree
- d. Disagree Please try module 3 for review.

Figure 4 Framework Feedback

As the learner reviews the self-identified modules they are presented with a range of specific quizzes, developed in the Moodle LMS, to check their vocabulary and understanding on the topic. This is illustrated in Figure 5 below

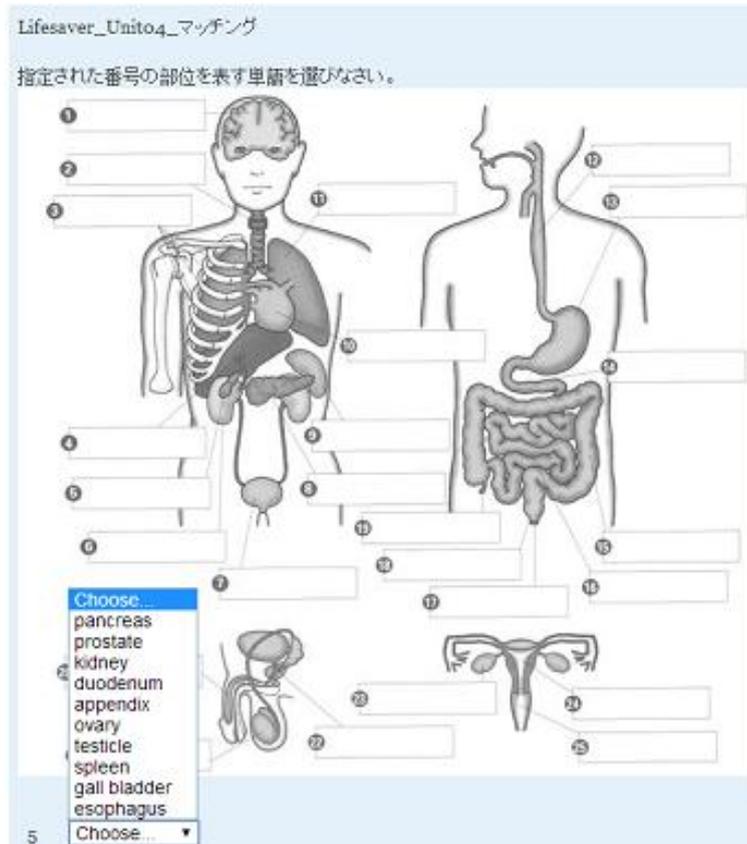


Figure 5 Assessment example

When learners successfully complete the requirements of the module tests identified, they are awarded, using the Moodle LMS badge functionality, the associated module 'micro-credential / badge'. This is illustrated in Figure 6 below

Badge details

Name: Badge for Module 4

Description: This badge is issued for your successful completion of module 4.

Created on: Wednesday, 19 February 2014, 2:53 PM

Image: 

Issuer details

Issuer name: Managed Virtual Learning Environment

Contact: admin@elearning.ac.nz

Badge expiry

This badge does not have an expiry date.

Criteria

Users are awarded this badge when they complete the following requirement:

- ALL of the following activities are completed:
 - "Quiz - Short Test for module 4: Spell Out"
 - "Quiz - Short test for module 4: Matching"
 - "Quiz - Short Test for module 4: Dictation"

Figure 6 Badge example

When learners have completed the requirements of all the module badges they are awarded a “course credential” which means they have successfully completed this basic medical terminology course. All the badges learners have earned have been design to be displayed in a learner portfolio. This will serve to increase learner accomplishment and satisfaction, but can also be used to demonstrate to their peers, family members and others what they have learned, rather than what was taught.

5. Summary and Future Directions

This paper has argued that over the last three decades foreign language teaching and learning has been influenced by constructivist strategies, techniques and methods. This has meant there is a growing focus on learner-centeredness and learner autonomy. The paper illustrated the unique challenges Japanese English language teachers in a medical university are facing.

It illustrated how the authors applied unique design ecosystem, based on self-reflective frameworks, digital portfolios and micro-credentials. It demonstrated first, how a self-reflective framework, where learners are able to make meaningful connections between their current skills/levels and the learning activities offered on available courses, was designed to help learners learn not only independently but also autonomously. Secondly, how the use of micro-credentials, confirming learning achievement, could help to motivate them toward further autonomous study.

However, the authors are conscious that further investigation on how self-reflective frameworks actually help learners identify the skills required and the appropriate course/module level and how the use of micro-credentials helps them to be motivated to study autonomously is required. As more learners participate in courses based on the use of self-reflective frameworks, portfolios and micro-credentials the authors intend to develop of measures to evaluate the success of these environments. The results of these evaluations will be valuable in monitoring the effectiveness of the courses in enhancing learner independence, autonomy and their acquisition of knowledge and skills.

6. References

- Aşık, A. (2010). Misconceptions on learner autonomy: A methodological and conceptual renewal. *Ekev Academic Review*, 14(43), 141-152
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Clayton, J. (2007) Development and validation of an instrument for assessing online learning environments in tertiary education: The Online Learning Environment Survey (OLLES). Unpublished Doctor of Science Education Thesis, Curtin University of Technology, Perth.
- Clayton, J. (2009) Evaluating online learning environments, Köln, Germany: LAP Lambert Academic Publishing.
- Clayton, John (2012) Mass-customisation and self-reflective frameworks: Early developments in New Zealand. *Research in Learning Technology*, 20 (Supp). pp. 189-203.
- Clayton, John (2013) Digital badges in health: A position paper for New Zealand educational providers. In: NET2013 Conference, 3-5 September, 2013, Cambridge, England.
- Clayton, J., Iwata, J., & Elliott, R. (2013) MEEPLE: Micro-credentialing Ecosystems Enabling Personal Learning Environments. In: Shar-E-Fest 2013, 10-11 October, 2013, Hamilton, New Zealand.
- Driver, R. (1989). Students' conceptions and the learning of science. *International Journal of Science Education*, 11(Special Issue), 481 - 490.
- Duschl, R. (1998). Making the nature of science explicit. In R. Millar, J. Leach & J. Osborne (Eds.), *Improving science education: The contribution of research* (pp. 187-207). London: Open University Press.
- Furtak, E., & Kunter, M. (2012). Effects of Autonomy-Supportive Teaching on Student Learning and Motivation. *Journal Of Experimental Education*, 80(3), 284-316.
- Loon, A., Ros, A., & Martens, R. (2012). Motivated learning with digital learning tasks: what about autonomy and structure?. *Educational Technology Research & Development*, 60(6), 1015-1032.
- Gunstone, R. (1994). The importance of specific science content in the enhancement of metacognition. In P. Fensham, R. Gunstone & R. White (Eds.), *The content of science: A constructivist approach to its teaching and learning* (pp. 131-147). London: The Falmer Press.
- Iwata, J., Clayton, J., & Saravani, S. (2013) Using self-reflection and badges in Moodle-based medical English review courses for enhancing learners autonomy. *International Conference on Educational Technologies 2013*. Kuala Lumpur, Malaysia 19- November – 1 December.
- Iwata, J., Tamaki, Y., Clayton, J. (2011). Integrating Moodle-based Activities into Teaching English for Medicine: Instructional Design and Students' Perceptions, G. Weir., et al

- (Ed.) *Corpora and language Technologies in Teaching, Learning and Research*, University of Strathclyde Publishing, Glasgow, UK, pp. 39-49.
- Kim, P., Ng, C., & Lim, G (2010) When cloud computing meets with Semantic Web: A new design for e-portfolio systems in the social media era. *British Journal of Educational Technology* 41(6), 1018-1028
- Macaskill, A., & Taylor, E. (2010). The development of a brief measure of learner autonomy in university students. *Studies In Higher Education*, 35(3), 351-359
- Furnborough, C. (2012). Making the most of others: autonomous interdependence in adult beginner distance language learners. *Distance Education*, 33(1), 99-116
- Oguz, A. (2013). Developing a Scale for Learner Autonomy Support. *Educational Sciences: Theory & Practice*, 13(4), 2187-2194
- Posner, G., Strike, K., Hewson, P., & Gertzog, W. (1982). Accommodation of scientific conception: Toward a theory of conceptual change. *Science Education*, 66(2), 211-227.
- Telloyan, J., Iwata, J., Iga, M. 2008. English Education as Seen by Japanese Doctors, Researchers and Students, *Bulletin of Shimane University Faculty of Medicine*, vol. 32, pp. 7-12.
- Treagust, D., Duit, R., & Fraser, B. (Eds.). (1996). *Improving teaching and learning in science and mathematics*. New York: Teachers College Press.

ISEPSS-2111
**Character Education and Personal Social Guidance and Its Effect on
Personal Social Competence**

Diana Septi Purnama
State University of Yogyakarta
dianasepti73@yahoo.com

Abdul Malek Rahman
UPSI
abdul.malek@fppm.upsi.edu.my

Abstract

This study examined the correlation between the independent variables consisting of personal social guidance counseling (X1) and character education in schools (X2) , and the dependent variable is a private social competence of students (Y) . In addition , there are variables which (Z) of the internal factors (Z1) and external factors (Z2). Purpose of this research is to find a concept model of appropriate guidance for developing adolescent personal social competence . This move of several reasons : First, in terms of adolescent development is vulnerable to the personal social problems. Secondly, the increasing number of teenage decadence, especially the crisis of character development. The crisis in the form of aberrant behavior such as fights , motorcycle gangs , teenage rape , premarital sex , drugs and others. Third, young people need the services of assistance from one adult personal social services counseling . The specific purpose of this study was to determine the correlation between character education and social personal guidance counseling through the internal and external factors that cause personal social competence .

This study uses a quantitative approach to the type of survey and use a sample survey of the subject and administer questionnaires and observation to collect data. As many as 1500 high school students in Yogyakarta that have implemented character education program in their school were involved in this study. The research instrument consists of independent variables and the dependent variable were prepared using an ordinal scale models in the form of Likert scale . While data collection techniques in this study were divided into two, namely the collection of primary data using questionnaires and secondary data collection is done by using observation and documentation . Data analysis was performed with two types of analysis i.e. (1) that is used in the descriptive analysis of qualitative data that is used to cross check the data and (2) quantitative analysis is used to reveal the behavior and study variables using statistical hypothesis testing.

As a whole by means of the steps being taken, then the model formulation of the concept of personal social guidance to develop personal social competence of teenagers as a product in this study. The hope of this model can be used as the basis for counseling teachers when there is a crisis of character in adolescents. Furthermore, this study can contribute to the provision of counseling services.

Keywords: Character education, personal social guidance counseling, personal social competence

Introduction

In general, adolescence is often associated with stereotypes about the irregularities and impropriety. They have personal and social problems that continue to occur without the proper solution to date. Referring to the results of research Evi Kristiyani (2008) using the test Woodworth prevalence of personality disorders in young adults in Pacitan Indonesia with an age range of 18-25 years in both men and women can be specified as 8 aspects, obsessive compulsive personality disorder 21.05 %, schizoid personality disorder 17.10 %, paranoid personality disorder 17.76%, threshold personality disorder 14.4%, antisocial personality disorder and 19.07 %, and other disorders such as emotional as much as 23.34 %, depression 23 % and impulsive 18.42%.

Besides, many theories that discussed the development of the unconformity, emotional disturbances and behavioral disorders as a result of the pressures experienced by adolescents because of the changes that happened to him as well as due to changes in the environment. In line with the changes that occur in adolescents, they are also faced with different tasks of the task in childhood. As known, in every phase of the development, including in adolescence , the individual has a developmental tasks that must be met . When these tasks are well done, it will be achieved satisfaction, happiness and acceptance from the environment. The success of individuals fulfilling these duties will also determine the success of individuals fulfill developmental tasks in the next phase.

Hurlock (2003) provides limits adolescence based on chronological age, ie between 13 to 18 years. The age limit is the limit of traditional, contemporary flow while limiting their teens between 11 to 22 years. Deviant behavior committed by juveniles under the age of 17 years is very diverse ranging from immoral acts and anti-social. Forms of delinquency such as; run away from home , carrying weapons , and racing on the road , until the deed is already leading to crime or unlawful act such as ; murder, robbery, rape, sex, drug use, and other acts of violence that are often reported by the media period. (Masngudin HMS , 2004).

Head of Yogyakarta District Police Commissioner Widodo said, it has picked up about 16 points prone to juvenile delinquency. While we can not give details, Widodo mention these points are spread over a number of high school and township areas. In Yogyakarta itself also identified eight critical points . All these points are in the neighborhood high school, either private or public. Student Section Chief Education Office of Yogyakarta Sujarwo added, it is ready to cooperate with the District Police Office and to perform the mapping. However, Sujarwo expect products to be produced maps can be immediately acted upon, for example, used for patrol and policing operations learner. (Kompas, 28 February 2013)

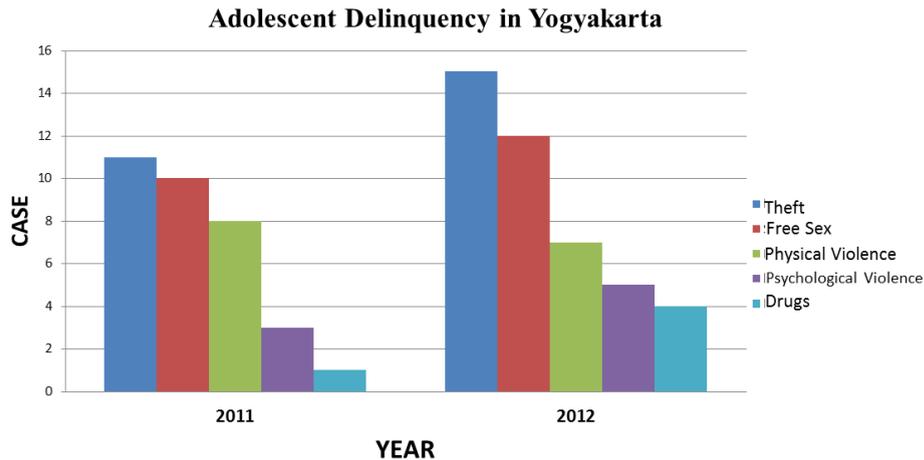


Figure 1. Chart of Adolescent Delinquency in Yogyakarta

(source: Police Data)

Adolescence is an age most potentially committed a crime and deviant behavior, because at that age teenage characters not fully formed (Nurdibyanandaru, the open source matters, 2007). Many factors that cause adolescents have not fully formed character, especially in his moral character is the teenagers who do not have good communication with the parents so that the lack of good modeling.

External factors that cause juvenile delinquency based on the results of several studies found no malfunction of the parents is a figure model for children (Syamsu Yusuf, 2004) . Besides family atmosphere creates a feeling unsafe and unpleasant and poor family relationships can cause psychological harm to any age, especially in adolescence. According to Immanuel Kant parents of naughty teens tend to have minimal aspirations about their children, avoiding the involvement of families and the lack of parental guidance to adolescents. Instead, the family atmosphere that creates a feeling of safety and fun personality will foster reasonable and vice versa. Many studies conducted by experts found that teenagers who come from families who are attentive, warm, and harmony has the ability to adapt and good socialization with surrounding environment (Hurlock, 2003) .

Furthermore Hurlock, 1997 adding that children have good adjustment in school, usually have a harmonious family background, the opinions of children and warm. This is because a child who comes from a close knit family would perceive their homes as a place of joy because of the fewer problems between the parents, the less problems facing children, and vice versa if the child perceives his family fall apart or less harmonious then it will burdened with the problems being faced by the parents.

While internal factors also influence the behavior of juvenile delinquency is on the self-concept or self-belief is a view of the whole self, both concerning the advantages and disadvantages of self, so as to have a considerable influence on the overall behavior displayed. Shavelson & Roger, 1997 stated that the concept of self-formed and evolved based on experience and intepretation of the environment, judgment of others, attributes, and behavior itself.

Therefore, responses and judgments of others about the individual will be able to influence how individuals assess themselves. Conger, 1997 stating that naughty teens usually have a rebellious nature, ambivalent toward authority, resentful, suspicious, implusif and showed

less mental control. Singgih Gunarsa, 2003 said that adolescents who are defined as brats usually have more negative self-concepts than children who are not performing. Thus adolescents who grew up in a less harmonious family and having the possibility of a negative self-concept has a greater tendency becomes delinquent than adolescents who grew up in a harmonious family and having a positive self-concept. According Drawati (2005) factors triggering the child committing a crime is a matter of moral education, parental attention and developmental age. So it was not surprising when the character be loud or wild child, because they are not given the knowledge about ethics and morals, right and wrong, what is good and what is not good, great tendency to do criminalist or potential violence to sustain their lives. Based on the above data proves that globalization brings a wide range of negative impacts. Such problems can be anticipated through counseling and the implementation of character education in schools in Indonesia. Therefore, it is necessary to do research related to Character Education and Social Personal Counseling on personal social competence of students in Indonesian schools also in terms of external and internal factors that influence it.

Character Education

Character education is the concept of the development of the moral consciousness of students (Lickona, 2011), emerged from psychology, social learning, and cognitive development framework. A literature review found the most efficacious approach to developing the character of students. Studies in character education has been conducted in the field of cognitive development (Gibbs, 2006; Mischel & Mischel, 1976; Narvaez, 2001; Rest, Narvaez, Thomas, & Bebeau, 2000) virtues of character (Bulach, 2002; Lickona, 1999), and social learning (Anderson 2000; Simons & Cleary, 2006; Wynne, 1997). Development approach theorized that children develop moral gradually. This theory was developed by Lawrence Kohlberg and similar to the model developed by Jean Piaget (Power, Higgins, & Kohlberg, 1989). Kohlberg argued that there are six stages of moral judgment with three levels, each level contains two stages (Power et al., 1989). In contrast to the cognitive development approach that associates with the character development of moral judgment and moral development of the child put in the developmental stage, the psychological association approach to character development associate with virtue. Psychological perspective is supported by Lickona (2011) demonstrated that children can be taught by teaching character virtues such as honesty and respect. Literature in psychology theory argues that virtues such as respect, responsibility, and honesty are the main elements for the development of a character (Character Education Partnership, 2006). However, another theory suggests that social learning environment, in this case an external factor, plays an important role in shaping the character of children (Wynne, 1997). According to Wynne, the environment include activities and opportunities intended to develop and foster character education. At a certain point in discourse, cognitive learning theories, psychological and social, embrace virtue in some aspects.

In this study not only uses cognitive learning theory, social psychology or as a framework for developing character. Instead explore describes how character education is implemented in schools in Yogyakarta. By looking at the curriculum related to the character from the perspective of the learner. According to Wynne, the environment include activities and opportunities intended to develop and foster character education. At a certain point in discourse, cognitive learning theories, psychological and social embrace virtue in some aspects. Those who believe that character can be developed through education and teaching virtue, which comes from a psychological theory (Hansen, 1995; Lickona, 1991; Stengel & Tom, 2006) often define the character by using a term that describes the properties necessary to embed the value of values or virtues. For example, a leading expert character development

through virtue, Lickona (1997) defines character education as "a deliberate effort, proactive to develop good character " (p. 46) He further explained that the virtues that make up good character is good for individuals and society . Berkowitz defines as "deliberate interventions to promote the formation of any or all aspects of the individual's moral function (page 2, 1998). Character Education Partnership (CEP), a leading organization in the development of character education developed by Lickona , Schaps, and Lewis, defines character education as " ... effort, a deliberate proactive with schools, districts, and states to inculcate students primarily ethical values such as caring, honesty, fairness, responsibility, and respect for self and others" (p.1, 2008) . Another opinion define character education, Wynne (1997), supporting social-learning of character development, argues that character education is necessary to establish an environment that encourages students to practice good habits. Wynne also supports call them virtues as nature (p. 63). Argument to approach caring community led by Noddings (1997) which defines character education as "the delivery of community values effectively to adolescents". Kohlberg, an advocate of cognitive development, using "moral education" instead of the term Moral "character education" According to Kohlberg , " referring to the moral judgment or decision based on moral judgment. Moral is a judgment, not a behavior or influence" (Kohlberg, 1980) . It also defines the purpose of moral education as "the stimulation of development of natural individual moral judgment and the capacity of the child, allowing him to use his own moral assessment to control his behavior.

Ryan and Bohlin (1999), the proponents of virtue, defines character education as a developmental process of carving themselves a moral essence of a person often with the help of others, requires effort, support, knowledge, encouragement examples (good or bad). Ki Hajar Dewantara have much thought on the issue of character education. Sharpen intelligence really mind either, because it can build a good and solid character. If that happens people will always be able to beat the passion and pathos that the original character such as violent, angry, grumpy, stingy, hard, etc. (Ki Hajar Dewantara the Noble Assembly of the Union Tamansiswa, 1977: 24). Furthermore Dewantara Ki Hajar said, the so-called "budipekerti " or a character or in a foreign language that is "spherical human soul" as the soul "law of faith". Budipekerti or characters, meaningful unification of the movement of thought, feeling, and the will, or the will, which raises power. Knowing that the "mind" means thoughts - feelings - the will, was "character" that means "power". So "budipekerti" the nature of the human soul, from wishful thinking to incarnate as a power. With "budipekerti" that every human being stands as a free man (impersonal), which may govern or control of oneself. This is a civilized human being and that is the intent and purpose of education. Ki Hajar Dewantara further said that Education is a business culture that is intended to give guidance in the soul growth of children's lives in order in the nature of personal and environment influence, they make progress toward a physically and mentally civilized humanity (Ki Suratman, 1987: 12) which is a civilized human being is the highest level that can be achieved by developing human during his lifetime. This means that in order to achieve one's personality or character of a person , then the civilized humanity is the highest level. The meaning of life in the nation's culture includes creativity, taste, and wills. When used in psychological terms , there is compliance with the aspect or the cognitive domain, the domain of emotions, and psychomotor domains or conative. It can be concluded that the Ki Hajar Dewantara want; a) placing the students as an educational center, b) see education as a process thus is dynamic, and c) give priority to the balance between creativity, taste, and intention in the student. Thus education is meant by Ki Hajar Dewantara that a balance of creativity, taste, and the intention is not just a process over the course of science or the transfer of knowledge, but at the same time the value of education also as a process transformation (transformation of value). In

other words, education is the process of formation of the human character to be truly human truth. Ki Hajar Dewantara outlook on education, shows us that have a strong commitment to shape the character of the nation through education.

Personal Social Guidance and Counseling

According to Winkel and Sri Hastuti (2004: 118), personal social guidance counseling services means counseling services provided to assist students in dealing with the state of his own mind and overcome many struggles in his own mind . Furthermore, it is explained that the personal social counseling as well as assistance in organizing themselves in various fields of life and human relationships with others in a variety of environments (social interaction).

Not much different opinion delivered by Syamsu Yusuf and A. Juntika Nurihsan (2006: 11) who says that the personal social guidance is guidance to assist individuals in solving personal social problems. Further explained that belonging to social problems is relationship problems with their peers, with faculty, and staff, understanding the nature and capability of self, adjustment to the educational environment and the communities in which they live and adjustment conflicts.

There also is explained that the personal social counseling is a program to help students understand and respect themselves and others, acquire effective interpersonal skills, understand safety and survival skills and to be able to contribute in the community (Public Schools of North Carolina, 2001: 10). From the opinions of personal social guidance counseling above, it is understood that the personal social counseling services are counseling services program that helps students develop awareness and acceptance of self and others, to help improve personal competence in survival and responsible for their decisions, and to develop and maintaining good relationships with others.

Purposes of Personal Social Guidance & Counseling Services

Based on the notion of personal social guidance counseling, it is generally known that the purpose of the personal social guidance counseling services is to help students develop awareness and acceptance of self and others, improve personal skills in survival, responsible for their decisions, develop and retain good relationships with others . In detail the Department of National Education (2008:198) , describes the purpose of guidance and counseling related to social aspects of personal social guidance are :

- a. Has a strong commitment to practice the values of faith and devotion to God Almighty, either in personal life, family, relationships with peers, school/Madrasah, workplace, and society in general.
- b. Having an attitude of tolerance toward other religions, with mutual respect and preserve the rights and obligations of each respective.
- c. Having an understanding of the rhythm of life fluctuated between fun (grace) and unpleasant (disaster), and be able to positively response accordance with the teachings of the religious affiliation.
- d. Having an understanding and self acceptance objectively and constructively, both related to the excellence and weaknes ; both physically and psychologically.
- e. Having a positive attitude or respect for themselves and others.
- f. Having the ability to make a healthy choice.
- g. Attitude of respect for others, respect or respect for others, do not harass the dignity or self-esteem.
- h. Having a sense of responsibility, which is manifested in the form of commitment to the duties and obligation, ability to interact socially (human relationship), which is manifested in the form of friendship, kinship, or friendship with a fellow human being.

- i. Having the ability to resolve the conflict (problem) both internal (within oneself) as well as with others.
- j. Having the ability to make decisions effectively.

The purpose of guidance and counseling in the areas of personal social high school is more clearly stated Cobia & Henderson (2007: 131) which has been detailing based on school level. Cobia & Henderson stated that the purpose of the personal social counseling provided to students in high school is to assist students in developing self development in the form of:

- a. increased ability to respond to pressure ;
- b. increased capacity in reception capability that is different from others and improve the poor self-acceptance and interfere in relationships with others ;
- c. increased ability to develop strategies in the face of unfavorable outlook and less clear ;
- d. increased ability to choose alternaif and able to assess the consequences of the actions to be performed ;
- e. increased ability to steer and control emotion
- f. increased understanding of all the things that happened in making the choice .

Personal Social Competence

Referring to the Connecticut Comprehensive School Counseling Programs developed by The Connecticut School Counselor Association (CSCA) suggested that personal social domain is a set of activities that assist students in developing interpersonal skills both personally and collectively. Personal social domains has three aspects, namely: (1) respect themselves and others (2) skill attainment goals (3) Skills safety and survived (survival). It shows that there is skill in competencies that are expected to meet the mastery of a competency. Besides Daniel Goleman (Bantam, 1998) divides the intrapersonal and interpersonal competencies in research studies as follows; personal competencies include self-awareness, self-control and self-motivation, social competence whereas a social consciousness which includes empathy, altruism, ability to understand the needs of others and try to develop the ability to understand the difference, persuasive, communication skills, leadership, conflict management, building relationships, collaboration and cooperation, ability to generate synergy group.

Malikail & Stewart (2003) argued about the definition of personal social skills as follows : Personal and Social Skills is that complex of knowledge, values, attitudes and abilities contribute to the development of a sound moral character, a sense of community, and competence in responding to the personal, social and cultural aspects of life.

Personal social skills include extensive knowledge and insight, values , attitudes and abilities that contribute to the development of moral character, and be aware of the environment and the ability to respond to the personal, social and cultural aspects in real life.

Based on various references mentioned above, personal social competence with respect to this research, students who have personal social competence characterized as competence with respect to the acquisition and collective self-awareness, self-esteem, has a value consciousness so that they can live independently and useful for others and the environment, interpersonal relationship skills, communication, respect differences and work together, and conflict resolution skills. Goleman (2005, p42) divides emotional intelligence into five basic skills or personal and social abilities , namely : Personal Skills . These skills determine how we manage ourselves. These skills include :

- a. Self awareness, knowing what is perceived by oneself at a time, and using it to guide decision-making yourself, have a realistic measure of the ability of self-confidence and strong Self-awareness includes awareness of emotions, self-assessment, and self-confidence.
- b. Handle personal emotions so that a positive impact to the performance of duties, sensitive to the heart and could delay the enjoyment before reaching a target , able to recover from emotional stress. Self-regulation is composed of self-control, trustworthiness, vigilance, adaptabilias, and innovation.
- c. Motivation that is using a personal desire for the ultimate in self-moving and guided toward the target, helping themselves to take the initiative and act very effectively, and to withstand failure and frustration. Include the encouragement of achievement motivation, commitment, initiative, and optimism.

Syamsu Yusuf (2004:97) argues that it is essentially guidance and counseling is the process of signification in social meaningfulness, or personal development process is characterized by individual spiritual and social piety. Based on the meaning of the above, the guidance and counseling services intended to assist individuals in order; (1) Has the nature of consciousness itself as a creature or a servant of God (2) Have a sense of life in the world function as vicegerent of Allah (3) Understand and accept the state itself in healthy (4) Having healthy habits in how to eat, sleep and use the spare time (5) climate creates a functional family life (6) the teachings of the religion (worship) as well as possible , both hablumminallah and hablumminannas. (7) Have the attitude and work study habits or positive (8) understand the problem and deal with it appropriately, stoic or patient (9) Understanding the factors that contribute to the problem or stress (10) able to change the perception or interest (11) does not regretted the incident (disaster) that has occurred , because as bad as any disaster that there must be a silver lining (12) does not dramatize the situation, not emotional in interpreting the events that happened, trying to muffle a self introspection .

The explanation above covers two things: the intrapersonal and interpersonal relationships are two variables that can not be separated in individual behavior, even has a position that is very important for the success of the individual life. Today these two variables is represented by a concept that is very popular, namely Emotional Intelligence (Goleman , 1996) which states that emotional intelligence is the single most important factor for personal adjustment, success in relationships, and in job performance. Thus emotional intelligent, not only about issues related to intrapersonal aspects (personal social) aspects but also the interpersonal (social). Both are functionally overlapping in the form of individual behavior everyday. Though conceptually and actually construct the two are not entirely the same.

The duties of the personal social development to be achieved through the help of guidance and counseling : (1) self-awareness (2) develop a positive attitude (3) make a healthy choice (4) respect for others (5) have a sense of responsibility responsible (6) develop competence interpersonal relationships (7) resolving conflict (8) can make good decisions (Kemendiknas,1994) .

There are four key words contained in the above explanation , namely : (1) self-awareness, (2) awareness of the value; keep God's commandments and prohibitions of Allah left everything to do with good moral, (3) skills to communicate effectively, and (4) conflict resolution skills .

Method

There were 1400 students from 7 high schools, four state high schools (SMA 1, 3, 6, dan 7 Negeri Yogyakarta) and three private schools (SMA Islam Terpadu Abu Bakar, SMA BOPKRI 2, dan SMA Muhammadiyah 1), in a provincial city in Indonesia participated in this study. The students were in the second year of high school, accepting character education program and guidance and counseling services in their school. The sample chosen at purposive sampling. The schools were selected to be representative schools that implemented character education program from government, Ministry of Education and Culture Department.

In the course of this research, the researcher has constructed and adapted three instruments for measuring effect of character education program, internal and external factors that cause formation behavior and measuring students's personal social competence and another instrument that adapted for measuring personal social guidance and counseling services taking into consideration the validity of the instrument. Respondents were required to indicate on a four point Likert Scale, their agreement with the statements given. The scale was 1= strongly agree, 2= agree, 3= disagree, 4= strongly disagree.

The score obtained was used to analyze correlation of the four variables in this study using Structural Equation Modelling (SEM). SEM is a statistical methods that allow complex relationships between one or more variables in this study

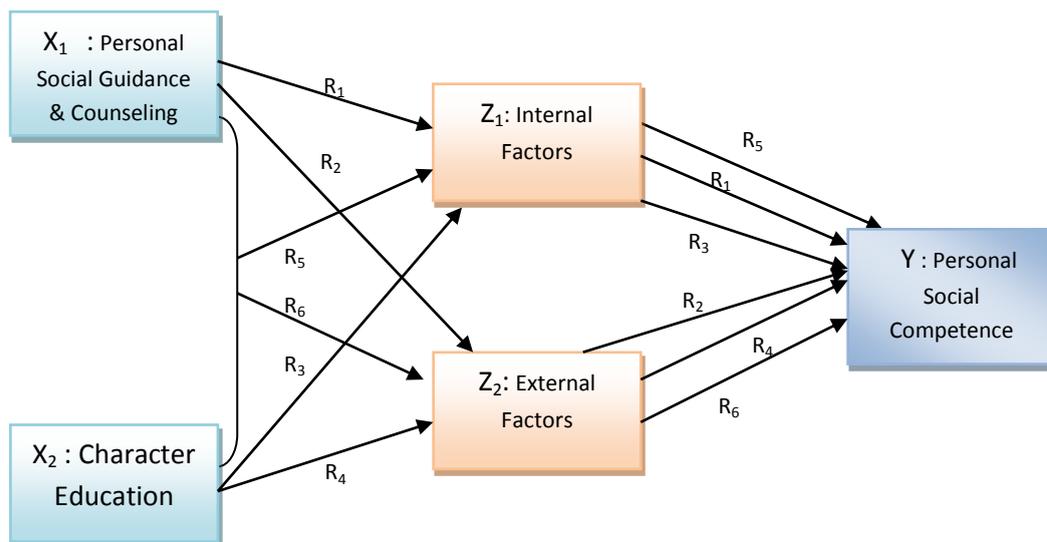


Figure 2. Variables and Their Relationships of The Study

For the purposes of SEM, specifically, mediation refers to a situation that includes three or more variables, such that there is a causal process between all variables. Note that this is distinct from moderation. There are three separate things in the model that cause a change in personal social competence: personal social guidance and counseling, character education, and the combined effect of internal and external factors. Mediation describes a much different relationship that is generally more complex. In a mediation relationship, there is a direct effects between an independent variable and a dependent variable. There are also indirect effects between an independent variable and a mediator variable, and between a mediator variable and a dependent variable.

Conclusions

Some research findings indicate that juvenile delinquency that occurs is very alarming. Students's personal social competences could be improved due to effective personal social guidance and counseling and character education program in schools, so as to reduce the number of juvenile delinquency. There is a mutual learning partnership in which teachers assist students with personal and social development through role modeling, counseling, sharing knowledge, coaching, and providing emotional support in guidance and counseling services and character education program. Counseling is a relationship, not just a procedure or activity, where one person professionally as a school counselor assists the development of students's personal social competences. Besides The approach of character education program focusing on the program being an experienced that indicates as making enabled personal growth to take place.

References

- American School Counselor Association (2005). *The ASCA National Model: A Framework For School Counseling Programs (2nd ed.)*. Alexandria, VA: Author
- Bantam. (2003) *Personal & Social Workforce Competencies*. Santa Fe Community College
- Blum, Lawrence (2003). "Review of Doris's *Lack of Character*" *Notre Dame Philosophical Reviews*.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed methods approaches (2th ed.)*. Thousand Oaks, California: SAGE Publications, Inc.
- Darcia Narvaez, Daniel K Lapsley. **Jurnal. Teaching Moral Character: Two Alternatives for Teacher Education.** [The Teacher Educator](#). Muncie: [Apr-Jun 2008](#). Vol. 43, Iss. 2; pg. 156, 17 pgs
- Depdikbud. (1994) *Program Kegiatan Belajar: Pedoman Bimbingan*. Jakarta: Depdikbud
- Duta Nurdibyanandaru (2007) *Upaya Mengembangkan Nilai Norma dan Sikap Remaja Serta Implikasinya dalam Penyelenggaraan Pendidikan*. Open Source Matters
- Drawati (2005) *Pencurian Sominasi Kriminal Anak*. <http://www.indonesia.com/bspot.kalsel> diunduh tanggal 2 Januari 2011
- Evi Kristiyanti, 2008. Studi Kenakalan Remaja di Jawa Tengah. Skripsi
- Garson, G. 2008. *Structural Equation Modeling*, diakses dari <http://faculty.chass.ncsu.edu/garson/PA765/structur.htm> pada October 15, 2012 .
- Goleman, Daniel. 2000. *Kecerdasan Emosi Untuk Mencapai Puncak Prestasi*, Jakarta : PT Gramedia
- Hansen Dt. 1995. *Teaching and The Moral Life of Clasrooms*. **Jurnal**. Journal for a Just and Caring education. Vol 2. Pg 59-74
- Huitt, W. (2004). Moral and character development. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved [date], from <http://www.edpsycinteractive.org/morchr/morchr.html>
- Hurlock B. Elizabeth. 2003. *Developmental Psychology*, Jakarat: Erlangga
- Kemdiknas.(2010). *Pengembangan Pendidikan Budaya dan Karakter Bangsa, BahanPelatihan Penguatan Metodologi Pembelajaran Berdasarkan Nilai-NilaiBudaya Untuk Membentuk Daya Saing dan Karakter Bangsa*. Jakarta :Pusat Kurikulum, Kemdiknas
- Ki Hadjar Dewantara. (1977). *Bagian Pertama: Pendidikan*. Yogyakarta: Majelis Luhur Persatuan Taman Siswa.
- Ki Suratman. (1987). *Pokok-pokok Ketamansiswaan*. Yogyakarta: Majelis Luhur Persatuan Taman Siswa

- Kohlberg. 1980. *Moral Development and Behavior*. wocester, Mass: Clark University Press. Dicitak kembali dalam Perkembangan Moral dan Moralisasi. Jakarta: Rineka Cipta. 1997
- KOMPAS. 2013. Penertiban Pelajar di Yogyakarta. Dalam Harian Umum Kompas, 28 februari 2013
- Masngudin HMS. 2004. *Kenakalan Remaja Sebagai Perilaku Menyimpang Hubungannya dengan Keberfungsian Sosial Keluarga*. Tersedia: <http://www.depsos.go.id/balatbang/puslitbang>.
- Myrick, Robert D. .1993. *Developmental Guidance and Counseling: A Practical Approach – Second edition*, Minneapolis: Educational Media Corporation
- Malikail & Stewart. 2003. *Social Personal and Values Skills*. Tersedia: www.Sasked.gov.sk.ca/docs/policy/cels/el6.html. diunduh pada tanggal 3 Maret 2011
- Michael E. Cavanagh. 1982. *The Counseling Experience*. Brooks/Cole Publishing Company, California USA
- Pemerintah Republik Indonesia, (2003), *Undang-Undang Republik Indonesia No.20 Tahun 2003 tentang Sistem Pendidikan Nasional*, Jakarta.
- Pervin, Lawrence (1994). "A Critical Analysis of Current Trait Theory", **Jurnal.Psychological Inquiry** 5, pp. 103-113.
- Board of Public School of Carolina. (2001). *Character Education Informational Handbook & Guide II*. Carolina State: Public School of Charolina.
- Rakhmat, Cece dan Solehuddin, M. 1998. *Pengukuran dan Penilaian Hasil Belajar*. Bandung: Publikasi Jurusan Psikologi Pendidikan dan Bimbingan FIP IKIP
- Ritchhart, R .(2002) *.Intellectual Character: What It Is,Why It Matters, and How to Get It*. John Wiley & Sons, Inc.: San Fransisco. New York: Bantam Books
- Singgih Gunarsa. 2003. *Psikologi Remaja*.BPK Gunung Mulya: Jakarta
- Sugiyono. (2008) *Metode penelitian kuantitatif, kualitatif dan R and D*. Bandung: Alfabeta.
- SUARA MERDEKA. 2011. Dalam Harian Umum Suara Merdeka. Kasus Narkoba di DIY, 6 Januari 2011
- Sudjana, Nana & Ibrahim. 1989. *Penelitian dan Penilaian Pendidikan*. Bandung: Sinar Baru
- Stacey & William G Huitt. 2004. *Connecting Cognitive Development and Constructivism: Implications from Theory for Instruction and Assessment*. **Jurnal**. Constructivism in The Human Sciences. Vol 9 No 1 pg: 67-90
- Sri Wahyuningsih. 2004. *Kasus Penyimpangan Perilaku Remaja*. Tersedia: <http://www.depsos.go.id?Puslitbang>. Diunduh pada tanggal 2 Februari 2011
- Syamsul Arifin. 2010. *Pesantren Sebagai Saluran Mobilitas*. **Jurnal**. Jurnal salam Vol 13 No.5 (2010)
- Thomas Lickona.1991. *Educating for Character: How Our Schools Can Teach Respect and Responsibility*. New York: Bantam
- Thomas Lickona.1993. "The Return of Character Education" dalam Jurnal Educational Leadership, Vol 51 N 3 p. 6-11
- TEMPO. 2007. *Data Kasus HIV AIDS di Kalangan Remaja*. Dalam Koran Tempo, 27 Juni 2002
- Wijanto, Setyo Hari. (2008). *Structural Equation Modelling Dengan LISREL 8.8: Konsep dan Tutorial*. Yogyakarta: Graha Ilmu
- Winkel, W.S. 1991. *Bimbingan dan Konseling di Institusi Pendidikan*. Jakarta: Grasindo
- William Damon & Anne Gregory. *The Youth Character: Towards the Formation of Adolescent Moral Identity*. **Jurnal**. Journal of Moral Education. Abingdon: June 1997. Vol 26, Iss 2, pg 117, 14 pgs
- Wahab, Rochmat. 2003, *Bimbingan social Pribadi-sosial Berbasis model Perkembangan, Disertasi*, Bandung: FPS UPI Bandung

- _____. 2005. *Implementasi Metodologi Penelitian dan Pengembangan*. Makalah, Yogyakarta: FIP UNY
- Yusuf, Syamsu. 2004. *Mental Hygiene: Pengembangan Kesehatan Mental dalam Kajian Psikologi dan Agama*. Bandung: Pustaka Bani Quraisy
- _____. 2005. *Psikologi Perkembangan Anak dan Remaja*. Remaja Rosdakarya: Bandung
- Yusuf, Syamsu LN dan A Juntika Nurihsan. 2005. *Landasan Bimbingan dan Konseling*. Remaja Rosdakarya: Bandung

ISEPSS-2113

Freedom and Equity of Access to Information: the Policy Change of IFLA, 2003-2013

Neng-shan Lin

National Central Library

cwei0029@ncl.edu.tw

Introduction

From 2006 to 2013, IFLA's (International Federation Library Association) policy progressed gradually towards the principles of freedom and equity of access to information, the so-called core values written in IFLA's Strategic Plan. This article intends to explain how the IFLA policy-makers have developed the two principles as IFLA's core values since 2006.

In the field of information and library science, research on policy change has been neglected. Most importantly, this article will introduce a useful research approach into the information and library science, which is the perception approach and has its unique advantage in analysis of policy change in the field of political science. The perception approach sees the "real world" (operational environment), including both internal and external factors, as the independent variable and treats the decision-makers' perceptions of the operational environment as the intervening variable. In other words, the importance of internal and external factors is determined through how the policy-makers perceive them.

Without the intervening variable, the association between explanatory and response variables disappears. To explain a certain policy change (dependent variable), researchers who adopt the perception approach, thus, not only need to focus on explaining the independent variables, but also need to discover the association between the explanatory and intervening variables. The logic between both the "real world" and policy-makers' perception of the "real world" forms the fundamental framework in this article for explaining IFLA's policy change.

This article argues that the two core values, written in the IFLA's Strategic Plan since 2006, are likely influenced by ALA's President Carla Hayden (2003-2004) and the World Summit on the Information Society held by International Telecommunication Union in December 2003 and in November 2005. IFLA's President Alex Byrne (2005-2007) is the key policy-maker who led the IFLA to the policy change in 2006. Although the two important values were not written in the IFLA's policy direction in 2004, they were advocated by IFLA's President Kay Raseroka (2003-2005) and President-elect Alex Byrne (2005-2007) in 2004. In 2006, the two core values, for the first time, were put in the IFLA's Strategic Plan. Since then, they have been repeatedly stressed in the IFLA's Strategic Plan as the core values playing the key role directing the IFLA's policy.

The perception approach:

Both Holsti and Castano emphasize the importance to the study of particular policy-maker's perceptions in terms of foreign policy behaviour. They argue as follows:

"Foreign-policy-making may be viewed as a search for satisfactory alternatives from among the range of those perceived by leaders who choose for their respective nation-states. The Key concept in this approach is the perception, the process by which decision-makers detect

and assign meaning to inputs from their environment and formulate their own purposes on intents.”¹

(Ole R. Holsti et al., 1968)

“In an international relations context, the mutual images held by actors affect their mutual expectations about the Other’s behaviour and guide the interpretation of the Other’s actions.”²

2

(Emanuele Castano et al., 2003)

Regarding the explanation of foreign policy, understanding of political elite’s images of the situation, for them, is more important than discovering the “reality” itself. Holsti stressed “in any case, the essential point is that the actor’s response will be shaped by *his perception* of the stimulus and not necessarily by qualities objectively inherent in it.”³

In order to explain this approach, it helps first to define certain concepts. “Operational environment” includes all factors except policy-makers themselves. Sprout and Sprout used “milieu,” “physical environment,” “non-human environment,” etc. as an alternative to the term “operational environment,”⁴ but Boulding preferred the term “situation.”⁵ Based on the territorial boundaries of states, the operational environment is divided into two sub-environments, the external and internal environments.⁶ There are some other substitute terms for the external environment such as international factors/environment and external factors, whereas the alternative term to the internal environment is domestic factors/environment.

Regarding the psychological environment, it refers to the policy-maker’s perception of the operational environment. The central question is: How do the related policy-making elite perceive the operational environment? That is to say, in what way does the policy-maker imagine the situation will determine the output of foreign policy behaviour? This is considered to be the master key to unlock explanation of foreign policy changes for the above scholars.

The study of perception, in fact, started in the Second World War. In the very beginning, “many students of world politics turned their attention to the ways in which different elites approached problems of international conflict and cooperation.”⁷ In 1953, Nathan Leites published a book, focused on the impact of Soviet leaders’ spirit and mentality on Russian foreign policy.⁸ In 1957, Harold and Margaret Sprout’s joint paper, entitled “Environmental Factors in the Study of International Politics,” pioneered the application of decision-making

¹ Ole R. Holsti, Robert C. North, and Richard A. Brody, “Perception and Action in the 1914 Crisis,” in J. David Singer edit. *Quantitative International Politics: Insights and Evidence*, New York: The Free Press, 1968, p128.

² Emanuele Castano, Simona Sacchi, and Peter Hays Gries, “The Perception of the Other in International Relations: Evidence for the Polarizing Effect of Entitativity.” *Political Psychology*, Vol. 24, No. 3, 2003, p449.

³ Ole R. Holsti et. al., 1968, p129.

⁴ Harold Sprout and Margaret Sprout, “Environmental Factors in the Study of International Politics,” *The Journal of Conflict Resolution*, Vol. 1, No. 4, December 1957, p311.

⁵ K. E. Boulding, “National Images and International Systems,” *The Journal of Conflict Resolution*, Vol. 3, No. 2, June 1959, pp120-21.

⁶ Michael Brecher, Blema Steinberg, and Janice Stein, “A Framework for Research on Foreign Policy Behavior,” *The Journal of Conflict Resolution*, Vol. 13, No. 1. March 1969, p82.

⁷ Alexander L. George, “The “Operational Code”: A Neglected Approach to the Study of Political Leaders and Decision-Making,” *International Studies Quarterly*, Vol. 13, No. 2, June 1969, p192.

⁸ Nathan Leites, *A Study of Bolshevism*, Illinois: The Free Press, 1953.

theory to foreign policy in terms of identifying the distinction between decision makers' psychological factors and operational environments.⁹

As the title suggests, the environmental factor (including both international and domestic dimensions) is argued to be significant in the explanation of foreign policy behaviours. However, it is important not because of what the environmental factor actually is, but rather what the decision maker perceives it to be. In the words of Harold and Margaret Sprout, they concluded:¹⁰ "With respect to policy making and the content of policy decisions, our position is that what matters is how the policy maker imagines the milieu to be, not how it actually is."

Two years later, Kenneth Boulding echoed the Sprouts' study arguing that 'we must recognize that the people whose decisions determine the policies and actions of nations do not respond to the "objective" facts of the situation, whatever that may mean, but to their image of the situation. It is what we think the world is like, not what it is really like that determines our behaviour.'¹¹ Based on the same assumption, Snyder believed the "subjective factors" of policy makers play an important role in the process of decision output, and stressed that "nation-state action is determined by the way in which the situation is defined subjectively by those charged with responsibility for making choices."¹²

The above argument stresses that the relation among the operational environment, decision makers' perception, and foreign policy forms a significant causality for investigators to explain the outcome of policy changes. Hyam Gold pointed out the operational environment is the explanatory variable, policy makers perception is the intervening variable, and national decision is the dependent variable.¹³ The chain of causation in the argument can be depicted as below:

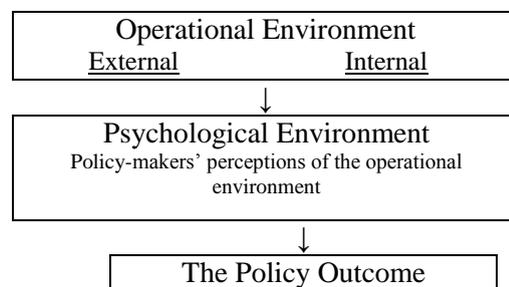


Figure 1. Perception and Policy Change

Given the fundamental framework for explaining policy changes, the question, then, arises: what are the possible independent variables in the external and internal dimensions of the operational environment? The variables most commonly concerned by theorists in the literature on the study of the perception and policy change are national status (political, military and economic capabilities),

⁹ Naomi Bailin Wish, "Foreign Policy Makers and Their National Role Conceptions," *International Studies Quarterly*, Vol. 24, No. 4, December 1980, p532.

¹⁰ Harold Sprout and Margaret Sprout, 1957, pp327-28.

¹¹ K. E. Boulding, 1959, pp120-21.

¹² Richard C. Snyder and Glenn D. Paige, "The United States Decision to Resist Aggression in Korea," in Richard C. Snyder, H. W. Bruck, and Burton Sapin edits, *Foreign Policy Decision Making: An Approach to the Study of International Politics*, New York: The Free Press of Glencoe, 1963, p212.

¹³ Hyam Gold, "Foreign Policy Decision-Making and the Environment: The Claims of Snyder, Brecher, and the Sprouts," *International Studies Quarterly*, Vol. 22, No. 4, December 1978, p571-2.

interest groups, and competing elites in terms of the internal environment, and in particular the external relations with the adversarial or ally countries in terms of the external dimension.¹⁴ Naomi Wish pointed out the national status is related to power and influence in the international politics, which is determined by economic and military power.¹⁵

The front refers to all the resources available to a national external behaviour, and the latter is about the ability to launch war or prevent other states from attacking.¹⁶ How the policy-makers perceive their national status affects the outcome of foreign policy.

In a democracy, the competing elites' challenge to the authority comes from different factions within the ruling party and in particular from the opposition party, which vie for power. However, in a single-party authoritarian country, either the competing factions within the party or the various interest groups generate the pressure on foreign policy. Regarding the interest groups, it can be classified as four identical types which are institutional, associational, nonassociational, and anomic. The definition of these four terms, in turn, are: 1. Military establishments, bureaucratic organizations, and religious institutions. 2. Trade union, business organizations, peasant associations, ethnic and civic groups, etc. 3. Kinship and lineage groups, regional, status, and class groups, etc. 4. The more or less spontaneous penetrations by unorganised parts of society into the party system in the form of riots, demonstrations, assassinations, etc.¹⁷

These theorists intended to establish a set of independent variables for research on policy-makers' perceptions. Although there are many sub-variables introduced, the variables which apply to case study vary. Some scholars turned their focus on policy-makers' perception of "adversarial" countries, and assume that how the decision-makers perceive their enemies determines the foreign policy behaviour.¹⁸ The variable in the external environment is defined by Dian Zinnes as the enemy's hostility attitudes toward the perceiver country.¹⁹ Holsti, North, and Brody focus on the adversarial country's "policy" towards the perceiver country.²⁰

Research on the principles of freedom and equity of access to information

IFLA's contribution to the multiculturalism in the libraries of the world, and in turn, it would promote the principle of equity in a society.²¹ Paul Sturges, in the paper entitled as "Understanding cultures, and IFLA's freedom of access to information and freedom of expression (FAIFE) core activity," intends to look into the policy impact on the multi-cultural

¹⁴ Naomi Bailin Wish, 1980, pp536-43, K. J. Holsti, "National Role Conceptions in the Study of Foreign Policy," *International Studies Quarterly*, Vol. 14, No.3, September 1970, pp245-56, and Michael Brecher et al., 1969, pp81-5.

¹⁵ Naomi Wish, 1980, p536.

¹⁶ Michael Brecher et al., 1969, pp83-4, and K. J. Holsti, 1970, p245.

¹⁷ Michael Brecher et al., 1969, pp84-5.

¹⁸ Nathan Leites, 1953, Dina A. Zinnes, "The Expression and Perception of Hostility in Prewar Crisis: 1914," in J. David Singer ed. *Quantitative International Politics: Insights and Evidence*, New York: Free Press, 1968. Alexander L. George, 1969, and Ole R. Holsti, "Foreign Policy Behaviour Viewed Cognitively," in Robert Axelrod edit, *Structure of Decision*, Princeton: Princeton University, 1976.

¹⁹ Dina A. Zinnes, 1968.

²⁰ Ole R. Holsti et al., 1968.

²¹ Paul Sturges, "Understanding cultures, and IFLA's freedom of access to information and freedom of expression (FAIFE) core activity," *Journal of Documentation*, 61(2): 296-305, 2005, page 299.

in the world society launched by the IFLA. In particular, Sturges analyzes the core activity advocated by the committee on FAIFE in the IFLA.

Sturges finds the FAIFE created “conditions for information access unhindered by prejudices, misconceptions and inadequate competences.” Sturges continues “FAIFE's role in facilitating removal of restrictions, combating suppression of information, fostering rights of access and supporting the development of information competences in all communities and in the information professionals who serve them, is potentially a major contributor to the enhancement of fair and harmonious relations in multicultural communities.”²²

Sturges's research does not put an emphasis on the core value of equity of access to information, which is part of this article's research. Most importantly, the focus of this article, investigation on the development of IFLA's core values (freedom and equity of access to information), is completely different from Sturges's research question.

Stuart Hamilton and Niels Ole Pors also investigate the core value of freedom of access to information in the paper, “Freedom of access to information and freedom of expression: The Internet as a tool for global social inclusion.” Hamilton and Niels are interested in “how the relationship between freedom of access to information and freedom of expression is expressed across the international library community.” In the end, they conclude the libraries included in the research are able to promote freedom of access to information and freedom of expression via the Internet although there are many difficulties facing them. As a result, the public libraries can play a vital role in the democratic process.²³

There is no doubt the research conducted by Hamilton and Niels contribute new thinking to the field of library and information science. However, it does not look into what this paper intends to investigate.

Principles of freedom and equality of access to information adopted by the IFLA

In 2000, the new IFLA Statutes was adopted by the policy-makers within the IFLA and implemented in 2001. These two core values, freedom and equity of access to information, were put into the new Statutes.²⁴ However, they were not written into the IFLA's Strategic Plan until 2006, which are:²⁵

²² Paul Sturges, “Understanding cultures, and IFLA's freedom of access to information and freedom of expression (FAIFE) core activity,” *Journal of Documentation*, 61(2): 296-305, 2005, page 296.

²³ Stuart Hamilton and Niels Ole Pors , “Freedom of access to information and freedom of expression: The Internet as a tool for global social inclusion,” *Library Management*, 24.8/9:407-416, 2003, page 407-408, 414-415.

²⁴ The endorsement of the principles of freedom of access to information, ideas and works of imagination and freedom of expression embodied in Article 19 of the Universal Declaration of Human Rights; * the belief that people, communities and organisations need universal and equitable access to information, ideas and works of imagination for their social, educational, cultural, democratic and economic well-being; * the conviction that delivery of high quality library and information services helps guarantee that access; and * the commitment to enable all members of the Federation to engage in, and benefit from, its activities without regard to citizenship, disability, ethnic origin, gender, geographical location, language, political philosophy, race or religion. IFLA (Peter Johan Lor). 2007. Looking to the future, Available: http://repository.up.ac.za/bitstream/handle/2263/2623/Lor_IFLA%282006%29.pdf?sequence=1, accessed 2014-04-06.

²⁵ IFLA. 2005. Strategic Plan 2006-2009. Available: <http://www.ifla.org/strategic-plan/2006-2009>, accessed 2013-06-08.

1. *The endorsement of the principles of freedom of access to information, ideas and works of imagination and freedom of expression embodied in Article 19 of the Universal Declaration of Human Rights.*
2. *The belief that people, communities and organizations need universal and equitable access to information, ideas and works of imagination for their social, educational, cultural, democratic and economic well-being. (IFLA, 2006)*

As the leading international member organization in the field of Information and Library Science, the IFLA sets out a strategic scheme to ensure its policy and action servicing for the library and information community in the world. We can see the importance of the Strategic Plan for the IFLA from the quotation below, addressed by Ellen Tise, President of the IFLA.

“The role and position of libraries is rapidly changing to match the growing influence of the Internet, the digitization of knowledge, and the expanding impact of online social networking tools. To continue its role ..., the IFLA Strategic Plan sets out IFLA’s strategic directions and goals for 2010-2015. It is a Strategic Plan to guide the governance and the entire activities of the IFLA organization.”²⁶ (IFLA,, 2009)

President Tise’s policy statement reveals the significance of the Strategic Plan not only for the IFLA but also for researchers to understand IFLA’s policy direction. Although the outline of every IFLA Strategic Plan may vary, it does not change its strategic directions and goals in guiding IFLA’s actions and policies.²⁷ Taking IFLA Strategic Plan for 2010-2015 (Version I) as an example, we could see it starts from introduction to vision, mission, core values, each strategic direction with its goals and priority activities (2010-2011), and scope of the IFLA Strategic Plan. That is the Strategic Plan when Ellen Tise was elected as President of the IFLA.²⁸

After Ingrid Parent came to power in 2011, the strategic direction of the Strategic Plan remains unchanged. However, the core values part was moved into the very beginning of the strategic plan and President Parent resets the priority activities (2012-2013) for each strategic direction in the Strategic Plan (Version II).²⁹

These two core values are, for the first time, were written in the Strategic Plan by the IFLA decision makers. This direction, more focusing on equitable and free access to information, was very likely influenced by the World Summit on the Information Society (WSIS) in 2003 held by the International Telecommunication Union and ALA’s President Carla Hadyen (2003-2004). As a result, how the decision makers within the IFLA perceive the WSIS and President Hayden’s proposal submitted for the IFLA council II in Berlin in 2003 needs to be uncovered.

International Telecommunication Union Plenipotentiary Conference in Minneapolis:

²⁶ IFLA. 2009. Strategic Plan 2010-2015 (Version 1). Available: <http://www.ifla.org/strategic-plan/archive>, accessed 2013-06-10.

²⁷ The IFLA official website says “recently the Governing Board reviewed the Strategic Plan 2010-2015. The four strategic directions and the goals were endorsed without change for 2012-2013.” IFLA. 2012. IFLA Strategic Plan 2010-2015. Available: <http://www.ifla.org/strategic-plan>, accessed 2013-06-19.

²⁸ According to the IFLA Statutes 13.2, the IFLA President “shall serve a single term of two years.” *IFLA Statutes*, p10. Ellen Tise became the IFLA President in 2009 and stepped down in 2011.

²⁹ IFLA. 2009. Ingrid Parent, IFLA Strategic Plan 2010-2015 (Version II). Available:

In 1998, the International Telecommunication Union (ITU) assembled and hosted a plenipotentiary conference in the city Minneapolis located in the U.S. state of Minnesota. In the meantime, the representative from Tunisia proposed a new plan which made an awareness of the unequal access to information and knowledge between developed countries and developing ones. The proposal was approved by the ITU via a resolution numbered 73 (Resolution 73), which promises to hold a World Summit on the Information Society and, then, placed on the agenda of the United Nations.³⁰

The ITU council, in 2001, decided to deal with the issue concerned by Resolution 73 in two phases. A World Summit on the Information Society will be held respectively in December 2003, in Geneva, and in November 2005, in Tunis.

The General Assembly of the United Nations took concrete action backing up the decision made by the ITU in terms of pursuing an equal access to information and issued Resolution 56/183. The General Assembly,

“Taking note of the action plan presented by the Secretary-General of the International Telecommunication Union ...for the holding of the World Summit on the Information Society and the creation, by the Administrative Committee on Coordination, of a high-level Summit organizing committee, chaired by the Secretary-General of the International Telecommunication Union ...,”

“Considering that the Summit is to be convened under the patronage of the Secretary-General of the United Nations, with the International Telecommunication Union taking the lead role in its preparation, in cooperation with interested United Nations bodies and other international organizations as well as the host countries,”³¹(General Assembly, UN, 2002)

We can also see the UN has a common ground, in its Resolution 53/183, with what the ITU advocates in the Resolution 73, and this provides a better understanding of the UN’s action supporting the ITU in this issue. The General Assembly,

“Recognizing also the pivotal role of the United Nations system in promoting development, in particular with respect to access to and transfer of technology, especially information and communication technologies and services, ...,”

“Convinced of the need, at the highest political level, to marshal the global consensus and commitment required to promote the urgently needed access of all countries to information, knowledge and communication technologies for development so as to reap the full benefits of the information and communication technologies revolution, and to address the whole range of relevant issues related to the information society, through the development of a common vision and understanding of the information society and the adoption of a declaration and plan of action for implementation by Governments, international institutions and all sectors of civil society,”³²(General Assembly, UN, 2002)

³⁰ WSIS. 2005. Why a World Summit on the Information Society. Available: <http://www.itu.int/wsis/basic/why.html>, accessed 2013-07-25.

³¹ UN. 2002. Resolution 56/183. Available: http://www.itu.int/wsis/docs/background/resolutions/56_183_unga_2002.pdf, accessed 2013.07-09.

³² Ibid.

Apparently, the decision made by the ITU, which was endorsed by the UN, clearly put a strong argument that the Information Society needs to make an awareness of the significance of both freedom of access to information and equitable access to information not only in the international organizations but also within every country. In 2003, the ITU started to hold the WSIS.

IFLA's policymakers' perception of the WSIS

With the UN's endorsement, the ITU eventually held the first phase of the WSIS in December 10 to 12, 2003, in Geneva. It is a platform which all the counterparties, including the IFLA and its members, exchange and discuss what and how to reach a consensus for the information society. There were more than one hundred countries participating this submit and many constructive consensuses were concluded. In particular, the IFLA held a pre-summit for the 2003 WSIS in November 2003. These help uncover how the IFLA developed its core values in its Strategic Plan since 2006.

In the end of the 2003 WSIS, there were two documents issued, which are Geneva Declaration of Principles (WSIS-03/GENEVA/DOC/0004) and Geneva Plan of Action (WSIS-03/GENEVA/DOC/0005).³³ The two values, freedom and equity of access to information, are not only emphasized by Geneva Declaration of Principles, but also taken actions by the WSIS participants via Geneva Plan of Action.

IFLA's policy-maker took the 2003 WSIS seriously. Prior to the first phase of the WSIS scheduled in December 2003, the IFLA attended second and third meeting of the Preparatory Committee of the WSIS and the Inter-Sessional meeting of the WSIS in Paris.³⁴ In addition, the decision makers of the IFLA, one month earlier, organized a pre-summit conference in November.³⁵ In the conference invitation letter, the IFLA says the libraries and librarians worldwide need to contribute for inclusion in the drafts of Geneva Declaration of Principles and Plan of Action. After the pre-summit conference, the IFLA with its members proposed their contribution to the WSIS, entitled as "Libraries @ the HEART of the information society."

There are many delegates from over seventy countries attending the pre-conference to the WSIS. In the meeting, the two values of freedom and equity of access to information were discussed in the librarians' round tables (chapter 5 in the proceedings of the conference). For example, the major issues of chapter 5 read "... The participants expressed their preoccupation with the large disparities that exist between developed and developing countries with regard to education, communications infrastructure and, consequently, to

³³ WSIS, 2003. Declaration of Principles Building the Information Society: a global challenge in the new Millennium. Available: http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1161|1160, accessed 2014-04-05.

³⁴ IFLA. 2003. Libraries @ the heart of the Information Society: IFLA Pre-World Summit Conference. Available: <http://archive.ifla.org/III/wsis/wsis-why.htm>, accessed 2014-02-08.

³⁵ When the IFLA was preparing a pre-summit for the WSIS in Geneva, the IFLA issued a press release in November 2003. It says that "the Geneva Summit is expected to approve two documents, a Declaration of Principles and an Action Plan. The early drafts of these documents make only passing and unsatisfactory references to libraries. So there is much still to do to persuade the decision makers of the relevance of libraries." IFLA. 2003. Available: <http://archive.ifla.org/III/wsis/wsis-why.htm>, accessed 2013-12-02.

affordable and equal access to information and to knowledge in general...”³⁶ In addition, the action and projects of chapter 5 once again show the concern for the equitable access to information, saying that “the majority of the participants supported the concept of creating new legislation to ensure fair and equal access to information and to knowledge in general, while clearly defining the role of libraries and information centres.”³⁷

The IFLA passed the Resolution II proposed by Carla Hayden, President, the American Library Association, Robert Moropa, and Barry Cropper, in the meeting held by the IFLA in Berlin in August 2003.³⁸ Then, it became the IFLA Council resolution on the WSIS and was discussed in the pre-conference. The resolution put strong emphasis on the principle of equity and “was carried out without dissent.”³⁹ Apparently, the IFLA’s policy-makers share the same value, equitable access to information, with President Hayden etc., which was accepted by the 2013 WSIS.

Two core values in the WSIS’s common version of the Information Society

The Declaration of Principles agreed by the 2003 WSIS participants establishes a perspective for the Information Society in which every reader is given the freedom of access to information and knowledge.

*“We, the representatives of the peoples of the world, assembled in Geneva from 10-12 December 2003 for the first phase of the World Summit on the Information Society, declare our common desire and commitment to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, ...”*⁴⁰ (Document WSIS-03/GENEVA/DOC/4-E, 12 December 2003)

The WSIS was endorsed by all the participants from different countries in the world. No doubt, the principle of the freedom of access to information, in particular those collected by libraries, becomes a significant value in the knowledge world at 21st century soon after the WSIS’s common version of the Information Society was reached in 2003. As the leading role in the Information Society, the IFLA policymakers must take action in response to the WSIS’s declaration in terms of freedom of access to information. It can be proved by the following policy statement.

The IFLA policy-makers share the values of freedom and equity of access to information adopted by the WSIS in a policy statement released in 2005. It reads “IFLA and libraries and information services share the common vision of an Information Society for all, as adopted by the World Summit on the Information Society in Geneva in November 2003.” In addition,

³⁶ IFLA. 2003. Libraries @ the HEART of the information society. Available: <http://archive.ifla.org/III/WSIS/proceedings2003.pdf>, page 35, accessed 2014-02-08.

³⁷ Ibid.

³⁸ IFLA, 2003. Libraries @ the HEART of the information society. Available: <http://archive.ifla.org/III/WSIS/proceedings2003.pdf>, page 23, accessed 2014.02.08. At that time, Robert Moropa was President of the Library and Information Association of South Africa and Barry Cropper was Chair of Executive Board of the Chartered Institute of Library and Information Professionals (UK).

³⁹ IFLA, 2003. Libraries @ the HEART of the information society. Available: <http://archive.ifla.org/III/WSIS/proceedings2003.pdf>, page 23, accessed 2014-02-08.

⁴⁰ WSIS. 2003. Declaration of Principles Building the Information Society: a global challenge in the new Millennium. Available : <https://www.itu.int/wsis/docs/geneva/official/dop.html>, accessed 2014-04-05.

the policy statement, furthermore, pointed out “To enable access to information by all peoples, the International Federation of Library Associations and Institutions is committed to the fundamental human rights to know, learn and communicate without restriction.”⁴¹

IFLA’s Three Pillars and the WSIS

Although policy statement does not include principles of “free access to information” and “equitable access to information,” the belief of “free access to information” was emphasized in the presentation held by IFLA President-elect Alex Byrne (2003-2005) for the IFLA’s governing board in December 2004. This principle was also endorsed by President Kay Raseroka (2003-2005) in the policy statement named “IFLA Three Pillars” in December 2004.⁴² It was put in the first pillar “Society” which two programs were written in the “IFLA’s special programs directed toward societal matters” session. The first program reads “Committee on Free Access to information and freedom of expression” (FAIFE).⁴³

President-elect Byrne’s presentation and President Raseroka’s endorsement, two important policy-makers of the IFLA, respectively expressed their belief in the two significant values in 2004. In particular, Byrne clearly stressed the two values in his presentation in 2004, and, then, he became IFLA’s President during the period 2005 to 2007. As the two core values were written in IFLA’s Strategic Plan in 2006. We could conclude Alex Byrne is the key person who contributes to this policy change.

In addition to the Three Pillars, we could also find how the IFLA’s policy-makers perceive the WSIS’s Declaration in Geneva in 2003 from the Strategic Plan. This could prove the connection between IFLA’s policy change and the 2003 WSIS. The decision makers of IFLA clearly pointed out they share the common version of the two values adopted by the WSIS in 2003 when the IFLA, for the first time, issued a Strategic Plan for the period from 2006 to 2009. In the “Vision” session of the Strategic Plan, we could see the quotation below:

“Libraries and information services are essential to the effective operation of the inclusive Information Society. IFLA and libraries and information services share the common vision of an Information Society for all, as adopted by the World Summit on the Information Society in Geneva in November 2003. That vision promotes an inclusive society in which everyone will be able to find, create, access, use and share information and knowledge.”⁴⁴ (IFLA, 2006)

As analyzed earlier in this article, the WSIS’s Declaration of Principles in Geneva was also contributed by IFLA’s policy-makers and its members. We should not ignore the impact of the Geneva Declaration and Principles on IFLA’s Strategic Plan. The IFLA’s policy statement clearly demonstrates the IFLA’s policy-makers’ perception of the importance of the

⁴¹ IFLA. 2005. Alexandria Manifesto on Libraries, the Information Society. Available: <http://www.ifla.org/publications/alexandria-manifesto-on-libraries--the-information-society-in-action>, accessed 2013-07-28.

⁴² IFLA. 2004. IFLA’s Three Pillars. Available: <http://conference.ifla.org/past-wlic/2010/three-pillars.htm>, accessed 2013-06-18.

⁴³ IFLA’s President Kay Raseroka (2003-2005), IFLA’s President-elect Alex Byrne (2005-2007), IFLA. 2004. IFLA’s Three Pillars and WSIS, Available: <http://www.ifla.org/publications/iflas-three-pillars-and-wsis>, accessed 2013-06-20.

⁴⁴ IFLA. 2006. Strategic Plan 2006-2009. Available: <http://www.ifla.org/strategic-plan/2006-2009>, accessed 2013-06-14.

WSIS, researchers could not neglect WSIS's influence on the policy change made by the IFLA.

ALA President Carla Hayden's influence on IFLA's policy change

On August 8, 2013, the IFLA held the IFLA Council II in Berlin. ALA President Carla Hayden submitted Resolution 2 to the Council II and it became part of the agenda. President Hayden expressed her firm-standing value, equity of access to information, in the Resolution. The IFLA Council II could be the platform where Hayden's influence on the formation of IFLA's equitable access to information has started. First, it was the official meeting which the members discussed issues with the IFLA's policy-makers. In particular, the incoming President Kay Raseroka would replace the incumbent President Christine Deschamps and became the President of IFLA after the closure of the Council at that day.

It needs to emphasize again that President Raseroka endorsed the two core values in December 2004. Second, as Hayden promised she would promote the value of equity of access to information by all means in August 2003. There is no doubt Hayden must try her best to spread the equitable belief in the Council.

On April 8, Carla D. Hayden, director of the city's Enoch Pratt Free Library in the US,⁴⁵ said in an interview that "equity of access speaks directly to me."⁴⁶ Two months prior to her presidency as the head of the American Library Association (ALA), Hayden was interviewed by *The Sun*, she said "she would be an advocate for greater equity of access to library resources in a time when most municipal and state libraries are feeling pressure from the nation's economic downturn."⁴⁷ In fact, the Enoch Pratt Free Library was forced to close its five library branches in 2001 because of the city's budget cut when Hayden served as director of the library. She found the closure harmed both poor and middle-class residents nearby and, then, the situation of equitable access to information in those communities became worsen.⁴⁸

Carla Hayden, in her inaugural speech as the ALA one-year presidency, made a strong emphasis on the principle of equitable access to information. She said the Association needs to reveal its determination to "one of the core values of the profession: equity of access ... to everyone, anywhere, anytime, and in any format, particularly those groups who are already underserved, such as residents of rural and urban America, senior citizens, and the disabled."⁴⁹ Thus, Hayden was likely to convince IFLA's policy-makers of the value of equitable access to information in the annual council after she proposed the Resolution 2.

Conclusion:

As a leading international organization in the information and library science, the IFLA's core values, freedom and equity of access to information, play a unique role for world-wide libraries. In particular, the two significant values were endorsed by the WSIS which had more

⁴⁵ Carla D. Hayden, Chief Executive Officer of the Enoch Pratt Free Library.

⁴⁶ Jamie Stiehm, Pratt chief takes issue to national stage; Hayden says she'll push for equal library access as head of national group, *The Sun* [Baltimore, Md], 8 April 2003: 2B. Available: <http://search.proquest.com/printviewfile?accountid=7979>, accessed 2014-04-03.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Martin Dowding, Pamela A Goodes, George Eberhart, Gordon Flagg et al. "Surviving annual, returning safely," *American Libraries* 34.7 (August 2003): 60-74.

than one hundred countries participating in. No doubt, the common version of the Information Society reached by all the representatives of the WSIS can not be neglected.

This article finds that the two core values written in IFLA's Strategic Plan since 2006 are likely influenced by ALA's President Carla Hayden (2003-2004) and the World Summit on the Information Society held by ITU in 2003. Soon after the 2013 WSIS, these two important values were advocated by IFLA's President Kay Raseroka and President elect Alex Byrne in 2004. IFLA's President Alex Byrne (2005-2007) is the key policy-maker who led the IFLA to the policy change in 2006. Since 2006, the two principles have been written in the IFLA's Strategic Plan as the core values directing the IFLA's policy.

List of Abbreviations for the Purpose of Citation

ALA	American Library Association
IFLA	International Federation Library Association
ITU	International Telecommunication Union
UN	United Nations
WSIS	World Summit on the Information Society

References

- Boulding, K. E. "National Images and International Systems," *The Journal of Conflict Resolution*, Vol. 3, No. 2, June 1959, pp120-31.
- Brecher, M., Steingerg, B., and Stein, J. "A Framework for Research on Foreign Policy Behavior," *The Journal of Conflict Resolution*, Vol. 13, No. 1. March 1969, pp75-101.
- Castano, E., Sacchi, S., and Gries, P. H., "The Perception of the Other in International Relations: Evidence for the Polarizing Effect of Entitativity," *Political Psychology*, Vol. 24, No. 3, 2003, pp449-68.
- George, A. L. "The 'Operational Code': A Neglected Approach to the Study of Political Leaders and Decision-Making," *International Studies Quarterly*, Vol. 13, No. 2, June 1969, pp190-222.
- Holsti, O. R., "External Conflict and Internal Consensus: The Sino-Soviet Case," in P. Stone, ed. *The General Inquirer: A Computer Approach to Content Analysis*, London: The M.I.T. Press, 1966, pp343-58.
- Hamilton, S. and Pors, N. Ole., "Freedom of access to information and freedom of expression: The Internet as a tool for global social inclusion," *Library Management*, 24.8/9, pp407-416, 2003.
- Holsti, O. R., "Foreign Policy Behavior Viewed Cognitively," in Robert Axelrod, ed. *Structure of Decision*, Princeton: Princeton University, 1976, pp18-54.
- Holsti, O. R., North, R. C., and Brody, R. A., "Perception and Action in the 1914 Crisis," in J. David Singer, ed. *Quantitative International Politics: Insights and Evidence*, New York: The Free Press, 1968, pp123-58
- Hyam Gold, "Foreign Policy Decision-Making and the Environment: The Claims of Snyder, Brecher, and the Sprouts," *International Studies Quarterly*, Vol. 22, No. 4, December

- 1978, p569-82.
- IFLA. 2003. Libraries @ the heart of the Information Society: IFLA Pre-World Summit Conference. Available: <http://archive.ifla.org/III/wsis/wsis-why.htm>, accessed 2014-02-08.
- IFLA. 2003. Libraries @ the HEART of the information society. Available: <http://archive.ifla.org/III/wsis/proceedings2003.pdf>, page 35, accessed 2014-02-08.
- IFLA. 2004. IFLA's Three Pillars. Available: <http://conference.ifla.org/past-wlic/2010/three-pillars.htm>, accessed 2013-06-18.
- IFLA. 2004. IFLA's Three Pillars and WSIS, Available: <http://www.ifla.org/publications/iflas-three-pillars-and-wsis>, accessed 2013-06-20.
- IFLA. 2005. Strategic Plan 2006-2009. Available: <http://www.ifla.org/strategic-plan/2006-2009>, accessed 2013-06-08.
- IFLA. 2005. Alexandria Manifesto on Libraries, the Information Society. Available: <http://www.ifla.org/publications/alexandria-manifesto-on-libraries--the-information-society-in-action>, accessed 2013-07-28.
- IFLA. 2006. Strategic Plan 2006-2009. Available: <http://www.ifla.org/strategic-plan/2006-2009>, accessed 2013-06-14.
- IFLA (Peter Johan Lor). 2007. Looking to the future, Available: http://repository.up.ac.za/bitstream/handle/2263/2623/Lor_IFLA%282006%29.pdf?sequence=1, accessed 2014-04-06.
- IFLA. 2009. Strategic Plan 2010-2015 (Version 1). Available: <http://www.ifla.org/strategic-plan/archive>, accessed 2013-06-10.
- IFLA. 2012. IFLA Strategic Plan 2010-2015. Available: <http://www.ifla.org/strategic-plan>, accessed 2013-06-19.
- Leites, N., *A Study of Bolshevism*, Illinois: The Free Press, 1953.
- Martin Dowding, Pamela A Goodes, George Eberhart, Gordon Flagg et al. "Surviving annual, returning safely," *American Libraries* 34.7 (August 2003): 60-74.
- Snyder, R. C. and Paige, G. D. "The United States Decision to Resist Aggression in Korea," in Richard C. Snyder, H. W. Bruck, and Burton Sapin, eds. *Foreign Policy Decision Making: An Approach to the Study of International Politics*, New York: The Free Press of Glencoe, 1963, pp206-49.
- Sprout, H. and Sprout, Margaret. "Environmental Factors in the Study of International Politics," *The Journal of Conflict Resolution*, Vol. 1, No. 4, December 1957, pp309-28.
- Stassen, G. H. "Individual Preference Versus Role-Constraint in Policy-Making: Senatorial Response to Secretaries Acheson and Dulls," *World Politics*, Vol. 25, October 1972, pp96-119.

Sturges, Paul, "Understanding cultures, and IFLA's freedom of access to information and freedom of expression (FAIFE) core activity," *Journal of Documentation*, Vol. 61, No.2, 2005, pp296-305.

The Sun [Baltimore, Md]. 8 April 2003: 2B. Available: <http://search.proquest.com/printviewfile?accountid=7979>, accessed 2014-04-03.

UN. 2002. Resolution 56/183. Available: http://www.itu.int/wsis/docs/background/resolutions/56_183_unga_2002.pdf, accessed 2013.07-09.

Wish, N. B., "Foreign Policy Makers and Their National Role Conceptions," *International Studies Quarterly*, Vol. 24, No. 4, December 1980, pp532-554.

WSIS. 2005. Why a World Summit on the Information Society. Available: <http://www.itu.int/wsis/basic/why.html>, accessed 2013-07-25.

WSIS, 2003. Declaration of Principles Building the Information Society: a global challenge in the new Millennium. Available: http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1161|1160, accessed 2014-04-05.

WSIS. 2003. Declaration of Principles Building the Information Society: a global challenge in the new Millennium. Available : <https://www.itu.int/wsis/docs/geneva/official/dop.html>, accessed 2014-04-05.

Zinnes, D. A., "The Expression and Perception of Hostility in Prewar Crisis: 1914," in J. David Singer, ed. *Quantitative International Politics: Insights and Evidence*, New York: Free Press, 1968, pp85-119.

ISEPSS-1761

Do Hong Kong preschool children possess an adequate level of English vocabulary skills to enable them to read?

Kwok-Shing Wong

Hong Kong Institute of Education

kswong@ied.edu.hk

Brian MacWhinney

Carnegie Mellon University

macw@cmu.edu

Abstract

English education is virtually universal in the Hong Kong early childhood education context, despite the fact that the city ceased to be a British colony in 1997. In terms of the focus of teaching, parents expect preschool teachers to concentrate on reading, as an early mastery of reading skills is traditionally believed to be an indication for great intelligence and future achievement. Such early emphasis on word-reading skills is unusual in that English native-speaking children normally do not begin their formal reading instruction until age 5, the age at which a child is supposed to have mastered his or her mother tongue. The goal of this paper is to explore how ready Hong Kong children are to learn to read in English which represents a foreign language to them. In particular, we want to investigate whether they possess an adequate level of oral vocabulary skills which researchers have argued is critical for future literacy development. We recruited 177 three-to-six-year-old Cantonese-speaking children (male = 97; female = 80) from 5 preschools and administered the Peabody Picture Vocabulary Test to the children in order to evaluate their understanding of English vocabulary. Our results showed that only about a quarter of the participants (24.8%) displayed average vocabulary scores, whereas the majority of the children (48.6%) displayed rather low vocabulary scores (more than 2 *SD* below the monolingual mean). The implications are three-fold: (1) the current curricular emphasis on early reading may be too challenging for children who are learning English as a foreign language; (2) preschool teachers may need to reconsider whether adequate activity time has been set aside for the teaching of oral vocabulary; and (3) parent education is essential in that parents need to be better-informed about the essential nature of oral vocabulary to learners' future literacy development.

ISEPSS-1720
**Special Educational Needs (SEN) Teachers' Experiences of Occupational
Therapy School-based (OTSB) Collaborative Consultation in One Special
School in a Scottish City: A Pilot Study**

Hasrul bin Hosshan

Sultan Idris Education University, Tanjong Malim, Perak, Malaysia
hasrul.hosshan@fppm.upsi.edu.my

Abstract

This research study proposal explores the experiences of SEN teachers concerning the provision of occupational therapy as a related service in the special school system. It is proposed that a descriptive phenomenology methodology will be used to investigate SEN teachers' experiences with occupational therapy school-based (OTSB) collaborative consultation in one special school in a Scottish city. Collaborative consultation has been widely adopted in OTSB practice. OTSB practitioners' consultation model of service delivery has been characterised as collaborative because interactions between occupational therapists and SEN teachers are dependent upon shared expertise rather than on the occupational therapists' superior knowledge base. This study proposal reviews recent research studies on the impact of OTSB consultation under the phenomenon of collaborative consultation on SEN teachers, and how it can lead to effective practice for students with SEN. Several of these relate directly to the feasibility of collaboration. The intention behind this study is to provide insight into the phenomenon of collaborative consultation on the experiences of SEN teachers while working with occupational therapy consultation services. It will focus on the how and why questions. Semi-structured face to face interviews will be conducted with ten experienced SEN teachers in one special school in a Scottish city and will be digitally recorded (dictaphone) and analysed with thematic analysis procedures. This pilot research study will be a guide for further research into the experiences of SEN teachers with the aim of developing occupational therapists' effectiveness, and into the validity of the collaborative consultation framework in a special school setting.

Keywords - Special Educational Needs (SEN) Teacher; Occupational Therapy School-Based (OTSB); Experience; Collaborative consultation.

Introduction

This study concerns the experiences of SEN teachers with OTSB consultation services in a school setting. It is undertaken in order to share the insights of SEN teachers into OTSB collaborative consultation in special schools.

This is done through raising awareness of the beliefs, views, influences and perceptions of SEN teachers' decision-making skills in collaborative consultation. These skills are highlighted in several studies, which all indicate that teachers generally perceive a consultation model service of delivery by occupational therapists to be more effective than other intervention strategies in school settings (Reid et al., 2006; Spencer et al., 2006; Villeneuve, 2009).

SEN teachers' concerns relate to role ambiguity and role overload (Hansen, 2007). SEN teachers newly involved in collaboration service delivery programmes may fear that their professional positions are gradually being eliminated. They may also experience doubts about their status. That is, they question whether or not they have valuable information to share

with occupational therapists or general teachers (Friend and Cook, 2010). They have specific expertise, but they wonder how it applies to students with SEN in another context.

Collaborative consultation has been widely adopted in OTSB practice (Case-Smith, 2005). Such collaboration is “a process in which a trained, school-based consultant, working in an egalitarian, non-hierarchical relationship with a consultee, assists that person in her efforts to make decisions and carry out plans that will be in the best educational interests of her students” (Kampwirth, 2006, p.3). Case-Smith and Rogers (2005) explain that OTSB consultation has been characterised as collaborative because interactions between occupational therapists and teachers are dependent upon shared expertise rather than on the occupational therapist’s superior knowledge base. However, there is a limited conceptual understanding of how collaboration contributes to educationally relevant outcomes for students with disabilities and specifically, how meaningful collaboration is for SEN teachers.

Bundy’s (1995) conceptualisation provides a framework for making unambiguous connections between expectations for occupational therapy (OT) involvement and the provision of services in ways that align with teachers’ expectations. Bundy (1995) suggested that occupational therapists in school settings need to focus attention on expected outcomes (such as the student’s skill development, their maintenance of function or their environmental adaptation). Within her framework, occupational therapists followed guidelines in order to engage with teachers to define problems in terms of their expectations within the educational context, and also negotiate the best possible strategies for achieving this expectation. The framework recommendations robustly imply that occupational therapists should be more transparent in the communication of their roles and responsibilities in school settings (Barnes and Turner, 2001; Fairbairn and Davidson, 1993; Nochajski, 2001; Wehrmann et al., 2006).

Friend and Cook (2010), in their book, support the view that true collaboration involves mutual commitment and shared accountability. The authors’ view makes collaborative consultation particularly relevant to the questions posed in this research proposal. Consistency in the provision of services is identified as a key factor to successful partnerships with teachers. As Fairbairn and Davidson (1993) state, collaborative consultation may be improved when occupational therapists are in a position to become more knowledgeable about the school system, the curriculum and everyday classroom practices. In addition, Villeneuve (2009) in his critical examination of published Canadian OT journals, strongly suggests that, as teachers are the main recipients of occupational therapy services in consultation, the therapist requires communication, interpersonal and partnership-building skills. All of these studies substantiate the claim from Wehrman et al. (2006) that, by increasing the number and frequency of OT visits, communication between therapists and teachers may be significantly improved.

Special Educational Needs (SEN) teachers’ experiences

SEN teachers are the main partners of OTSB consultation services in special schools. Their understanding of occupational therapy roles can influence the provision of occupational therapy services in schools. Challenges to collaboration between teachers and occupational therapists are well documented. Specific challenges can be categorised as follows:

Table 1: Challenges when implementing collaborative services with occupational therapists for SEN teachers

Type of challenges	Related studies
--------------------	-----------------

a) A lack of pre-service preparation of teachers and occupational therapists for collaborative consultation	Fairbairn and Davidson, 1993; Barnes and Turner, 2001; Nochajski, 2001; Wehrman et al., 2006
b) Ambiguity of roles and expectations among service providers.	Fairbairn and Davidson, 1993; Nochajski, 2001
c) Personal challenges, including professional isolation, heavy caseloads, rapport with teachers and personnel shortages	Barnes and Turner, 2001; Reid et al. 2006.
d) A lack of educational relevance in occupational therapy recommendations.	Bose and Hinojosa, 2008

Fairbairn and Davidson (1993) study teachers' expectations from consultation with occupational therapists who were working with children with special needs in two Ontario public school boards. Even though this study appeared two decades ago this robust literature continues to be a baseline for literature examining the teachers' experiences of the roles and effectiveness of occupational therapy in schools. Information was obtained through a questionnaire distributed to all teachers (n=143) who had worked with occupational therapists, and personal follow-up interviews were conducted with 10 of these teachers. Findings suggest that all teachers believe there is an important role for occupational therapists in the school system. Teachers suggested that occupational therapists must continue to support and share with teachers their knowledge about student with SEN by providing more demonstration, by modelling suggested occupational therapy programmes and in addition, by working with students with SEN inside the classroom, rather than outside, whenever possible (Fairbairn and Davidson, 1993). However, participants also expressed confusion over the scope of occupational therapy practice in schools.

Reid et al. (2006) assess the implication of occupational therapy consultation services for teachers. The authors present their results by (a) occupational therapist ratings of change in teacher awareness of student needs in the classroom and (b) teachers' implementation of occupational therapy strategies in the school environment. Prior to consultation with occupational therapists, students performed poorly in functional tasks in classroom. Following the occupational therapy consultation process, the study found that student performance improved in line with the level of teachers' awareness and implementation of occupational therapy strategies. One issue with this study is that it did not include a control group who did not receive any consultation. This would have increased the significance of the results.

Wehrman et al. (2006), whose studies were conducted as part of the larger programme evaluation by Reid et al. (2006) conclude that there is confusion about what teachers can expect from occupational therapy services. Their qualitative study involved conducting focus group interviews with 52 teachers to produce more in-depth findings. The teachers interviewed felt occupational therapists need to share knowledge of the education system to enable them to achieve educationally relevant student outcomes. Wehrman et al. (2006) supported the main findings of the Fairbairn and Davidson (1993) study which point out that occupational therapists need to consistently educate and enhance rapport with teacher rather

than to spending the majority of their time assessing and documenting students' levels of functioning. This recommendation shows that teachers become more satisfied when they and their students benefit from services and when they have good communication with the occupational therapist (Reid et al. 2006).

Nochajski (2001) actively studies collaboration between educators and therapists. In one qualitative study, the author uses semi-structured interviews with teachers, occupational therapists and physical therapists, n= 51, to investigate the perspectives of teachers and therapists towards collaboration. The study identified lack of time as one of the most common barriers to effective collaboration. Nochajski (2001) repeatedly backs up her claim that teachers and therapists need sufficient time and opportunity to share information because trust and rapport take time to establish. There have been encouraging results when occupational therapists invest in a collaborative partnership with teachers. The methodological quality appeared reasonably robust in conjunction with credible data collection using a semi-structured interview format and tape recordings. Transferability of data in analysis is well presented. This ensures the quality of the research as the researchers have a clear list of issues to be addressed.

Occupational therapists' experiences of the OTSB consultation model of service delivery

This section aims to explore occupational therapists' experiences of the OTSB collaborative consultation approach for students with SEN. In order to better understand this aspect, the review explores the published literature concentrating on the views of occupational therapists. Firstly, it discusses and compares direct and consultation models of service delivery in the context of schools' current practice. Secondly, this section presents an occupational therapist's perspective on the OTSB collaborative consultation approach.

Villeneuve (2009), in his critical examination of OTSB, states that occupational therapy services have recognised the need to move away from a direct model service (pull-out/one-to-one) model of service delivery towards a more collaborative approach. This approach supports the student in the classroom through occupational therapist consultations with teachers and parents. This collaborative consultation is the preferred method for OTSB in North America, although the literature shows that many challenges have been identified (Wehrman et al. 2006; Villeneuve, 2009). Villeneuve (2009) discusses consultation as a collaborative process between occupational therapists and teachers for the purpose of identifying goals, developing strategies and monitoring student progress.

On one hand, consultation services are provided when the environment needs to be adapted to meet the needs of a particular student. On the other hand, Villeneuve (2009) highlighted that therapists still combine direct services with a collaborative consultation framework even though direct services are the primary intervention approach in the school context for student with SEN. This argument is supported by Case-Smith and Cable's (1996) research findings. As Case-Smith is recognised as one of the pioneers of OTSB, her research is considered a guideline for other occupational therapists to follow.

Case-Smith and Cable (1996) define direct services as interventions that address individual needs which often involve a hands-on approach and are provided by a therapist in one-on-one interactions or in small groups. Their research determines the amount of time that occupational therapists spend on direct and consultative models of service delivery, and explore their attitudes to each model. In their nationwide survey of 216 occupational therapists in the United States, their key findings showed that therapists' attitudes towards consultation were positive, enjoying opportunities for personal interactions and collaboration with teachers.

In addition, therapists value sharing ideas which have a positive impact in the classroom environment. However, the authors claims that this finding can be explained by the fact that contract therapists are often paid for direct service and as result, occupational therapists are not interested in spending time in discussions with teachers. Results show that 47 % of participants in this quantitative research stated that they also valued interactions with students during direct intervention and felt that direct services are still important to student outcomes. However, the sample size (n=216) of this research represent less than 10% of the population of occupational therapists who work in the school system in the United States. Therefore, it is not possible to generalise the findings with confidence.

In summary, occupational therapy in school-based practice, whether using a direct or consultation model of service delivery, is still relevant for the development of student skills in the classroom. Although literature emphasises the move towards providing consultative services, this review has found minimal information regarding how much therapists value consultation.

Successful working partnerships

The aim of this review is to point out the contribution of government policies and acts in line with a collaboration approach. Firstly, regarding the government's influence, the review demonstrates the Scottish Government's efforts on collaboration in education for students with SEN. Secondly, it discusses programme administrators and researchers, who have a lot of funding enabling a way to make the research collaboration beneficial for each stakeholder. In addition suggestions are made regarding helpful ways for supporting students with SEN to develop skills. Finally, this section presents two recent successful models of service delivery as examples of the benefits of occupational therapy collaboration within a school environment. These models will also be used to demonstrate best practice in consultative collaboration.

Experiences of teachers, therapists and parents across Scotland who work in partnership to improve outcomes for student with SEN were highlighted recently. Her Majesty's Inspectorate of Education (HMIE) 2007 report on the implementation of the Education Additional Support for Learning (Scotland) Act (2004) found that the Scottish Government has identified ways for schools and authorities to take action to improve the quality of partnership working between agencies. The Scottish Government regularly asks school staff about their partnership with AHP and arranges meetings to enable AHPs, teachers and parents to provide feedback and recommendations to improve the availability of learning opportunities for SEN students. Implementation of this checking for over two years resulted in a number of policy initiatives such as Curriculum for Excellence, Additional Support for Learning and other related policies. These promote the education of stakeholders responsible for the learning opportunities of SEN students, and collaboration between them.

Government policy initiatives have contributed to the building up of a team research collaboration consisting of teachers, therapists, academics and also the government itself. This team collaboration is known as CIRCLE (Child Inclusion: Research into Curriculum, Learning and Education) collaboration (Forsyth et al., 2007). The aim of the project is to help students with SEN reach their full potential. Forsyth and colleagues (2007) started a review of evidence and models of practice employed by AHPs in Scotland for student with DCD. Their study into actual practice (school environment) focuses on how all staff work with students with SEN and spend time in several schools hoping to gather thoughts and experiences of

education staff. The key findings of this review emphasise that parents need to be fully involved with the therapist in planning and implementation for the development of students with SEN in the school environment (Forsyth et al. 2007). They conclude that a framework for effective practice for children with DCD needs to include health promotion, communication, student and parent involvement, working together, and increased skills and knowledge.

In 2009, Forsyth produced a systematic review of the evidence for the effectiveness of occupational therapy and speech and language therapist intervention for students in primary school. This project provides guidelines for a common 'language' to enable therapists and teachers to understand each other in collaboration. This collaboration project has already published a series of resources for SEN teachers, therapy manuals and intervention descriptions for other AHPs. Some critics have pointed out that these guidelines place an unnecessary burden on teachers and other AHPs who already have professional guidelines of their own. This comment can be supported by Forbes (2001), who analyses the collaboration policy of teachers and therapists based in Scotland. This study discusses the policy document *A Manual of Good Practice in Special Educational Needs* (Scottish Office Education and Industry Department (SOEID), 1999) which addresses changing notions of inter-professionalism within and beyond the Scottish context. In the philosophy of collaboration, shared accountability to reach the desired outcomes for both parties is more valuable, especially in skill development for SEN students.

Recently, a qualitative research project called *Occupational Therapy into Schools* (OTiS) was pilot tested in two schools in the UK (Hutton, 2009). Hutton (2009) explains that this alternative service delivery mode arose from concerns about a long waiting list for service and a desire to meet the needs of an increasingly diverse population of students with SEN. The OTiS project placed two occupational therapists in each school with the mandate to work with teachers two days a week to increase their capacity to support children's motor development in the classroom. The qualitative interview data gathered from the teaching team who came into direct contact with occupational therapists during the intervention was then used to evaluate the partnership with these occupational therapists. The researcher found that feedback from both therapists and teachers who took part in the OTiS project demonstrated that, although the new model of service delivery involved a period of adjustment and uncertainty at the outset, both parties felt that its impact on students was greater than one-to-one therapy in the long run. In addition, Campbell et al. (2012) comment that "OTiS provides an indication that the time is right to pursue new models of service delivery that address the limitations of current approaches to OTSB" (p.53). A limitation of this study is that the evaluating method might be strengthened by using an additional method such as a survey to aid understanding of occupational therapy recommendations among teachers. Moreover, the findings cannot be representative of a wider population. This study does not use this to assess how changes identified by staff in the school were implemented in practice.

In conclusion, the key to effective collaboration in educational settings is integration of professional knowledge and direct work with students to create systematic support for teachers, parents and the school. Efficient support from government enables other stakeholders to contribute fully to the implementation of collaboration. The goal of these models of service delivery is to support and enable teachers to work with SEN students thus creating a more supportive environment for them. Overall there is a growing body of literature to evidence the benefits of collaborative consultation for occupational therapy, but

there are still many difficulties for SEN students that have not been addressed by a new intervention.

Research Questions

Bell (2010) states that research questions seek to identify or describe the phenomenon in question when prior knowledge of the phenomenon is limited. A deeper understanding of SEN teachers’ experiences of collaborative consultation with OTSB in special school settings can be obtained by using a qualitative research method. The research questions that have guided this investigation are:

1. What are SEN teachers’ experiences, perceptions, views and beliefs on school-based occupational therapy collaborative consultation in special school settings?
2. What are the possible means of fostering a good relationship between occupational therapists and SEN teachers, resulting in collaborative consultation?
3. What are the obstacles preventing SEN teachers from benefitting from school-based occupational therapy in educational settings?

Sample size

Purposive sampling is the best sampling option to facilitate understanding of the phenomenon of interest in SEN teachers’ experience of consultative collaboration with OTSB. This is an appropriate method to select the participants for a study using a descriptive phenomenological approach because the aim is to understand and synthesise a particular phenomenon: collaborative consultation from the perspective of those who have experienced it.

Denzin and Lincoln (2008) add that sample sizes of 10 to 15 are adequate provided participants are able to provide rich descriptions of the phenomenon. Therefore, ten (10) participants is proposed as a reasonable sample size. The main reason for this is that each interview will take about 60 to 90 minutes to complete. Each interview could take seven to ten hours to transcribe, equalling up to a hundred hours (Patton, 2002). So ten or more participants may be outwith the practical scope of the researcher in terms of resources (time and cost); but fewer than ten participants may not generate sufficient depth and richness of data (Denscombe, 2010).

It is proposed that this study involves ten participants in order to examine collaborative consultation between SEN teachers and occupational therapists in the special school setting.

The inclusion criteria for participants have been designed to fit the research question and to elicit the data that needs to be obtained in order to answer the research question. These criteria are detailed below:

Table 2: Inclusion criteria

Participants
<ul style="list-style-type: none"> • Volunteer to participate • Full time SEN teachers from a special school, working in collaborative consultation with OTSB practitioners. • With two or more years of work experience with OTSB consultation in school settings • Having had direct contact with occupational therapists throughout the consultation process

- | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Agree to sign informed consent and agree to participate in the study• Agree to having their interview recorded• Agree to read their interview transcripts to validate the accuracy of the data |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The number of years' experience required will ensure that the study will record a rich understanding of SEN teachers' experiences in working with consultative collaboration assessment and implementation, and will also allow the obtaining of a broader knowledge base of the OTSB process.

Data collection procedure

The researcher will obtain contact information for the SEN teachers who will potentially be participating in the research study, and obtain the completed informed consent forms from the participants. Once identified, participant names will be obtained by the researcher (with their consent) and the researcher will contact the participants. Saks and Alisop (2007) suggest providing a telephone number or email address in order for potential participants to clarify any details to facilitate informed consent. A venue and time will then be confirmed by telephone.

At the onset or prior to the semi-structured in-depth interview process, it is proposed that participants will be informed that the interviews are being digitally recorded (dictaphone). Hermanowicz (2002) emphasises that recording is now generally thought to be good practice for all qualitative interviewing. Permission will be requested from each participant to digitally record the interviews. Audio recording will help data analysis later but more vitally, it will enable the researcher to capture the lived experience and engage with the research participants. Bryman (2004) points out that recording an interview may be an issue for some research participants who do not wish their words to be preserved, and suggests that the researcher is flexible and prepares for all circumstances. It is proposed that the interviews will last for an average of 60 to 90 minutes.

Interviews will then be scheduled at the participant's convenience, according to their preferred time and setting within the facility. The interview will be held in one of the rooms at their school, because SEN teachers will most likely be more comfortable participating in the study at their own workplace. In addition, a flexible time slot choice will be presented to the participants, so as to fit in with their working hours. Permission of free duty on working hours to participate in interview sessions will be obtained from the Head of SEN teachers. Care will be taken to keep phones in silent mode throughout the whole interview process. These procedures will be followed for all of the interviews.

At the beginning of each interview, the SEN teacher will be asked to give a narrative account of an occupational therapist's consultation and their view of the recommended intervention. Interviews will be conducted using probing (open-ended) questions to encourage the SEN teachers to describe in detail their perceptions and experiences while working with occupational therapists. They will also be informed what will be done with the data after the interview is completed. Data will be protected to ensure the anonymity of individuals in the research study. After the completion of each interview, each participant's interview will be transcribed verbatim without any identification mentioned on the data transcription. This will involve taking the final report or themes back to participants and allowing them to comment on the accuracy of the findings. To assist in the data collection phase, it is proposed the researcher will utilise a reflective diary – providing a detailed account of how the researcher spends time on-site (interview sessions) and in the transcription and analysis phase. The

researcher intends to record details related to the observations in a field notebook and keep a field diary to chronicle the researcher's thinking, feelings, experiences and perceptions throughout the research process. (The researcher will record descriptive and reflective information).

A gift, as an acknowledgement of the participant's contribution to the research study, will also be given.

Data analysis

In qualitative research, data collection and data analysis must be simultaneous processes (Rossman, 1996). According to Creswell (2009), the data analysis process consists of the following steps:

Table 3: The five main stages of data analysis

Stage	Qualitative data analysis
1. Data preparation	Organise and prepare the data analysis Transcribing the text (interview) Cataloguing the text or visual data Preparation of data and loading to software (if applicable)
2. Initial exploration of the data	Look for obvious recurrent themes or issues Add notes to the data Write memos to capture ideas
3. Analysis of the data	Code the data Coding is the process of organising the material into chunks or segments of text before bringing meaning to information (Rossman and Rallis, 1998, p.171) Group the codes into categories or themes Comparison of categories and themes.
4. Representation and display of the data	Written interpretation of the findings Illustration of points by quotes and pictures
5. Validation of the data	Data verification by using triangulation and member checking Comparison with alternative explanations

Creswell et al. (2009, p.129)

Additionally, Sieber (1998) suggests data, once analysed, need to be kept for a reasonable period of time and recommends five to ten years. The researcher will store data in a secure place and not allow access to other researchers who might misuse it. A proposal might mention the issue of data ownership. Therefore, Berg (2001) recommends the use of personal agreements to designate ownership of research data. The idea is to guard against sharing the data with individuals not involved in the project.

Conclusion

There is evidently still much scope for research into these questions. Carefully controlled comparative studies would be of particular benefit. In addition, more research is needed into how SEN teachers' experiences can provide a good benchmark for occupational therapists in school settings in general.

In addition, numerous studies have revealed that increased teacher satisfaction levels are associated with a positive change in the students' occupational performance in school. For clarity, robust studies of the efficacy of occupational therapists' consultation in special schools are also urgently required.

In conclusion, the key to effective collaboration in educational settings is integration of professional knowledge and direct work with students to create systematic support for teachers, parents, and school staff. Support also comes via government influences. To sum up, in order for occupational therapists to benefit fully from SEN teachers' experiences of working with them, they need to take the teachers' recommendations into account in their own practice. It is therefore also necessary to look at consultation services in school practice from the occupational therapist's standpoint.

Acknowledgement

This research proposal is submitted in fulfilment of the requirement for the Degree of Master of Science in Occupational Therapy, Queen Margaret University, Edinburgh. First and foremost, I must thank to Linda Renton, my supervisor and MSc Module Coordinator whose support and guidance throughout this process has been invaluable. Her expertise, knowledge, depth and clarity of thinking, encouragement, feedback and ability to light my way, has been an inspiration for me.

Reference

- Barnes, K., and Turner, K. 2001. Team collaborative practices between teachers and occupational therapists. *American Journal of Occupational Therapy*, 55, pp. 83-89.
- Bayona, C. L., McDougall, J., Tucker, M. A., Nichols, M., and Mandich, A. 2006. School-based occupational therapy for children with fine motor difficulties: Evaluating functional outcomes and fidelity of services. *Physical & Occupational Therapy in Pediatrics*, 26, pp.89-110.
- Bose, P., and Hinojosa, J. 2008. Reported experiences from occupational therapists interacting with teachers in inclusive early childhood classrooms. *American Journal of Occupational Therapy*, 62, pp. 289-297.
- Bundy, A. C.1995. Assessment and intervention in school-based practice: Answering questions and minimizing discrepancies. *Physical & Occupational Therapy in Pediatrics*, 15(2) pp.69-88.
- Campbell, W. N., Missiuna, C. A., Rivard, L. M. and Pollock, N. A. 2012. "Support for everyone": Experiences of occupational therapists delivering a new model of school-based service. *Canadian Journal of Occupational Therapy*, 79, pp.51-59.
- Case-Smith, J. 1997. Variables related to successful school-based practice. *The Occupational Therapy Journal of Research*, 17 pp.133-153.
- Case-Smith, J., and Cable, J. 1996. Perceptions of occupational therapists regarding service delivery models in school-based practice. *Occupational Therapy Journal of Research*, 16, pp. 23-44.
- Case-Smith, J., and Rogers, J. 2005. School-based occupational therapy. In J. Case-Smith (Ed.), *Occupational therapy for children* (5th ed.). St. Louis,MO: ElsevierMosby. pp. 795-824.

- Fairbairn, M., and Davidson, I. 1993. Teachers' perceptions of the role and effectiveness of occupational therapists in schools. *Canadian Journal of Occupational Therapy*, 60. pp. 185-191.
- Forbes, J. C. 2001. Teacher/ therapist collaboration policy: an analysis. *Child Language Teaching/ Therapy*.pp. 195-205.
- Green, J., and Thorogood, N. 2009. *Qualitative methods for health research*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Hanft, B. and Shepherd, J. 2008. *Collaborating for student success: A guide for school-based occupational therapy*. (Eds.). Bethesda,MD: American Occupational Therapy Association, Inc.
- Hutton, E. 2009. Occupational therapy in mainstream primary schools: An evaluation of a pilot project. *The British Journal of Occupational Therapy*, 72, pp. 308-313.
- Kemmis, B.L., and Dunn, W. 1996. Collaborative Consultation: The efficacy of remedial and compensatory interventions in school contexts. *The American Journal of Occupational Therapy*. 50 (9), pp. 709-717.
- Kampwirth, T. J. 2006. *Collaborative consultation in the schools: Effective practices for students with learning and behavior problems*. Upper Saddle River, NJ: Prentice Hall.
- Long, D. 2003. Predicting length of service provision in school-based occupational therapy. *Physical and Occupational Therapy in Pediatrics*. 23 (4), pp. 79-93.
- Missiuna, C., Pollock, N., Levac, D., Campbell, W., S., Whalen, S., Bennett, S., and Russell, D. 2012. Partnering for change: An innovative school-based occupational therapy service delivery model for children with developmental coordination disorder. *Canadian Journal of Occupational Therapy*, 79, pp. 41-50
- Nochajski, S. M. (2001). Collaboration between team members in inclusive educational settings. *Occupational Therapy in Health Care*, 15(3/4), pp. 101-112.
- Reid, D., Chiu, T., Sinclair, G., Wehrmann, S., and Naseer, Z. 2006. Outcomes of an occupational therapy school-based consultation service for students with fine motor difficulties. *Canadian Journal of Occupational Therapy*, 73, pp.215-224.
- Sayers, B. R. 2008. Collaboration in school settings: A critical appraisal of the topic. *Journal of Occupational Therapy, Schools, and Early Intervention*, 1, pp. 170-179.
- Scottish Educational Research Association (SERA). Ethical guideline.[online] Available at: <http://www.sera.ac.uk/docs/Publications/SEREthicalGuidelinesWeb.PDF> [Accessed October 26 2012].
- Scottish Executive Education Department (SEED). Starting points for research in school.[online] Available at: <http://www.sera.ac.uk/docs/2007/SERASEEDStartingpoints.pdf>. [Accessed November 12 2012].
- Scottish Government. 2009.*Draft guidance on partnership working between allied health professions and education: working together to improve outcomes for children and young people*. Edinburgh: Scottish Government.
- Silverman, D. 2012. *Interpreting qualitative data*. 4th ed. Thousand Oaks, California : Sage Publications.
- Swinth, Y., Spencer, K. J., and Jackson, L. L. 2007. Occupational therapy: Effective school-based practices within a policy context. No.2011. Center on Personnel Studies in Special Education, University of Florida.
- Villeneuve, M. 2009. A critical examination of school-based occupational therapy collaborative consultation. *Canadian Journal of Occupational Therapy*, 76, pp. 206-218.

Wehrmann, S., Teresa, C., Reid, D., and Sinclair, G. 2006. Evaluation of occupational therapy school-based consultation service for students with fine motor difficulties: A qualitative study. *Canadian Journal of Occupational Therapy*, 73, pp.225-235.

Poster Sessions– May 8

Education

Kyoto Research Park 4F

11:00-12:00

Thursday, May 8

ISEPSS-1801

The Learning of Entomology Curriculum's Pedagogical Content Knowledge in Elementary Pre-service Teachers

Yi-Ting Kuo

National Taipei University of Education

Chow-Chin Lu

National Taipei University of Education

ISEPSS- 1800

Developing the Insect Playing Table Game to Test Elementary Student's Insect Conceptions and Science Process Skills

Chow-Chin Lu

National Taipei University of Education

ISEPSS- 1735

The Research of Environmental Education of Senior Learners in Taiwan

Hung, Ying-Tsun

Ching Kuo Institute of Management and Health

Chin, Hsiu-Lan

Toko University

Chen, Mei-Lan

Ching Kuo Institute of Management and Health

ISEPSS- 1809

Using Creative Dance to Inspire Early Childhood Geometric Learning

Yi-Chun Chen

Chaoyang University of Technology

JuanAnn Tai

Tainan University of Technology

Tzong-Ming Wey

Chaoyang University of Technology

ISEPSS- 1839

Student Learning Performance on the Nanotechnology Teaching in the Elementary School by Instructional Media

Hung-Yin Tsai

National Tsing-Hua University

Mei-Yu Chang

National Hsinchu University of Education

Shiang-Yi Chiou

Tien Shin Elementary School

ISEPSS- 1820

The Implementation Process of Mentorship Programs for Gifted Students among the New Sons of Taiwan

Chao-Yi Chen

National Taiwan Normal University

ISEPSS- 2066

From Dewey's Experiential Learning Perspective to Discuss Bank Clerks' Experience History of the Informal Learning

Ching-An Lai

National Chung Cheng University

Meng-Ching Hu

National Chung Cheng University

ISEPSS- 1849

The Teaching of Preservice Teachers on Nanotechnology Curriculum in Elementary School

Mei-Yu Chang

National Hsinchu University of Education

Suo-Ying Luo

Shang-Guan Elementary School

Meng-Kao Yeh

National Tsing Hua University

ISEPSS- 1892

The Research on Creating Electric Picture-books of Real Disadvantaged Families' Life Stories

Chwen-Chyong Tsau

Fooying University

ISEPSS-1924

Analyzing Picture-books as Life-education Teaching Media for Young Children in Taiwan

Ling-Li Chu

National Kaohsiung Normal University

Chwen-Chyong Tsau

Fooying University

Py-yueh Hsien

Lujhu Public Kindergarten

ISEPSS-1726

The Process of Retirement Determination: A Taiwanese study

Ya-Hui Lee

National Chung-Cheng University

Chun-Ting Yeh

National Chung-Cheng University

Ching-Yi Lu

National Chung-Cheng University

ISEPSS-2100

The Image of Elderly and Ageism In Taiwan : From the Symbolic Interaction Theory

Yi-Fen Wang

Nation Chung Cheng University

ICSSAM-794

Library Websites Popularity: Does Facebook Really Matter?

Wahidah Mohd Zain

International Islamic University Malaysia

Roslina Othman

International Islamic University Malaysia

ISEPSS-1801
**The Learning of Entomology Curriculum's Pedagogical Content
Knowledge in Elementary Pre-service Teachers**

Yi-Ting Kuo^{a,*}, Chow-Chin Lu^b

^aGraduate student, Department of Science Education, National Taipei University of
Education

886-227321104#53320, 134 He-Ping E. Rd., Sec. 2, Taipei, Taiwan, Republic of China

E-mail address: s109612037@stu.ntue.edu.tw

^bProfessor, Department of Science Education, National Taipei University of Education
886-227321104#53320, 134 He-Ping E. Rd., Sec. 2, Taipei, Taiwan, Republic of China

E-mail address: luchowch@tea.ntue.edu.tw

Abstract

We develop Entomology curriculum (Entomology knowledge, insect outdoor teaching skills, rearing insect skills, insect's science fairs and insect teaching plans) for 43 elementary pre-service scientific teachers at national university of education in Taiwan. This study is to explore elementary pre-service teachers' pedagogical content knowledge with summary of quantified statistics (Insect conception and teaching strategies of science teachers questionnaire, ICTS) and qualitative analysis (Outdoor insect learning skill sheet, Rearing insect sheet, view on Insect's science fairs sheet, and Insect teaching plans). The results of this research are follows: 1. The elementary pre-service teachers had very good conceptions in Entomology knowledge, such as insect life cycle (correct rate 79.1%), reproductive behavior (correct rate 81.4%), ecological environment (correct rate 97.7%), human and insects (correct rate 100%), but failed conceptions in insect structure and function (correct rate 55.8%), insect classification (correct rate 55.8%) and insect defense mode (correct rate 55.8%). 2. Elementary pre-service teachers have well at outdoor insects learning skills (average is 8.98 score, 12 score is full score), they can use direct observation, sweeping method and crossing the line of investigation when they observe outdoor insect habitats. 3. Elementary pre-service teachers have well at rearing insect skills (average is 6.48 score, 9 score is full score), they know what habitats of insects need, and device insect rearing environment. 4. Elementary pre-service teachers have the basic ability to guide insect's science fairs for elementary students (average is 1.85 score, 3 score is full score), they can analyze the creative and shortcoming content of science fairs experiments. 5. Elementary pre-service teachers have the basic ability to design insect teaching plans (average is 1.92 score, 3 score is full score), they can design teaching objectives, teaching strategies, teaching content and learning assessment.

Keywords: Entomology curriculum, Pedagogical content knowledge, Elementary pre-service teachers, ICTS

1. Introduction

1.1 Rationale and Importance of this study

Lu and Chen (2009) studied in elementary pre-service teachers, majoring in mathematics and sciences, are still unfamiliar with insects and difficult to teach insect units. Elementary pre-service teachers engaged in teaching strategies as they must understand the pedagogical content knowledge (Wu, 2010). This study to enhance entomology pedagogical content knowledge of elementary pre-service teachers, offers "Entomology curriculum" containing Entomology knowledge, insect outdoor teaching skills, rearing insect skills, insect's science

fairs and insect teaching plans. Thus, the elementary pre-service teachers can promote their teaching strategies of insect units.

Shulman (1986) advanced thinking about teacher knowledge by introducing the idea of pedagogical content knowledge. He claimed that the emphases on teacher subject knowledge and pedagogy were being treated as mutually exclusive domains in research concerned with these domains. Shulman (1987) put forward seven categories in PCK included: content knowledge, pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learner, knowledge of educational context, and knowledge of educational aims.

1.2 Research Objective

In this study, we selected 43 elementary pre-service teachers, majoring in science, to teach entomology curriculum containing insect pedagogical knowledge and pedagogical content knowledge. This research was guided by the following research questions: 1. How do elementary pre-service teachers obtain entomology knowledge? 2. How do elementary pre-service teachers obtain insect outdoor teaching skills? 3. How do elementary pre-service teachers obtain rearing insects skills? 4. How do elementary pre-service teachers view on insect's science fairs? 5. How do elementary pre-service teachers design insect teaching plans?

2. Methodology

2.1. Entomology Curriculum Design

We use "Insect Conception and Teaching Strategies of Science Teachers Questionnaire (ICTS)" to test elementary pre-service teacher' entomology knowledge, ICTS is shown on Table 1. We design Entomology curriculum from pedagogical knowledge and pedagogical content knowledge, Entomology curriculum is shown on Table 2.

Table1: Corresponding Entomology knowledge and ICTS concept.

Entomology Knowledge	Teaching Contents	The Concept of ICTS
Insects General	Insects Definition, Insects Evolution, Classification, Structure and Function	Insect Classification
Insects Introduction (Homoptera, Orthoptera, Odonata, Hemiptera, Mantodea, Blattodea, Lepidoptera, Hymenoptera, Coleoptera, Diptera)	Feature Insect Classification, Evolution, Structure and Function, Life Cycle, Reproductive Behavior, Defense Mode, Ecological Roles, The Relationship between Insects and Herbivorous	Structure and Function Life Cycle Reproductive Behavior Defense Mode Ecological Environment
Recognizing Insect Habitat in Taiwan	Insect Habitat and Insect Conservation in Taiwan	Human and Insects

Table 2: Corresponding Entomology curriculum's pedagogical knowledge and pedagogical content knowledge

Pedagogical Knowledge	Teaching Contents	Pedagogical Knowledge	Content
Outdoor insect learning skill	Learning survey insects (Transect, Direct Observational Method and Sweeping Method), learning to observe insect fauna, record insect habitat.	Outdoor insect learning skill sheet	
Rearing insect skills	How to device insect rearing environment? How to record insect's behavior? How to record insect's growth conditions?	Rearing insect sheet	
Guide Insect's Science Fairs	What is insect suitable for materials science fairs? How to design insect experiments?	View on insect's science fairs sheet	
Learning Design Insect teaching plans	How to design insect teaching plans in Taiwan?	Insect teaching plans	

2.2. The study sample

The 43 elementary pre-service teachers study at Department of Science Education, National Taipei University of Education. They are sophomore and have been completed general biology specialized courses and experimental skills in the first year of university.

2.3. Research Tools

2.3.1. Insect Conception and Teaching Strategies of Science Teachers Questionnaire

We use "Insect Conception and Teaching Strategies of Science Teachers Questionnaire (ICTS)" designed from Lu (2013); and select the second part of ICTS. The second part involving 28 questions, question 1 to 24 is multiple choice among the seven main conceptions about the insect concept cognition (structure and function, life cycle, insect classification, reproductive behavior, defense mode, ecological environment, relationship of human and insects), question 25 to 26 is short answer question, and question 27 to 28 is drawing question. The Kr-21 value for the ICTS is 0.743, the average Difficulty Index is 0.61 (range = 0.37-0.87), the average Index of Discrimination is 0.46 (range = 0.27-0.74). Therefore, the questions used have good content reliability.

2.3.2 Outdoor Insect Learning Skill Sheet

The elementary pre-service teachers based on the sheet to learn outdoor insect observation, they explain how to find the insect habitat, how to collect insects, how to observe insects, how to record the appearance of insects and the insect ecological environment. Each subject performed four ranking score respectively, we investigate elementary pre-service teachers' outdoor insect learning skill with these record.

2.3.3 Rearing Insect Sheet

The elementary pre-service teachers based on the sheet to learn insect feeding, they explain how to device insect rearing environment, how to record insects behavior, how to record insects growth. Each subject performed four ranking score respectively, we investigate elementary pre-service teachers' insect feeding skill with these record.

2.3.4 View on Insect's Science Fairs Sheet

The elementary pre-service teachers based on the sheet to learn insect's science fairs comments, they explain what creative content of insect's science fairs and interpret the shortcoming content of insect's science fairs. Each subject performed four ranking score respectively, we investigate elementary pre-service teachers' insect's science fairs comments with these record.

2.3.5 Insect teaching plans

The elementary pre-service teachers based on the plans to learn insect courses teaching, they explain how to design elementary insect teaching plans, includes teaching objectives, teaching strategies, teaching content and learning assessment. Each subject performed four ranking score respectively, we investigate elementary pre-service teachers' insect courses teaching with these record.

2.4. Data Collection and Analysis

Quantitative data: data from the ICTS of 43 elementary pre-service teachers were analyzed using SPSS 18.0 software.

Qualitative data: analyses of answers given in outdoor insect learning skill sheet, rearing insect sheet, view on insect's science fairs sheet, and insect teaching plans. We analyzed these qualitative data and view on the learning of Entomology curriculum's pedagogical content knowledge in elementary pre-service teachers.

3. Results

3.1 Elementary pre-service teachers obtain Entomology knowledge

In this study, ICTS' question 1 to 24 is multiple choice, when elementary pre-service teacher answer correct get 1 score, and answer wrong or no answer get 0 score. To explore elementary pre-service teachers learn entomology knowledge, is shown in Table 3.

Table 3: Explore elementary pre-service teachers learn entomology knowledge with ICTS

Entomology Knowledge	The Concept of ICTS	ICTS's Question	Correct Rate (%)
Insects General	Insect Classification	4、10、16、21	55.82
Insects Introduction (Homoptera, Orthoptera, Odonata, Hemiptera, Mantodea, Blattodea, Lepidoptera, Hymenoptera, Coleoptera, Diptera)	Structure and Function	1、7、13、23	55.81
	Life Cycle	6、12、18、22	79.07
	Reproductive Behavior	3、9、15、19	81.39
	Defense Mode	5、11、17、20	55.82
	Ecological Environment	2、14、24	97.68
Recognizing Insect Habitat in Taiwan	Human and Insects	8	100

According to Table 4, elementary pre-service teachers had very good concepts, such as human and insects (100%), ecological environment (97.68%), reproductive behavior

(81.39%), life cycle (79.07%). Professor taught detail relationship with the living environment, reproductive behavior, life cycle of insects in class, and elementary pre-service teachers according to their own contact experience with insects; therefore, they had higher rate of correct answers. Elementary pre-service teachers failed in structure and function (55.81%), insect classification (55.82%), and defense mode (55.82%). There are a wide variety of insects, professor didn't teach all of the insect classification in class, and elementary pre-service teachers didn't review the structure and function of insect after school, so elementary pre-service teachers failed in these answer.

3.2 Elementary pre-service teachers obtain outdoor insect learning skills

Outdoor insect learning skill sheet contains 4 items: how to find the insect habitat, how to collect insects, how to observe insects when they find insects, how to record the insect ecological environment. Each item has 4 grade, 3 score is the best mark, 0 score is no answer, so 12 score is full scores. The statistics percentage of outdoor insect learning skill sheet in elementary pre-service teachers is show in Figure 1.

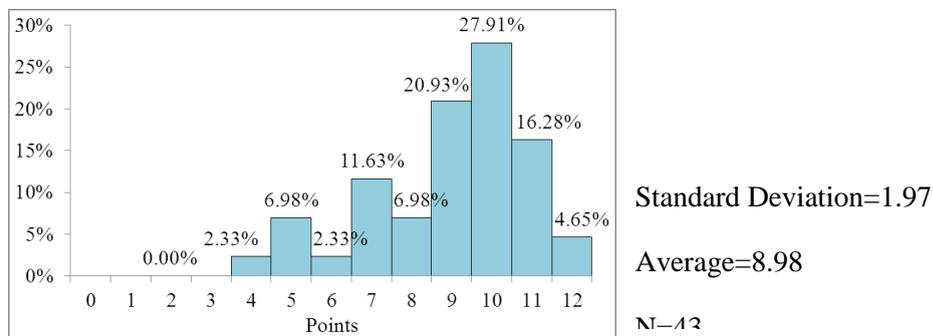


Fig. 1: The statistics percentage of elementary pre-service teachers' outdoor insect learning skill sheet

According to Figure 1, elementary pre-service teachers have well at outdoor insects learning skills (average is 8.98 score, the standard deviation is 1.97). They can use direct observation, sweeping method and crossing the line of investigation when they find insect and observe outdoor insect habitats (table 4).

Table4: The elementary pre-service teacher recorded the appearance of insects and the insect ecological environment

Place	Environment	Survey	Name	Structure	Number	Activity	Others
Underbrush	15 cm grass	Direct observation	Locust		One	Jump	

3.3 Elementary pre-service teachers obtain rearing insects skills

Rearing insect sheet contains 3 items: device insect rearing environment, record the behavior of insects, record the growth of insects. Each item has 4 grade, 3 score is the best mark, 0

score is no answer, so 9 score is full scores. The statistics percentage of rearing insect sheets in elementary pre-service teachers is show in Figure 3.

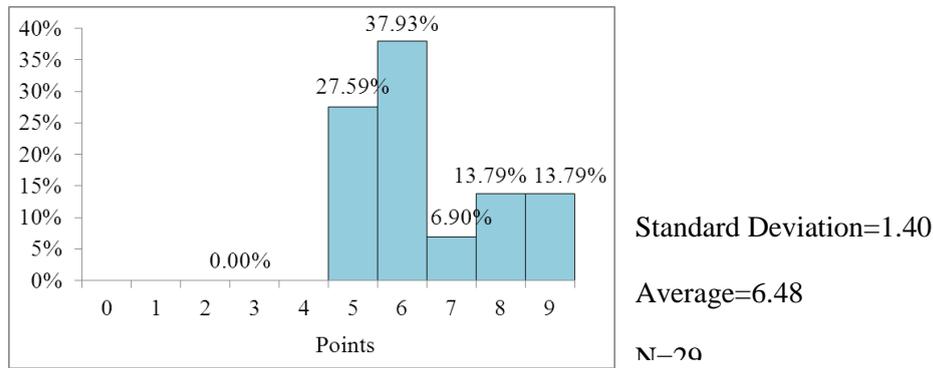


Figure 2: The statistics percentage of elementary pre-service teachers’ rearing insect sheet

According to Figure 2, elementary pre-service teachers have well at rearing insects skills (average is 6.48 score, the standard deviation is 1.40). They know what habitats of insects need, and device insect rearing environment. They can record the behavior of insects and the growth of insects very well.

3.4 Elementary pre-service teachers guide insect’s science fairs for elementary students

View on insect’s science fairs sheet contains 4 grade: Elementary pre-service teachers get 3 score when they explain what creative content of insect’s science fairs and interpret the shortcoming content of insect’s science fairs very well, 2 score means ordinary level explanation, 1 score means bad level explanation, 0 points is no explanation. The statistics percentage of view on insect’s science fairs sheet in elementary pre-service teachers is show in Figure 3.

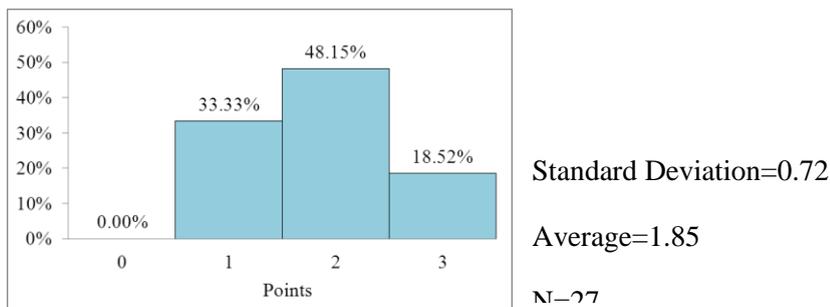


Figure 3: The statistics percentage of elementary pre-service teachers’ view on insect’s science fairs sheet

According to Figure 3, elementary pre-service teachers have the basic ability to guide insect’s science fairs for elementary students (average is 1.85 score, the standard deviation is 0.72), they can analyze the creative and shortcoming content of science fairs experiments.

3.5 Elementary pre-service teachers design insect teaching plans

Design insect teaching plans contains 4 grade: Elementary pre-service teachers get 3 score when they design teaching objectives, teaching strategies, teaching content and learning assessment of insect teaching plan very well, 2 score means ordinary level design, 1 score means bad level design, 0 points is no design. The statistics percentage of designing insect teaching plans in elementary pre-service teachers is show in Figure 4.

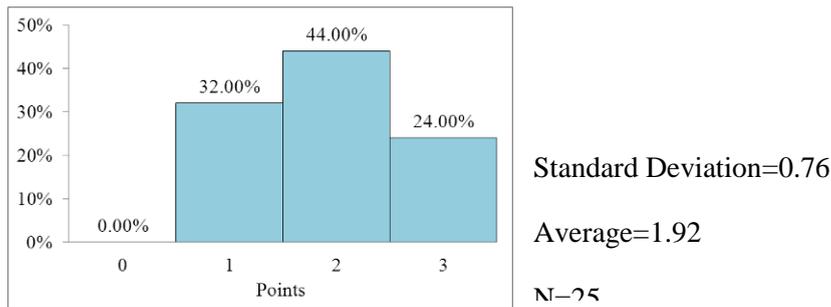


Figure 4: The statistics percentage of elementary pre-service teachers' designing insect teaching plans

According to Figure 4, elementary pre-service teachers have the basic ability to design insect teaching plans for elementary students (average is 1.92 score, the standard deviation is 0.76), they can design teaching objectives, teaching strategies, teaching content and learning assessment of insect teaching plan.

4. Conclusion

Among the seven main concepts insects in ICTS multiple choice, the elementary pre-service teachers had very good concepts in life cycle (correct rate 79.08%), reproductive behavior (correct rate 81.39%), ecological environment (correct rate 97.68%) and human and insects (correct rate 100%), but failed in structure and function (correct rate 55.81%), insect classification (correct rate 55.82%) and defense mode (correct rate 55.82%).

Pedagogical content knowledge (PCK) of Entomology Curriculum is divided into four parts: outdoor insect learning skill sheet, rearing insect sheet, view on insect's science fairs sheet, and insect teaching plans. Elementary pre-service teachers obtain pedagogical content knowledge (PCK) is shown in Table 7.

Table 5: The elementary pre-service teachers' pedagogical content knowledge

Pedagogical Knowledge	Teaching Content	Pedagogical Content Knowledge(PCK)
Outdoor insect learning skills	Learning survey insects (Transect, direct observational method and sweeping method), learn to observe insect shape structure, record insect habitat.	Elementary pre-service teachers can use direct observation, sweeping method and crossing the line of investigation when they observe insect habitats.
Rearing insect skills	How to device insect rearing environment, how to record insects behavior, how to record insects growth	Elementary pre-service teachers know what habitats of insects need, and device insect rearing environment.
View on insect's science fairs	Explain what creative content of insect's science fairs and interpret the shortcoming content of insect's science fairs.	Elementary pre-service teachers have the basic ability to guide insect's science fairs for elementary students.
Design Insect teaching plans	Design elementary insect teaching plans, includes teaching objectives, teaching strategies, teaching content and learning assessment	Elementary pre-service teachers have the basic ability to design insect teaching plans for elementary students.

5. Acknowledgements

We appreciated to those who made the completion of this study possible, including: funding supported from the National Science Council Taiwan, R.O.C. (NSC101-2511-S-152-010-MY2), and 43 elementary pre-service teachers participated in this study.

6. References

- Lu, C. C., & Chen, C. H. (2009). *Elementary Mentor Teachers Teaching Science of The Difficulties*. Paper presented at the 25th ASET Annual International Conference, National Taiwan Normal University, Taipei, Taiwan.
- Lu, C. C. (2013). *Construction of Insect Conception and Teaching Strategies of Science Teachers Questionnaire*. Paper presented at the 2013 Conference and Symposium on Psychological and Educational Testing seek, National Taichung University of Education, Taichung, Taiwan.
- Rau, J. W. (2003). *Professional Development: Theory and Practice* (2nd ed.). Wu-Nan Book, Taipei.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
- Wu, C. S. (2010). *Research in Teacher Education*. Taiwan Higher Education Press, Taipei, Taiwan.

ISEPSS-1800

Developing the Insect Playing Table Game to Test Elementary Student's Insect Conceptions and Science Process Skills

Chow-Chin Lu*

Professor, Department of Science Education, National Taipei University of Education
886-227321104#53320, 134 He-Ping E. Rd., Sec. 2, Taipei, Taiwan, Republic of China

*E-mail address: luchowch@tea.ntue.edu.tw

Abstract

We develop Insect Playing Table Game (IPTG), which creating pattern use as the ADDIE model to test elementary school student's insect conception and science process skills in Taiwan. First step is to analyze the IPTG materials. We analyze the "structure and function, mouthparts and eating, life cycle, and habits" of insect in Taiwan. And what students need to train science process skills, like observation, compared with the classification, organization and association, induction, judgments and inference. Second, design the IPTG. Making IPTG has a clear teaching aim, multi-playing strategy like defensive policy, insect cards, baby cards and other materials intended style of the table game etc. Third, develop the IPTG. Developing IPTG includes drawing insect playing map, knowledge cards, rescue cards, insect money, rules of the game, coaching manuals, etc., especially the constructional detail magnify function and interactive game design in the playing materials promote the student's science process skills.

Forth, implement IPTG. We invite two national college professors and four senior science teachers to play IPTG, and then we interview them to collect the testing amendments, and corrected it. Fifth, evaluate IPTG. We use quasi-experiment design and questionnaire survey to evaluate IPTG. We select 126 fifth grade students in an elementary school in Taiwan and ask them to play IPTG for two weeks, and then we tested them by the "Insect Cognitive Conception Test". We found that after playing the IPTG materials, the student's post-test scores (16.75) is higher than the pre-test scores (7.72), and there are significant differences ($t = 16.47$, $p = .00$) and helps the student to comprehend the insect conception. We ask 6 elementary school teachers to evaluate the science process skills of students after playing IPTG, the scores of IPTG quality certification form is 95.9, the evaluators give the IPTG teaching materials the highest certification level: AAA level. The teachers think that IPTG can improve students' science process skills.

Keywords: Insect Playing Table Game (IPTG), Science Process Skills, ADDIE design, Insect Cognitive Conception Test

1. Introduction

1.1. Rationale and Importance of this study

Insects has the most widely distributed and the largest number of animals on Earth, even though students has to learn insects curriculum in schools, but after learning, students are still unfamiliar with insects, and has lots of alternative conceptions(Zhuang, 2002). Before student start learning insect curriculum in school, they learn the insect conception from book pictures, picture books or TV media (Lu, Chen, & Chen, 2011), but in order to attract children's interest, most of the books and media often try to make the insect appearance and habits to be anthropomorphic, which pass on the wrong message to children and will let them prone to have the wrong conceptions. If we don't guide them to have the right conceptions, it might effect their future learning in insects (Lu & Chen, 2008; Lu et al., 2011; Marriott, 2002)

The International Society for Board Game Studies is an interdisciplinary group dedicated to research on board games and the history and development of board games around the world. Some of the research is very general and examines board games as a part of play and learning in different cultures (Hitchens, Patrickson, & Young, 2013). In this study, we try to develop Insect Playing Table Game (IPTG) with real insect picture to help elementary school student learn the correct insect conception. The IPTG teaching materials use coach playing strategies to design it, and wish to build up an IPTG that can help the students to train their science process skills.

1.2. Research Objective

This study adopted the systematic design of instruction teaching model (ADDIE) to develop Insect Playing Table Game (IPTG) teaching material that can detect elementary school student's insect conceptions, which are interesting and has science process skills in it. In this study we probe five questions: First, how do us analysis the IPTG teaching material base on student cognitive conceptions. Second, what kind of IPTG teaching material designing can accomplish our goal? Third, how do we make the IPTG teaching material? Forth, how to implement the IPTG teaching material in teaching? Fifth, how do we evaluation the IPTG teaching material?

2. Methodology

2.1. Research Design

The IPTG teaching materials can divided into two phases: development phase and evaluation phase. In development phase, we design and develop the IPTG teaching materials base on ADDIE systematic design of instruction teaching mode shown in figure 1. In the evaluation phase, we use questionnaire and quasi-experimental research method to evaluate the feasibility and the effectiveness of establishment student's correctly insect conceptions of IPTG teaching materials.

2.2. Research Tool

2.2.1. IPTG quality certification evaluate form

In this research, we use the "E-learning quality certification evaluate form", which was develop by Sung, Chang, Lin, Lee, & Chen, (2009), exchange it to evaluate IPTG, and named IPTG quality certification evaluate form. The form has four dimensions, including: teaching contents, playing direction, playing design, and insect card represent. The evaluators will give 0 to 8 point when evaluating the teaching design; the maximal score is 104 point. Certification grade "A" means the teaching materials got 65 to 74 points in the test; if it got grade AA, it means certification grade is over 78 to 90 points; if the certification grade is over 91 point, it can be certificate as AAA grade.

2.2.2. Insect Cognitive Conception Test

In the study, we also use the "Insect Cognitive Conception Test" that was design by Lu, and Jeng, (2012). It has 21 questions in the test, includes seven questions that ask "structure and function of insects", six questions that ask "mouthparts and eating" and eight questions that ask "life cycle and habits". The KR_{21} of this test is .738 and show the test has reliability which was capable to use.

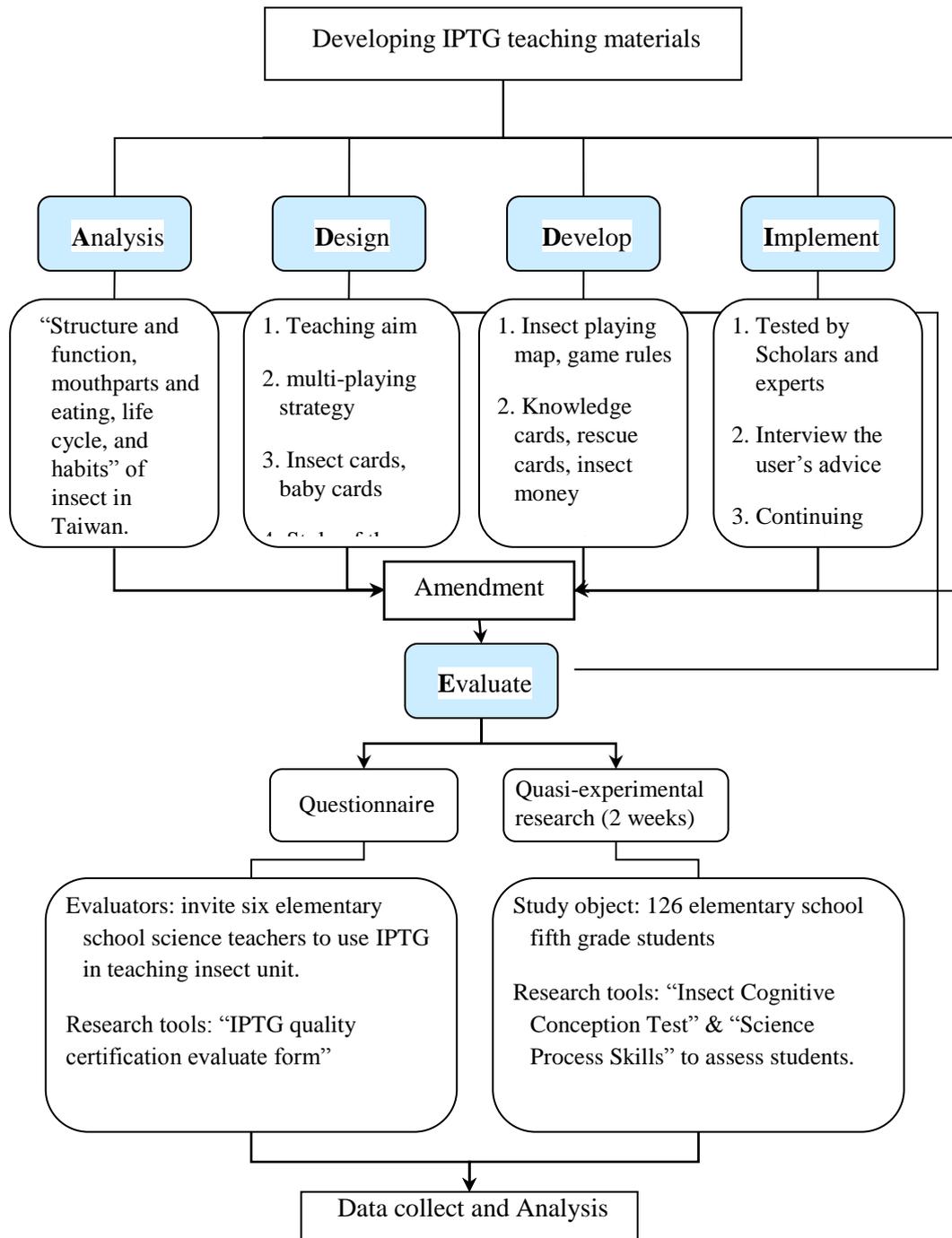


Fig. 1 Proposed research model of developing IPTG teaching materials

2.3. Data Collection

We collected both quantitative and qualitative data. IPTG quality certification form and Insect Cognitive Conception Test is our quantitative data. These data present the evaluation results of the IPTG teaching materials and the user's suggestion after using IPTG teaching materials. It display with statistical average and shows the IPTG teaching materials is validity in improving student's insect conceptions. The qualitative data includes IPTG user's interviewing record, evaluator's interview record and student's science process skills. We use interpretative analysis to grasp the details suggestion of our users, evaluators and students after using IPTG teaching materials.

3. RESULTS

3.1. Designing and developing phase of IPTG teaching materials

The designing of IPTG teaching materials is using teaching strategies as arrangement "structure and function, mouthparts and eating, life cycle, and habits" of insect, and clear teaching aim, multi-playing strategy. We sort out the conception of insect, our teaching goals, insect card, 3 baby cards exchange 1 insect card, and instructor guide into a list, shown as Figure 2.

As we see in figure 2, the designing concept of "structure and function, mouthparts and eating, life cycle and habits" is according to understand the basic insect conceptions. "Insect cards" is according to understand the features of variety insects (Figure 3). The "Baby cards" description is a particular feature of insect cards (Figure 3). "Instructor Guide" Contains insect playing map (Figure 4), knowledge cards and rescue cards.

3.2. Implement phase of IPTG teaching materials

We invite two international professors (specialty in insects, P1-P2), and four senior elementary school science teachers (T1-T4) to test IPTG teaching materials and interview them for their suggestions, and use it as the reference when corrected IPTG. We sort out the interview results and the correction as Table 1.

Table 1 Testing results and corrections of IPTG teaching materials

Dimension	Users suggestion	Corrections
1. Teaching Contents	1-1. IPTG can mention more insect type (GInv-P1, P2, 20130602; GInv-T3, T4, 20130224) ◦	1-1. We have <i>Coleoptera</i> , <i>Lepidoptera</i> , <i>Hymenoptera</i> insects in the IPTG, we added <i>Hemiptera</i> and <i>Homoptera</i> two kinds of insect.
2. Playing Direction	2-1. Can emphasize the learning point again after the table game (GInv-P1, T1, 20130611) ◦	2-1. We added the learning point prompted function, to emphasize the learning point again after the table game was over.
3. Playing Design	3-1. IPTG playing feedback isn't enough (GInv-P2, T1, T2, 20130611) ◦	3-1. We added the knowledge cards to strengthen the immediately feedback. 3-2. We added the timing function to increase the irritating of the game.
4. Insect card represent	4-1. The feature of Insect card isn't enough, and maybe reduce the comprehension (GInv-P2, T1, T2, T4, 20130624).	4-1. We added insect cartoon images into the back of insect card, performance structural characteristics of the insect.

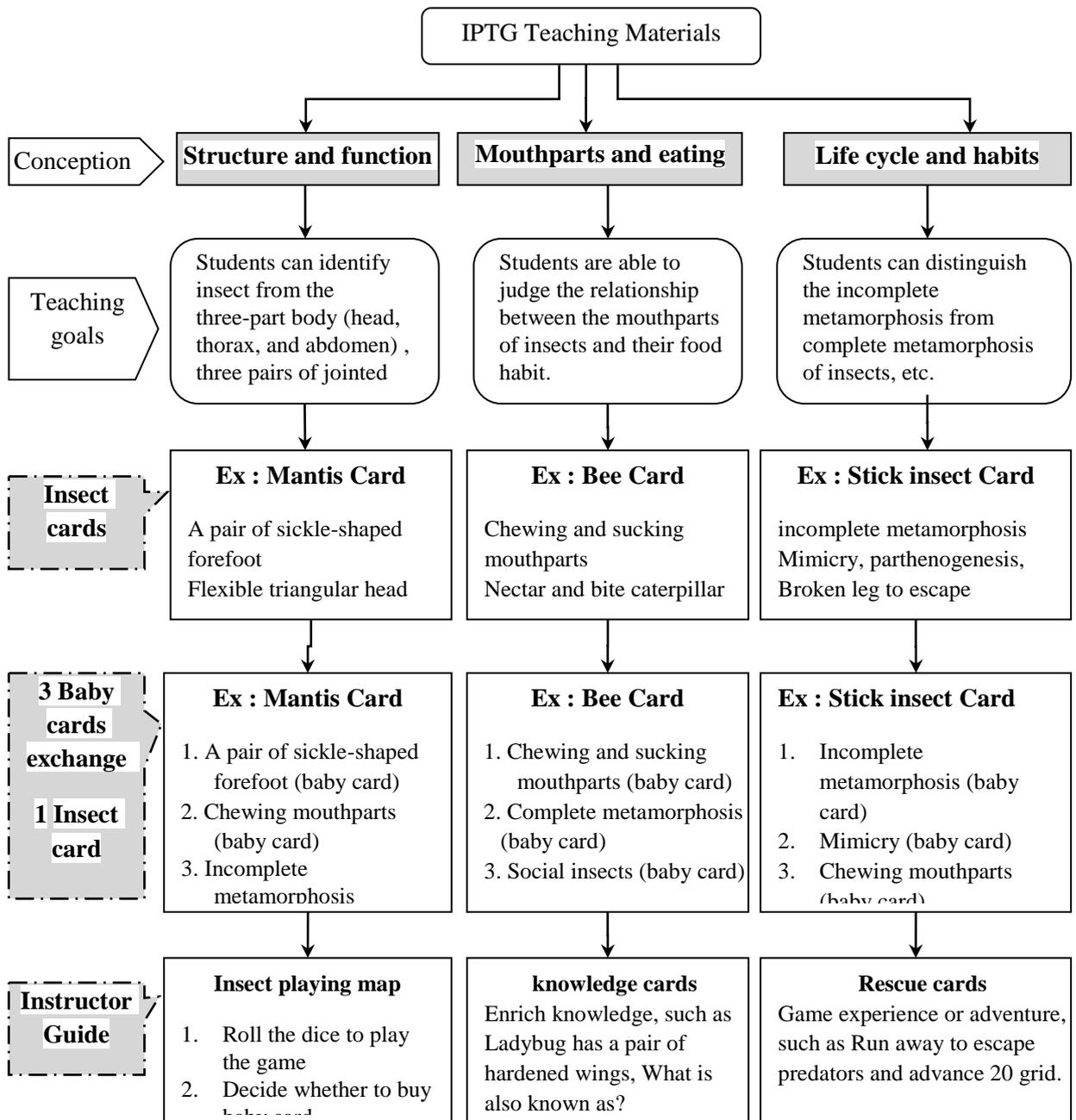


Fig. 2 Development phases of IPTG teaching materials



Fig. 3 IPTG illustrated insects card and baby cards



Fig. 4 IPTG illustrated insect playing map

3.3. Evaluation phase of IPTG teaching materials

3.3.1. IPTG quality certification evaluate form

After finishing the IPTG, we ask six evaluators to evaluate the designing results of IPTG, shown in Table 2. The evaluators give the IPTG teaching materials the highest certification level: AAA level.

Table 2 IPTG evaluate result from the IPTG quality certification evaluate form

Evaluation dimension	Mean	Standard deviation
1. Teaching Contents (Content, total score 21)	19.6	1.08
2. Playing Directions (Navigation, total score 19)	17.0	2.10
3. Playing Design (Instructional design, total score 43)	40.3	1.63
4. Insect card Represent (Instructional guide, total score 21)	19.0	1.10
Total score (Total, total score 104)	95.9	4.37

3.3.2. Insect Cognitive Conception Test

In the insect cognitive conception test (7 questions ask “structure and function of insects”, 6 questions ask “mouthparts and eating” and 8 questions ask about “life cycle and habits”) survey, we exclude the error questionnaire sheets and get 126 elementary school fifth grade students valid questionnaire sheets. The pre-test and post-test result of insect cognitive conception test is shown in table 3.

Table 3 Test performance of fifth grade students’ insects cognitive conception test

Conceptual category	Pre-test ($N = 126$)		Post-test ($N = 126$)		d	t	p
	M	SD	M	SD			
Structure and function of insects	2.37	1.39	5.97	1.76	1.67	8.85	.00**
Mouthparts and eating	2.08	1.31	4.66	1.82	2.38	10.96	.00**
Life cycle and habits	3.27	1.33	6.12	1.32	1.13	9.02	.00**
Total score	7.72	2.53	16.75	3.65	6.08	16.47	.00**

M : Mean; SD : Standard Deviation; D : Discrepancy between Pre-test and Post-test ;** $p < .00$

From table 3, we can know that students discrepancy between pre-test and post-test results from insect cognitive conception test is 9.03; the total score of t-test is 16.47, and the “structure and function of insects” get’s $t=8.85$; the “mouthparts and eating” get’s $t=10.96$; the “life cycle and habits” get’s $t=9.02$ ($p=.00$). This shows that students have significant progress on the total score and three conceptual category after using IPTG.

3.3.3. Students’ Science Process Skills

Sorting description with evaluator interview result instruction:

The IPTG teaching materials have correct content and clear pictures, the content is interesting and fun, the scientific conceptions is express correctly. The organizations of the IPTG teaching materials are completely and can gives students appropriate breadth and depth learning step-by-step; students can

observe various structures of 20 kinds of insects from insect cards, compare and classify insect species by its structures, such as Coleoptera insects have a hard outer sheath-wing, etc. (Int-T1, T4, T5, T6, 20130703).

The IPTG has integrated framework, clearly divide each card; the table game is vivid and lively, players compete to win each other, so they organize and associate baby cards to exchange insect card or resist other players to exchange insect card. It is a way to practice and assesses students; they can induction and summary insect cognitive knowledge in a short time, the design of knowledge cards showing the answer can provide many knowledge when their playing the IPTG (Int -T1, T2, T3, T4, 20130703).

The IPTG teaching materials have playing recording function, which can help students take judgments and inference; the content in IPTG has features a variety of insects, students can judge and infer which baby card he should buy in the game guide, it can record how much money player remaining to lead students make a better decision (Int -T2, T3, T5, 20130703).

4. Conclusion

4.1. Follow ADDIE pattern can develop good quality of IPTG teaching materials

The IPTG teaching materials develop by following the five step of ADDIE pattern. First, we analysis student's cognitive conception when they learn structure and function, mouthparts and eating, life cycle, and habits of insects. Second, we use conception of insect, teaching goals, insect card, 3 baby cards exchange 1 insect card, and instructor guide to design the whole teaching materials of the IPTG. Then, we design insect cards, baby cards, knowledge cards and rescue cards; and devise instructor Guide, insect playing map. After testing IPTG, we adopted the expert's suggestion and three functions: First, we added Hymenoptera insect to increase the richness and completeness of IPTG. Second, we added the function of showing the correct answer and learning key points to let the students can finish the learning in IPTG. The last, we added insect cartoon images into the back of insect card, performance structural characteristics of the insect. In the evaluation phase, the IPTG obtain the AAA certification, which display IPTG is an excellent table game.

4.2. IPTG can help students to obtain the insect conceptions and science process skills

According to the pretest and posttest scores in t-test in the "Insect cognitive conception test", we found that after playing IPTG teaching materials for two weeks, students can have better insect conceptions, especially in structure and function of insects, due to the clear and correct insect cards. Students can observe various structures of 20 kinds of insects from insect cards, compare and classify insect species by its structures, and can induction and summary insect cognitive knowledge in a short time. Students can judge and infer which baby card he should buy in the game guide, it can record how much money player remaining to lead students make a better decision

5. Acknowledgements

We appreciated to those who made the completion of this study possible, including: funding supported from the National Science Council Taiwan, R.O.C. (NSC101-2511-S-152-010-MY2), teachers who takes questionnaires, teachers who join focus grouping interview and senior teachers who assist the entire researcher. Last but not less, the supports from our research team.

6. References

- Hitchens, M., Patrickson, B., & Young, S. (2013). Reality and terror, the first-person shooter in current day settings. *Games and Culture*, 9, 3-29.
- Lu, C. C. & Chen, Y. Y. (2008). Integrating digital storybooks into teaching to promote children's cognitive concepts of animal growth. *Journal of Educational Practice and Research*, 21(2), 33-62.
- Lu, C. C., Chen, Y. Y., & Chen, C. W. (2011). A correlative study of CD-ROM storybooks in classrooms and school children's formation of descriptive concepts. *International Journal of Science and Mathematics Education*, 9(1), 47-67.

- Lu, C. C., & Jeng, S. L. (2012, December). Developing digital game based on the conception of insects (DGBI) to test elementary student's insect conceptions. *Creative Education, 3*, 101-110.
- Marriott. S (2002). Red in tooth and claw? Images of nature in modern picture books. *Children's Literature in Education, 33*(3), 175-183.
- Sung, Y. T., Chang, K. E., Lin, H. L., Lee, Y. F., & Chen, M. P. (2009). Establishing certification standard for e-learning courseware quality and analyzing its reliabilities. *Journal of e-Business, 11*(4), 823-846.
- Zhuang, S. J. (2002). Action research of elementary school students' learning camp insects. A *Master's thesis of National Taipei University of Education*.

ISEPSS- 1735

The Research of Environmental Education of Senior Learners in Taiwan

Hung, Ying-Tsun^{a*}, Chin, Hsiu-Lan^{b'}, Chen, Mei-Lan^c

^aAssistant Professor of the Department of Senior Citizen Service in Management of Ching Kuo Institute of Management and Health, Keelung, Taiwan
E-mail address: ythung888@gmail.com

^bAssistant Professor, Department of Elderly Welfare & Social Work, Toko University, Taiwan
E-mail address: 99090@mail.toko.edu.tw

^cGraduate student of Institute of Health Industry Management of Ching Kuo Institute of Management and Health, Keelung, Taiwan
E-mail address: kellychen1216@gmail.com

Abstract

Purpose : In 2013, there are 2,644,876 people whose age are over 65 years old , which occupied 11.33% of Taiwanese population, and the average life was 80 years old. This study focuses on the learning needs , spiritual health and environmental literacy of senior learners.

Methods : The research uses the questionnaire survey procedure. It conducted in the Senior Learning University in Taiwan. The Total sample were 438. The descriptive statistics, single factor analysis of variance, t-test and Pearson correlation statistical methods was used to conduct analysis for the data.

Results : In this study, there are 70% female senior learners and 30% male senior learners. Besides, married learners are about 79%. For education level, people whose highest education level are junior high school occupied 49%. Before-retirement occupations belong to industrial and business which occupied 36%. 40% learners' religion belief are Buddhists. At least 40%learners participate in volunteering frequently. 90% learners are in good health condition. Even though they don't have serious disease, but they more or less have chronic. For the whole life satisfaction, 40% to 50% feel satisfied, and with so-so-feeling learners are about 50%, on matter in physical, economic, social relationship and whole life satisfaction. There are 54.1% learners didn't attend any environmental education or ecology –related courses during this year. The elderly get the average number – 3.53 in environmental education learning needs which is higher than the average number 3. The environmental literacy ' average number is 3.11 which is kind of lower, especially lower at environmental awareness and technique aspects. Spiritual health average number is 3.93, which shows that senior learners' spiritual health are commonly good. In other words, environmental education learning needs and environmental literacy are related positively. The environmental literacy and spiritual health are related positively. Secondly, senior spirituality are in good condition. It shows that senior citizen participate in education activity such as Senior Learning University can help them to promote the spiritual health and reach the goal of successful ageing. Thirdly, for people who have religion belief and who do the volunteering usually have better spiritual health. The spiritual health and physical health don't have significant relationship.

Conclusion and Suggestion : The study finds that as for senior citizen, the environmental literacy are lower, especially in environmental awareness and behavior. We suggest the government and related organization pay more attention to the promotion of the environmental literacy for the elderly. By means of the intervention, senior education activity, we can help them to learn more environmental knowledge, behavior and action.

Key Words: environmental education learning needs, environmental literary, senior learner, spiritual health,

ISEPSS- 1809

Using creative dance to inspire early childhood geometric learning

Yi-Chun Chen

Graduate Student, Dept. of Early Childhood Development and Education, CYUT.
kimikono@gmail.com

JuanAnn Tai

Associate Professor, Dept. of Dance, TUT.
anntai@ms17.hinet.net

Tzong-Ming Wey

Assistant Professor, Dept. of Early Childhood Development and Education, CYUT.
tmwey@gm.cyut.edu.tw

Abstract

The aim of this research is applying creative dance to inspire early childhood geometric learning. The application of creative dance will help young children to develop their body potential, improve their coordination, and sense of rhythm. This will not only help them understand the concept of geometry, but also develop their creative ability. Moreover, this method allows the young children to express themselves as well as their feelings through dancing, which will increase the effect of geometric learning as a result.

The course is designed according to dance elements: Space, Time, Weight, and Relations and is mainly based on space-orientation to integrate the concept of geometric shapes and space. These creative dance classes have been taught twice a week, forty (40) minutes each session for totally sixteen sessions (640 minutes).

The method was to observe the class with two other participants; questionnaires were given after the class. Upon analyzing all the records and video recordings, the results of this research are as below:

1. Creative dance may increase young children's learning interests and give them a joyful environment while learning.
2. Applying creative dance in teaching may inspire the children to learn and increase their sense of geometric shapes and space.

Key words: Creative dance, Early childhood, Geometric shapes, Space.

ISEPSS- 1839

Student learning performance on the nanotechnology teaching in the elementary school by instructional media

Hung-Yin Tsai^{1,*}, Mei-Yu Chang², Shiang-Yi Chiou³

¹Department of Power Mechanical Engineering, National Tsing-Hua University, Hsinchu 300, Taiwan, ROC

E-mail:hytsai@pme.nthu.edu.tw

²Department of Education, National Hsinchu University of Education, Hsinchu 300, Taiwan, ROC

E-mail:mmchang@mail.nhcue.edu.tw

³Tien Shin Elementary School, Taoyuan 335, Taiwan, ROC

E-mail:lulu528402002@yahoo.com.tw

Keywords: Instructional media, Nanotechnology education, Elementary school.

Abstract

The learning performance analysis of students on the nanotechnology teaching in the elementary school through applying different instructional media was studied. Participants of total 12 classes including 313 students were middle-grade and senior-grade students of three elementary schools in Taoyuan and Miaoli counties in Taiwan. Students were divided into four groups and each group was respectively applied by one of instructional media: "Video", "Power Point", "Animation" and "The most suitable media chosen by the teacher". Students did a pre-test of nanotechnology achievement one week before the experiment. After the experiment, students did a post-test of nanotechnology achievement and an interest inventory of nanotechnology. From the test results, students' learning achievement and learning interest of nanotechnology are analyzed by analysis of variance in different grades and in different instructional media.

In the current study, "The most suitable media chosen by the teacher" had statistically significant difference in achievement test than "Animation" did; while the middle-grade students showed statistically significant difference in achievement test than the senior-grade students did. The interaction study of the achievement test in instruction media and different grade students showed that the middle-grade student had statistically significant difference in "favorite of science" and "confidence of nanotechnology" than the senior-grade one did.

ISEPSS-1820
**The Implementation Process of Mentorship Programs for
Gifted Students among the New Sons of Taiwan**

Chao-Yi Chen

Professor, Department of Special Education, National Taiwan Normal University
t14016@ntnu.edu.tw

Abstract

Most of the mass media and scholars interested in the ‘New Sons of Taiwan’ (NST), but the issue has focused on the shortcomings and weaknesses of those young students; however, many of them have participated in the educational programs for the gifted. Our study emphasizes on their potentials and strengths, may bring more positive attention and encourage long-term tutors to mentor these students.

Participants in this study included 23 mentors, 36 gifted elementary school students of Taipei City and Taipei County and their parents as well. Among the parents, 3 mothers are from Vietnam, 1 Hong Kong, 1 Macau, 1 Myanmar, 1 Malaysia, 1 Malaysia father and the rests are from China. These mentor-student pairs are so flexible that we develop one-to-one interaction, group activities and thematic group curriculum. Adopting Action Research, we modified the program while we proceed it. Through observatory method, in-depth interview and collecting relevant documentary materials, research team analyzed the process of interaction, the effects and influence of mentorship program. The findings are:

1. We adopted Action Research to precede the program and kept close attention to the needs of mentors, parents and students, and modified the program accordingly with flexibility.
2. The mentor-student interaction included multi-dimensional teaching, learning models, and strategies.
3. The mothers of the NST are the positive providers of educational resources.
4. The gifted students’ families had opportunity to explore outside of their own social cultural circle.
5. We put emphasis on the empowerments of these mentors, and on their process of listening, looking, understanding and sharing.

Keywords: Gifted Students, Mentorship program, New Sons of Taiwan (NST)

1. Preface and Research Purpose

The large amount of master’s thesis and dissertation in 21st century have focused the topic regarding NST (i.e. children who have foreign parent or children of new immigrant) . In just a few years, considerable research energy quickly accumulated, people have paid close attention on this topic. 吳俊憲、吳錦惠 (2007) have analyzed the current research status and research trend upon the educational issue of NST. They believed the amount of relevant studies have increased by twice, but mostly were master’s thesis and dissertation. Project of subsidies from related institution and the aggressiveness from academic are still insufficient. Based on the principle of equality on educational opportunity, we suggest that academic must follow the change of the time and the dynamic of society to focus on NST research.

In addition, current mass media and thesis often focused on the weakness aspect of NST. In fact there are many NST who accept education program for gifted. We expect that this study

will lead the research direction toward concentrating on their advantage, and call for reconsidering this educational issue by positive attitude. We also hope the authority to execute concrete action, provide essential human and social resources. Furthermore, we urge to make a thorough inquiry on the problem of how NST obtain better guide on education to develop their own advantage and ability, and then feedback to the society in return. The rising of NST research will be the symbol of indicating that our society moving toward to the multi-cultural friendly environment.

2. Research Method

2.1 Research participants

Participants in the study included 23 mentors, 36 gifted elementary school students of Taipei City and Taipei County and their parents as well. Among the parents, 3 mothers are from Vietnam, 1 Hong Kong, 1 Macau, 1 Myanmar, 1 Malaysia, 1 Malaysia father and the rests are from China.

2.2 Research process

The study is the mentorship program for NST gifted students. We discussed the interaction between mentors and students and its effect on each other, we also recorded the implementation process, effect and result. The nature of our program was action research, which contained the collaboration of researchers and participants. We constantly modified the ongoing program through dialog, jointly experienced reflection and problem solving process. During the program, we interviewed both teachers and students. Researcher observed the interaction between teachers and students, collected related documentary material, and analyzed their interaction and the learning effect of students. The content as follow:

2.2.1 Mentors and students carry out activities

During eight months of after school time or weekend time, Mentors and students carried out the following activities : exploring interest; searching data (in Library of on computer); reading references; gaining and stimulating special ability; proceeding exploring research; planning career; leading students to join activities; understanding the learning, working and live status on mentors; discussing the transitional phase of being gifted students; visiting schedules; and other activities that can extend student's life and learning domain. The location of above activities are in library, bookstore, computer classroom, field gathering place, zoo, botanical garden, laboratory, seminar, observatory, science center, art museum, Flora EXPO, university, and student's home etc. Before the activities are over, we left 20 minutes for students to take notes. The main rule is that students must contribute at least 4 hours per week upon activities by his or her own (For example, reading, practicing special talent, collecting information, and finishing homework assigned by mentors).

2.2.2 Thematic group curriculum

As above mentioned, we added the thematic group curriculum into mentor workshop which was originally not planned by research team. Our team invited all students and their parents. The goal of the curriculum was to share the resources and produced more opportunity for students to learn. The mentors also had the chances to communicate with parents, find out the parenting attitude and further discover students' learning status.

2.2.3 Group colloquium and visit activities

The program divided into groups, 7 groups from group A to G, 3 individual groups and 2 network groups. Each group has been assigned by two to six mentors. Through group colloquium and visit activities, students extended their learning field. They also found

interests in learning from the conversation and activities with mentors, thus increased their learning motivation. Their team work ability and interpersonal relationship has become better through the interaction with peers. The group activities held at least once a month.

2.2.4 Research team observed interaction between participants and adjust the pair in proper time

During the program, research team followed up the interaction of every pair of teachers and students, and also participated thematic group curriculum, group colloquium and visit activities. We stayed close relationship with all the participants, and assisted mentors to cope with something unfamiliar.

2.2.5 Holding empowerment learning camp and parent educational work shop in winter and summer time

We invited all the gifted students, parents, and mentors to the empowerment learning camp and parent educational work shop held in winter and summer time. For gifted, we provided courses including puzzle game, high level thinking, special ability, study method, communication and expression, and visit activities to extend learning field. As for the parents, we offered courses such as parenting education lecture, parenting experience sharing and mutual feedback.

2.2.6 Holding closing ceremony conference

After the end of the program, there was a closing ceremony conference (5th Jun. 2012) which presented students' learning process and result. The students shared what they have learned, and conferee addressed question and offered feedback. Mentors also share something they have learned from the guiding process. In the end all participants discussed the program and propose some advice and feedback.

3. Outcome and discussion

The research lasted for a year, and the research finding and discussion as follow:

3.1 Flexibly modifying the program to fulfill the spirit of action research according to the need of three parties

At the beginning of the program, we faced different needs and challenges from mentors, parents, and students. Although the researchers had experiences on mentorship program for junior high gifted students in the past, this program has proved to be more difficult than ever. This was the first time that our research objects were elementary gifted students, who especially are the NST. We thus faced multicultural parents, on whom we needed to pay more attention. The gifted students in our research came from different background, including middle class and rich family from official department or doctors. There were also parents whose jobs were cleaners and taxi drivers. Other than the normal family, there were children from domestic violence high risk family. The gifted area varied from intelligent gifted to art gifted. Some of them tended to be ADHD or ADD.

The research team intensively discussed with mentors and parents through in-depth interview, email (several email per day), phone and observation, in order to modify the content of the program more flexible.

In the progress of the empowerment workshop and mentor guidance program we took advantage of different characteristic and specialty of mentors to match with students. The research team and mentors gradually built up the program that full of multicultural feature. We used multiple methods to match mentors and students, for example one to one, one to two, or one to three. The mentorship program from foreign studies used only one to one as research method. We found that group interaction can produce better effect on students and

didn't give away the benefit from one on one method. (The flexible method used in this research differentiated from the one on one way in past program)

3.2 Two. The mentor-student interaction unfold multiple teaching and learning strategy

Mentors developed multiple teaching methods, and tried to upgrade students' multi-dimensional learning strategy. We gradually built up our own structure of mentorship program in Taiwan through the process of the implementation. The most important part is that mentorship program is based on the following three elements: mentors' knowledge on culture diversity, intensively interaction between mentors and students, and mentors' understanding on the student's family background.

3.3 Mothers were the active providers who offered the educational resources for gifted students.

The mothers of NST gifted are often considered to be disadvantaged minority. However, our study found that far from being the disadvantaged one, they were the active providers who offered educational resources. The mothers were the doers who considered the program as an educational resource, they actively demanded to join into the whole process, and were always willing to speak out laud for themselves.

3.4 The program broadened the social and cultural circle for the gifted family

One of the mothers pointed out that our program should be called "Mentor friend ship program". (P-S32 M-101025-1-3) They believed, mentors not only are the teachers, who guides the children but also the good friend for them. The Mentors leaded the children and parents to better understand the society and culture in Taiwan. The families had opportunity to interact with each other and shared their parenting experiences. The parents benefited a lot from the group activities, and even form the partnership and supportive network in between.

3.5 Emphasize mentors' enrichment process – listening, seeing, understanding and sharing

Most of the mentors grown up in main stream society, they didn't have the opportunity to meet other group of people or discover the advantages and disadvantages of NST. Under the collective reflection in the multicultural enrichment workshop, mentors rethought the issue upon the diversity of mainstream, minority and special culture. Furthermore, we kept stimulating mentors to discover diversity throughout the workshop. The mentors expressed their shocking during reflection. In the process of listening, seeing, understanding and sharing, they constantly rebuilt the idea mentor model, and prepare for the next step.

3.6 The active response from all participants shown that they were looking forward to the continuation of the program

3.6.1. The expectations and hopes from gifted

During the program, the participants of each group slowly built the connected and trustful relationships. The children were impressed so much by the universities which mentors currently attends to or graduated from. They have even grown fond of those universities. For example: Mentor T10's responsible student S18 painted " Normal * university * Goal" on the "map of my dream career". (F-S18-101127-4-1); S19 wrote down "I like teacher's college life" on a study list. (File-S19-101127-3-2)

After teaching the children how to set up email account, they were encouraged to email their mentor. The "love letters" between T7 and S13 showed the "mentor friendship" that S32's mother mentioned earlier.

"Title: A sympathy card

Teacher, how are you? I worried that you didn't reply my mail. You always reply my mail in time. I didn't know until yesterday that you got sick. I am so worried. I hope you get well soon, be safe, and stay healthy. "(P -S13-101128-3-2)

T7 responded a passage on Facebook :

" I love my gifted students, they are so lovely and caring that they will make me forget my troubles :D. When I got sick, students draw me a cute greetings card. Another one asked me to fill in the questionnaire. So cute ! " (File -T7-101130-4-1)

3.6.2. Feedback and recognition from parents

After interviewing (including face to face interviews, telephone interviews) or e-mail the parents, they expressed their recognition and gratitude, and hoped that the program will keep going:

"I'd like to see the program lasts till next year, and the year after. Do not tell me there's no more in a year after." (I -S21 M-101113-3-3)

3.6.3. The growth and joy from the mentors

Not only the students but also mentors benefit from the program. The benefits can be listed as follow:

3.6.3.1. To stimulate new ideas and to validate theories on the books

During the course of mentorship program, students often addressed new ideas and offered creative thoughts. Levinson (1978) pointed out that the new point of view from students will bring the effect of "rejuvenation" on teachers, and harmonize the relationship between teachers and students.

"I felt challenging at the first time I saw [S32]. (S32 asked) teacher: (Pointing at the blackboard) Why is this green? How to answer the question? Why the blackboard is not black sort of answer. He asked you the questions which you normally won't ask. Later on I thought, maybe it is the trait of gifted students. He found out many questions." (R-T16-101219-5-12) .

3.6.3.2. Establishing long term friendship with students

In the program, students and teachers both earned the friendship from each other. Many students were accompanied by the mentor while they went through important event of lifetime. When the researchers went into T19's home for the first time, T19's husband mentioned that the family didn't approve her to participate the program. The husband suggested that she should retire and have more quality time with family, but he couldn't resist her passion on the teaching, and agreed on it at last, he said, "T19 will not just guide the student for one or two years, she usually makes it to six or seven years." (O-S35-101114-2-5) .

3.6.3.3. Mentors felt touched and empowered

There was one time a new teacher coming aboard, the research team tried to alter the pair by moving out one of the students from T7. Hopefully it would release the pressure of the mentor, but T7 doesn't want to make decision, she said: "I'm afraid my students will say: 'why you don't want me anymore?'" (R-T7-101219-2-4) After query the children and parents, the children said: "My mentor is very good, why would I want to change?". (R-T7-101219-2-4) Although S12 has little syndrome of ADHD, T7 was moved by the words. It gave her energy to keep accompanying and teaching the three gifted.

We acquired plentiful data and information from the research process. At the early stage of the program we collected the information regarding NST gifted, and had meeting with parents and prepared for the mentor empowerment workshop. In the middle phase of the program we evaluated the demand from mentors, parents and students, and modified the content of the program. The important findings in the initial stage discovered that the mother of NST gifted was the active provider who provided educational resources, and the program itself broadened the social cultural field for students' family. Through the program we led the

children and parents out of the family and provided them the opportunity to understand the society and culture in Taiwan. We also paid more attention to the need of learning for gifted. The NST families interacted with each other and shared the parenting experiences. On the mentors' side, no matter what identity they are, for example college students, master students, retired teacher or working people, they kept engaging self-empowerment process. The process of listening, seeing, understanding and sharing was shared among them. The mentors not only were the one-sided giver but also the active learner.

The research actively gave feedback to the participants on the demand evaluation, plan execution, reflection and modification, and the participants expected that the program could be continued. We were glad to see the positive cycle to be further developed, and expected the research findings and reflection of mentorship program can be contributed to the relevant domain.

ISEPSS- 2066

From Dewey's Experiential Learning Perspective to Discuss Bank Clerks' Experience History of the Informal Learning

Ching-An Lai^{a*}, Meng-Ching Hu^b

^aNo.168, Sec. 1, University Rd., Min-Hsiung Township, Chiayi County 621,
Taiwan (R.O.C.)

E-mail address: stockpile78@gmail.com

^b No.168, Sec. 1, University Rd., Min-Hsiung Township, Chiayi County 621,
Taiwan (R.O.C.)

E-mail address: adumch@ccu.edu.tw

ABSTRACT

Financial service industry is highly-specialized business. In the globalized and information rapidly circulated era, to be a bank professional service clerk have to learn and enrich new knowledge; however, in contrary to many formally and regularly professional internal and external trainings are in a short term, informal learning is long-term.

The purpose of this research lies in making use of Dewey's experiential learning perspective to discuss bank clerks' learning history of informal learning by applying qualitative research design, and interviewing three selected domestic bank clerks who serve in foreign companies. The interview focuses on the information of their former learning experiences, including regularly and formally professional training and informal learning, learning approaches and sources, the applying of informal learning and other elements to carry out the information collecting, analyzing and explore bank clerks' experience history of the informal learning and the construction of the practical theory.

The research result indicates: in the past of regular and formal learning, the internal training is primary and attending exterior training is less essential, so the learning from formal learning is not profound; nevertheless, informal learning can offer impressive memory and applying with one's own will. For the learning and sources of informal learning are most from the learning in the working places and less from reading books, newspaper or magazines. Last but not least, the knowledge power learning from the informal learning can be applying in the working places and to serving customers and also applying to other few items.

Keywords: Experiential Learning, Informal Learning, Bank Clerks' Informal Learning, Workplace Informal Learning

ISEPSS- 1849
The Teaching of preservice Teachers on Nanotechnology Curriculum in elementary school

Mei-Yu Chang^{a,*}, Suo-Ying Luo^b, and Meng-Kao Yeh^c

^a National Hsinchu University of Education, Taiwan

E-mail address: mmchang@mail.nhcue.edu.tw

^b Hsinchu County Shang-Guan Elementary school, Taiwan

^c National Tsing Hua University, Taiwan

ABSTRACT

The purpose of this study is to understand the improvement of pre-service teachers in nano curriculum knowledge and teaching ability. This study also tries to explore the attitude of pre-service teachers who took a course in nanotechnology in National Hsinchu University of Education. This study is based on the analyses of both quantitative and qualitative data. The research was carried out in two parts: the first part used 49 pre-service teachers who took nanotechnology course as the participants to understand pre-service teachers teaching abilities. The pre- and post-tests, questionnaires, field notes and interview information were utilized as the study instruments. The second part of the study used 15 out of the 49 pre-service teachers as the participants. And the study instruments include classroom observation checklists, reflections, and interview. The following conclusions and suggestions are based on the results of data analysis. The pre-service teachers are very interested in nanotechnology course and not affected by their academic background. The pre-service teachers are even more interested in nanotechnology course with media and experimental operations than the lectures. The pre-service teachers are interested in the development of nanotechnology and the impact of nanotechnology on environment. The pre-service teachers are able to design teaching materials based on nanotechnology's core concepts and they can also make good use of instructional media, and experiments to help students to understand. The pre-service teachers wish to have more time to learn comprehensive content so that they can have in-depth understanding of nanotechnology. The pre-service teachers wish to learn more teaching skills in elementary schools.

Keywords: Nano curriculum and teaching, Pre-service teacher, Science teaching.

1. Purpose of Study

The purpose of this study is to investigate the knowledge of nanotechnology, and attitude of pre-service teachers after taking the course of nanotechnology, and to investigate the teaching of pre-service teachers in elementary schools.

2. Background of Study

Nano scale is a very tiny scale, a nano meter is equal to 10^{-9} meter. If materials and substance can be prepared in nano scale size, both of the physical and chemical characteristics of these materials will be changed (Nano New World, 2013). The influence of nanotechnology will cause a variety of revolutionary in our society. In other words, nanotechnology is going to significantly change our future. Scientists forecast: "The future will be the era of nanotechnology." This field will impact many areas of science and technology. Nano materials are becoming ever more common in our everyday lives. For example: anti-ageing

cosmetic products, different coatings for making stain-resistant textiles and furniture, antibacterial coatings in refrigerators (Nano New World, 2013).

Many American economists and educators agree:” People must have the technological literacy to be able to maintain U.S. economic growth. (Bybee, 2003; Weber & Custer, 2005)” By 2020, technologies and products derived from nanotechnology will contribute more than \$1 trillion each year to the worldwide economics (Jen-Ni, Liou, Huei-Ching, Su, Ying-Ju, Yuan, & Jr-Hung, Tsai, 2002). And, two million nanotechnology workers will be needed world wide by 2015 (Roco, 2003). Therefore, nanotechnology around the world has been put into the race.

The key of competitiveness is talented person cultivation. The top priority in education is to enable students to have basic knowledge and understanding about nanotechnology, and to train people with the literacy of nanotechnology.

Science education has entered an entirely different perspective. The new generation of skilled workers ~~need~~ should be educated and trained in the perspective of multidisciplinary way. The uniqueness of multi-disciplinarity of nanoscale, offers us an opportunity to reconsider science education. It is the time to use nano as a driving force in improving education. International funding for nanotechnology research is at all-time high. “Nano” literacy has become a global priority. Some 50 countries have established national initiatives to develop human resources and build research capacity in nanotechnology.

Nanoscience education has become part of the curricula in several universities and high schools in Europe. For examples, the National Nanotechnology Initiative (NNI) in the U.S. (Roco, 2003); The European Commission’s (EC) Nanotechnology Action Plan; The Germany Federal Ministry of Research and Education (Chung-Yu, Wu, 2003).

Manpower of Nanotechnology in the near future is needed. Two million new nano scientists and engineers will be needed worldwide in the next 10-15 years (Education Division of Taipei Economic and Cultural Office in Los Angeles, 2009). These people will be the ones impacted the most by nanotechnology, and the ones who will be the next generation of pioneering scientists. They will also be the workforce that drives this technology to shape tomorrow’s society.

To accelerate the research and development of nanotechnology, the National Science council of Taiwan launched the National Science and Technology Program for Nanoscience and Nanotechnology in 2002 (Ministry of Education, 2002). The Nanotechnology Human Resource Development (NHRD) program was established to undertake the task of education and teacher professional development.

The K-12 nanotechnology program was established in August 2002. The focus of the K-12 nanotechnology program was to provide teachers with information about nanotechnology and to develop material to inspire students to learn advanced technology (Advisory Office of the Ministry of Education, 2005).

3. Participants

The participants of this study were 49 pre-service teachers who took the course of nanotechnology in the university.

4. Methods

Methods used in this study were both quantitative and qualitative. This study was carried out in two parts: the first part was to compare the outcome of pre-service teachers learning before and after taking the nanotechnology course, and the attitude of learning nanotechnology course. The course of nanotechnology is an introduction of nanotechnology, and is 27 hours each week for about 9 weeks. The second part of this study was to understand the teaching of

pre-service teachers after taking the nanotechnology course. There are 15 pre-service teachers participated in the teaching in elementary school.

(1) The instruments used in this study are the questionnaires of pre- and posttests, and the attitude of pre-service teachers in learning nanotechnology. The questionnaire of pre- and posttests were developed by the researchers, and were examined by two university professors who taught nanotechnology course. There are 20 items in this questionnaire. The attitude questionnaire of learning nanotechnology is a Likert scale. This attitude questionnaire with 26 items was developed by the research team. The statistics analysis of SPSS 12.0 for windows was introduced in this study. After the statistics analysis, the reliability of attitude questionnaire of Cronbach's α is .89.

(2) The qualitative data were the observation field notes, the interview, and the reflection of pre-service teachers teaching. The triangulation process was introduced both on collecting data and on translation of information in interviews and observation notes.

5. Results

The results of this study are shown below.

5.1 The achievement tests of pre-service teachers on nanotechnology learning

After the analysis of paired-samples t-test, the results showed that there is a significant difference ($p < .05$; $t = -5.85$) between pre-test and posttest on nanotechnology learning of pre-service teachers. After the nanotechnology learning, the achievement test of pre-service teachers performed significantly better than that of the pre-test.

Table 1: The achievement tests of pre-service teachers

	test	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>
The achievement tests of nanotechnology	pre-test	49	49.59	12.62	-5.85***
	posttest	49	61.84	13.14	

* $p < .050$ ** $p < .010$ *** $p < .001$

5.2 The attitude test of pre-service teachers

The attitude test of this study includes 26 items, the results showed that there are 21 items had the mean above median ($M=3$), with the exceptions of 5 items (Table 2). The 5 items were 13,14,24,25, and 26. The items of 13 and 14 showed that pre-service teachers disagreed that they would rather listen than do some experiments in learning nanotechnology. Item 24 is about the understanding of K-12 of nanotechnology in Taiwan. Pre-service teachers showed that they did not know much about K-12 of nanotechnology in Taiwan. Item 25 and 26 were about the abilities in designing and teaching nanotechnology lesson. The pre-service teacher did not show the confidence of these abilities.

Table 2: The attitude test of pre-service teachers

Item	<i>M</i>	<i>SD</i>
1. I am interested in the phenomenon of nano.	3.61	.70

2. I like nanotechnology.	3.55	.87
3. Most nanotechnologies are helpful in life.	4.02	.60
4. I found that nano-related products are closely related to my daily life.	3.71	.79
5. I know some daily nanotechnology products.	3.78	.82
6. I hope to learn more nano-related knowledge.	3.78	.65
7. I want to understand more about the causes and regularity of various nano phenomena.	3.69	.68
8. I think the understanding of nanotechnology is helpful to science teaching.	3.88	.75
9. I am interested in the knowledge of nanotechnology education.	3.43	.76
10. I am happy to integrate nanotechnology into my teaching.	3.73	.73
11. I am anxious about learning nanotechnology.	3.35	.86
12. I am fascinated with nanotechnology experimental course, and I feel happy in it.	3.16	.72
13. I am more concentrated in listening lectures than watching nanotechnology experiments.	2.88	.86
14. I am more concentrated in listening lectures than doing nanotechnology experiments.	2.61	.70
15. The nanotechnology experimental course enhance my knowledge and learning about nano science.	3.67	.69
16. Learning nanotechnology helpful for my future.	3.43	.65
17. The content of nanotechnology course is appropriate for me.	3.18	.95
18. I learned a lot in the nanotechnology course.	3.78	.62
19. The nanotechnology course makes me a better in understanding of nanotechnology knowledge.	3.94	.56
20. To learn the nanotechnology knowledge will be useful in teaching elementary students.	3.31	.85
21. In addition to the content of what I have learned in class, I will collect nano-related information.	3.08	.76
22. I will apply the knowledge I have learned from nanotechnology course to life.	3.27	.99
23. I think that nanotechnology education will have a great impact on national development.	3.24	1.01
24. I understand the current situation of nanotechnology education in Taiwan.	2.71	.98
25. I have the ability to design nanotechnology courses.	2.61	.86
26. I have the ability to teach nanotechnology courses.	2.43	.79

N=49

6. REFERENCES

- Advisory Office of the Ministry of Education. (2005). *2004 National Nanotechnology K-12 Education Development Program and the Prospective Nanotechnology Administrative Support Personnel Training Programs Planned Final Report*. Taipei: Advisory Office of the Ministry of Education.
- Bybee, R. (2003). Fulfilling a promise: Standards for technological literacy. *The Technology Teacher*, 62(6), 23-26.
- Chung-Yu, Wu (2003). *Nano World: Give New Opportunities for Universities*. Taipei: National Chiao Tung University.
- Education Division of Taipei Economic and Cultural Office (T.E.C.O.) in Los Angeles (2009). Nanotechnology education is a new popular courses in America. *Newsletters of the Ministry of Education*, 384. Retrieved Apr. 2013, from: http://epaper.edu.tw/e9617_epaper/windows.aspx?windows_sn=4601
- Jen-Ni, Liou, Huei-Ching, Su, Ying-Ju, Yuan, & Jr-Hung, Tsai (2002). Nanotechnology - the Fourth Wave of Global Industrial Revolution. *The Movement of Enterprise*, 71, 2-9.
- Ministry of Education. (2003). *National Nanoscience and Nanotechnology Program Planning Report*. (2003-2008). Taipei: Ministry of Education.
- Nano New World, 2012. Retrieved May 2013, from: <http://nano.nstm.gov.tw/>
- Roco, M. C. (2003). Converging science and technology at the nanoscale: opportunities for education and training. *Nature Biotechnology*, 21(10), 1247-1249.
- Weber, K., & Custer, R. (2005). Gender-based preferences toward technology education content, activities, and instructional methods. *Journal of Technology Education*, 16(2), 55-71.

ISEPSS- 1892
**The Research on Creating Electric Picture-Books based on Real
Disadvantaged Families' life stories in Kaohsiung**

Chwen-Chyong Tsau(曹純瓊)

Associate professor of Fooyin University in Kaohsiung, Taiwan

Email: chwenchyongtsau@hotmail.com

1. Background and purpose

In Taiwan, the disadvantaged families had being increased obviously within these 10 years. According to the Ministry of the Interior, the number of the disadvantaged families (also called 'families in hardship') was over 20,000 per year recently. According to article 24 of the Employment Service Act (2003), 'disadvantaged families' mean 'breadwinners women, the aged, the disabled, indigenous peoples, persons who have living support and be able to work, the unemployed due to disasters. Chou & Zeng (2006) divided the disadvantaged families into 10 types based on the causes- poverty, racial minorities, cultural differences, residential areas, social exclusion, digital information gap, disability, teaching process, government fund. Single-parent family, grandparent-raising family, new immigrant female family, the handicapped family, aboriginal family, family with low income, and family of living alone elderly people then accordingly were all types of disadvantaged families.

The present rate of young children from disadvantaged families also increased obviously. The development and health of these children's body, mental and soul were deeply influenced negatively especially children with developmental delayed or handicapped by their declined family functioning and lack of social resources and supports.

1999's 921 earthquake, 2009's 88 Flood (Typhoon Morakot), enterovirus epidemic raging in the kindergartens, global financial turmoil, losing-jobs and unemployment...all natural and man-made disasters pushed these disadvantaged families into awkward predicament. It was occasionally heard the economic bankruptcy parent committed suicide by burning charcoal/gasoline or the dropouts wandering and stirred up trouble. How could the students especially young children face these social problems including disasters and their weak functioning families, and meanwhile establish positive attitude toward life, recognize and affirm themselves, respect and cherish their lives? Certain Researches indicated it was important to start life education from the early childhood..

Fortunately, our government noticed the importance of life-education and actively implemented certain plans, even named 2001 to be 'the year of life-education' to support all schools to promote life-education programs and let students to understand the meaning of life and respect all beings. Being early childhood education teacher trainer, I felt this was a duty to promote life education especially in the kindergarten. Since picture-book was the most popular reading and teaching material in kindergarten, and also had profound influence on children. The purpose of this study hence were: (1) to know the life stories of the disadvantaged families, and (2) to create picture-books about their life stories as propaganda media to help young children to care, respect and support them.

2. Methods

2.1 subjects

Purposive sampling was used, subjects were from the most popular disadvantaged families – single-parent family, new immigrant female family, the handicapped family (of an autistic child) , whose child was studying in the kindergarten.

2.2 Research methods

To execute this study, I invited 6 preschool teachers who were also my undergraduate students (seniors) as team members and adopted case study. They were all female around 26-year-old and had research topics and educational statistics experiences with me before. The research process followed five-step mode developed by R. Driver & V. Oldham (1986): the guide- induce- recombination- application- review, conducting a circulating process which was similar to action research by group discussing and recollecting personal interview data and then creating picture-books based on the interview data (real disadvantaged families' life stories).

2.3 Data collection and processing

A. Literature review and analysis was conducted repeatedly through team reading and discussion, then developed case interview outline.

B. Case interviewed 3 disadvantaged families, including the mothers and their children 1 hr. ~1hr. and half each time in the kindergarten where their children studying in or their homes. All interviewers was interviewed 4~5 times every 2~3 weeks, in order to understand their growth process and life experiences. All interviews was recorded under the interviewers agreement.

C. Interview data was written verbatim and classified, and confirmed and corrected by the inter-viewers, then coded for analysis and discussion.

D. Team reading and discussion was also recorded, written summarized and coded.

E. Creating picture-books were evaluated by senior experts 3 times, and then followed by repeatedly discusses and revised.

2.4 Life-story picture-books creating

A. Life stories were based on and really reflect the interview of 3 disadvantaged families, and developed as the contents of 3 picture-books .

B. Through literature analysis and team discussion, the rules of themes of 3 picture-books were decided as below:

a. Theme: caring the disadvantaged, including single-parent with grandparents raising family, new immigrant female family, and the handicapped family.

b. Main character: the above mentioned families' mother or her young child who's studying in the kindergarten.

c. Context: the details based honestly on the deep personal interview about the above mentioned families.

d. Background: using the seasonal plants, festival and cultural features as the setting or objects in the pictures.

e. Drawing skills and materials: paper sculpture was mainly the characteristic of all picture-books, photos, origami (color paper) , collage etc were accepted to make the characters in the pictures vivid, stereoscopic, and specific to the readers.

f. Content: understandable and could be retold by young children.

g. Revise and Evaluation: to revise picture-books was need according to the evaluation and suggestion from senior experts and scholars in the field of early childhood education. Finally revise would be after story telling with the created picture-books.

3. Research Process

Following Driver & Oldham's 5-step mode, it took our team about 9 months to accomplish this research; the research process summarized as below and also see Table 1:

Table 1 the 5-step research process

month	step	procedure	strategies
07	Guide	Inspiring interest and confirm direction	team discussion, explanation and demonstration
	↓		
08	Induce	Inducing concepts/ ideals	team reading and discussion
	↓		
09	recombination	Perceiving differences between new and old concepts/ideas	team reading and discussion, personal interview
	↓		
		Clarifying and exchanging ideas	individual/group report, instructing and inducing
		Falling into conflicting context	
11		Constructing new concepts/ideas	team discussion, instructing and inducing
	↓		
			group report, writing life stories about interviewed subjects cooperatively
			creating picture-books cooperatively
12		Evaluating new concepts/ideas	Inviting 6 senior experts evaluating picture-books and discussing together, group review, team discussion
02	application	Applying new concepts/ideas	Revising contents of picture-books, team discussion
	↓		
			Results announcing (picture-books' story telling in kindergartens)
03	review	Introspecting concepts/ideas and learning process	team review and discussion, introspecting and revising picture-books, completing research report

3.1 Guide

After internet research, our team found single-parent family, grandparent-raising family, and new immigration female family were the most popular among all disadvantaged families in kindergarten and the presenting rate were increasing yearly. We were also interested in how the life education executed in the kindergarten and knew that it was important for the children especially of these disadvantaged families. Through 2 times reading and discussion, team members had consensus on what life education mean and decided group reading direction on how kindergarten implementing life education for young children before personal interview.

3.2 Induce

Through team discussion, individual oral reports, and 4 times group-reading on the topic of preschool life education that members were interested in, we reconfirmed the meaning of life education, clarified the direction and meaning of interview: to inspire reader cherish, affirm and concern one's and other's life would be our goal to gather life story and create picture-books. We members divided

into 3 groups according to our own interest and chances access to persons who would like to accept individual interview: Xuan-Zhi and Yan-Ling chose single-parent and grandparent raising family whose child were their students, Shu-Guang and Yi-Ting chose new immigrant female families that Shu-Guang were familiar with, Zhao-Rong and Ting-Yi chose the handicapped family with an autistic child who was Zhao-Rong's student.

In 4th and 5th meeting, each groups shared certain references, tried to clarify some questions, such as: (1)why single-parent family needed grandparent raise their kids, (2)what the relationship between grandparent and grandkids were. The interview outline for single-parent and grandparent-raising family, we decided were: (1) the process of becoming grandparent-raising, (2)how the grandparent's living changed, (3)how's the grandkids' living, (4) the feeling of becoming grandparent-raising, (5)expecting and viewpoints for the future. And the design for the picture-book was from the positive attitude to view this family, and the pictures should reflect kid's core thought and feeling. As to the family with an autistic child, research paper indicated pressure for caring autistic kid was always existed, relative and friends support and self-growing were important for the mother. We discussed the difference and conflict about parenting between the mother and the father, so we decided to interview all the families and the interview outline for each parents should not quite the same. According to the The yearly report for the internet of the Ministry of the Interior, new immigrant female parent mainly came from Mainland China and East-Southern Asia, the population rate of Vietnamese was No. 1, more than 50,000 Vietnamese female in Taiwan every year. Facing the rapidly changing and multiple roles in their families, those new immigrant mothers' life adaption including marriage and parenting was difficult. The interview outline then could focus more on parenting. In the 6th team discussion, we concluded that picture-books should express positive information, and rules about pictures in the book, such as presenting vividly the characteristic and feeling of the characters, and humorous writing to present the story even readers felt sad while reading, etc.

3.3 Recombination

Team discussion held 3 times, and the goal we reached was to confirm all interviewers basic references, agreement paper, interview outline and methods. Actually 2 mothers from single-parent and grandparent-raising family and new immigrant female family refused interview, we indeed frustrated and worried, and also found there were many disadvantaged families around us.

We had certain consensus on interview: (1) interviewers included all members of the family according to their family tree, yet mainly focused on the young child and primary caregiver, the rest members needed to be interviewed only when references were not enough; (2) interview method decided to use half-structured personal interview, interview would be held in their familiar places such as their homes or kindergarten where kids studied; (3) interview material for the kids were the picture-book:"Guess How Much I Love You" to start the talking; (4) outline for the adults: family life, social relationship, parenting, attitude and expectation; (5) life stories title and main theme :family living, parenting and social relationship were 3 dimensions for the new immigrant female family, psychological adaptation process of parenting for the handicapped family and also for the single-parent and grandparent-raising family, and then how to get along with these families.

After 1st and 2nd interview, we clarified and exchanged our experiences and opinions. We found all interviewers answered all questions, yet some answers still remain reservation: the autistic family's economic status and early intervention for her kid, the Chinese interpretation from the father seemed different form the immigrant mother's answers because of her poor expression in Chinese, single father and divorced mother seemed not trust and not quite sure about the grandparent's parenting. Therefore, we decide to visit those who were familiar with these families and these mothers and kids: the social worker, friends with same nationality, preschool teachers.

After 3rd interview and while we were coding data, team members were falling into conflicting context, the interview of the handicapped family needed to be postponed because of the autistic kid-Xiang-Xiang and the father got sick, the talk of the single-parent and his kid- Cheng-Cheng was short, and one of our member- Shu-Guang dropout because she needed to take care of her ill daughter.

We then decided to discuss, clarify and analyze new information through internet (facebook, skype & email) sometimes, and interview another families. Besides, to write interview data verbatim was a heavy loading to our team members who need to work during daytime and to study at night, so Mei-Ling joined our team to share what Shu-Guang did before.

During Nov.~ Jan., we met quite often, discussed and started writing and drawing life-story picture-books based on the analysis of the interview data. Finally, 3 life stories and black-white picture-books draft, colored picture-books 1st draft and 2nd draft were successively accomplished by repeating discussion and correction.

And we then did self-evaluations twice, one was evaluating the black-white draft, and one was evaluating color draft. The 1st evaluation dimensions followed the Picture-Book design written by Osamu-Yoshimi Nagumo (2006) , and were: (1) theme and concepts of the picture-books (purpose, social event clue, folk tale, imaginative adventure, scientific knowledge, children counseling), (2) setting readers (who, where, how to read), (3) plot development (type: straight line, parallel, map, wavy, flashback; transforms knot), (4) written text (pattern decision: language used in daily life, reduce the text description of the scene, lively sense of rhythm, brief and repeated same words, effective use of onomatopoeia), (5) characters in the picture (role decision, expression, painting materials), (6) drawing configuration (layout, color and effects) (see chart 1). Discussion and revise right after self-evaluation, and then finally it was time to invite senior experts and scholars to evaluate our life stories and 2nd draft. Actually we got into conflict quite often while creating picture-books, such as the setting and background to express their real living and also hiding their feeling and thinking, pragmatic problem, drawing materials. At last, we decided to use paper sculpture to present the main characters and objects, to use pastels pen to drawing the background, and words were form the core characters- the kid or the mother.

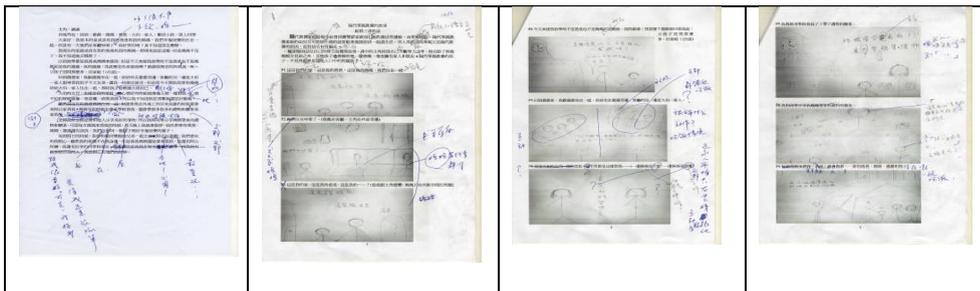


Chart 1 1st self-evaluation sample – story of the single-parent and grandparent-raising family

The 2nd self-evaluation dimensions were the same as evaluation by 6 senior experts and scholars , the evaluation dimensions were: suitable theme, story structure, visual art, appropriate to young readers. We found there were big difference between 2nd self-evaluation and 1st experts' evaluation opinions because of the evaluating viewpoints, and the big difference was that team members didn't think much about the appropriation for young children and teachers, the role of young listener and teachers as reader for young children. Expert also suggested theme, pictures coherence and plot development should be improved, and characters in each picture should be always the same.

2nd experts evaluation dimensions were: (1) picture-book title, (2) story structure coherence, (3) background setting, coloring and blank arrangement in each page, (3)the use and place of the

words in each page, (4) the inspiration of the ending, (5) the features and expression of the characters, (6) others. Specific opinions and suggestions were reasonable and accepted as revising reference. So team members focused on how the plot develop and character features to read certain books and to revise stories in order to response to the theme. We also reconsidered and tried to keep in mind about what Osamu-Yoshimi Nagumo (2006) mentioned in his book: unforgettable picture-book should include 3 characteristic: touching

story plot development, directly conveying author's mind and strong impressive pictures, interesting and fresh unique creative ideas.

3.4 Application (story telling in kindergarten)

This step was just like a caterpillars transformed into butterfly after a long 7- months hard work. Team members were so happy to tell stories with self-created picture-books, and to observe the response of the young listeners (5~6-year-old kids). We also invited young listeners to vote which one was the most favorite, and the answer was Xiang-Xiang My Little baby because they all liked the lovely infant, and the scene that Xiang-Xiang asked mother to hug him (see chart 2) was so touching too. The 2nd popular one was The Story of Cheng-Cheng because the young listeners felt pity for his loneliness (see chart 3). The only scene of the story of Mei-Fong the young listeners felt so touching was the scene of getting married (see chart 3).



Chart2 the most favorite scene in the picture-books

In the activity of retelling stories by young children, we found interesting phenomenon: young children could express exactly what happened to the characters and could understand the emotion by the color of the pictures such as anger and sad, they could also understand why Cheng-Cheng had to live with his grandfather, but could not understand why the parents divorced. While reading the story of Mei-Fong, one child happily spoke loudly: “that was Vietnam, my mother lived there”, and about 1/2 young children could retell the story, they could remember very well especially how many times Mie-Fong went to the kitchen and the scene that Mei-Fong scolded her kid. As to Xiang-Xiang, all young children remembered so well to tell the story by watching pictures.

3.5 Review

We did final revise after story telling in the kindergarten:

- (1) Xiang-Xiang My Little Baby: increasing background and release sense of space, modifying words to be more specific and clear, the image of characters being more complete and not lacking arms or legs.
- (2) The Story of Cheng-Cheng: adding page numbers, modifying words to improve reading fluency, adjusting the place of the words and pictures, enlarging the words, omitting words inside pictures.
- (3) The story of Mei-Fong: the picture of background such as national emblem and traditional costumes should accord to the tradition and culture, word should be printed better than pasted, adding page numbers and modifying words to improve reading fluency, enriching the background in the pictures, and the size of the characters should be the same.

4. Results

According to team repeatedly discussion about senior experts' evaluation and suggestions, our team revised 3 times and the final version was electronic ones, each book owned front and back cover, title-page, butterfly-page, letter to parents, life-story brief instruction, characters introduction, story-page , and page number.

The last step was to use photo-story to make it be electronic books (CD) and sent to more than 120 kindergarten as a way to promote preschool life education.

5. Conclusion

The research method this study used - 5-step circulating process: guide- induce- recombination-application- review helped team members to repeat reading-and-discussing, interview and revising picture-books again and again in order to create better books for young children to give more concern to the disadvantage families, I thought we made it. This was just a start or one more step to actively support the disadvantaged families. Facing the present rate and the diversity of the disadvantaged families, this was not enough. To create series of life education picture-books was still in need.

6. References (Please contact author)

Special Thanks for my team members: Zhao-Rong Liu, Mei-Ling Chen, Ting-Yi Chen, Shien-Zi Zhang, Yan-Ling Lin, Shu-Guang Liu, Yi-Ting Yin.

ISEPSS-1924
Analyzing Picture-Books as Life-Education Teaching Media For Young Children in Taiwan

Ling-Li Chu^a

Young Children Education Teacher of Public Longhua Primary School in Kaohsiung city

Chwen-Chyong Tsau^b

Associate Professor of Fooyin University in Kaohsiung city

Py-yueh Hsien^c

Principal of Lujhu Public Kindergarten in Kaohsiung city

Abstract

2011 named as “the Year of Life Education” by the Ministry of Education in Taiwan showed the importance of life education in Taiwan. Related papers increased yearly showed not only the government but scholars and experts were paying more attention on this issue. Their contents were multivariate, but picture-books were the most popular media frequently used by the researchers included teachers of preschool to junior-high schools, because of its’ accessible, and attractive pictures and stories.

Our study therefore focused on theses of master degree and Ph D through National Digital Library of Theses and Dissertations in Taiwan, and adapted document and comparative analysis to analyze 74 dissertation published during 2002~2014. We found 13 papers analyzing how the meaning of life showed in the contents of certain picture-books, and the rest papers were all using picture-books as teaching media for life education: 17 papers for young children, 35 papers for elementary-school pupils, 1 paper for junior-high students, 4 for papers for parents groups, 4 for others. We as workers in the early childhood education, we decided to focus on analyzing those papers only for young children, and the total papers in this education field was 25.

The results showed that almost all researchers confirmed that to implement life education could improve subjects’ attitude toward life education and viewpoints of life positively, especially in the dimensions of ‘self-understanding’ and ‘communication with others’. Some researchers such as Jin-Rong Xie (2011), Chun-Ying Yang (2010) indicated that picture-books as well as daily life experience/ events were the most effective materials for life education for young children. Knowing more about him/her-self, young child was willing to face various challenges through the learning paths of school age, and also showed more concern about the surrounding (nature and society). Not only children, but also researchers and teachers improved their professional growth and self- perspective on life education through the process of implementing life education and teaching reflection.

Keywords: life education, picture-books

1. Introduction

Due to ‘valued the technology, underestimated humanity’ in our society, the Ministry of Education thought this utilitarianism approach and the school-bullying events would twist all human’s social value, hence named 2011 as “the Year of Life Education” to promote life education in all schools. Related papers increased yearly showed not only the government but scholars and experts were paying more attention on this issue. According to the related literature, life education included 4 dimensions: ‘self and ego’, ‘self and others’, ‘self and environment’, and ‘self and universe’, which was appropriate to child’s mental

developmental process, starting from self-recognition to understanding others, to learning interactive manners, to empathy and helping others, to understanding and then cherishing the environment around oneself, the countries and the universe.

We, as workers in the field of early childhood education, felt the importance for human beings to learn life education starting from early childhood stage. According to related literature, the issues of life education were so multivariate, yet picture-book was the most popular media frequently used by the researchers included teachers of kindergartens to junior-high schools, because of its' accessible, and attractive pictures and stories.

The purpose of this research was to know how and what life education was implemented in kindergartens. We therefore adapted document and comparative analysis methods, focused on theses of master degree and Ph D through National Digital Library of Theses and Dissertations on the topic concerned about using picture-books as media to implement life education in the early childhood stage in Taiwan. 25 dissertation published during 2002~2014, were our subjects.

2. Literature Analysis

2.1 The meaning of life education

The development of Life education in Taiwan could be divided into 3 stages: 'the budding-1996~1999', 'the flourishing- 1999~2002' (paid more attention by researchers and educators), and 'the consensus- 2002~till now', the concepts and meaning of life education had been concluded to a significant consolidation. The researchers and educators would consider life education in the viewpoint of 'holistic education' (全人教育), an education integrated the body, the mind, and the soul; it contained the relationships with the individual and heaven, human, objects, and the balance and harmony of these 4 dimensions would construct the harmony and happiness of life (Zhi-ping, Lin, 2000; Tak-Cheung Wong, 2000) as showed in chart 1. Ming-Yi Lin (2012) indicated that the meaning was but to live in a healthy living style and had positive, active perspective toward life. Neu Ze-Cheng, Lir Yu-Ling, & Huang Jia-Li (2006) mentioned that life education curriculum approach should include concern of life-and-death, ethics and spirituality and 12 abilities index. According to the above mentioned and related policies and researches, the meaning to implement life education was to cultivate children to have positive, active viewpoint and attitude toward life, and the learning should be from self-recognition, then being aware and paying attention to the environment surrounded one-self included human being, events/object, then successfully reaching peaceful and harmony for one-self and others, and then getting the harmony for all human beings and even the universe.

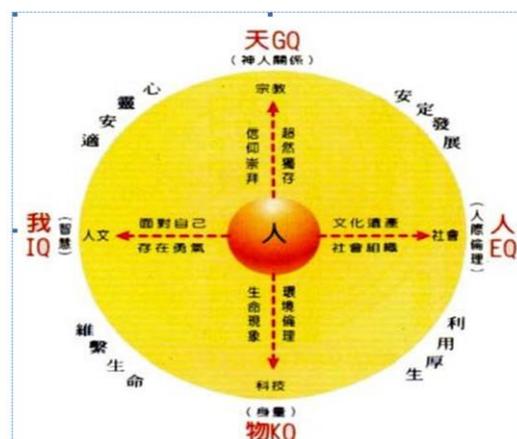


Chart 1 concept map of holistic education

2.2 Curriculum and Teaching of life education

This year (2014), the Ministry of Education started executing ‘life education promotion project’, and the project provided effective strategies for curriculum and teaching of life education. Accordingly, Yu-Mei Chen concluded the principles of curriculum and teaching for preschool life education were: (1) to respect pupils and to value their unique characters; (2) noting the experience and learning by doing; (3) from concrete to abstract content; (4) to promote team collaboration opportunities; (5) to use questioning techniques to guide children think and integrate concepts. Tak-Cheung Wong (2000) also indicated that life education was not a fixed science or course, but a random and integrated course; teaching strategies should adopt multi-mode (such as all kinds of games, experiencing activities, films watching, role play, and visiting related agencies) to teach lively accordance with the age of students.

2.3 The Educational Value of Picture-books for Children

Hsin-Yi Foundation (1989) found 97% 3~6-year-old children had experience with picture-books and 95% children loved picture-books, it was then noticed that picture-books was indispensable to children in their living. The message described in picture-books included role expectations, values, cultural standard and so on which influence the socialization for children profoundly.

Krogh & Lamme (1985), Yu-Gui Li (2001) pointed out that expressive way of picture books was to access children’s thinking and living experiences. All kinds of emotion expression showed in the picture-books, such as happy, sad, surprise, and jealous, could let readers reflected their emotion and/or understood others’ feeling, that was a role exchange chances to understand deeply about others different feeling. Besides, picture-books also provided readers a better experiences of living and art, closely linked the reality and increased their identity. We found that children indeed integrated into the world of the story and felt the same as the characters while enjoying different picture-books, yet it still needed teachers’ story-telling techniques and conversion with children to let children understand the emotion of the characters in the picture-books. Bainbridge, Pantaleo & Ellis (1999) mentioned the similar finding: discussion after reading could efficiently reduce prejudice among children, and let them get acquainted with each other, and children would let their experiences apply to the story events, and shared their feeling with others.

While reading, children would respond to the literature elements of picture-books. Chun-Tian Wu (2001) found children would respond not to the theme but to the characters and events, mainly because picture-books usually utilized certain character or certain event to elaborate the story. Chyong-Zhen Qiu (2003) also indicated that young children did only interpretation more on the themes related to living experiences such as ‘enjoying the nature’ and ‘family love’. Children could experienced different living experiences through different plots of different picture-books, and only high-quality picture-books could provide diversified living experiences.

2.4 Life Education Illustrated in Picture-Books

Xing-An Xu & Hui-Ru Qiu (2013) indicated the functions of picture-books for life education were: (1) to establish positive value and world-wide view; (2) to expand life experience and enhance environmental awareness; (3) to learn to think and to solve problems; (4) to learn

emotion management and self-identity; (5) to understand one-self and the surroundings and the universe in order to promote holistic development (life education goal).

Nai-Yu Huang (2002) pointed out that the theme of picture-books selling in the book-stores covered a wide range of fields, and all possessed the qualities of education, child psychology, play, literature, and aesthetic; and was the best teaching materials for life education. Related researchers such as Mei-Gui Lu (2007) proved the implementing effects of picture-books. Yi-Xun Li (2008) mentioned that picture-books was just like a wide and colorful wonderland for young children; children could gain much fun from reading and exploring in this wonderland and influenced imperceptibly into their live perspective. Shu-Chen Wu & Chwen-Chen Wei (2010) thought picture-books were the bridge between adults and young children. In our classes, the materials we used frequently were all kinds of picture books. We used them to stimulate children's conversation and thinking. And picture-books were also indeed a wonderful media to introduce young children easily understand the meaning of life education. Through a wide range of life education picture-books, the difficult life education topics could became abstract, simple and interesting, and easily to promote children to understood and experienced the meaning of life education.

3. Research Method

3.1 Research data sources

National Digital Library of Theses and Dissertations in Taiwan was our research data source. We focused on theses of master degree and Ph D that were related to life education for young children and published since 'the year of life education' (2001) ~ 2014, we then searched for the keywords: 'life education', 'picture-books' and 'picture book', and checked if it was related to 'using picture-books to implement life education' in order to exclude unrelated papers. There were 74 dissertation met this conditions. We then found 13 papers analyzing how the meaning of life showed in the contents of certain picture-books, and the rest papers were all using picture-books as teaching media for life education: 17 papers for young children, 35 papers for elementary-school pupils, 1 paper for junior-high students, 4 for papers for parents groups, 4 for others. We as workers in the early childhood education, we decided to focus on analyzing those papers only for young children, and the total papers in this education field was 25.

3.2 Research Method and Data Analysis

This research adopted content analysis which was also called informational analysis or documentary analysis. Neuman (1997) introduced that content analysis was an objective analysis that could find the hidden text messages. We three researchers were analyzed individualized about the research method, content (curriculum and teaching), and results, and then meeting together to discuss and to check the results consistency.

4. Results and Discussion

4.1 Analysis of Research Methods

Among 25 papers related to young children life education and picture books, 17 papers were action research (56.52%), 6 were using content analysis method (26.08%), 1 was questionnaire (4.35%), 1 was case study (4.35%). Using action research was the most popular within these papers, and the reason was that the researchers were early childhood education teachers and they could be teachers and researchers at the same time to conduct the action research to solve their teaching problem and to expect to enhance young children's feelings and awareness of life education.

4.2 Analysis on Research Purposes

The maximum number 19 papers was the purpose to investigate the influences of life education by using picture-books as media on the subjects (16 papers for young children, 1 paper for teacher, 2 papers for children-and- parents). There were 4 papers for the purpose of investigating 4 dimensions (self and ego, self and others, self and environment, self and universe) of life education in the picture-books, that was the second popular purpose, 4 papers included. 1 paper for investigating the death concept through teaching with picture-books, and 1 paper for analyzing the content of the picture-books through life education curriculum approach (3 dimensions: concern of life-and-death, ethical concern, and spiritual concern). Almost all papers were empirical studies, choosing appropriate picture books as certain media to implement self-designed programs and teaching methods in order to investigate the learning effects on the subjects' perspective and attitude toward life.

4.3 Analysis on the Role and Utilization of Picture-Books

4.3.1 Text Analysis

The number of papers using picture-books as their research subjects and conducting text analysis was 6, and could be divided into 3 areas: (1) 4 papers for analyzing by the meaning of life education (self and ego, self and others, self and environment, self and universe), (2) 1 paper for analyzing by the curriculum approach (concern of life-and-death, ethics and spirituality), (3) 1 paper for analyzing death concept.

Through these papers using picture-books as their research subjects and conducting text analysis, we found what the picture-book resources we could use in design and teaching preschool life education. And we knew 'self and ego' and 'self and others' were the most popular theme among these picture-book resources, 'the readers were all in the stages of preschool and elementary school level' might be the answer, for the life education. The main development in these two stages was to recognize one-self, learn how to get along with others and respect others. As to the theme of 'self and society' and 'self and universe', the picture-book resources were rare, and need to be developed. We thought 'self and society' or 'self and environment' could inspire readers to develop local characteristics, and could introduce the beauty and history of the surroundings around the young readers. To get familiar with and to respect the hometown one was born and grew up, the tangible environment and the intangible feeling would indeed guide young readers to aware and to appreciate the harmony and happiness of life, the meaning of life education then was formed and blossomed naturally.

4.3.2 curriculum and teaching

A. Class teaching mode

17 researchers of preschool life education by using picture-books as media were all in class-group teaching mode, since the researchers were almost early childhood education teachers and their students were naturally the purposive sampling, all young subjects were over 4-year-old. 12 pieces papers adopted research method, 2 pieces were qualitative research (using participating observation and documents analysis), 1 was case study. The purpose for all these papers was to understand the influence of life education on young children or teachers. Only one paper (Chwen-Chen Wei, 2009) was to investigate the story tellers-and-creators' cognition of life education and their selection of picture books. 1 paper (Shan-Feng Shi, 2007) adopted questionnaire method to investigate the current status and obstacles of early childhood education teachers implementing life education by using picture books.

The data collection was almost the same in the papers which used action research and qualitative research, almost all data was collected by participating observation and records,

young children's works, learning chart, interview and feedback sheets, reflection diary, teaching diary etc. All data was analyzed according to the research purpose and theme. Picture books were selected to fit the research purpose, and presented to the young children by showing the paper-made ones (example: Mei-Ju SuHang, 2004) or internet picture books (example: Li-Ya Wang, 2013) or multimedia teaching (example: Yun-Jun Pan, 2005). The curriculum or program designed and implemented by the researchers, also use the following strategies except story telling: group discussion and drama pretending play (example: Pei-Hua Dai, 2005) or experiencing activities, young children telling or retelling stories (example: Xiu-Mei Chen, 2005; Zhia-Ling Zhang, 2007), or following the leader's movement and pretending games (example: Mei-Ju SuHang, 2004). The experiencing activities were planting and raising pets, such as silkworms, caterpillar, tadpole in order to experience life process (example: Qiu-Juan Xiao, 2002).

B. Parent-and –Child learning mode

2 papers were using parent-and-child learning mode to teaching life education by using picture books; one was designed by Zheng-Zin Jing (2010), adopted action research in campus ; one was designed by Yan-Feng Huang (2010) adopted qualitative research in her family. They all implemented self-designed life education program. Yan-Feng Huang (2010) took 9 years to finish her study. The strategies used in Huang's stories were sitting in a circle to listen to the picture books first, then to implement 'painting story and telling story'. All research results showed Adults' participation and guides could effectively help young children access the holistic development, and to reach the goal of family life education.

4.4 Analysis on Research Results

All results showed almost all researchers improve that to implement life education would help young subjects to increase their attitude and value toward life education. And among 4 dimensions, the most effective learning effects was 'to understand myself' and 'self and others' communication'. Some researchers such as Jin-Rong Xie (2011) indicated the best material for life education was children's daily living experience or events. Chun-Ying Yang, (2010) found to share daily living experiences would improve the development of children's empathy and concern for the environment. Ming-Hui Chen (2008) also mentioned in her research results: life education could be learned by concern the events and objects around one-self. Gong-Man Lin (2007) indicated the researchers could get professional growth of teaching. All the above mentioned papers showed that to implement life education improved not only researchers' positive attitude toward life education, but also their perspective toward life education.

5. Conclusion and Recommendation

5.1 Principles for designing curriculum and teaching

Most researchers such as Mei-Ju SuHang (2004) concluded that all related literature indicated life education was holistic education, was the education of body, mind and soul, and this conclusion responded to the policy. Their self-designed curriculum and teaching also supported the suggestion of Dr. Yi-Liang Huang (2000): to use spiral design, to follow integration principle in order to avoid repeating theme (topics), to emphasize the principle of convergence to convergent living and social relevance, to teach students to face and understand the process of birth and death and to live actively.

5.2 Amplification of the Age Levels of Readers

The subjects of the papers were mostly from kindergartens and elementary schools, around 4-year-old to 12-year-old. Some also included adolescents of junior high schools and high schools, such as the subjects in Yan-Feng Huang's (2010) research. Actually Adolescents facing academic pressure, new environment and different character development stage,

needed life education to help them coping with the learning and adaptation. The characteristics of picture books would easily guide and improve a positive and optimistic life views. Unfortunately, we could not find any subject was under 4-year-old or even young than 2-year-old. We believed life education should start from the early beginning of life since the natural and man-made disasters occurred frequently.

5.3 Deepen the Research Content

All papers we collected from National Digital Library of Theses and Dissertations in Taiwan were all thesis for master degree, and almost all focused on Taiwanese picture-books. Yet picture books owned characteristic of literature and of art. We hence expected papers using content analysis on the characteristic of the literature and art, and so as young subjects' literacy and aesthetic development.

5.4 Extension Research Process

Almost all the researches even the action researches only took 10-16 weeks to investigate the learning effects on young children, and could not observe long-term change of the influence on young children's behavior. And we all knew the influence of life education was far long, we therefore recommended the researcher in the future need to extent their research process or add a follow-up.

5.5 Encouraging to Develop Local Features in Life Education

Almost all researchers presented and suggested the best materials for life education were from young children's daily life especially to learn the dimensions of 'self and others'. Since there were rare about 'self and environment', we suggested to encourage and support the researchers to develop curriculum that enriched community-based or school-based local cultural characteristics.

ISEPSS-1726

The process of retirement determination: A Taiwanese study

Ya-Hui Lee^a, Chun-Ting Yeh^{b,*}, Ching-Yi Lu^c

^aNational Chung-Cheng University, No.168, Sec. 1, Daxue Rd., Minxiong Township, Chiayi County, Taiwan, 621

E-mail address: yahuilee@ccu.edu.tw

^bNational Chung-Cheng University, No.168, Sec. 1, Daxue Rd., Minxiong Township, Chiayi County, Taiwan, 621

E-mail address: miss5138@yahoo.com.tw

^cNational Chung-Cheng University, No.168, Sec. 1, Daxue Rd., Minxiong Township, Chiayi County, Taiwan, 621

E-mail address: mislu0124@gmail.com

ABSTRACT

Although the mandatory retirement age has been amended from 60 to 65 in Taiwan since 2008, the attempt for the extension of working career seems to be ineffective. In 2010, the average retirement age still remained in 56.6 years old in Taiwan. Therefore, face-to-face semi-structured interviews were conducted in this study with 32 retirees to explore their retirement determined process experiences. The results of this research indicated that the important influence factors on the process of retirement determination included: policy, work, family and personal issues. On the other hand, the time sequence of determination of retirement consists of the initial thoughts, having the second thoughts, and the process of making a decision until actual retirement. The results could provide the reference for the retirement policymaker and adult educator in planning the preretirement learning program.

Keywords: retirement determination, retirement transition

1. INTRODUCTION

Although the mandatory retirement age has been amended from 60 to 65 in Taiwan since 2008 (Labor Standards Act, 2008), the attempt for the extension of working career seems to be ineffective. In 2010, the average retirement age still remained in 56.6 years old in Taiwan (Directorate-General of Budget, Accounting and Statistics, Executive Yuan, Taiwan, 2010). Currently the concept of postpone retirement of elderly people is advocated globally. In order to extend the elderly career, some employment programs or amendments of the pension system are also proposed (European Foundation for the Improvement of Living and Working Conditions [Eurofound], 2012). However, the phenomenon of early retirement in Taiwan has not yet changed for the better even though the retirement age has been postponed. Therefore, it is significant to understand the process of the retirement determination of Taiwanese elderly. This research was targeted at Taiwanese retirees to explore their whole process of the retirement decision, including the initial thought, and all the various factors influenced the decision to actual retire. The results of this study may help the development of retirement policies, and the preservation of the senior manpower for enterprises.

2. LITERATURE REVIEW

2.1 Retirement Definition

Retirement usually refers to an individual leaves a full time job after reaching a certain age, and begins converting the role and structure of life (Turner & Helms, 1989). As time changes,

retirement covers a variety of significances: discontinue working, phased retirement, re-employment, enjoy leisure life (Atchley, & Barusch, 2004), or conduct learning activities positively, and thus subversive the old concept of retirement which was viewed as leisure (Slack & Jensen, 2008). Hodkinson, Ford, Hodkinson & Hawthorn (2008) advocated that retirement is a process of learning, and the process has gone through anticipation, determination, preparation, and experiencing the life of retirement.

2.2 The Theory of Retirement Phases

Atchle & Barusch (2004) proposed the theory of retirement phases to illustrate the transforming process of retirement. The 8 retirement phases included preretirement, honeymoon, immediate retirement routine, rest and relaxation, disenchantment, reorientation, retirement routine, and termination of retirement. From the theory of retirement phases we can understand the process of the generating and vanishing of individuals' roles of retirement, as well as individuals' adapting status in different phases. However, not every retiree will experience all the process.

2.3 Retirement Determination

Some of the related researches (Anderson, Li, Bechhofer, McCrone, & Stewart, 2000; Quine, Bemard, & Kendig, 2006) showed that, individual's retirement decision was affected or supported by system, environment, resources, knowledge and ability. Furthermore, decision and preparation before retirement would influence individual's life after retirement regarding individual's psychology, economy, schedule plan, and coping of social interaction (Firmin, & Craycraft, 2009). It is helpful to plan the retirement goal, content, and time if elderly would begin to establish the concept of retirement preparation (Price, 2003).

3. METHOD

3.1 Participants

The participants in this study were 32 retirees including 19 males and 13 females, ages ranging from 55-82 years old. The occupation of respondents included 6 civil servants /state-owned-enterprise employees, 14 teachers, and 12 private enterprise employees. Their level of education: 1 of elementary, 1 of junior high, 10 of high school /vocational, 16 of university /college, and 5 of master. There were 18 participants retired for 5~10 years, and 14 retired for more than 10 years.

3.2 Data Collection

Face-to-face semi-structured interviews were conducted in this study with 32 retirees to explore their retirement determining process experiences (Packer, 2011).

3.3 Data Analysis

Constant comparative method was conducted in this study to analyze the interview data (Glaser, & Strauss, 1999). The data analysis framework as described in the following table.

Table 1: Interview data analysis framework

category	subcategory	meaning unites
The influence factors of retirement determination	Policy	Encouraging early retirement age of 55
		Mandatory retirement age of 65

4. RESULTS

4.1 The Influence Factors of Retirement Determination

Table 2: The items of retirement determination in each influence factor

Influence factors	Items
Policy	Program of encouraging early retirement
	Mandatory retirement age of 65
Work	Personnel downsizing
	High risk work
	Low work achievement
	Working pressure
	The impact of colleague's resignation
Family	The need of taking care of unhealthy family member
	Family support for enjoying retirement leisure life
Personal issues	Stable financial situation
	Longing for retirement life style
	Unhealthy physical condition

4.2 The Time Sequence of Retirement Determination

Table 3: The implications of the process of retirement determination

The process of retirement determination	Implications
The initial thoughts	The participants' beginning thoughts of the retirement, but not necessary the ultimate reason.
Having the second thoughts	The participants changed the retirement decisions, might be different from the initial thoughts.
Making a decision	The reasons that the participants made to retire.
Actual retirement	The final reasons that the participants made, and usually were the reasons for resignation.

5. DISCUSSION

The previous researches indicated that individual's retirement decision was affected by system, environment, resources, knowledge and ability (Anderson, Li, Bechhofer, McCrone, & Stewart, 2000;

Quine, Bemard, & Kendig, 2006). In this study showed that the retirement determination was not merely a decision made by the individual after considered various factors, the interviewees very often experienced a journey of deciding. For example, the interviewees might be influenced by the policy, work, family, or any personal issues to have the initial thought of retirement, then the interviewees had second thoughts because of the issues of their work and family. At the end the reasons for them to decide to retire including policy, work and family issues that were the real deciding factors to leave the jobs. From the results of this study we are more aware of the idea of preretirement of the retirement phases theory of Atchle & Barusch (2004), that is, the process and the considering factors from the initial period to the approaching period of the actual retirement.

Table 4: The matrix of the results between the influence factors and the process of retirement determination

Influence factors	The process of retirement determination			
	The initial thoughts	Having the second thoughts	Making a decision	Actual retirement
Policy	*		*	*
Work	*	*	*	*
Family	*	*	*	*
Personal issues	*			

6. CONCLUSION

6.1 The important influence factors on the process of retirement determination include policy, work, family and personal issues.

6.2 The time sequence of determination of retirement consists of the initial thoughts, having the second thoughts, and the process of making a decision until actual retirement.

7. REFERENCES

- Anderson, M., Li, Y., Bechhofer, F., McCrone, D., & Stewart, R. (2000). Sooner rather than later? Younger and middle-aged adults preparing for retirement. *Ageing and Society*, 20, 445-466.
- Atchley, R. C., & Barusch, A. S. (2004). *Social forces and aging: An introduction to social gerontology* (10th ed.). Belmont, CA: Wadsworth Publishing Company.
- Directorate-General of Budget, Accounting and Statistics, Executive Yuan, Taiwan (2010). *The comprehensive analyze of workers' tendency in 2009*. Resource document. Directorate-General of Budget, Accounting and Statistics, Executive Yuan. <http://www.dgbas.gov.tw/public/Data/011191525371.pdf> (Chinese)
- European Foundation for the Improvement of Living and Working Conditions, Eurofound (2012). *Employment trends and policies for older workers in the recession*. Brussels: John Hurley, Research Officer.
- Firmin, M. W., & Craycraft, A. (2009). Life meanings for past and present: Case studies of four retired faculty. *Education Research Quarterly*, 32(4), 17-35.
- Glaser, B. G., & Strauss, F. (1999). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine De Gruyter.
- Hodkinson, P., Ford, G., Hodkinson, H., & Hawthorn, R. (2008). Retirement as a learning process. *Educational Gerontology*, 34(3), 167-184.

Labor Standards Act (2008).

Packer, M. (2011). *The science of qualitative research*. New York, NY: Cambridge.

Price, C. A. (2003). Professional women's retirement adjustment: The experience of reestablishing order. *Journal of Aging Studies, 17*, 341-355.

Quine, S., Bemard, D., & Kendig, H. (2006). Understanding baby boomers' expectations and plans for their retirement: Findings from a qualitative study. *Australian Journal on Ageing, 25*(3), 145-150.

Slack, T., & Jensen, L. (2008). Employment hardship among older workers: Does residential and gender inequality extend into older age. *The Journal of Gerontology, 63*(1), 15-25.

Turner, J. S., & Helms, D. (1989). *Contemporary Adulthood*. TX: Holt, Rinehart and Winston.

ISEPSS-2100
**The Image of Elderly and Ageism In Taiwan : From the Symbolic
Interaction Theory**

Yi-Fen Wang
Nation Chung Cheng University
yifenwang224@gmail.com

Abstract

Symbolic interaction theory is the microscopic theory of sociology. At the time to explore issues about aging, it considered elderly is constructed out of the product through various symbol systems, burdened with the interpretation of social life and aging and this image is not everlasting, but as times change and these systems carry some symbolic connotations it will affect our thinking, attitudes, beliefs and behavior. The elderly has low state in Western society, not only have negative connotations but also reflecting the ageism. Therefore the study will explore the image of elderly and ageism in Taiwan from the symbolic interaction theory.

This study used content analysis, the National Library "Theses and Dissertations System in Taiwan" and "Taiwan TSSCI Social Science Citation Index database" for the whole search, and "the image of elderly" or "ageism" as the keywords. In order to understand the results of previous studies for the image of elderly and ageism, comparison of this phenomenon by different generations and analyze the results and phenomenon.

The results showed that the image of elderly in Taiwan totally 27 researches, including 26 master dissertations and 1 journal articles in TSSCI database, which were organized from five aspect as follow: (a) fiction and prose ; (b) picture books and picture books ; (c) newspaper and mixed paper ; (d) textbooks ; five areas (e) attitudes and behavior do organize and explore .Lastly, this study provides three advices include: (a) the policy aspects: continuation of the elderly Education Policy White Paper action program to increase the visibility of positive image of elderly ; (b) the concept aspects: deepen aging education in the educational system , the culture community correct aging concepts ; (c) the social aspects: emphasis education and social importance for the elderly to participate and create age-friendly environment and cities.

Keyword: symbolic interaction theory, the image of elderly, ageism

ICSSAM-794

Library Websites Popularity: Does Facebook Really Matter?

Wahidah Mohd Zain

Department of Library and Information Science, Faculty of Information and Communication
Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia
myaviame_84@yahoo.com

Roslina Othman

Department of Library and Information Science, Faculty of Information and Communication
Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia
roslina@iium.edu.my

The corresponding author: Wahidah Mohd Zain

Abstract

The purpose of this paper is to determine whether the utilization of social media (Facebook) is an important factor in increasing the visibility of the library site usage in Malaysian public universities. Nine top ranked Malaysian public universities involved in this research and number of Facebook followers for each library website is listed. Alexa software was used as the approach to study the issue of visibility. Alexa is able to determine web site usage, by showing the percentage of visitors of library related subdomain(s) as listed in the top subdomains for each University website (domain) over a month. It is found that Universiti Utara Malaysia library website scored the highest percentage of visitors based on the library related subdomain(s) as listed in the top subdomains for the University website in Alexa. To check such irregularities in access, this paper use EvalAccess 2.0 and it is found that Universiti Sains Malaysia's library website scored higher irregularities. In term of number of Facebook followers, Univesity of Malaya library has the highest score. It is showed that the utilization of social media (Facebook) is not yet an important factor in increasing the visibility of the library websites. However, expectedly, top ranked universities' library web sites, are more visible and popular. This research is limited to the situation in Malaysia where public universities are more noticeable and seldom face financial constraints rather than private universities. It is highly important for those universities' library web sites that are not highly visible to initiate the necessary measures in improving the development of their web sites as the usage of the website is an indicator of online quality.

Keywords: Library web sites, User studies, Social media, Facebook, Public universities, Malaysia

1. Introduction

Many steps have been taken by the Ministry of Higher Education, Malaysia (MOHE) in improving the quality of education in our universities as one of the objectives of MOHE is to develop at least 20 centers of excellence that is recognized internationally in terms of research, copyright, publishing, collaborative research and 10% of the commercialization of research results [1]. Academic library has been a central and important source of support for the university research community and will continue, to be in this important role. The collections and services of the academic library are keys to this supporting role. The Malaysian Ministry of Higher Education (MOHE) has put their focus and efforts in order to improve the quality of higher education in Malaysia.

The selected universities with research status must strive to achieve excellence and upgrade the ranking, in order to be par with international level. Among the top ranked Malaysia's public universities in Asia as ranked by QS University Rankings is listed in Table 1:

Table 1: University Rankings: Asia, Malaysia Public Universities

No.	Institution	2013 Rank	2012 Rank
1	University of Malaya	33	35
2	Universiti Kebangsaan Malaysia	57	58
3	Universiti Sains Malaysia	61	63
4	Universiti Teknologi Malaysia	68	75
5	Universiti Putra Malaysia	73	76
6	International Islamic University of Malaysia	151-160	151-160
7	Universiti Malaysia Sarawak	181-190	161-170
8	Univeristi Teknologi Mara	201-250	201-250
9	Universiti Utara Malaysia	201-250	251-300
10	Universiti Malaysia Perlis	201-250	-
11	Universiti Malaysia Terengganu	251-300	301+
12	Universiti Tun Hussin Onn Malaysia	251-300	251-300
13	Universiti Malaysia Pahang	251-300	

Source: QS University Rankings: Asia, [10]

Most of the universities libraries whether they are public or private have a quite the same feature in having university web sites. With the establishment of the World Wide Web in the 1990s the internet has become widely accessible and the libraries have initiated their own web sites to foster their mission and visions. They recognize that the internet can increase their scale of communication through the web sites as the internet is capable to deliver large quantities of information and services in a quick manner as stressed by Bakar [2]. One of the efforts to market their services and websites, academic libraries has created their own library Facebook page in reaching students. Facebook is like a trend amongst library users that libraries just cannot neglect [3]. Spomer, [4] reported that when Facebook opened up its services in 2006, librarians immediately began to explore the possibilities to use it for their organizations. Meanwhile, Charnigo & Barnett-Ellis [5], emphasized that some librarians in their study viewed Facebook as a instrument in delivering library services and communicating with patrons.

2.Purpose of the study

The objectives of this study are to find out the level of visibility and accessibility of the top ranked Malaysia's public university libraries' websites and determine whether the utilization

of social media (Facebook) is an important factor in increasing the visibility of the library site in Malaysian public universities.

3.Findings

3.1 Popularity

The website can be as a mark for the university in telling the world of its existing. Bakar [2] has noted that websites with greater number of quality links have better visibility. In this study, Alexa software will be used to measure the visibility of the university websites and identifying any library related top subdomains listed in the university websites. According to Lin et al [5] the rankings of Alexa are based on the user popularity. The web site usage can be an indicator of online quality. Alexa has the capability in identifying the popularity or usage based on the traffic rankings as it is an installed base of well over 10 million toolbars as elaborated in [9].

3.1.1 University website and the library related subdomains

Table 2 shows the total sites linking in, popularity rank, load time and listed library e-service in the top subdomains for this site by percentage in recorded February 2014. In term of visibility, Universiti Putra Malaysia marks the highest total sites linking in with 3074 sites linking in followed by Universiti Teknologi Malaysia with 3299 sites. For the popularity rank in Malaysia, Universiti Teknologi MARA leads (246), followed by University of Malaya (300), Universiti Teknologi Malaysia (328), and Universiti Putra Malaysia (364). Globally, Universiti Teknologi Malaysia's website is the top ranked among other public universities followed by Universiti Teknologi MARA.

This high visibility and rank could be attributed to the fact that Universiti Teknologi MARA has the highest population of students and staff compared to other universities as showed in Table 2. Most of the universities with the Research University status closely followed with high rank. University with the fastest load time is Universiti Kebangsaan Malaysia 1.062 seconds. Overall, the result shows that top ranked universities scores high visibility. Exception is only for Universiti Teknologi MARA as the number of population of the universities is high. In order to identify the popularity of the library websites among the users, this paper also utilized the Alexa software, to extract the data. From the data of each University Library websites, top subdomains in the websites related to the university library were recorded. As shown in Table 2, all highly ranked websites nationally scores high percentage of visitors to the library websites or subdomains. Exception is only for Universiti Utara Malaysia where the score for the cumulative percentage for the library visitors outstandingly high although the ranking is not in the top category. Five universities categorized in high score group are Universiti Utara Malaysia (total library subdomains visitors: 27.77%, rank: 846), Universiti Teknologi MARA (total library subdomains visitors: 23.87%, rank: 246), University of Malaya (total library subdomains visitors: 15.32%, rank: 300), Universiti Teknologi Malaysia (total library subdomains visitors: 18.91%, rank: 328) and Universiti Putra Malaysia (total library subdomains visitors: 18.35%, rank: 364).

As outlined in one of Alexa Rankings website [11] the lower your Alexa ranking, the more it is affected by tiny statistical changes, both in terms of your logged website traffic and websites with similar Alexa rankings. The reason that might cause Universiti Utara Malaysia score high is the establishment of PERPUN Library Catalog, MALCat. PERPUN Library Catalog is a union catalog of all the public university libraries and government link corporation

university library registered with MOHE. MALCat is a Perpun service for public, based at Perpustakaan Sultanah Bahiyah, Universiti Utara Malaysia. MALCat are using UUM infratructure and library resources to develop, enhance dan maintain the system. The service uses MARC records upplied by Perpun members, which make up the vast majority of the database, as well as an increasing range of other contributing libraries.

Name of university	*Number of Enrolment/ Population (person)	Total sites linking in	Popularity Rank		Load time (seconds)	Listed library related subdomains for university's site by percentage	
			Global	Malaysia		Subdomain/Link (link.my)	** (%)
University of Malaya	26,341	2269	41329	300	Average (1.677)	umlib.um.edu diglib.um.edu ezproxy.um.edu e-journal.um.edu TOTAL	7.16 4.23 2.65 1.28 15.32
Universiti Kebangsaan Malaysia	24,993	2066	54120	694	Fast (1.062)	journalarticle.ukm ezplib.ukm TOTAL	3.45 2.50 5.95
Universiti Putra Malaysia	31,180	3074	44273	364	Fast (1.258)	lib.upm.edu ezproxy.upm.edu webopac.upm.edu TOTAL	9.32 6.91 2.12 18.35
Universiti Sains Malaysia	28,277	2985	62951	571	Average (2.037)	eprints.usm TOTAL	6.32 6.32
Universiti Teknologi Malaysia	34,618	3299	33025	328	Average (1.596)	library.utm psz.utm eprints.utm TOTAL	2.74 5.16 11.0 18.91
International Islamic University Malaysia	29,802	1065	78453	724	Average (1.482)	irep.iium.edu lib.iium.edu TOTAL	4.88 4.46 9.34
Universiti Teknologi MARA	223,753	1594	33649	246	Fast (1.27)	library.uitm.edu eprints.uitm.edu ptar.uitm.edu jurnalintelek.uitm.edu TOTAL	13.44 4.57 4.44 1.42 23.87
Universiti Utara Malaysia	31,617	911	84274	846	Average (2.021)	elib.uum.edu cmslib.uum.edu TOTAL	24.25 3.52 27.77
Universiti Malaysia Sabah	18,017	730	189913	2560	Average (1.537)	eprints.ums.edu TOTAL	7.05 7.05

Table 2: Universities number of enrolment, total sites linking in, popularity rank, load time and listed library e-service in the top subdomains for this site by percentage in February 2014

* Source: Malaysia Educational Statistics[6]

*

*Percentage of visitors that visited the subdomain over a month

3.1.2 Library Website and Facebook Followers

The main intention of usage and application of Facebook by the library administrators is to outreach their users [7]. This paper attempted to compare the number of the number of Facebook followers and the total percentage of visitors visit library website (%). Only main library Facebook page is counted and the data was taken in February 2014. The purpose is to find any significant pattern between the two. As lay out in Table 3, although University of Malaya and International Islamic University Malaysia has high number of Facebook followers (13098 and 9939) respectively, the total percentage of visitors visit library website is not obviously high. This shows that the utilization of social media (Facebook) is not yet an important factor in increasing the visibility of the library websites.

Table 3: Number of Facebook followers and the percentage of visitors of the library website

Library Main Websites	Number of Facebook Followers	*Total Percentage of Visitors visit Library Website (%)
Universiti Utara Malaysia	4359	27.77
Universiti Teknologi MARA	2409	23.87
Universiti Teknologi Malaysia	4363	18.91
Universiti Putra Malaysia	2417	18.35
University of Malaya	13098	15.32
International Islamic University Malaysia	9939	9.34
Universiti Malaysia Sabah	1437	7.05
Universiti Sains Malaysia	5522	6.32
Universiti Kebangsaan Malaysia	1166	5.95

*Total percentage of visitors of library related subdomain(s) as listed in the top subdomains for the university Website over a month as evaluated in Alexa.

3.2 Accesibility

To check such irregularities in access, this paper use EvalAccess 2.0 software. The software is used as a tool to evaluate the online web accessibility invented using web service technology. This technology provides varieties of methods of evaluation. This includes evaluation of web page, website and HTML mark-up by presenting the complete report of errors as the result of the evaluation. One of the major specifications widely referenced for accessible Web content design is Web Content Accessibility Guideline 1.0 (WCAG)—is a stable international specification developed through a voluntary industry consensus. According to Zeng and Parmanto [8] WCAG guideline attaches a priority level to each

checkpoint based on the checkpoint's impact on accessibility. Priority 1 checkpoints mandate the largest level of compliance while priority 3 checkpoints are optional for Web content developers. We used the 3 point priority level in reverse as the weighting factor for the calculation of WAB score. Priority 1 violations will weight 3 times heavier than the priority 3 violations because people with disabilities have more difficulties to access the webpage with priority 1 violation. Thus, in this study, only result with Priority 1 errors will be concerned. The scoring by EvalAccess 2.0 for the libraries websites are as shown in Table 3.

Table 3: Scoring for Library Main Websites

Library Main Websites	Priority 1	Priority 2
University of Malaya	1	99
Universiti Kebangsaan Malaysia	6	81
Universiti Putra Malaysia	1	171
Universiti Sains Malaysia	62	267
Universiti Teknologi Malaysia	0	49
International Islamic University Malaysia	4	13
Universiti Teknologi MARA	2	1
Universiti Utara Malaysia	0	1

Of the nine public universities library websites that are being assessed for accessibility two of them do not have Priority 1 error. Table 3 shows that Universiti Sains Malaysia has the highest Priority 1 errors with 62 errors and the rest score between 1 to 6 errors.

4.0 Conclusion

By having the data of visibility and accessibility among the top ranked Malaysia's public university libraries' websites, the findings of the study revealed although most of the top rank universities' web sites are more visible and accessible as emphasized by Bakar [2], some exceptional reasons such as the size of population of the library users, the unique services offer (MALCat) which does not offered by other websites will help in increasing the visibility. It is pertinent; therefore, for those universities libraries that want to increase the visibility of their library website must consistently upgrade the information and be creative in innovating new features or services that will attract users. For accessibility issue, those library websites which have this problem should take the necessary steps to improve the development of their web sites. Hopefully by taking these measures it would help the university libraries in their drive to be the best among their contemporaries.

5. References

- [1] Ministry of Higher Education. Higher Learning Institution, 2011. [Online]. Retrieved on February 21, 2014 from <http://www.mohe.gov.my/portal/institusi/ipta.html>.
- [2] Bakar A. B. A. Myths and realities of digital reference services: Perspectives of libraries from developing countries. *Library Management*, 2012, 33(3):136–141.
- [3] Spomer M. Y. The fine art of throwing sheep: how Facebook can contribute to librarianship and community at theological institutions, *Theological Librarianship*, 2008, 1(1):10–21.
- [4] Charnigo L. , Barnett-Ellis P. Checking Out Facebook.com: The Impact of a Digital Trend on Academic Libraries. *Information Technology and Libraries*, 26(1): 23–34.
- [5] Lin F., Chia F., Chen Y. Lin S. Quality Evaluation of Web Services, in *Proceedings of the IEEE International Conference on E-Commerce Technology for Dynamic E-Business (CEC-East'04)*, Beijing, China, September 13-15, 2004, pp.226-233.
- [6] Malaysian Ministry of Education. *Quick Facts 2012 Malaysia Educational Statistics*. Educational Data Sector, Educational Planning and Research Division, Putrajaya, 2012.
- [7] Breeding M. Librarians face online social networks,” *Computers in Libraries*, 2007, 27(8): 30–32,
- [8] Zeng X., Parmanto B. Evaluation of web accessibility of consumer health information websites.,” *AMIA Annual Symposium Proceedings*, AMIA Symposium, January, 2003. pp. 743–747.
- [9] Alexa. Retrieved on January 1, 2014 from www.alexa.com
- [10] QS University Rankings: Asia. [Online].Retrieved on January 1, 2014 from www.topuniversities.com
- [11] Alexa Rankings. [Online]. Retrieved on January 1, 2014 from http://randsca.com/index.php/2013/06/02/alexa_rankings

Communication, Society & Psychology

Kyoto Research Park 4F

11:00-12:00

Thursday, May 8

ICSSAM-604

Cognition Differences in Elder's Advertising Effect: An Investigation of Moderating Product Involvement and Information Load

Yu, Shu-Yin

Ming-Chuan University

ICSSAM- 578

Interdisciplinary Team Learning Talent Cultivation in Taiwanese Higher Education: A Case Study of Interdisciplinary Team Participation in an Entrepreneurship Competition

Wei-Chen Yang

Southern Taiwan University of Science and Technology

Chia-Chun Lin

Southern Taiwan University of Science and Technology

ICSSAM- 677

The Mental Model of Elderly on Medication Problems

Hui-Jiun Hu

National Chiayi University

ICSSAM- 548

By Car or by Bus? The Influence of Atmospheric Conditions on Decisions Regarding Transportation in Poland

Adam Choryński

Polish Academy of Sciences

Dariusz Graczyk

Polish Academy of Sciences

ICSSAM- 943

Personalized Fear Appeal For An Anti-Binge Drinking Campaign

Cameron Ng

Nanyang Technological University

Sheryl Huang

Nanyang Technological University

ADeline Tan

Nanyang Technological University

Sara-Jean Yip

Nanyang Technological University

Younbo Jung

Nanyang Technological University

ICSSAM- 538

**Stigmatized For My Religious Choices? When Fashionableness Become Reprehensible
Innovation**

Hesham Fazel

King Khalid University

ISEPSS- 1733

Action Research of Caregiver's Praxis Community on Emotional Regulation Program Design

Hsiu-Lan Chin

Toko University

Ying-Tsun Hung

Ching Kuo Institute of Management and Health

ICSSAM-604

Cognition differences in Elder's Advertising Effect: An Investigation of Moderating Product Involvement and Information Load

Yu, Shu-Yin

Ming-Chuan University, Taoyuan: 5 De Ming Rd., Gui Shan District, Taoyuan County 333,
Taiwan

Email:syyu00@yahoo.com.tw

Abstract

The article aims to probe into the manipulation of different information loads and the advertising effects on the elderly after they read advertising samples regarding the involvement of different products. By exploring the cognition and comprehension of Taiwanese elderly, this study intends to establish primary research of the elderly, in order to supplement the references for designers or marketing researchers to communicate with the elderly. A descriptive Analysis of the personality traits included 150 subjects of Taiwanese elderly. Descriptive statistics one way ANOVA and logistic regression were used in order to detect the relationships with different cognitive styles. Different cognitive styles of the elderly have significant influences on the advertising effect of samples with low involvement and different information loads. High involvement products are appropriate for elderly verbalizers. For elderly visualizers, advertisements with high involvement and light information load, or low involvement and middle information load, are suitable strategies of advertising information load. In advertising communications with the elderly of different cognitive styles, low involvement advertising is more suitable as a marketing tool. Although the cognitive style and advertising effect of the elderly cannot be easily observed, when the elderly become mainstream consumer groups, effective communication approach has become an important tool for the effect of market opening for the elderly.

Keywords: Advertising Effect, Cognitive style, Product involvement, Information load

1. Introduction

The silver market of elderly consumers is prosperously developing in Asia. In the affluent Asia Pacific region, consisting of Japan, Korea, Taiwan, Hong Kong, Singapore, and Australia, the total potential spending by elderly households is estimated to have reached \$868 billion USD in 2005, and this is projected to rise to \$1.5 trillion USD in 2015. This implies an impressive annual growth rate of 10.8%, much higher than what has been forecast for Asia [1]. At present, although the silver market is growing, most research results are based primarily on younger adults, the marketing resources are not growing with them.

Across the life span, aging is associated with the decline in physical strength and deliberative processing included memory performance, information judgment and decision making [2]. Owing to the degradation of their information processing ability, the elderly's cognition of time and space will be narrowed, as will their instant information identification ability. Their response speed to stimuli will also decrease. These changes affect the elderly's fluency in induction, making inferences, semantics, language, numeric and space, and emotional responses to advertising information [3].

According to the changes in cognitive abilities and information comprehension, some researches support that elderly may also find it more difficult to understand the unfamiliar or complicated messages [4,5]. This study on information load for Taiwanese elderly with cognitive styles provides a framework to predict possible cognitive differences in advertising effect ion.

2. Theoretical Background

2.1 Information load

Advertising information load is the amount of message content in advertising caused the audiences' loading when reading them. Advertising designers encode messages to the receivers to convey consumption motives or needs as stimulation. The designers specifically provide benefits, stimulations and identification to trigger the consumers' action, and these actions are an extremely important factor of advertising stimulation.

Resnik and Stern [6] reviewed 378 TV commercials and suggested that when the advertising contains such information as price, value, quality, performance, function, content, components, accessibility, unique supplies, flavor, nutrition, packaging or appearance, guarantees, safety, the research of independent groups on products, and the research of products and new ideas, it will be treated as advertising with information. Stern, Krugman and Resnik [7] found that 92% of all advertising includes information, and that on average, each print advertisement contains 1.7 pieces of information. Abernethy and Butler [8] demonstrated that on average, each TV commercial includes 1.06 pieces of information (49%), each magazine advertisement includes 1.7 pieces of information (86%), and each newspaper advertisement includes 3.13 pieces of information (96.6%). Katov, Nomura and Ito [9] defined the degree of visual information loads, stating that complicated information loads will result in a negative cognitive effect. Coates [10] suggested that different information sources reveal different transmission functions. When there are too many information loads, the consumers' decision-making time will increase and the decision-making quality will decrease, meaning that advertising which has a proper information load is more effective.

Based on the above, in comparison to visual advertising, print advertising has greater information load; moreover, layout, form, and expression techniques of advertising are directly related to information load in advertising. Therefore, this study intends to validate the best effect of information load on readers, and determine the limit and critical load of information receiving load of different age groups.

2.2 Cognitive style

The dimension of cognitive style attempts to describe the ways in which individual process and analyze information as part of a decision-making or problem solving process. Paivio [11] used experimental evidence to discuss the dual theory on nonverbal imagery and verbal processes (inner speech) as memory codes and mediators of behavior. Richardson [12] proposed a theory known as the visualizer vs. verbalizer dimension of cognitive style. Jonassen and Grabowski [13] proposed two characteristics of cognitive styles, which are visualizer and verbalizer. The former has concrete thinking and tends to think about real or imagery objects. On the other hand, verbalizers' thinking is related to abstract symbols. Moreover, visualizers' thinking is Subjective Self Oriented, while verbalizers' thinking is Objective Task Oriented. In addition, visualizers acquire information by "seeing", and when learning verbal information, in particular, they expect the assistance of pictures. Verbalizers prefer absorbing information by "reading" and words are the best media [14].

Richardson [12] developed a verbalizer-visualizer questionnaire known as the VVQ scale to distinguish between verbal and visual learners. Triantafillou, Demetriadis, Pombortsis and Georgiadou [15] concluded that Greek students' performances were mainly affected by adapting to the learning environment based on individual cognitive styles. According to the research, visualizers are those who rely on imagery when attempting to perform cognitive tasks, while verbalizers are those who rely on verbal-analytical strategies. The VV cognitive style has noticeably different mental activities. The above studies have demonstrated evidences to support that individuals can be reliably classified as visualizers vs. verbalizers. The presentation of material in a format containing text with pictures facilitates learning for visualizers more when compared to the same content in a format that contains only text. Verbalizers will utilize a highly verbal content, whereas visualizers will use diagrams or pictures to illustrate their ideas.

2.3 Advertising effect

How advertising affects consumer behavior has always been a complicated process that cannot be explicitly explained. The assessment of advertising effect should not be restricted to surveys on the effect of the advertising itself.

Lutz [16] defined attitude as “an individual’s preference for specific advertising stimuli as he/she is exposed to specific situations.” Fishbein and Ajzen [17] divided attitude into the three parts of cognition, affection, and desire. They suggested that attitude will affect consumer behavior through factors such as other people’s comments or external environments. Attitude is the consumers’ level of preference. When consumers have a good attitude towards advertisements and are in need of a product, a need variable will be developed further to form the purchase intention. Bruner and Kumar [18] indicated that advertising attitude is composed of multiple stages, from the lower level of cognition and affection to the higher level of purchase action. In addition, attitude regarding advertising is a factor that forms and changes brand attitude, and is an important moderator for the formation of advertising effect. In order to determine how advertising influences message receiving and behaviors of the elderly, it is necessary to recognize the formation and changes of elderly cognition. Thus, the cognition construct regarding advertising comprehension and evaluation, the affection construct regarding advertising preference, and the action construct regarding actual behaviors, can be used to measure and predict the advertising behavior of the elderly.

3. Research Design

This study chooses male and female seniors, 65 years old or over, including 75 visualizers and 75 verbalizers, for a total of 150 subjects. The first stage of the questionnaire survey collected information on gender, age, income, educational level, occupation, and retirement of all subjects. The second stage investigated the perception of advertising samples with different information loads. The advertising effect was measured by subjects’ reaction after reading sample advertising.

This study explored the manipulation of different information loads in print advertising. The test aimed to find the advertising effect on the elderly, in terms of cognition, affection, and action, after they read advertising samples with different information loads. The results were used to investigate the mutual influences between cognitive styles of the elderly and advertising effects. Regarding sample design, by low and high product involvement, this study examined the differentiation effects of different types of products, where the amounts of information include light information load (one message), middle information load (three messages), and heavy information load (five messages).

Table 1 Test result of advertising effect with different information loads

Variances		mean	df	sd	t	p
CS		2.83	.608	149	-3.408	.001*
Verbalizer		3.19	.379	148	8.764	.000*
Visualizer		2.48	.588			
High involvement	Light	3.72	149	.634	13.901	.000*
	Middle	3.39	149	.533	8.938	.000*
	Heavy	2.97	149	.583	-.697	.487
Low involvement	Light	3.28	149	.656	5.189	.000*
	Middle	3.35	149	.650	6.537	.000*
	Heavy	3.16	149	.683	2.931	.004*

Note: * denotes, $P < .05$

4. Result

Cronbach's α of the variables is above 0.6, Cronbach's α of visualizers is .806 and that of verbalizers is .665, which indicates that the overall design of the questionnaire items is reliable. The percentages of male and female subjects were 52.8% and 47.2%. The subjects in their mid-elderly phase, aged 65-79, and accounted for 72.9%. Most of them graduated from senior high school and vocational school (36.1%), followed by college and university (38.2%). Moreover, 60% of the subjects are retired or semi-retired. Regarding incomes, based on personal total incomes, 30.6% do not have incomes. By dividing the elderly into low income, medium income, and high income groups, more than half of subjects have medium and low incomes, including Subjects' gender, educational level, and incomes are significantly related to different cognitive styles. According to the validation results of different information loads, besides high involvement and heavy information load samples $t(149) = -.697$, $p > .05$, all the samples have reached the level of significance, indicating that the test results have statistical differences (table 1). Subjects' cognitive styles have reached the level of significance $t(149) = -3.408$, $p < .05$, and have statistical difference. Verbalizers and visualizers have reached the level of significance $t(148) = 8.764$, $p < .05$, indicating that the two cognitive styles have statistical differences (table 1).

Table 2 Test result of cognitive styles on different information loads

			R ²	df	mean square	f	p
High involvement	Light	between	1.370	1	1.370	3.460	.065
		within	58.593	148	.396		
		Total	59.962	149			
	Middle	between	.907	1	.907	3.243	.074
		within	41.407	148	.280		
		Total	42.315	149			
	Heavy	between	1.245	1	1.245	3.696	.056
		within	49.866	148	.337		
		Total	51.111	149			
Low involvement	Light	between	2.003	1	2.003	4.779	.030*
		within	62.034	148	.419		
		Total	64.037	149			
	Middle	between	1.852	1	1.852	4.492	.036*
		within	61.010	148	.412		
		Total	62.862	149			
	Heavy	between	1.965	1	1.965	4.311	.040*
		within	67.450	148	.456		
		Total	69.415	149			

Note: * denotes, P<.05

Table 3 Means of different information loads and cognitive styles

CS	High involvement			Low involvement		
	light	middle	heavy	light	middle	heavy
Verbalizer	3.82	3.47	3.06	3.39	3.46	3.05
Visualizer	3.62	3.31	2.88	3.16	3.24	3.28
	3.72	3.39	2.97	3.28	3.35	3.16

The cognitive styles of the subjects have a significant influence on samples with low involvement and different information loads, while the influence on samples with high involvement and different information loads is insignificant (table 2). The advertising effect of different information loads on visualizers is lower than that on verbalizers. The advertising effect of samples high involvement and heavy information load is low. The advertising effect of samples with low involvement and heavy information load on visualizers is higher than that on verbalizers (table 3). The results suggested that both kinds of cognitive styles have higher advertising effect on samples with high involvement and light information load. The advertising effect of samples with high involvement and heavy information load is lower, while the advertising effect of samples with low involvement and middle information load is better.

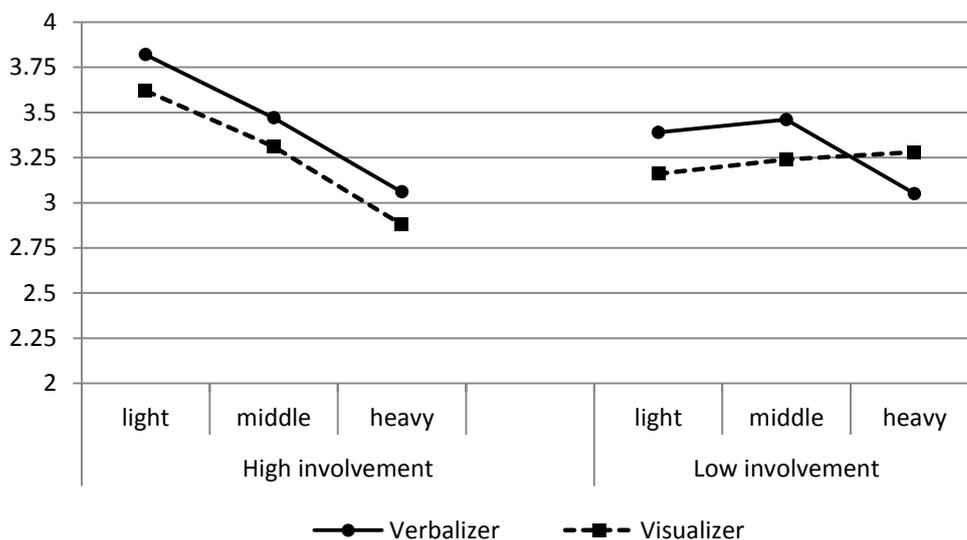


Fig. 1 Comparison of means of advertising effect on verbalizers and visualizers

5. Conclusion

Different cognitive styles of the elderly have significant influences on the advertising effect of samples with low involvement and different information loads. Besides the samples with high involvement and heavy information load, the advertising effect of samples with different information loads on verbalizers is slightly higher than that on visualizers. Therefore, in advertising communications with the elderly of different cognitive styles, low involvement advertising is more suitable as a marketing tool. High involvement products are appropriate for elderly verbalizers. For elderly visualizers, advertisements with high involvement and light information load, or low involvement and middle information load, are suitable strategies of advertising information load.

6. References

- [1] Hedrick-Wong Yuwa and MasterCard, *The Glittering Silver Market: The Rise of the Elderly Consumers in Asia*, Wiley Publishing Co, NJ, 2006.
- [2] Ellen P. Aging-related Changes in Decision Making, *The Aging Consumer: Perspectives from Psychology and Economics*, Routledge, NY, 2010.
- [3] Schaie W. K and Carstensen L. *Social Structures, Aging and Self-regulation in the Elderly*, Springer Publishing Co, NY, 2006.
- [4] Mather M. A Review of Decision-making Processes: Weighing the risks and benefits of aging. In L. L. Carstensen & C. R. Hartel (Eds.), *When I am 64* (pp. 145-173). National Academies Press, Washington, DC, 2006.
- [5] Hibbard J. H., Slovic P. Finucan P. E. & Tusler M. Is the Informed-Choice Policy Approach Appropriate for Medicare Beneficiaries? *Health Affairs*, 20, 2001, pp.199-203.
- [6] Resnik A. L. & Stern B. L. An Analysis of Information Content in Television Advertising, *Journal of Marketing*, 41(1), 1977, pp.50-53.
- [7] Stern B. L., Krugman D. M. & Resnick A. J. Magazine Advertising: An Analysis of Its Information Content, *Journal of Advertising Research*, 21(2), 1981, pp.39-44.
- [8] Abernthy A. M. & Butler D. D. Advertising Information: Services versus Products, *Journal of Retailing*, 25(December), 1992, pp.1-17.
- [9] Katov M., Nomura N. & Ito K. The Visual Information Load as a Parameter for Designing Pleasurable Environment, *International Conference on Designing Pleasurable Products and Interfaces on Pittsburgh, PA: International Conference on Designing Pleasurable Products and Interfaces*, 2003.
- [10] Coates D. *Watches Tell More Than Time*, McGraw-Hill, NY, 2003.
- [11] Paivio A. *Imagery and Verbal Processes*. Holt, Rinehart, & Winston, NY, 1971.
- [12] Richardson A. Verbalizer-visualizer: A Cognitive Style Dimension, *Journal of Mental Imagery*, 1(1), 1977, pp.109-126.

- [13] Jonassen D. H. & Barbara L. G. Handbook of Individual Differences, Learning and Instruction, Hillsdale, Laurence Erlbaum Associates, NJ, 1993.
- [14] Kirby J. R., Phillip J. M. & Neville J. S. Verbal and Visual Learning Style, *Contemporary Education Psychology*, 13, 1988, pp.169-184.
- [15] Triantafillou E., Stavros N. D., Andreas S. P. & Elissavet G. The Value of Adaptivity based on Cognitive Style: An Empirical Study, *British Journal of Educational Technology*, 35(1), 2004, pp.95-106.
- [16] Lutz R. J. Attitude toward the Ad. As a Mediator of Advertising Effectiveness: Determinants and Consequences, *Advances in Consumer Research*, 10, 1985, pp.532-539.
- [17] Fishbein M. & Ajzen I. Brief, Attitude, Intention and Behavior: An Introduction to Theory and Research Reading, Addison-Wesley, MA, 1975.
- [18] Burner II G. C. & Kumar A. Web Commercials and Advertising Hierarchy-of-Effects, *Journal of Advertising Research*, 40(1/2), 2000, pp.35-42.

ICSSAM- 578
Interdisciplinary Team Learning Talent Cultivation in Taiwanese Higher Education: A Case Study of Interdisciplinary Team Participation in an Entrepreneurship Competition

Wei-Chen Yang*

Southern Taiwan University of Science and Technology. Department of International Business. Assistant Professor.
E-mail : anni@mail.stust.edu.tw

Chia-Chun Lin**

Southern Taiwan University of Science and Technology. Department of Creative Product Design. Assistant Professor.
No. 1, Nan-Tai Street, Yung Kang Dist., Tainan City 710, Taiwan R.O.C.
TEL : +886-6-253-3131 #5138
E-mail : zdl@mail.stust.edu.tw

ABSTRACT

With the development of competitive trend in global industry, companies are seeking to increase competitiveness and interdisciplinary integration to solve the competition dilemma and pursue opportunities for industrial innovation. In higher education, Babson College initiated innovation and entrepreneurship education, which developed and flourished at the Massachusetts Institute of Technology. Innovation and entrepreneurship courses have experienced a boom in popularity in universities and colleges in Taiwan.

This study investigated interdisciplinary student teams and their learning processes. The team investigated in this study was composed of students from the Southern Taiwan University of Science and Technology. How interdisciplinary student teams developed and accomplished tasks during entrepreneurship competitions was also investigated. The team not only garnered successive awards in Taiwan, but was awarded first prize of the Young Entrepreneurs of the Future.

Keyword: Interdisciplinary; Talent Cultivation; Entrepreneurship Competition

1. Introduction

In response to the growing industrial competition worldwide, enterprises have increasingly emphasized interdisciplinary integration to improve their competitiveness, resolve competition dilemmas, and seek opportunities for industrial innovation. Fostering

interdisciplinary talent has become a development trend for training future talent. The Ministry of Education (MOE), Taiwan, established MOE Regulations for Subsidizing Universities and Colleges to Implement Interdisciplinary Degree and Credit Programs. Budgets have been allocated for the programs since 2007. The MOE encouraged universities and colleges to establish interdisciplinary degree or credit programs for cultivating talents required by industries and society. After the implementation of the program, more than 50 schools have been approved for the subsidy.

Higher education regarding innovation and entrepreneurship originated from Babson College and was promoted by the Massachusetts Institute of Technology. In Taiwan, such education has resulted in a trend of innovation and entrepreneurship competition among college students. To establish the university–industry cooperation, innovation, and entrepreneurship mechanisms, the MOE promoted the College Graduates’ Entrepreneurship Service Plan (U-START Plan) to increase the entrepreneurial opportunities for college graduates by using the flexibility of microenterprises and assistance from cultivation centers, thereby stimulating university–industry cooperation and promoting the innovation and entrepreneurship culture in campuses.

Based on the promotion of these regulations and plans by the MOE, incubating interdisciplinary talent and promoting campus-based innovation and entrepreneurship culture have become prevalent. All universities and colleges train interdisciplinary cooperation teams to participate in international and domestic innovation and entrepreneurship competitions. Through review, competition, and resource and budget subsidies, the schools have implemented interdisciplinary cooperation and cultivation of talent in individuals who exhibit innovation and entrepreneurship. Based on this background, this study investigated the case of Southern Taiwan University of Science and Technology during their establishment of an interdisciplinary student team and the learning process. We explored the process through which an interdisciplinary student team participated in entrepreneurship competitions, how the team developed and completed tasks, won numerous awards in Taiwan, and won first prize at an international young entrepreneur competition.

2. Literature Review

2.1 Interdisciplinary Research

According to Przeclawski (1993), interdisciplinary research explores a specific problem from diverse academic fields. In interdisciplinary research, scholars from different disciplines form a research group, describe the problem, and provide a professional theoretical basis based on their respective disciplines. The researchers must attain high involvement, commitment, and consensus regarding the research project.^[1]

A team is a multidimensional concept, which is defined as “a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable.”^[2] Interdisciplinary teams comprise undergraduate students from various disciplines, which forces the students to solve a common problem by creating new knowledge and theories that traverse disciplinary boundaries, including interdisciplinary integration.^[3] Parker (1996) contended that interdisciplinary teams unite members with diverse skills, which possibly improve their ability to solve complex problems. This type of teamwork can effectively improve the research and development of new products^[4]

2.2 Competition Learning

An American philosopher and educator, John Dewey, proposed the concept of learning by doing. He believed that direct and concrete actual experiences are the true learning processes. Dewey said “To ‘learn from experience’ is to make a backward and forward connection between what we do to things and what we enjoy or suffer from things in consequence. Under such conditions, doing becomes a trying; an experiment with the world to find out what it is like; the undergoing becomes instruction—discovery of the connection of things.” Thus, in actual teaching activities, teachers should enable and encourage students to perceive and actively explore the surrounding environment. Through an alternative trying and experiencing process, the students learn from new cognitive methods and results.^[5]

Experiential learning was derived from learning by doing and represents the idea of learning through practice and reflection. This education model involves a hypothesis that active participation in problem-solving processes engenders optimal learning effectiveness. In addition, the model is an interactive process between teachers and students and between the topic and environment, coordinating equivalent importance between teaching content and processes and indicating that each teaching process is a shared opportunity for teachers and students to learn.^[6]

The Center for Entrepreneurship Education and Development of Feng Chia University defined competition learning in an article entitled “Concept and Application of Competition Learning” on their official website:

Pedagogical methods include various methods such as class lectures, discussion and exploration, case teaching, competition learning, and professional internships. Competition learning requires knowledge integration and produces effective practice second only to that of professional internships after conducting market testing in real environments. In addition, competition learning is most effective for knowledge integration. Especially in university education, competition learning substantially bridges the gap between school knowledge and actual practice in society.

Competition learning has recently become prevalent in Taiwan. Innovation and entrepreneurship competitions establish simulated (quasireal) environments where

participants can personally experience decision-making processes and operations identical to those in real environments; such events foster learning effectiveness inside (innovation and entrepreneurship) and outside (team competition process) the competition. Therefore, universities and colleges in Taiwan establish interdisciplinary teams to participate in numerous innovation and entrepreneurship competitions. Competition learning is a new method for experiential learning.

3. Case of an Interdisciplinary Team Participating in Competition Learning

3.1 Team Background and Goal

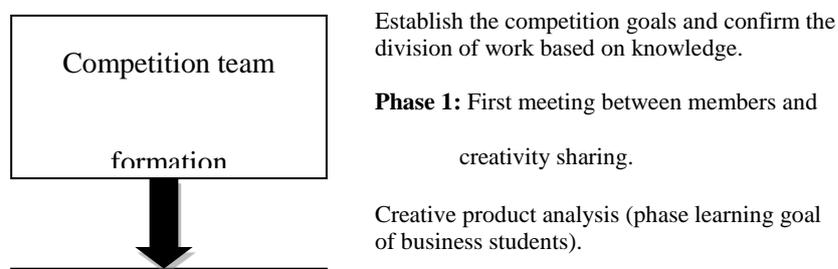
To train students in the aspects of teamwork, creativity, innovation, and entrepreneurship and to increase their occupational competitiveness, Southern Taiwan University of Science and Technology has actively promoted interdisciplinary cooperation. The case interdisciplinary team in this study comprised students from the College of Digital Design and the College of Business and was supervised and directed by Dr. Chia-Chun Lin from the Department of Creative Product Design and Dr. Wei-Chen Yang from the Department of International Business.

The students of the Colleges of Digital Design and Business have established a team since 2011. The goals of the team are as follows:

- (1) The interdisciplinary team implements product design and operation planning through cooperation between disciplines. During the process, the students collaboratively create concrete knowledge for solving problems that exist in real situations.
- (2) Interdisciplinary cooperation encourages a dialogue between different disciplines. The process of cooperating with team members from other disciplines enables students to solve extensive, complicated problems.
- (3) Applying interdisciplinary concepts into design enables designers cooperate with specialists of diverse disciplines, thereby generating multiple ideas for solving problems.
- (4) The interdisciplinary team discusses and implements creativity research and development, innovation, production, channels, and branding. Subsequently, in the simulated (quasireal) environment of various competitions, the students in the team can experience decision-making processes and operations identical to real situations to achieve product innovation and attain the learning effectiveness of collaboratively creating market values as a team.

3.2 Implementation Methods and Steps

The case team was composed based on a project. When the project concluded, relevant members returned to their original positions. The composition and implementation of the team was as follows (Execution flow chart):



As shown in the Execution flow chart, during the competition team formation phase, the members must confirm the operating model and division of work of the team. The team members from different disciplines initially communicated with each other and divided the work to reach a consensus regarding the operating method of the team. Consolidating the goal facilitated teamwork.

The case team adopted an interdisciplinary cooperation model to creatively present creative design products. The team also considered consumer needs and created values for consumers. By combining creative product design and marketing projects, students can learn the methods for increasing the added value of products by using innovative business marketing modules and developing interdisciplinary cooperation and communication abilities.

3.3 The Effectiveness of the Interdisciplinary Team

The students of this interdisciplinary team have attended various large-scale creative entrepreneurship competitions. Such experience facilitates the cultivation of entrepreneurship and enables the students to experience the fantastic appeal of creativity and innovation. The students can reverse traditional business values and enjoy the multiplier effect of agglomeration and value-added knowledge.

The following table shows the achievements of the team after participating in various competitions and exhibitions:

Date	Competition and Exhibition	Achievement
April 2011	Take off Dream Originality and Innovation Contest	Excellent work
May 2011	China and Taiwan bilateral Interscholastic International trade Simulation Merchandise Show Contest	<ul style="list-style-type: none"> ● Exhibitors plan (Champion) ● Products will be published (Excellent work) ● Exhibition booth Design(Excellent work) ● Business Communication (Ranked fifth)
May 2011	Sixth Dragon Smile Entrepreneurship Competition	Finalist
April 2011 to August	TiC100 Innovative business contest	Finalist
April 2012	Take off Dream Originality and Innovation Contest	Runner-up
May 2012	Seventh Dragon Smile Entrepreneurship Competition	Finalist
June 2012	Brand creation contest	Finalist
April 2012 to August	TiC100 Innovative business contest	Runner-up
August 2012	2012 TiC Taiwan Award	Runner-up

October 2012	Campus Entrepreneurship Competition	Runner-up
October 2012	National College students' creativity and entrepreneurship contest	Champion
November 2012	2012 Green technology industry Expo	Free invited
June 2013	2013 Ecoprenuur TiC Mongolia	Champion
August 2013	G-mark(Good Design Award)	Finalist
September 2013	2013 National College Creative innovation and entrepreneurship Marketing Planning Competition	Champion
October 2013	Global Little Giant Elite Entrepreneurship Competition	Runner-up
November 2013	National College Creative Product Marketing Competition	Champion

The interdisciplinary team of this case participated in 14 nationwide competitions in Taiwan and 2 international large-scale competitions. The team was also invited to participate in a large-scale international business exhibition. During the process of various competitions, the interdisciplinary team had to undergo knowledge integration. After market testing, the team simulated operations in real environments by joining competitions. The case team in this study showed that an interdisciplinary team can achieve effective knowledge integration and teamwork during the process of competition learning.

4. Conclusion

Based on the promotion of these regulations and plans by the MOE, incubating interdisciplinary talent and promoting campus-based innovation and entrepreneurship culture have become prevalent. All universities and colleges train interdisciplinary cooperation teams to participate in international and domestic innovation and entrepreneurship competitions. Through review, competition, and resource and budget subsidies, the schools have implemented interdisciplinary cooperation and cultivation of talent in individuals who exhibit innovation and entrepreneurship.

Combining learning and competition, students on the interdisciplinary student team investigated in this study had various perspectives and expertise. Thus, team efficiency was enhanced, and communication and knowledge exchange facilitated. The team was comprised of team members from different fields of study, including students from the School of Design, and the School of Business and Management.

The interdisciplinary student team investigated in this case study was actively cultivated to participate in large Taiwanese and international innovation and entrepreneurship competitions to experience the entrepreneurial process in depth. By participating in innovative, interdisciplinary collaboration, the students faced a series of challenges and tasks, and drew on cooperation and coordination to develop solutions, thus receiving an education in interdisciplinary and entrepreneurial education. This case showed that using competition learning to reduce the gap between school knowledge and work practice presents substantial benefits in university education.

5. References

1. Przeclawski, k., 1993, Transdisciplinary research. *Tourism research : Critiques and challenges*, 9-19.
2. Jason, M. A., 2000, "Improving Teamwork: The Effect of Self-assessment on Construction Design Teams" , *Design Studies*, Vol.21 (3), 223-238.
3. Tress, B., Tress, G., & Fry, G., 2006, Defining concepts and process of Knowledge production in integrative research. From landscape research to landscape planning,13-26.
4. Parker, G. M., 1996, *Team Players and Teamwork: The New Competitive Business Strategy*, Jossey-Bass Business & Management Series, Paperback Reprint edition.
5. Wu mu Kun ,2009,The Insights of John Dewey's Empirical Philosophy for Curriculum and Teaching, *Journal of Taipei Municipal University of Education*, 40(1), 35-54.
6. Feng Chia University Center for Entrepreneurship Education and Development, Contest learning of concept and application, home page.
<http://www.ceed.fcu.edu.tw/wSite/ct?xItem=41375&ctNode=14717&mp=403101>

ICSSAM- 677
The Mental Model of Elderly on Medication Problems

Hui-Jiun Hu

Department of Visual Arts, College of Humanities and Arts, National Chiayi University,
Taiwan

Email: momo@mail.ncyu.edu.tw

Abstract

Advancements in the economy and medical technology have prolonged the average lifespan of human beings. As people age, various physiological and psychological functions gradually deteriorate, causing loss of memory, inability to focus, and anxiety. Furthermore, also leads to deterioration of the body's immune system, which may in turn lead to numerous chronic diseases, such as hypertension, high blood sugar, and high cholesterol. Although scheduled medication can be taken to control these diseases, elderly often tend to forget to take, take repeatedly, overuse, or otherwise misuse medication, hindering the effectiveness of their medical care. We use a non-participatory method and in-depth interviews to conduct a data gathering and analysis the medication problems of elderly. And, employed to determine the needs and expectations of elderly mind. Ten elderly aged 65 and above who were on long-term medication were recruited as the research subjects. The findings show elderly mental model comprise 7 affinities: Vocal Reminders and Feedback from Family Members (f1), Accurately Dispensing Medication (f2), Easy Handling of Medication (f3), Self-Medication (f4), Safe and Hygienic Locking Mechanism (f5), Easy to Carry (f6), and Easy to Use (f7).

Keyword: Mental Model, Medication Problem

1. Introduction

According to the 1993 population statistics of Taiwan, the population of senior citizens aged 65 years and above was 1,485,200, accounting for 7.09% of the total population. Thus, Taiwan achieved the aging society baseline established by the WHO (Ministry of Interior, 2012). The rapid transition into an aging society stimulates changes in lifestyle and social structure, and creates novel needs and problems. Thus, awareness must be placed in health care technologies. Based on the spirit of humanity, Wang (2009) proposed the orange technology concept, which advocates the integration of health technologies, happiness technologies, and offering/organic technologies. Orange is a color generated from the integration of red and yellow. The color red represents brightness and symbolizes rational technologies; whereas yellow represents warmth and symbolizes sensual and humane care.

Wang anticipated the use of technologies to assist people in respecting the physical environment and to advocate spiritual conservation and enhancement (Wang, 2011 and 2012). Zheng and Wang (2011) stated the focus of orange technology designs is to truly understand the living habits of senior citizens. Only with this understanding can the physical, psychological, and living needs of senior citizens be identified. Then, by integrating technologies, a medical network can be established to create comfortable and safe lifestyles and enhance the living quality of senior citizens. With age, the bodily functions of senior citizens gradually deteriorate with age, increasing the frequency and type of medication. Subsequently, the advancement in medical technologies has developed treatment for various diseases and illnesses, from the common cold to diabetes, through medication can be treated through medication, which can be controlled or even cured. But, independent senior citizens at home often forget or repeat their medication, irregularly take medication, or take incorrect dosages. In addition, patients with chronic diseases often self-withdraw from medication when they perceive symptom improvement and continue medication when symptoms reappear, generating the risk of disease progression or poor treatment control. Thus, how to solve the problems pertaining to the medication of senior citizens at home is a crucial issue in current household care services.

In addition, design teams should regard the creation of the maximum values for the users as their primary design and development goals. However, personal opinions and blind spots inevitably exist. The results of numerous user experience studies show that effective research results and analysis frameworks facilitate researchers and design teams in identifying user needs and problems more objectively and providing research teams with novel objective perceptions on elderly-oriented information and communication devices. Design teams can then use these objective aspects in accurately developing conceptual designs, reducing the chances of design failure.

2. Literature review

2.1 Medication Problems of Elderly

As people age, various physiological and psychology functions gradually deteriorate. A report published by the U.S. National Center for Health Statistics indicated that the pathological changes for elderly include hypertension, heart disease, diabetes, stroke, cancer, arthritis, and cataract. IEK (2011) proposed that presbyopia is the most troubling problem for elderly in Taiwan and China. And, elderly are prone to forget, repeat, or misuse medication. Elderly also are prone to accept the recommendations provided by the radio or by friends and family, and subsequently take unsolicited medication or accept dubious prescriptions, neglecting the medication prescribed by the hospital. In addition, they may even self-prescribe medication, change the type and quantity of their medication. Alternatively, elderly may perceive obstruction, difficulty, and fear for technological

products that possess strong functionalities or require complex operations, subsequently causing them to reject the product. With the advancements in technology, current design trends emphasize methods to transform complex technology and programs into easy-to-use operations. And then, the mechanical use of medication conducted by elderly is extremely tedious, and they often generate resentment and resistance when family members fail to interact with them or show concern. Extant pillbox designs only emphasize the satisfaction of the medication activity, and fail to consider the aspect of psychological feelings. Thus, how to satisfy the emotional needs of elderly are crucial.

2.2 Mental Model

Cognitive psychologists believe that the behavioral performance of people are significantly influenced by their underlying mental models. These mental models are the personal internal experience models of people when interacting with external activity, and possess functions that describe, explain, and predict behaviors. Jonassen (1995) proposed that mental models can be theoretically illustrated into a relationship network among various concepts. Carley and Palmquist (1992) further explained that mental models are internal representations, and language is the key to understanding these models. That is, people typically transform external activity into internal representations to subsequently form mental models, and employ these models through language, text, or other expressive methods to communicate with the community. Carley and Palmquist employed an integrated a qualitative research method and a quantitative cluster analysis to develop a novel map analysis method. Transcripts were examined to produce concepts, and concepts were compared to determine the relationship among them. These relationships were subsequently linked to form a mental, or network, map. Weinschenk (2010) also believed that products become easier-to-use when the conceptual models of the product itself or the product interface resonate with the mental models of the users.

3. Research Method

In the present study, the analysis of elderly experiences was conducted using a non-participatory observation method combined with in-depth interviews. Ten elderly aged 65 and above who were on long-term medication were recruited as the research subjects. The demographics of the subjects are tabulated in Table 1. Investigations were conducted in 2 parts that lasted approximately 1.5 h. In the first part, the actual conditions for the subjects' medication process were initially analyzed to identify problems; then, the subjects were asked to undergo an open-ended in-depth interview to discuss their illnesses, medication conditions, medication processes, and personal problems. In the second part, the subjects were informed that a novel smart pillbox suited for elderly to determine their expectations for such a product; subsequently, they were asked to provide their opinions and needs.

For data analysis, the interview recordings were converted into transcripts. Three qualitative researchers were invited to perform open coding to determine the medication problems and pillbox expectations of the subjects. Then, the researchers performed bottom-up inductive and axial coding to cluster similar concepts into a concept group, forming the aforementioned affinity factors. Subsequently, the affinity diagram method proposed in the book authored by Young (2008), *Mental Models: Aligning Design Strategy with Human Behavior*, was employed to extract the mental models of the research subjects. Young elaborated that mental models is a tool that can establish intangible thinking patterns using organized frameworks and present these patterns using visual lists or tables. Consequently, these lists and tables can be examined to identify the thinking and behavior models of users.

Table 1. Subject Demographics

No	Title	Sex	Age	Symptoms	Years of Medication	Characteristics
01	Ms. Chuang	F	78	Heart disease; lowering blood sugar (BS); stroke record	16	Able to walk independently; unable to stand for long periods of time
02	Ms. Chen (1)	F	73	Diabetes; hypertension	14	Chunky; only active at or near home
03	Ms. Hsieh	F	65	Hypertension; breast cancer-induced depression	11	Resistant to medication
04	Ms. Chen (2)	F	75	Hypertension	8	Illiterate; solitary; independent
05	Ms. Wang	F	66	Hypertension; thyroid hyperactivity	8	Short; slightly plump; dislikes leaving home
06	Mr. Chuang (1)	M	79	Diabetes; hypertension; trachea diseases	17	Tall; slightly plump; average mobility
07	Mr. Tsai	M	78	Hypertension	21	Illiterate
08	Mr. Lin	M	67	Diabetes; lowering BS	13	Thin; tall; 170 cm; healthy
09	Mr. Chen	M	83	AD	15	Accompanied by caregiver
10	Mr. Chuang (2)	M	68	Hypertension	7	Tall

4. Results and Analysis

4.1 Analyzing the Medication Problems of Elderly

The first section for data analysis focused on medication problems. Subsequently, 68 problems were presented following classification and coding. These problems were categorized into 9 dimensions, as tabulated in Table 2. Results showed that “Unclear Medication Usage” was the most apparent dimension that comprised 24 problems (35%), followed by “Inconvenient Medication Retrieval,” which comprised 10 problems (15%) and “Taking Medicine According to Drug Bag,” which comprised 10 questions (15%).

Table 2. The Coding of Elderly’ Medication Errors

No	Axial Code	Inductive Code	No. of Items
q1	Unclear Medication Application (24)	Forgetting Medication	10
		Repeated Medication	6
		Unclear of Previous Application	3
		Wrongly Applied Medication	3
		Reliance on Objects For Medication Reminders	2
q2	Inconvenient Medication Retrieval (10)	Medication is difficult to extract	8
		Medication is difficult to retrieve	2
q3	Taking Medication According to Drug Bag (10)	Directly applying medicine from the drug bag	6
		Fixed medication habit	4
q4	Difficulty in Identifying Medication (7)	Dispensing difficulty	5
		Medication is difficult to identify	2
q5	Carrying Difficulties (7)	Convenience of outdoor carriage	5
		Irregular location for medication	2
q6	Conventional Pillboxes are Difficult to Use (4)	Conventional pillboxes are difficult to use	4
q7	Illiteracy (3)	Illiteracy	3
q8	Weariness of Applying Medication (2)	Weariness of applying medication	2
q9	Assistance from Family Members (1)	Assistance from family members	1

The deterioration of elderly’ immune system elevates the chances of contracting various well-known chronic diseases, such as hypertension, high BP, and hyperlipidemia. Although scheduled medication can be taken to control these diseases, elderly often tend to forget to

take medication or show response retardation conditions because of memory loss. They may even present loss of short-term memory, immediately forgetting actions they have performed. This causes them to forget or repeat medication, confusion in application methods, or discontinue medication, resulting in the production of numerous medication problems. The Health Department of Yilan asserted that the hospital departments and health types that elderly are required to remember are extremely complex; thus, the chances of medication error occurring in senior citizen groups are 7-fold compared to young people, and chances of the interaction effect occurring during the application of medication elevated by 2.5-fold. The primary reasons for the occurrence of medication errors comprise self-prescribing medication; adjusting the dosage; discontinuing, forgetting, repeating, medication; untimely application of medication; applying expired medication; exchanging medication; purchasing unclear medication, rumored remedies, or herbal medicine; and inappropriate storage of medication (Chen, 2012).

4.2 Mental Model of Elderly

The second section for data analysis focused on the expectation of elderly pertaining to future smart pillboxes. A bottom-up inductive coding method was employed, compiling 99 counts relating to needs, which were consequently grouped into 10 types (Table 3). The results of Table 3 show that “Ease-of-Use” was the most expected type, comprising 22 needs (22%), followed by “Reminder from Family Members,” which comprised 19 needs (19%), “Does Not Cause Tension and Stress,” which comprises 13 needs (13%), and “Accuracy,” which comprises 12 needs (12%).

Table 3. Elderly' Expectations Relating to Future Smart Pillboxes

No	Axial Code	Inductive Code	No. of Needs
r1	Ease of Use (22)	Easy functions and operations	12
		Rejection of use due to complexity	10
r2	Reminder from Family Members (19)	Medication reminders	10
		Prefers the reminder of family members	9
r3	Does Not Cause Tension and Stress (13)	Stress of using technological products	6
		Loud sounds leading to tension	4
		Privacy	3
r4	Accurately Dispensing Medication (12)	Accurately Dispensing Medication	12
r5	Easy to Carry (8)	easy to carry	8
r6	Safe and Hygienic Locking Mechanism (6)	Safety	4
		Hygiene	2
r7	Easy Retrieval and Application (6)	Convenient retrieval and application of medication	6
r8	Audio and Visual Assistance (6)	Illiteracy resulting in the need for audio and visual assistance	6
r9	Self-Medication (5)	Self-medication	5
r10	Post-Medication Feedback (2)	Acknowledge that medication was applied	2

The collected data were organized and coded based on the affinity diagram proposed by Young (2008). The results obtained during the context observation process were compiled and converged, transforming abstract thinking patterns into physical solutions. Then, the mental models of elderly were compiled into lists and tables using a visualization method, as shown in Fig 1. The expectations and needs of elderly pertaining to future products were identified using their current medication conditions, establishing 7 affinities relating to the mental ideals of elderly, specifically, Vocal Reminders and Feedback from Family Members (f1), Accurately Dispensing Medication (f2), Easy Handling of Medication (f3), Self-Medication (f4), Safe and Hygienic Locking Mechanism (f5), Easy to Carry (f6), and Easy to Use (f7).

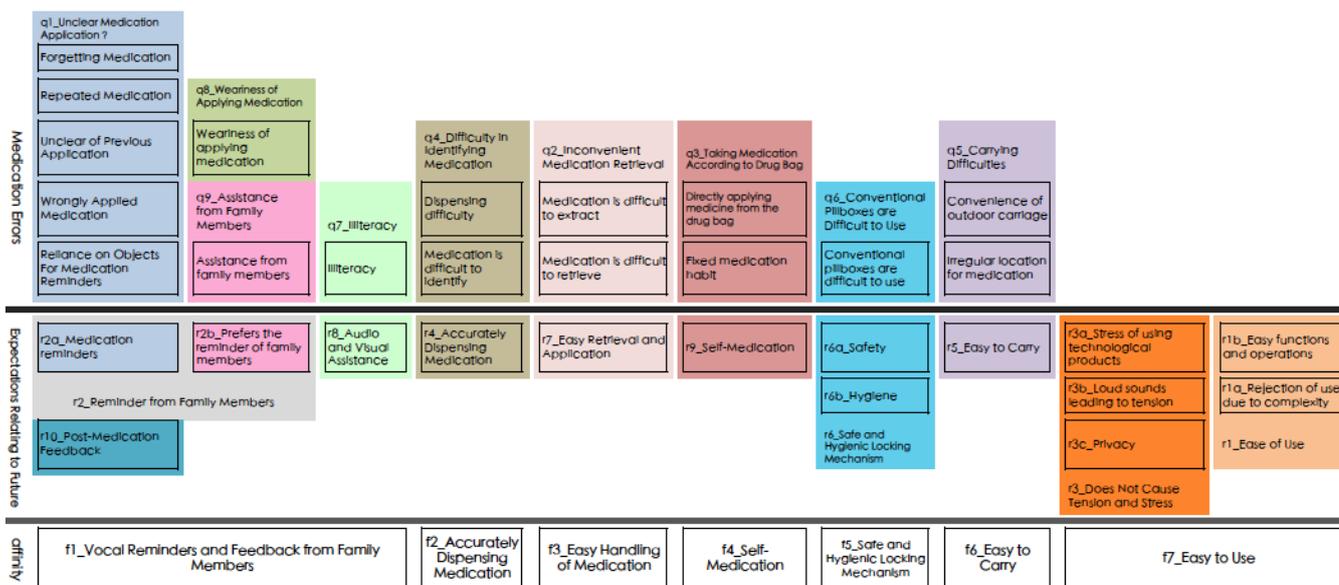


Fig. 1. The mental model for the medication problems and smart pillbox expectations of elderly

5. Conclusion

A favorable design originates from the heart, and produces pleasure and satisfaction to the user. Orange technology designs emphasize innovation based on elderly and the integration of information and communications technology to subsequently bestow intelligent living implications to products, present ubiquitous family interaction and concern, and mitigate the difficulties, fear, and rejection of elderly when using technological products; thereby truly and intangibly incorporating personalized technology designs into everyday lifestyles. Favorable orange technology can be applied to create comprehensive healthcare systems that elderly trust and feel comfortable and safe using. In addition, the orange technology can reduce the cost of caring for elderly, reduce spatial distances, and enhance the interaction and emotions between the user and his/her family members. Based on the analysis results obtained in this study, elderly' mental models comprise 7 affinities, specifically, Vocal Reminders and Feedback from Family Members (f1), Accurately Dispensing Medication (f2), Easy Handling of Medication (f3), Self-Medication (f4), Safe and Hygienic Locking Mechanism (f5), Easy to Carry (f6), and Easy to Use (f7).

6. References

- The Ministry of Interior. Geriatrics Welfare and Policies 2012. Retrieved from <http://sowf.moi.gov.tw/04/01.htm>
- G. F. Wang. The Development and Challenges of Orange Technology. *Journal of Scientific Development*, 2011, 463: pp.64-71.

- G. F Wang. When Orange Meets Green: Entering a Better Technological Lifestyle. *NCKU Magazine*, 2012, 237: pp.66-71.
- G. S. Zheng and T. Wang. Orange Technology and Senior Citizen Technology. *Journal of Scientific Development*, 2011, 466: pp.18-23.
- The Industrial Economics and Knowledge Research Center. Investigation on the Consumer Behavior of Cross-Strait Senior Citizens 2011.
- Jonassen, David H. Operationalizing Mental Models: Strategies for Assessing Mental Models to Support Meaningful Learning. *Paper presented at the Computer Support for Collaborative Learning Conference*, 1995.
- Carley, K., & Palmquist, M. Extracting, representing, and analyzing mental models. *Social Forces*, 1992, 70(3): pp.601-636.
- Weinschenk, Susan. The Secret to Designing an Intuitive UX : Match the Mental Model to the Conceptual Model 2010/04/08. Retrieved from <http://uxmag.com/articles/the-secret-to-designing-an-intuitive-user-experience>
- Young, Indi. *Mental Models: Aligning Design Strategy with Human Behavior*, Rosenfeld Media, 2008.
- M. L. Chen. Medication Care for Senior Citizens - A Consultation Initiative in Yilan County 2012.

ICSSAM- 548

By car or by bus? The influence of atmospheric conditions on decisions regarding transportation in Poland.

Adam Choryński

Institute for Agricultural and Forest Environment, Polish Academy of Sciences
Bukowska 19, 60-809 Poznań, Poland
Email:adam@swarzedz.net.pl

Dariusz Graczyk

Institute for Agricultural and Forest Environment, Polish Academy of Sciences
Bukowska 19, 60-809 Poznań, Poland
Email:darekgraczyk@wp.pl

Abstract

For many years, cities have faced the problem of car traffics. It does not matter whether thinking of towns in developed countries or developing ones, the issue of crowded streets that overwhelm urban agglomerations and block their development is a major problem. Moreover, urban areas in developing countries become even more vulnerable to jamming with the excess of cars, because of less expanded infrastructure and public transportation systems. Even though the number of private vehicles increases (in Poland from 294 cars per 1000 inhabitants in 2003 up to 486 in 2012). Taking into account gentrification processes and depopulation of towns centres in favour of suburbs, a vision of absolutely inefficient communication routs may be formed.

This issue to a large extent relates to Poland, one of the new member state of the European Union, a country where having a car becomes a determinant of social status. Municipal authorities are undertaking actions in order to improve streets bandwidth e.g. by promoting public transportation (rather clumsy efforts), or by installing intelligent traffic lights (it works, but only to some extent due to specified routs capacity). Ineffective efforts undertaken by the municipalities to cope with the problem result with stepping down of the state and taking initiative by the car drivers themselves. They are using internet systems informing on the actual road situation by aggregating data through mobile telephones equipped with GPS module.

Within this difficult background there are days when streets, though morning rush hours, stay clear, and time needed to getting from one part of the town to another becomes an issue of a few minutes. Authors of the paper are arguing that weather conditions are a very important

factor influencing peoples decisions on the way how to travel on their everyday routs. While long-lasting and frequent behaviours are largely influenced by habits, single activities are affected by atmospheric conditions on a particular day or during a sequence of days. There is a high probability that while air temperature falls below 0°C, some of car drivers are deciding to use public transportation, or that during rainy weather more often use own cars. Authors are confronting meteorological data with information on average travel speed in ten Polish towns. The data on the average travel speed comes from an internet system that aggregates figures from users quipped with mobile phone with GPS module and installed special application. Thanks to this comparison it becomes possible to assess whether weather has an actual impact on transportation decisions in Poland.

Keywords: public transport, transportation decisions, traffics, weather

ICSSAM- 943
Personalized Fear Appeal For An Anti-Binge Drinking Campaign

ICSSAM- 538

**Stigmatized For My Religious Choices? When Fashionableness Become
Reprehensible Innovation**

Hesham Fazel

King Khalid University

hfazel@hotmail.com

ABSTRACT

Stigma negatively affects the way people interact with each other. This paper discusses how fashionable clothing choices can lead to social stigmatization. Religious ideology is a key factor that may explain how and why some religious practices (e.g., veil) can be stigmatized. Research is needed in religious ideologies to understand stigmatization in consumer setting. Scientifically, I examined the psychological underpinnings of fashionableness adoption differences on the level of stigmatizing people who like to have fashionable and stylish products. Scarce attention has been given to examine certain culture ideology (e.g., religious ideology) as a research framework. Such a framework may play a crucial role in explaining the relationship between fashionableness adoption and social stigmatization. The findings show a main effect of fashionableness adoption on social stigmatizing within people who embrace certain religious ideology. Furthermore, results indicate that perceived innovation mediates the relationship between fashionableness adoption and social stigmatization.

Keywords:, Culture Ideology, Stigmatization, Fashionableness Innovation

ISEPSS- 1733
**Action Research of Caregiver's Praxis Community on Emotional
Regulation Program Design**

Hsiu-Lan Chin^{*1}

Department of Aged Welfare & Social Work, Toko University, Taiwan / Assistant professor
No.51, Sec. 2, Syuefu Rd., Puzih City, Chiayi County 61363, Taiwan
Email:099090@mail.toko.edu.tw

Ying-Tsun Hung²

Department of Senior Citizen Service Management, Ching Kuo Institute of Management and Health,
Taiwan/ Assistant professor
No. 336, Fuxing Rd., Chongshan Dist, Keelung City 20301, Taiwan

Key Words: Action Research, Caregiver's Praxis Community, Emotional Regulation, Program Design

1. Purpose

Older adults compared to younger adults focus on emotional well-being. The lifespan trajectory of emotional processing and its regulation has been characterized behaviorally. Despite a decline in basic cognitive mechanisms, older adults may possess abilities that allow them to function quite effectively as they age, particularly when cognition is examined in a socio-emotional context. This is the main concept behind the "Social Brain Hypothesis". For aged residents in long-term care facilities, attachment behaviors to caregivers affect emotional well-being. The promotion of interaction between aged residents and caregivers has been a cornerstone in the implementation of multiple health care interventions. Our research arranges a "caregiver's praxis community" composed of the researcher and caregivers on an organizational level, and works on emotional regulation for the aged residents through dynamic workshops.

2. Method

The study took place over a period of 3 months. Participants included 6 caregivers and 14 aged residents. The caregivers recorded the variation of valence in research participants. The recording tool is described as "Emotional Valence Recording" which was modified from the "Self-Assessment Manikin (SAM)" (see Figure 1). The workshops took place every Tuesday afternoon. Emotional regulation programs were implemented and the self-awareness of the emotional status of participants was recorded. In this study caregivers recorded their own emotional valence and that of the aged residents from 9 to 1, to display the emotional status after attending the workshops and programs.

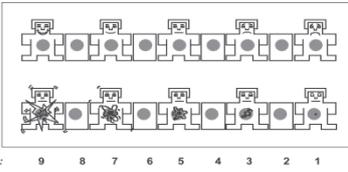
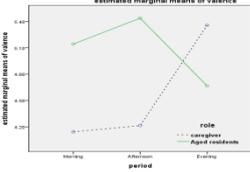
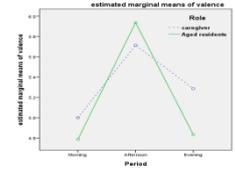
3. Results

After the first workshop the recording data shows that the valence between aged residents and caregivers is significantly different ($t=-3.175$, $p<0.05$). It further indicates the aged residents were

much happier than caregivers. There is no difference among different periods in the day, however, the analysis of Covariance (period * role) is different significantly ($F(2,165) = 13.789, p < 0.001$) and the estimated marginal means of valence shows the profile of Univariate (see Figure 2). This means with the covariant effect, the aged residents are much happier than the caregivers. After 3 months of workshops, the valence between aged residents and caregivers did not differ. There is however, difference among different periods ($F(2,165) = 10.305, p < 0.001$). The Scheffe analysis shows the participants are much happier in the afternoon than both morning and evening. There is no difference on Covariance (period * role), and the estimated marginal means of valence shows the profile of Univariate (see Figure 3).

4. Discussion

The result supports the “Social Brain Hypothesis” because older adults were able to improve cognitive function quite effectively in the socio-emotional context. The research also provides insight into the interactions that take place between caregivers and aged residents. By attending emotional regulation programs the age residents’ emotional valence increased and aroused the emotional valence of caregivers. Further, follow-up commentary from leaders in these long-term care facilities note that the number of complaints by residents has been reduced because of the emotional regulation programs. This research displays that emotional regulation programs in the afternoon have a positive effect on both caregivers and aged residents.

 <p>Scoring: 9 8 7 6 5 4 3 2 1</p>		
<p>Figure 1 Self- Assessment Manikin (SAM)</p>	<p>Figure 2 Profile of Univariate on the first workshop</p>	<p>Figure 3 Profile of Univariate. on the last workshop</p>

Poster Session - May 9

Social Science, Society, Culture & Politics

Kyoto Research Park 4F

09:00-10:00

Friday, May 9

ISPESS-2065

Operating a Smart Phone Application for Taipei City Marketing

Yuan-Fan Tsai *National Taipei University of Education*

Chun-Hsiang Chan *National Taiwan University*

Chi-Chen Yeh *National Taipei University of Education*

Wan-Jou Lu *National Taipei University of Education*

Yu-Qian Zhang *National Taipei University of Education*

ISPESS-1853

The Effects of Balance-Based Training on Blood Pressure and Postural Control Capacity in Older Elderly

Shu-Lin Lee *Chung Chou University of Science and Technology*

Yi-Fang Lee *Cathay Healthcare management*

ISPESS-1881

A Model of Technology Adoption by Older Adults

Kenneth Wang *Lunghwa University of Science and Technology*

ICSSAM-947

The Chronic Care Model for Quality of Life of Diabetes Mellitus Type II in Chaiyaphum Province Context

Pattara Junlawanna *Chaiyaphum Rajabath University.*

ICSSAM-663

Heat Waves and Increased Mortality in Poland. The Issue of Knowledge Gaps and Poor Preparedness of Services

Dariusz Graczyk *Polish Academy of Sciences*

Adam Choryński *Polish Academy of Sciences*

ICSSAM-696

NicoNico Live as Social Platform: A Study of Japanese Live Streaming Services

Eiki Kikuchi *Keio University*

ICSSAM-729

Lifting The Nation through Baseball Philosophy

Amir Hakim Hasyim *Sriwijaya University*

ICSSAM-964

Community-based Care Model to Prevent Hypertension

Jirapa - Siriwatanamethanon *Chaiyaphum Rajabhat University*

ICSSAM-870

The Research of Racial Issue and Human Nature in Othello

Yun Chen *National Kaohsiung Normal University*

ICSSAM-722

A New Form of Administrative Discretion in Japan and its Regulation: Targeting Permanently Closed Public School Facilities

Einoshin Suzuki *Keio University*

ISPESS-2065
Operating A Smart Phone Application for Taipei City Marketing

**Tsai, Yuan-Fan^{a,*}, Chan, Chun-Hsiang^b, Yeh, Chi-Chen^c, Lu, Wan-Jou^d,
Zhang, Yu-Qian^e**

^aNational Taipei University of Education, No.134, Sec. 2, Heping E. Rd., Da-an District, Taipei City
106, Taiwan (R.O.C.) , Taipei, Taiwan (R.O.C)
E-mail address: tyf@tea.ntue.edu.tw

^bNational Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei, 10617 Taiwan(R.O.C), Taipei,
Taiwan (R.O.C)
E-mail address: r01228005@ntu.edu.tw

^c National Taipei University of Education, No.134, Sec. 2, Heping E. Rd., Da-an District, Taipei City
106, Taiwan (R.O.C.) , Taipei, Taiwan (R.O.C)
E-mail address: dogogo24@hotmail.com

^d National Taipei University of Education, No.134, Sec. 2, Heping E. Rd., Da-an District, Taipei City
106, Taiwan (R.O.C.) , Taipei, Taiwan (R.O.C)
E-mail address: hyt85416@gmail.com

^e National Taipei University of Education, No.134, Sec. 2, Heping E. Rd., Da-an District, Taipei City
106, Taiwan (R.O.C.) , Taipei, Taiwan (R.O.C)
E-mail address: daisuki_yamapi@hotmail.com

Abstract

In recent year, city marketing has gradually become a highly regarded issue. The popularity of local films which brings lots of advantages to the city, is coming to be a different way to city marketing. However, there doesn't exist a convenient and complete smart phone application (APP) as city marketing media for Taipei City. This study attempts to connect city image and movies mainly shot in Taipei City by capturing representative scenes of movie and adding both introduction and information of movies. In order to let public users easily pick up their city image to movies, this APP, *Taipei City Movie*, offers web map to present where these movies shot. This APP not only provides basic information, but also offers navigation services. As a result, this study develops a smart phone application to present a connection between movie attractions and Taipei City marketing.

Keywords: Movie Marketing, City Marketing, Smart Phone Application (APP), City Image, Local Films

ISPESS-1853

The Effects of Balance-Based Training on Blood Pressure and Postural Control Capacity in Older Elderly

Shu-Lin Lee^{1*}, Yi-Fang Lee²

^{1*}Department of Health Food, Chung Chou University of Science and Technology, Changhua County, Taiwan (R.O.C.)

² Department of Dietetics, Cathay Healthcare management, Taipei country, Taiwan (R.O.C.)

Abstract

The purpose of this study was to evaluate the effects of Wii Fit balance training or Pilates-based training intervention for 10-weeks on blood pressure levels and the postural control system in older elderly. Sixty-five older subjects volunteered to participate in a Wii-Fit exercise group (n=18) Pilates-based training group (n=35), and control group (n=22). The Wii-Fit and Pilates-based groups have training intervention program 3 times per week for 10 weeks. Postural control capacity and resting blood pressure were measured before and after training program. The results showed that there were no significantly changes on blood pressure and Mean arterial pressure (MAP) data neither after in the Wii-Fit training nor in the Pilates-based training. The Sensory Organization Test (SOT) composite scores tend to increase after Wii-Fit and Pilates-based training intervention. However, Wii-Fit training tends to have higher balance capacity than in Pilates-based training. The results illustrated that balance exercise intervention change the postural control, but there are no effects on resting blood pressure in older elderly.

ISPESS-1881

A model of technology adoption by older adults

Kenneth Wang*

Department of Business Administration, Lunghwa University of Science and Technology,
Taoyuan, Taiwan

E-mail address: che@mail.lhu.edu.tw

Abstract

The purpose of this study was to understand the mobile phone usage attitudes and behaviors of older adults in Taiwan and propose a technology adoption model for examining the factors that influence the adoption of technology products by older adults. The model for the adoption of technology by older adults (MATOA) including five independent variables namely biophysical aging restrictions, anxiety, requisite knowledge, intrinsic motivation, and Usage expectancy. The dependent variable was behavioral intentions. Additionally, this study selected three moderators, that is, gender, age, and education level, for examining the influence that varying demographics has on adoption behavior.

Keywords: Older adults, technology, mobile phone, consumer behavior, unified theory of acceptance and use of technology (UTAUT).

1. Introduction

Most of the world's developed countries are experiencing an increase in the average age of their population. In Taiwan, the percentage of the population aged 65 years or over was 10.7% in 2010, and is projected to reach 25.8% in 2032. The old-age dependency ratio is projected to rise from the 14.6% in 2010 to 40.7% in 2032 (Hsu et al., 2012). Preparations for this unprecedented rise in aging rates in Taiwan are likely to result in significant demand for technology that enables future generations of older adults to live independently.

With the rapid developments in wireless technology, mobile phones have become the most important tool for communication and interaction. The widespread use of mobile phones enriches the lives of older adults (Wang et al., 2009). A number of studies have indicated that older adults are becoming increasingly familiar with technology such as computers, the Internet, and mobile phones (Wang et al., 2012; Cresci et al., 2010). Currently, both older people and baby boomers (people born between 1946 and 1964) are the fastest-growing group regarding technology adoption (Horriagan, 2008). Moreover, as baby boomers enter their senior years, information technology (IT) use among older adults is likely to increase (Cresci et al., 2010). According to Hsu et al. (2012), the prevalence of mobile phones in

Taiwan has further reduced technological barriers for baby boomers. However, unlike computers and the Internet, mobile phones have several limitations related to their capability, limited screen size, and use context range. The findings of previous studies on computers and the Internet cannot be directly applied to mobile phone use (Wang et al., 2009). Thus, the use of mobile phones among older adults presents a significant research topic.

Regarding technology use, older adults generally have considerably different needs, concerns, abilities, and competencies compared to those of their younger counterparts (Chen and Persson, 2002). Therefore, understanding the behavior of older adults regarding technology adoption is important, especially considering the current prevalence of mobile phones in everyday life. For this study, we employed the unified theory of acceptance and use of technology (UTAUT) as the base model to construct a model of technology adoption suitable for older adults in an effort to understand the technology adoption behavioral intentions of older adults. In the following section, we introduce UTAUT and its wide applications in the field of information management. Then, we describe the model for the adoption of technology by older adults (MATOA) constructed and developed from UTAUT in this study.

2. Unified theory of acceptance and use of technology (UTAUT)

Information systems research has extensively examined how and why individuals adopt new information technologies. Several important and unique contributions to literature on user acceptance of information technology exist. However, a review of previous literature and an aggregation of relevant theories conducted by Venkatesh et al. (2003) found that the explanatory power of previous technology adoption models for user intentions gradually declines as validation experience increases. Thus, a new theoretical model known as the unified theory of acceptance and use of technology (UTAUT) was developed following a holistic review of 32 constructs in eight key competing theoretical models. The primary purpose of UTAUT was the integration of previously established IT usage motivations to understand the usage intentions of users when accepting new technologies. Comparisons and actual validations have indicated that UTAUT possesses an explanatory power that exceeds 70%. The UTAUT employs performance expectancy, effort expectancy, social influence, and facilitating conditions as constructs that influence behavioral intentions. Users' behavioral intentions influence their subsequent usage behavior. Additionally, users' gender, age, experience, and willingness to use are set as moderating factors in this model. Table 1 lists the key constructs and their definitions.

Table 1 : The key constructs and definitions.

Constructs	Definitions
Performance Expectancy	“The degree to which an individual believes that

	using the system will enable him or her to achieve gains in job performance”
Effort Expectancy	“The degree of ease associated with using the system”
Social Influence	“The degree to which an individual perceives that whether others believe he or she should use the new system is important”
Facilitating Conditions	“The degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system”

3. Model for the adoption of technology by older adults (MATOA)

For this study, we employed the UTAUT model proposed by Venkatesh et al. (2003) as the theoretical basis of the research framework. We then modified this basis into an adoption model suitable for older adults based on their conditions/ characteristics. After conducting a literature review, we found that a number of the UTAUT variables were not suitable for older adults. In UTAUT, the investigated targets were average, young users. However, older adults belong to a unique group that is not considered in UTAUT.

Additionally, the gradual deterioration in physical condition associated with aging and the significant differences between previous and current social structures and living environments further complicate the technology adoption motivations, factors, and limitations of older adults compared to those of young people. The facilitating conditions refer to the environmental assistance and support perceived by individuals utilizing technology. However, we contend that the influence of external organizations and companies on older adults declines significantly after retirement. In other words, the influence of facilitating conditions is significantly lower for older adults; thus, it is not suitable to be used as an influencing factor for the technology adoption intentions of older adults.

The model for the adoption of technology by older adults (MATOA) constructed in this study is shown in Figure 1. Four additional constructs were added to the basic research framework, namely biophysical aging restrictions, anxiety, requisite knowledge, and intrinsic motivation. Furthermore, the performance expectancy, effort expectancy, and social influence constructs of UTAUT were consolidated into usage expectancy as an independent construct. The dependent variable was behavioral intentions. Additionally, we selected three moderators, that is, gender, age, and education level, for examining the influence that varying demographics has on adoption behavior. The UTAUT was used as a comparison model to

verify that MATOA is more suitable compared to UTAUT for investigating the technology adoption intentions of older adults.

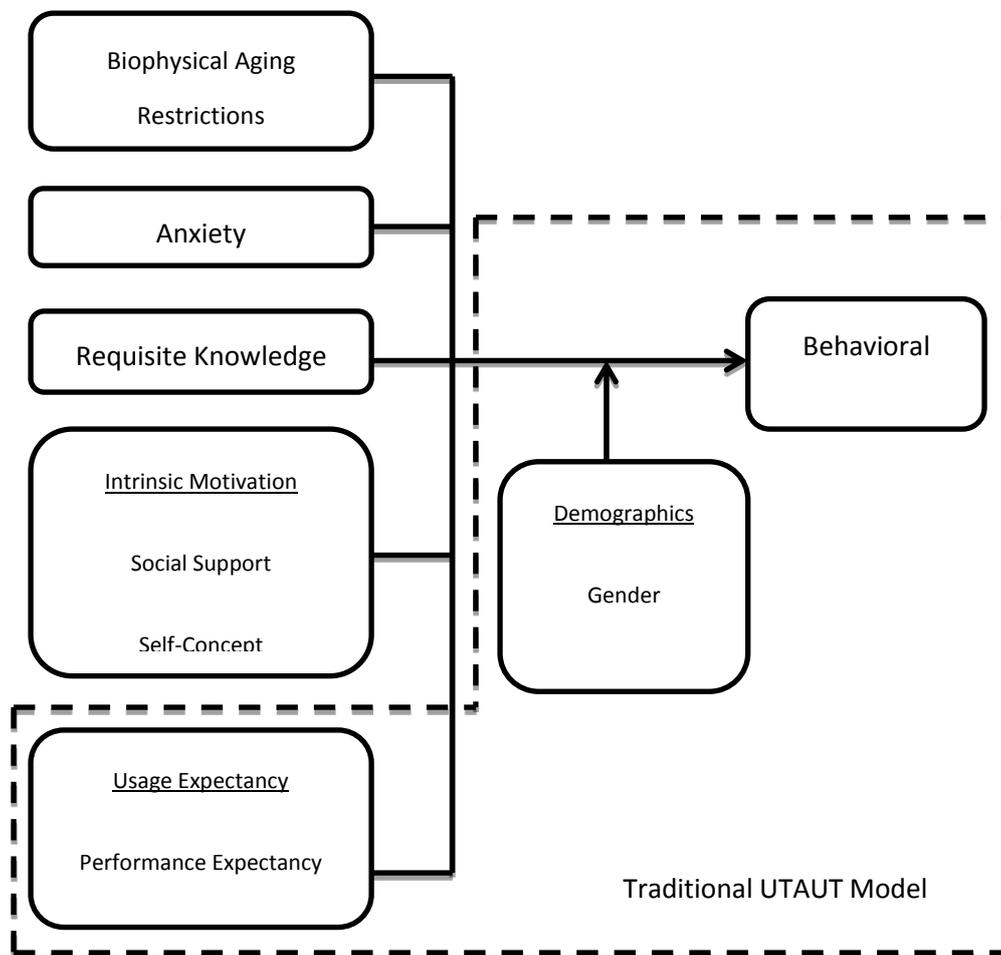


Fig. 1 : MATOA framework

Biophysical Aging Restrictions

Biophysical aging can reduce cognitive performance, leading to a decline in working-memory capacity, a deceleration in processing speed, and a reduced ability to distinguish relevant information from irrelevant information, as well as physical challenges and health impairments caused by a deterioration of vision, hearing, and mobility/flexibility (Wood et al., 2010; Namazi and McClintic, 2003). Each of these challenges and impairments has the potential to negatively affect older adults’ interaction with technology products (Carpenter & Buday, 2007; Saunders, 2004). Moreover, the degeneration of visual acuity causes difficulties for older adults attempting to read text on mobile phone screens and accurately operate phone interfaces (Wilkowska and Ziefle, 2009). In conclusion, we contend that the phenomenon of biophysical aging increases the obstacles and difficulties older adults experience when using and learning how to use mobile phones, thereby further affecting older adults’ mobile phone use.

Requisite Knowledge

A multi-disciplinary literature review conducted by Wagner et al. (2010) regarding computer use by the elderly found that a lack of knowledge was the primary barrier to computer use for elderly people (Kim, 2008; Ng, 2008). Most studies on the use of technology products by the elderly have indicated that the possession of sufficient requisite knowledge by older adults is positively correlated with technology product usage (Grimes et al., 2010). Similarly, older adults lacking the requisite knowledge for mobile phones are unlikely to desire a greater understanding of mobile phone functions, services, and potential benefits, and are even more unlikely to understand the assistance, enjoyment, and solutions that mobile phones can provide for them. Thus, the possession of mobile phone requisite knowledge facilitates the increase in mobile phone adoption among older adults.

Anxiety

Many studies have indicated that computer anxiety is a barrier that can inhibit computer use among adults of any age, and is particularly an issue for novice users (Wood et al., 2010; Czaja et al., 2006). However, recent research on seniors has suggested that increased computer use or training reduces computer anxiety (Karavidas et al., 2005; Hollis-Sawyer & Stern, 1999). Similar to computer usage, older adults also encounter various situations when using mobile phones. Thus, the development of anxiety further influences mobile phone usage intentions.

Intrinsic Motivation

Regarding attitudes toward using technology, intrinsic motivation is always considered one of the core constructs (Carpenter & Buday, 2007). In this study, intrinsic motivation was divided into four dimensions, namely social support, self concept, self management, and self compensation. Regarding social support, for older adults, the support and encouragement provided by family is an important motivational factor for increasing their adoption of technology products (Brown & Venkatesh, 2005). Self-concept refers to an individual's perception of his or her core personality from a personality awareness perspective. People's self-perception has an important influence on their personality type and typically includes their self-esteem and self-image (Huang, 1989). Self-management refers to the life management abilities possessed by older adults and includes life management, emotional management, and role management. Elderly people should maintain a basic awareness and care of themselves and independently manage their lives to maintain superior physical and mental conditions and confidence. Self-compensation refers to the adoption of technology products by older adults to address past regrets (Wang, 2007). Baidu Encyclopedia (2011) investigated the consumer psychology of older adults and found that older adults exhibited

compensatory behavior characteristics when engaging in consumption. When family or personal living standards are higher and older people can enjoy leisure time, independent children, and lighter economic burdens, satisfactory compensation for past regrets often becomes the consumption goal of older people. That is, older people attempt to compensate for unfulfilled consumption desires caused by past limitations. Thus, we contend that the intrinsic motivations of older adults influence their mobile phone usage intentions.

Usage Expectancy

In this study, usage expectancy refers to the belief held by older adults that adopting technology products is meaningful. This construct comprises three variables, that is, performance expectancy, effort expectancy, and social influence. We contend that usage expectancy influences older adults' willingness to use mobile phones.

4. Summary

This study primarily established the framework for mobile phone adoption by older adults. Thus, we selected variables such as biophysical aging restrictions, anxiety, requisite knowledge, intrinsic motivation, and usage expectancy, analyzed their relationship with behavioral intentions.

Although the UTAUT model integrates 8 theories and 32 constructs, it only explores the user perspective, that is, the individual's perception of the necessity and convenience of technology, and thus lacks objectivity. Therefore, examining the thoughts of real users and the influence of the external environment is difficult using the UTAUT model. By contrast, the MATOA constructed in this study uses both subjective and objective perspectives for examining the behavioral intentions of users. Furthermore, because older adults have lifestyle habits, ideas, demands, and abilities that differ from those of younger groups, this study required a different perspective. The empirical results indicated that the MATOA possesses greater explanatory power than that of the UTAUT model and can directly explore the fundamentals of technology adoption by older adults. Thus, the MATOA can provide the industry with more recommendations and broader references for the future development of technology products that are more convenient for older adults and, thus, eliminate the negative perceptions that older adults have of technology.

5. Acknowledgement

This research was financially supported by the National Science Council (NSC) via grant NSC 102-2627-E-155 -001 -.

6. References

- Baidu Encyclopedia (2011). The Consumption Psychology of the Elderly. Retrieved from <http://baike.baidu.com/view/1472759.htm?goodTagLemma>
- Huang, F. S. (1989). *Adult Psychology and Learning*. Taipei: Shita Book Press.
- Barrera, M., Sandler, I. N., & Ramsay, T. B. (1981). Preliminary development of a scale of social support: Studies on college students. *American Journal of Community Psychology*, 9(4), 435-447.
- Brown, S. A., & Venkatesh, V. (2005). Model of adoption of technology in households: a baseline model test and extension incorporating household life cycle. *MIS Quarterly*, 29(3), 399-426.
- Carpenter, B. D., & Buday, S. (2007). Computer use among older adults in a naturally occurring retirement community. *Computers in Human Behavior*, 23(6), 3012-3024.
- Chen, Y., & Persson, A. (2002). Internet use among young and older adults: Relation to psychological well-being. *Educational Gerontology*, 28(9), 731-744.
- Czaja, S. J., Charness, N., Fisk, A. D., Hertzog, C., Nair, S. N., & Rogers, W. A. (2006). Factors predicting the use of technology: Findings from the center for research and education on aging and technology enhancement (CREATE). *Psychology and Aging*, 21(2), 333-352.
- Cresci, M. K., Yarandi, H. N., & Morrell, R. W. (2010). Pro-nets versus No-nets: differences in urban older adults' predilections for internet use. *Educational Gerontology*, 36, 500-520.
- Grimes, G. A., Hough, M. G., Mazur, E., & Signorella, M. L. (2010). Older adults' knowledge of internet hazards. *Educational Gerontology*, 36, 173-192.
- Hollis-Sawyer, L. A., & Sterns, H. L. (1999). A novel goal-oriented approach for training older adult computer novices: Beyond the effects of individual difference factors. *Educational Gerontology*, 25, 661-684.
- Horrigan, J. B. (2008). Home broadband adoption 2008. Pew Internet and American Life Project. Retrieved from http://www.pewinternet.org/~media/Files/Reports/2008/PIP_Broadband_2008.pdf
- Hsu, Y-L., Su, R-H., & Wang, Z. (2012). Profile of the 'aging boomer' in Taiwan. *Gerontechnology*, 11(2), 119-120.
- Kalish, R. A. (1975). *Late adulthood: Perspectives on human development*. Monterey, CA: Brooks Cole.
- Karavidas, M., Lim, N. K., & Katsikas, S. L. (2005). The effects of computers on older adult users. *Computers in Human Behaviour*, 21(5), 697-711.
- Kim, Y. S. (2008). Reviewing and critiquing computer learning and usage among older adults. *Educational Gerontology*, 34(8), 709-735.

- Kline, D. W., & Scialfa, C. T. (1997). Sensory and perceptual functioning: Basic research and human factors implications. In A. D. Fisk & W. A. Rogers (Eds.), *Handbook of human factors and the older adult*, San Diego: Academic Press, 27-54.
- Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: self-maintaining and instrumental activities of daily living. *Gerontologist*, 9(3), 179-186.
- Mallenius, S., Rossi, M., & Tuunainen, V. K. (2007). Factors affecting the adoption and use of mobile devices and services by elderly people-results from a pilot study. *Proceeding of 6th Annual Global Mobility Roundtable*, Los Angeles.
- Moschis, G. (2003). Marketing to older adults: an updated overview of present knowledge and practice. *Journal of Consumer Marketing*, 20(6), 516-525.
- Moschis, G., Curasi, C., & Bellenger, D. (2004). Patronage motives of mature consumers in the selection of food and grocery stores. *Journal of Consumer Marketing*, 21(2), 123-133.
- Namazi, K., & McClintic, M. (2003). Computer use among elderly persons in long-term care facilities. *Educational Gerontology*, 29, 535-550.
- Ng, C.-h. (2008). Motivation among older adults in learning computer technologies: A grounded model. *Educational Gerontology*, 34(1), 1-14
- Saunders, E. J. (2004). Maximizing computer use among the elderly in rural senior centers. *Educational Gerontology*, 30(7), 573-585.
- Venkatesh, V., & Brown, S. A. (2001). A longitudinal investigation of Personal Computers in homes: adoption determinants and emerging challenges. *MIS Quarterly*, 25(1), 71-102.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- Wagner, N., Hassanein, K., & Head, M. (2010). Computer use by older adults: A multi-disciplinary review. *Computers in Human Behavior*, 26, 870-882.
- Wang, K. H. C. (2007). Constructing theory of innovation adoption for elderly: Based on new technology products. Unpublished Dissertation, Yuan-Ze University.
- Wang, L., Rau, P-L., and Salvendy, G. (2012). Older adults' acceptance of information technology. *Educational Gerontology*, 37(12), 1081-1099.
- Wang, L., Sato, H., Rau, P-L., Fujimura, K., & Gao, Q. (2009). Chinese text spacing on mobile phones for senior citizens. *Educational Gerontology*, 35, 77-90.
- Wilkowska, W., & Ziefle, M. (2009). Which factors form older adults' acceptance of mobile information and communication technology? 81-101.
- Wood, E., Lanuza, C., Baciú, I., MacKenzie, M., & Nosko, A. (2010). Instructional styles, attitudes and experiences of seniors in computer workshops. *Educational Gerontology*, 36, 834-857.
- A. Banerjee, A joint economic-lot-size model for purchaser and vendor, *Decision Sciences*, vol.17, pp. 292-311, 1986.

- S. K. Goyal, A joint economic-lot-size model for purchaser and vendor: A comment, *Decision Sciences*, vol.19, pp. 236-241, 1988.
- R. M. Hill, The single-vendor single-buyer integrated production–inventory model with a generalized policy, *European Journal of Operational Research*, vol. 97, pp. 493-499, 1997.
- S.L. Kim and D. Ha, A JIT lot-splitting model for supply chain management: Enhancing buyer–supplier linkage, *Int. J. Production Economics*, vol. 86, pp. 1-10, 2003.
- M. Ben-Daya, M. Darwis, and K. Ertogral, The joint economic lot sizing problem: Review and extensions, *European Journal of Operational Research*, vol. 185, pp. 726-742, 2008.
- L. Lu, A one-vendor multi-buyer integrated inventory model, *European Journal of Operational Research*, vol. 81, pp. 312-323, 1995.
- H. Sijadi, R. N. Ibrahim, and P. B. Lochert, A single-vendor multiple-buyer inventory model with a multiple-shipment policy, *Int J Adv Manuf Technol*, vol. 27, pp. 1030-1037, 2006.
1. M. Hoque, Synchronization in the single-manufacturer multi-buyer integrated inventory supply chain, *European Journal of Operational Research*, vol. 188, pp. 811-825, 2008.
- T. Kim, Y. Hong, and S. Y. Chang, Joint economic procurement--production-delivery policy for multiple items in a single-manufacturer, multiple-retailer system, *Int. J. Production Economics*, vol.103, pp. 199-208, 2006.
- M. Y. Jaber and S. K. Goyal, Coordinating a three-level supply chain with multiple suppliers, a vendor and multiple buyers, *Int. J. Production Economics*, vol. 116, pp. 95-103, 2008.

ICSSAM-947

The Chronic Care Model for Quality of Life of Diabetes Mellitus Type II in Chaiyaphum Province Context

Pattara Junlawanna,¹

Faculty of Nursing Rajabath Chaiyaphum University, Chaiyaphum, Thailand. 36000

Email address: pj2609@gmail.com

Abstract

The purposes of this study was to developed model for improve Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province context. The three steps of the study design consisted of 1) drafting the model, 2) testing the model and 3) improved and developed model. The results showed the model for improve Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients: The out comes of model and the process of model The out comes were the Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients. The process of this model had 4 components 1) self Care Management (blood sugar control, movement & exercise, work, rest & sleep and medicine) 2) self help group (how to cook for blood sugar control, movement & exercise, how to prevent & care hyperglycemia and hypoglycemia, stress management and foot care) 3) monitoring and supporting self care management (home visit, education & counseling, social net work for movement and exercise) 4) health service for supporting self care management (fasting blood sugar, diabetic retinopathy screening, diabetic neuropathy screening, blood cholesterol, and information system for self care management)

Keyword: Quality of Life, Type 2 Diabetes Mellitus, Chronic Care Model.

1. Introduction

Chronic diseases are the major cause of death and disability worldwide :mortality rate 573 per 100,000 population, the most are 779 per 100,000 population in Africa and South-East Asia are 676 per 100,000 population. (WHO, 2008; 82).

In Thailand are 675 per 100,000 population in Japan 273 per 100,000 population. Cause-specific mortality rate from Cardiovascular diseases and diabetes in Thailand are 244 in Japan are 68 per 100,000 population. (WHO, 2008; 68, 76).

Diabetes Mellitus is the first common leading cause of death in both developed and developing countries. Diabetes care is becoming a priority for health systems as costs and health outcomes are being closely scrutinized around the world. The illness, disability, and premature death from the disease directly effect the well being and quality of life of the workforce and the elderly in daily day life.

In Thailand diabetes mellitus (DM) patients 3.5 million mortality rate 12.06 per 100,000 population. Burden of disease 47,596 million bath / year and effected to Quality of Life (QOL) (Ministry of Public Health ,2012). DM patients 71 % can't control blood sugar, complication 22 % were: Hypertension ,coronary heart disease and renal failure. Risk factors about complication from coronary heart disease are mass index ,blood cholesterol, blood pressure, ratio of west /hip.(Inter AISIA,2002). In Thailand 95 % are Type 2 Diabetes Mellitus (T2DM) patients, the major of problems from behaviors: eating ,moving and exercise. The prevalence of type 2 diabetes mellitus (T2DM) in Thailand increased significantly, from 6.7% in 2004 to 7.0 % in 2010. The age-adjusted prevalence of diabetes among adults was 6.7% (men, 6.0%; women, 7.4%) in 2004 and 7.0% (men, 6.4%; women, 7.9%) These findings show that the prevalence of diabetes is rising rapidly in the Thais population and appears to be increasing in parallel with prevalence of obesity. This enormous increase in the number of T2DM patients will certainly be accompanied by chronic diabetic micro-vascular or macro-vascular complications. Diabetic peripheral neuropathy (DPN) is the most prevalent and troublesome complication in patients with diabetes mellitus (DM), causing morbidity with significant impact on the quality of life of the person with diabetes, and can result in early death.

In Chaiyaphum province the Northeast region of Thailand, diabetes mellitus (DM) patients 286,000 mortality rate 22.56 per 100,000 population higher than country mortality rate ,most of them are Type 2 Diabetes Mellitus (T2DM). (Ministry of Public Health ,2012) in 2010.Bangkok and the urban and rural Northeast had the highest female prevalence of diabetes, which was higher than that in the urban North and rural South(Wichai Aekplakorn et al,2004).

The WHO has determined 2 main objectives caring for diabetic patients: maintain health and quality of life of individuals with diabetes through effective patient care and education and treat and prevent complications of DM which should correlate with a decrease in morbidity and mortality as well as a reduction in the cost for treatment (World Health Organization and International Diabetes Federation, 2004).

Thailand has developed the conceptual framework for managing chronic disease, following the Chronic Care Model which includes the quality improvement for excellence in clinic service program. However, the ongoing system both government and private sector is overlapping, lacking of effective co-ordination, and does not cover all risk areas. Besides, there is no sufficient information to be applied as the conceptual framework for monitor and manage NCD at national level.

Chronic Care Model that are focused on both outcomes and process have been developed and proposed as viable alternatives to our current care systems to strengthen self-management and address problems. Successful chronic disease management has been a difficult challenge within Thailand because of numerous factors, which include

few organizations have made the comprehensive systems changes associated with demonstrably better patient and system outcomes. Successful chronic disease management has been a difficult challenge with in the Chaiyaphum province because of numerous factors, which include lack of information technology in outpatient settings; multiple sources of nonintegrated information; limited access to and use of diabetes specialists including education services for empower self-management and service system support for promote self-management.

A Chronic Care Model (CCM) has been the main principle for developed and modify elements that have been focus to outcomes and process to improve Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province context. The elements of the CCM include decision support, clinical information systems, self-management education, and delivery system design.

The Faculty of Nursing at Chaiyaphum Rajabhat University has taken steps to research for develop model that appropriate modify of Chronic Care Model for North-East for implement into catchments area to improve diabetes care processes and outcomes in communities and Health promoting hospital settings.

The purposes of this study was to developed model for improve Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province context. The three steps of the study design consisted of 1) drafting the model, 2) refining the model, and 3) verifying the model. In the drafting phase, develop first draft from 1) the results of survey QLO of Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum (Pattara Junlawanna,2011) an 2) extensive literature review about Chronic Care Model(CCM) ([Mac Coll Center for Health Care Innovation](#),2003),and research related.

In the refining model phase, two successful hospital were recruited.The research tools were the semi-structured interview. Data collection included the use of appraisal forms with 15 key informants. In the verification model phase ,verify the model by pilot study about self-help group, how to cook healthy menu from herbs in household & community, self-management and medicine with stake Holder that consist of type 2 Diabetes Mellitus (T2DM)

patients in Chaiyaphum village, and care giver, Village Health Volunteers, Nursing instructors, Students nursing, and social network. Develop

Second draft model. Verifying the second draft model by 5 experts and public hearing about accurate, appropriate, and feasible to utilize in the Chaiyaphum Province context. The research tools were The Chronic Care Model for Quality of Life of Diabetes Mellitus Type II in Chaiyaphum Province Context.

2. Main Body

2.1 Figures and Tables

Table 1 Baseline and demographic characteristics of Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province.

Variables	No	%	Regression coefficient	95 % CL	p-value
Personnel Factors					
Gender			-1.83	-4.62 -0.93	0.190
Female	63	63			
Male	37	37			
Age (yrs)			-0.31	-0.08- 0.22	0.241
35 – 50	9	9			
51 – 60	53	53			
> 60	38	38			
Weight (kg) : Mean (SD)	60.7 (10.1)				
Height (cm) : Mean (SD)	158.4 (6.6)				
BMI (kg/m2)			0.55	-0.64- 0.17	0.361
< 25	80	80.0			
25 – 30	17	17.0			
> 30	3	3.0			
Mean (SD)	24.9 (4.2)				
Min-Max	17.4 - 34.8				
Marital status			1.57	-1.27- 4.46	0.277
Married	71	71			

Single	12	12			
Widowed, divorced, separated	17	17			
Education			4.54	0.60- 8.50	0.023
Primary school	78	78			
Secondary school	22	22			
Occupation			1.09	-1.95- 4.15	0.447
Agriculturist	77	77			
Employee/laborer	10	10			
House work	7	7			
Merchant, government officer, state enterprise	6	6			
Family income/month (baht)			0.02	-0.01- 0.01	0.002
< 5,000	48	48			
5,000 - 10,000	50	50			
>10,000	2	2			
Median (QD)	6,790				
Min-Max	3,500-21,000				
Years with T2DM (yrs)			-0.39	-0.60 -0.19	< 0.001 *
1-10	34	34			
11-20	58	58			
> 20	8	8			
Mean (SD)	9.8 (4.2)				
Min-Max	2 – 25				

Table 1 Baseline and demographic characteristics of Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province. (continuous)

Variables	No	%	Regression coefficient	95 % CL	p-value
Blood sugar			-0.38	-0.60 to -0.19	< 0.001 *
< 126 mg%	41	41			
>126 mg%	59	59			
Complications			-0.75	-0.91 to 0.58	< 0.001*
Non complication	49	49			
Complications	51	51			
Medical problems			-0.75*	-0.91 to 0.58	< 0.001
Non Medical problems	69	69			
Medical problems	31	31			
Family factors					
Care giver			-1.83	-4.62 - 0.93	0.190
Non Care giver					
Status in family			2.42	-0.15 - 4.99	0.065
Leader	43	43			
member	57	57			
Financial secure			8.99	6.56 - 11.41	< 0.001*
Not enough	73	73			
Enough	27	27			
Context and Environmental Factors					
Health services system ; Health center /village health volunteer.			9.41	5.02 to 13.78	< 0.001*
Not access	15	15			
access	85	85			
Accessibly to Health information resource /resource			3.90	1.42 to 6.45	0.002
Not access	44	44			
access	56	56			
Social network/ health network ;exercise			9.62	5.02 to	< 0.001*

group , welfare group, ect.				13.78	
Non	33				
Some group	67				

Table 2 Mean scores for QOL in Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province.

WHOQOL-BREF-THAI	Mean (SD)	<i>p</i> -value ^a
Overall	FAIR	
Baseline –	80.5 (7.1)	
24 wks	96.2 (5.8)	<0.001*
Physical health	Good	
Baseline - -	27.9 (2.9)	<0.001*
24 wks	30.5 (2.8)	
Psychological Health	Good	
Baseline - -	22.9 (2.7)	<0.001*
24 wks	25.2 (2.5)	
Social relationships	Fair	
Baseline - -	9.7 (1.3)	<0.001*
24 wks	12.2 (1.5)	
Environment	Fair	
Baseline–	27.6 (3.0)	<0.001*
24 wks	30.9 (3.4)	

The first step is drafting the model from Quality of Life survey and factors related , developed the conceptual framework for managing chronic disease, following the Chronic Care Model.(CCM)

The main baseline and demographic characteristics of patients are given in Table 1. The majority (63.0%) of study participants were females. Most of patients were 51-60 years old (53%); 78.0% finished only primary school.

Most were married (71.0%), and Agriculturist (77.0%). The monthly family income was 5,000 -10,000 baht in 50.0%

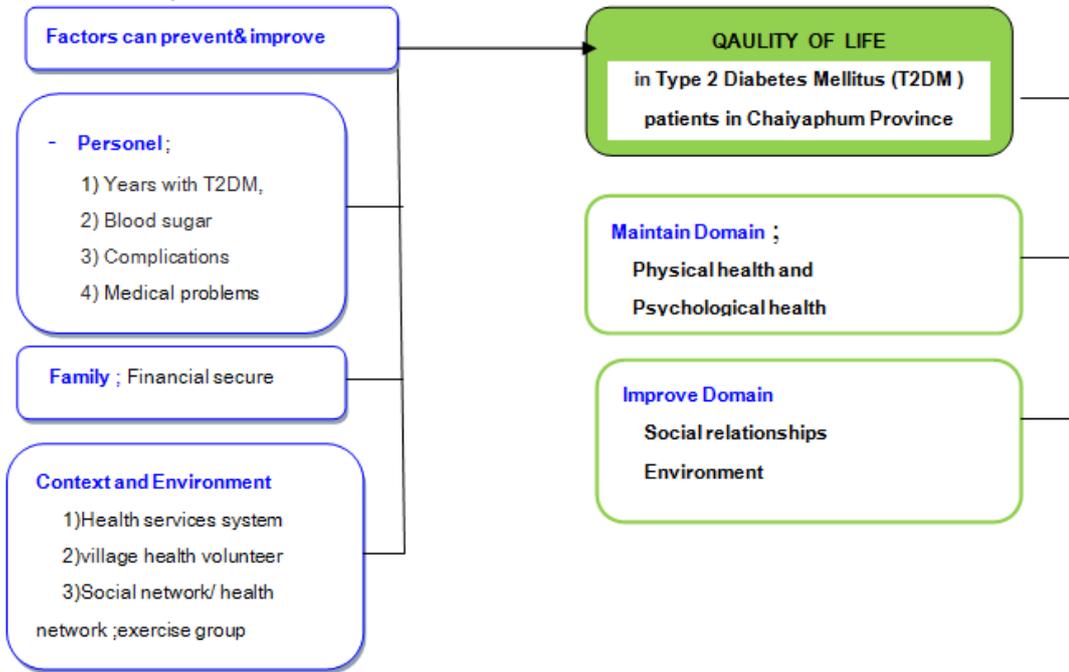
Most of them had body mass index (BMI) < 25 kg/m² (50 %) (Table 1). Quality of Life in over all were fair mean 80.5,

SD. 7 .1 , Physical health were good mean 22.9 SD.2.7, Psychological health were good mean 22.9 ,SD.2.7 , Social relationships were fair mean 9.7 , SD.1.3 , Environment were fair mean 27.6, SD.3.0.

Factors related Quality of Life ; Regression coefficient there were significant correlations with Personnel Factors ;

1) Years with T2DM, 2) Blood sugar 3) Complications,and Medical problems ,Family Factors; 1) Financial secure ,Context and Environmental Factors ; Health services system ; 1)Health center /village health volunteer,2) Social network/ health network ;exercise group , welfare group, ect. (p-value <0.001)

PICTURE 1 ;First draft from QOL survey



Result from the refining first draft model by 15 key informants from two successful hospital.

Picture 2 ; refine model for QOL of T2DM in Chaiyaphum province, Thailand.

Refine model for QOL of T2DM in Chaiyaphum province, Thailand.



Result from verification model ,verify the model by pilot study about self-help group, how to cook healthy menu from herbs in household & community, self-management and medicine administration with stake Holder that consist of type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum village, and care giver, Village Health Volunteers, Nursing instructors,Students nursing, and social network. Second draft model verifying by 5 experts and public hearing about accurate, appropriate, and feasible to utilize in the Chaiyaphum Province context.The research tools were The Chronic Care Model for Quality of Life of Diabetes Mellitus Type II in Chaiyaphum Province Context.

DISCUSSION

The findings revealed as follow :

1. The components of the Chronic Care Model for Quality of Life of Diabetes Mellitus Type II in Chaiyaphum Province Context **according to the** outcomes and process of model **consists of 1)** The outcomes were the Quality of Life (*QOL*) in Type 2 Diabetes Mellitus (T2DM) patients. 2)The process of this model had

4 components 2.1) self Care Management (blood sugar control , movement &exercise, work, rest & sleep and medicine 2.2) self help group (how to cook for blood sugar control, movement &exercise, how to prevent & care hyperglycemia and hypoglycemia, stress management and foot care) 2.3) monitoring and supporting self care management (home visit, education & counseling, social net work for movement and exercise) 2.4) health service for supporting self care management (fasting blood sugar, diabetic retinopathy screening, diabetic neuropathy screening, blood cholesterol, and information system for self care management)

**The Chronic Care Model for Quality of Life of Diabetes Mellitus Type II
in Chaiyaphum Province Context**



2. The verification of the Chronic Care Model for Quality of Life of Diabetes Mellitus Type II by the experts revealed that all components were accurate, appropriate, and feasible to utilize in Chaiyaphum Province Context.

2.3 Acknowledgments and Legal Responsibility

The authors would like to express their sincere thanks for the participated of Type 2 Diabetes Mellitus (T2DM) patients and care giver, village health volunteer, practical support given by the staff of the Chaiyaphum hospital and Naphay Health promotion hospital, in Chaiyaphum Province , Faculty of Nursing and Chaiyaphum Rajabhat University full support. We would also like to thank those who could not be mentioned here for their kindness and encouragement. This study was supported by a grant from the National Research Council of Thailand(NRCT), Chaiyaphum Rajabhat University (CPRU).

3. References

- [1] Akaphon Virat. **Factors influence to Quality of Life of Type 2 Diabetes Mellitus (T2DM) patients in Thakhonyang sub-district, Kantaravichai District, Mahasarakam Province, Thailand.** (2005).
- [2] Chanpen Suriyawang., et all., **Quality of Life of Elderly in Petchabun Province, Thailand.** (2006).
- [3]. Diabetes Association of Thailand, **Diabetes Mellitus Guideline 2007.**
- [4] Kleefstra N, Landman GW, Houweling ST, Ubink-Veltmaat LJ, Logtenberg SJ, Meyboom-de Jong B, Coyne JC, Groenier KH, Bilo HJ: **Prediction of mortality in type 2 diabetes from health-related quality of life (ZODIAC- Diabetes Care 2008, 31(5):932-933.** [PubMed Abstract](#) | [Publisher Full Text](#).
- [5] Landman GW, van Hateren KJ, Kleefstra N, Groenier KH, Gans RO, Bilo HJ: **Health-related quality of life and mortality in a general and elderly population of patients with type 2 diabetes (ZODIAC-18).** *Diabetes Care* 2010, **33(11):2378-2382.** [PubMed Abstract](#) | [Publisher Full Text](#) | [PubMed Central Full Text](#).
- [6] Maddigan SL, Feeny DH, Majumdar SR, Farris KB, Johnson JA: **Understanding the determinants of health for people with type 2 diabetes.** *Am J Public Health* 2006, **96(9):1649-1655.** [PubMed Abstract](#) | [Publisher Full Text](#) | [PubMed Central Full Text](#)
- [7] National Statistic Organization, Thailand. **Health ,Welfare and Exercise in population Survey** (2007).
- [8] (2012).
- [9] Pattara Junlawanna. **Quality of Life of Type 2 Diabetes Mellitus (T2DM) patients in Chaiyaphum Province context.**(2007).
- [10] **Quality of Life Index for Country 2014** http://www.numbeo.com/quality-of-life/rankings_by_country.jsp
- [11] Sekson heebkawg, and Wongsu Loungsiriwong., **Quality of Life of Type 2 Diabetes Mellitus (T2DM) patients in Kuchinarai District, Kalasin Province ,Thailand.**(2011)
- [12] World Health Organization. - **NCD Country Profiles , 2011.** http://www.who.int/nmh/countries/ind_en.pdf
- [13] **World Health Statistics 2013, 63-68,** http://www.who.int/gho/publications/world_health_statistics/2013/en

ICSSAM-663

Heat Waves and Increased Mortality in Poland. The Issue of Knowledge Gaps and Poor Preparedness of Services.

Dariusz Graczyk

Institute for Agricultural and Forest Environment, Polish Academy of Sciences
Bukowska 19, 60-809 Poznań, Poland
darekgraczyk@wp.pl

Adam Choryński

Institute for Agricultural and Forest Environment, Polish Academy of Sciences
Bukowska 19, 60-809 Poznań, Poland
adam@swarzedz.net.pl

Abstract

The beginning of the twenty-first century in Europe was plentiful of meteorological extremes regarding to air temperature. The heat wave of 2003 in western Europe and 2010 in eastern Europe was especially severe for human health and for the economy. In both of these heat waves there were tens of thousands fatalities, and what is particularly noteworthy, is the fact that the highest number of fatalities took place in developed countries of western Europe. This is even though these states, with strong economies, and high level of social protection and medical care, were seen as well prepared for such an extreme. Both of these heat waves have been studied and analysed numerously. These researches were to assess the amount of losses, their reasons and to build-up preparedness in the event of another similar weather conditions in the future.

Poland was in the borderline of these natural disasters area, so it did not result in significant losses. Nevertheless, Polish citizens mostly remember the heat wave of 2006, when for several Polish towns July became the hottest month in the whole history of measurements. Even though such extreme weather conditions were present, the system of management with heat waves does not exist in Poland. Health service is not prepared, crisis management is marginalising the problem. This might be because, so far there have not been many studies that deal with the case of fatalities during heat waves in Poland. Even though meteorological data reaching the fifties of the twentieth century are available for most of large towns in Poland, demographic information are much harder to obtain. Moreover, these data very often do not include many detailed information, as for example the cause of death, or the age of the deceased. The problem in the mortality analysis regarding extremely high air temperature

might be also the occurrence of such weather conditions during last two decades (almost in every year), and this is the period with most reliable demographical data.

In this research authors are analysing whether the appearance of heat waves has an impact on the increased mortality in six largest Polish cities. An additional element of the study will be evaluation, where is it possible, whether the amount of mortality is higher or lower in non-urban areas. This is to make implications if the urban heat island effect occurs in Poland.

Thermal conditions during summer periods on selected areas will be analysed. This will help to find the temperature thresholds and duration of such temperature thresholds in urban areas and their surroundings. Using this information defining the most risky parameters of heat wave will become possible. Such information may be a good suggestion for Polish health service to be better prepared, because so far, there have not been heat wave recommendations established.

Keywords: climate extremes, heat waves, mortality, preparedness, urban heat island effect

ICSSAM-696
NicoNico Live as Social Platform: A Study of Japanese Live Streaming Services

Eiki Kikuchi

Graduate School of Media and Governance, Keio University
eiki@sfc.keio.ac.jp

Abstract

Live streaming is a new technology in the field of Computer Mediated Communication (CMC) that has been gaining popularity in recent years. It enables users to broadcast their own live video and audio freely through the Internet. NicoNico Live has attracting a number of young users and has becoming one of the most popular live streaming services in Japan. This study focuses on Japanese live streaming services, in particular on NicoNico Live, and shows their originality. In this study, we compare NicoNico Live with Ustream, one of the most popular live streaming services in the world. According to an online survey by The Nielsen Company, the user base of NicoNico Live is larger and younger than that of Ustream in Japan. To understand why NicoNico Live has gained so much popularity in Japan, we conducted participant observations by using NicoNico Live in practice and interviewing 9 informants who use NicoNico Live on a daily basis. We found that they use the service as a way to meet people and to build intimacy with them. However, NicoNico Live does not originally provide these functions. Instead, unique user cultures that have emerged on NicoNico Live help users build intimacy with one another. In this study, we examine in detail the social functions of three typical NicoNico Live user cultures. We hypothesize that these practices have transformed NicoNico Live from a simple streaming service to a kind of social meeting place for young Internet users who want to find intimate relationships.

Keywords: social platform, live streaming, NicoNico Live, user culture

1. Where the problem lies

The development of Information and Communications Technologies (ICTs) has brought about the appearance of various web services in recent years. In the area of CMC (Computer Mediated Communication), which is a communication method using a computer as an intermediary, there is also newly emerging communication using audio and video, in addition to traditional text based communication. Live streaming is one technology that enables such communication. Through live streaming it is possible to transmit audio and video to people in real time.

Ustream is perhaps the most used and well-known live streaming service in the world. (Figure 1) Ustream, which began in America in 2007, now has 24 million users worldwide. However, in Japan there is a better known live streaming service - NicoNico Live, operated by Internet entertainment company Niwango, Inc. (Figure 2) The service has many users, mainly young people, and it continues to be the most well-known live streaming service inside Japan.

There are many surveys and guidebooks related to live streaming. However almost all of them lump NicoNico Live and Ustream together. Hardly any pay attention to NicoNico Live's uniqueness. And so, this research will focus on Japan's live steaming services, notably on NicoNico Live, examining its originality whilst comparing it to Ustream.

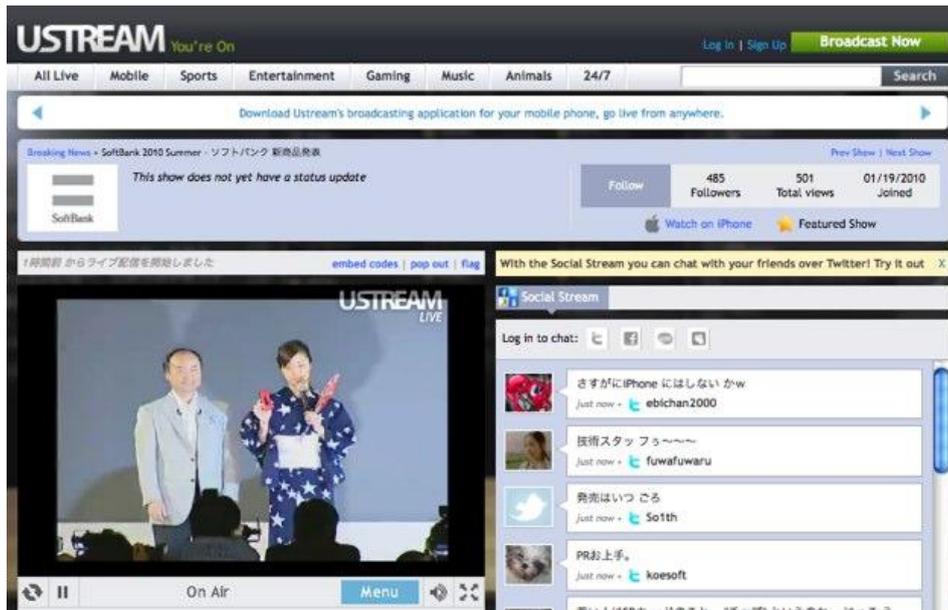


Figure 1 Ustream's broadcasting screen

(Reference:

<http://techcrunch.com/2010/05/17/ustream-asia-debuts-new-iphone-apps-for-japan/>)

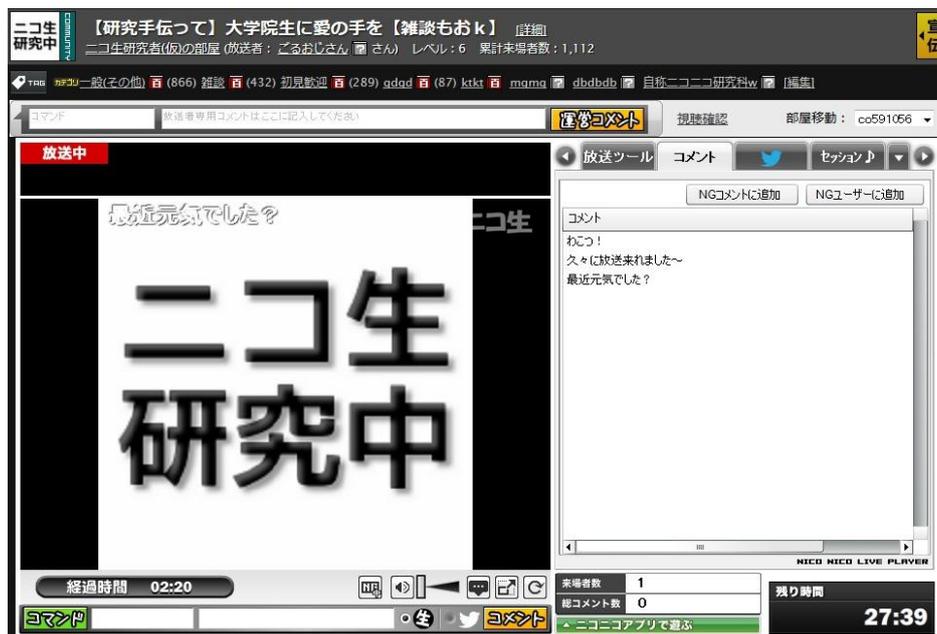


Figure 2 NicoNico Live's broadcasting screen

(Reference: A live broadcast of the writer)

2. A comparison of NicoNico Live and Ustream

Let's compare NicoNico Live and Ustream in order to make NicoNico Live's uniqueness clear. In a usage trend survey by Nielsen Online, the number of visitors to NicoNico Live and Ustream were compared¹. According to that survey, the number of visitors was 1,383,000 and 992,000 respectively, meaning NicoNico Live had around 400,000 more visitors. Compared to Ustream, the average age of those visiting NicoNico Live was younger. From the following data, it is clear that NicoNico Live has gained huge support from young people and is outperforming Ustream.

So why is NicoNico Live so popular in Japan? In order to clarify why, I'd like to take a look at NicoNico Live's characteristic user culture.

3. NicoNico Live's User Culture

In order to clarify NicoNico Live's user culture, we undertook participant observation by using NicoNico Live ourselves. In order to further ensure objectivity, we also held interview surveys with 9 NicoNico Live users. In the interview surveys, we used the voice call function of the voice call software, Skype, which is often used by NicoNico Live users. Using a semi-structured interview, we asked the users questions about how they used NicoNico Live.

The fact there are several user cultures was confirmed by the results of the survey. We will introduce the three points we think were particularly important.

- Comment Viewer

Comment viewer is the term for the software with which anyone can comment in response to comments made, or see comments in real time².

On NicoNico Live, comments are usually displayed anonymously on-screen. (Refer back to figure 2) Therefore namanushi³ and listeners⁴ cannot identify users who posted comments. However, if one uses the Comment Viewer, it becomes possible to identify the user who posted the comment, so one becomes able to communicate in a conversation with other users. (Figure 3) Comment Viewer is used widely on NicoNico Live.

¹ The number of visitors to NicoNico Live and Ustream have increased. Budget screening's live broadcasts are popular | News release | Nielsen Co. Ltd. (http://www.netratings.co.jp/news_release/2010/05/Newsrelease20100526.html)

² There are various Comment Viewers by different developers.

³ An abbreviation for "owner of live broadcast". The user who is actually broadcasting the live broadcast.

⁴ A user who visited to watch the live broadcast.

777	11127855	53:35	もう いや 落ち込んでるのが あ ほらしくなったwww	P
778	20008165	53:59	元気になるのが一番w	P
779	24749833	54:16	元祖クロミだから→がんくろちゃん= SONYではどう?	P
780	11127855	54:53	落ち込んでた内容話すわ	P
781	東京特許	55:06	ソニー君でいいんじゃない	
782	24749833	55:20	そっか ものともだから 違うか	P
783	13646626	55:21	仕事でミスしたら てへべろ すればい いんだよw	P
784	W7qW9cDLdcSZPWfCvp3...	55:27	可愛い	
785	17196668	55:35	wwwwwww	P
786	ヘルパーヘルペスター	55:46	マイク全部稼働してるんだね。	
787	東京特許	55:48	困ったときは、ソニー君に助けてもら おう	

Figure 3 A screen of the Comment Viewer (One part)

What's interesting is that Comment Viewer is something developed unofficially by users. Originally, it was surmised by Niwango that users on NicoNico Live would not have conversations. In a web magazine interview in 2009⁵, one of the developers, Sugitani Yasuyuki, testified as much whilst talking about NicoNico Live's concept of "crowd messaging".

Crowd messaging is the concept of presenting many people chatting on the 'net. Message boards and chat rooms break down when 50 people or so gather on them, but at NicoNico douga, through the outbreak of a time axis, it doesn't break even with a 100 people. One is able to communicate with a lot of text and have an overlap of time (with others' comments). (Omission) Crowd messaging is no good for being able to hold a conversation. Chat needs to be practical, so the limit is about 50 people. There's no need for crowd messaging to be practical, so thousands or tens of thousands of people can participate. And so, from the beginning of NicoNico Live, the focus was on large numbers - 1000, 2000 people – participating. It was like "50 people? Forget that. It's about the superiority of being large scale"

From the beginning, NicoNico Live has been a service whereby large numbers of users can comment as they like whilst watching live broadcasts. It was not necessarily intended to be for small scale use of holding conversations. However, there are actually users holding conversations on a small scale by using the Comment Viewer. Behind the scenes of this user culture of users who developed, and are using,

⁵ "Dwango have loved live broadcasts for a long time" NicoNico Live developer Sugitani's ambition: CodeZine (<http://codezine.jp/article/detail/3458>)

Comment Viewer, we can see there's a desire from other users who wish to have conversations.

NicoNico-Live-specific greetings

There are NicoNico Live specific greetings, such as “Shoken” and “Wakotsu⁶.” This is another way user culture can be seen. (Figure 4) They are the first words used in a comment by listeners visiting the live broadcast, and are used daily by users.

On NicoNico Live, though a namanushi may be using the Comment Viewer, as long as a listener does not comment, there is no way of letting the namanushi know they are watching, so the listener makes a comment and lets the namanushi know of their existence. Therefore, there is a need for communication. In other words, these greetings are the starting points of conversations.

These two greetings came into existence in the blink of an eye amongst NicoNico Live users and became widely used. Greetings help to realize smooth social intercourse. Users are a created culture that unconsciously understands this fact.



Figure 4 “wakotsu” written on-screen

• Commu-Link

On NicoNico Live there are profile pages for each live broadcast programme, which are called communities. In a community, the owner of the programme, the namanushi, can freely post information. Commu-Link refers to a namanushi linking their community to a community they are close to. (Figure 5) When you type a link on a community page, it is automatically changed into a hyperlink. Using that function, one can link a new namanushi's community to one's own. Commu-Link is a name the

⁶ Listener who visited for the first time a live broadcast greeted as "Shoken", it is determined that the greeting "Wakotsu" the second time.

users independently made up and became accustomed to. One could also call this a user culture.

The act of Commu-Link visualizes relationships and introduces you and namanushi close to you to other users. Through this, it seems the intention is to acquire acquaintances, expand human relations and strengthen existing relationships.

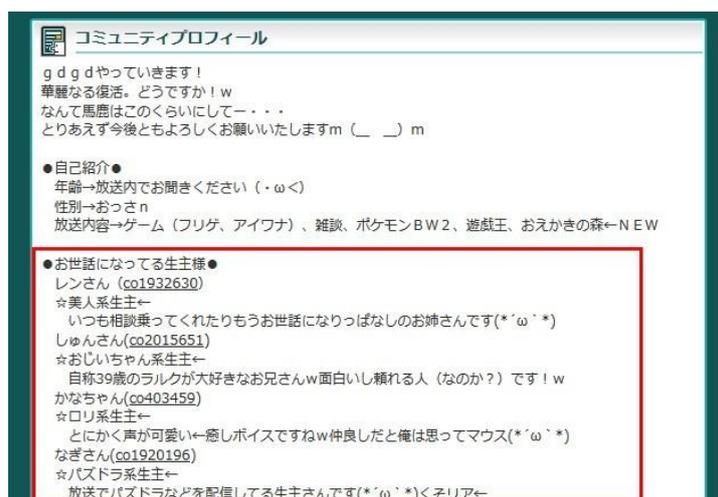


Figure 5 Commu-Link (The part outlined in red)

4. Discussion

I introduced 3 user cultures, but it is assumed there are various functions to communicate and support one's social life on NicoNico Live. Additionally, as a result of the interviews, we found that the 9 informants we interviewed had all made friends and lovers through NicoNico Live.

Henceforth, we could make the following hypothesis. According to these user cultures, NicoNico Live has changed from being a simple live streaming service to a social place where young internet users come seeking to meet others. In the future, through a more detailed investigation, we would like to prove this hypothesis.

References

- [1] Yu , Tsuda, Yasuhiro, Fujihara, Tetsutaro, Uehara , Yoshitaka, Morimura, Kenji ,Ohira, Mikihiro, Mori , Hajime, Kita, 2011 'Analysis of the psychology of users of internet live broadcasts' "Information Processing Society of Japan Research Paper. GN (Groupware and Network Service)" 2011-GN-79(9) 1-8
- [2] 2010 "Let's start internet live streaming! Ustream and NicoNico Live" Aspect

ICSSAM-729
Uplifting National Pride through Philosophy of Baseball

Amir Hakim Hasjim

Master of Notary, Faculty of Law – Sriwijaya University

Palembang – Indonesia

amir26@ymail.com

Abstract

Achievement in sport is an avenue to increase the pride of a nation . So far the Indonesia's only known sport to regularly perform in the world stage is the sport of badminton . In this article, I would like to propose that besides the sport of badminton, the sport of baseball is another alternative for Indonesians to put their names and the country on the international level.

Baseball is not just a leisure time hobby instead it is a highly competitive sport that surely can generate serious money . To the fact of the matter of the human's physiology, Indonesians (and Philippines) can aspire to play in the arena of the ultimate baseball competition in the world, known famously as the Major League Baseball (MLB)¹. Although in order to be able to realize their dreams, one should take very serious look on how to fundamentally change the baseball training regiment in Indonesia.

Finally, every training needs a regular competition to measure how far the training has improve the one's ability. I strongly suggest that Nippon Professional Baseball (NPB) in Japan is a right stepping stone for Indonesias baseball players to go beyond their national boundaries competition toward the ultimate goal of entering the MLB competition . Many players who had competed in the NPB, now have a very important role as players for each of their own teams in MLB and become the respected members of the society.

Keyword : Philosophy of Sport

¹ http://en.wikipedia.org/wiki/Major_League_Baseball

Introduction



200px-Major_League_Baseball.svg

Football and Basketball are two of most popular sports in the world with all its fanfare of excitement and coverage, not excluding in the Southeast Asia countries. Even though the participants of those sport are still mainly from the caucasian and african ethnic groups, due to their superior anatomical factors such as body height amongst others to Asians. Yet, a professional baseball competition in United States of America (USA) or famously known as the Major League Baseball (MLB) competition, the most famous, heavily covered by the media around the world (even its final round competition is nicknamed “the World Series”) and the most expensive sport competition in term of money involved (players’ contract, sponsorship, etc.), many Asian origin players are not just participating in it but also contributing crucial parts to their teams’ efforts in winning the ultimate prize.

Even if by far those Asian origin players are all but from the East Asian countries of Japan, Korea and China. Nevertheless, we can conclude that baseball is indeed a multi-ethnic friendly sport and it belongs to all nations in the world.

MLB is not just a job for its players, a sport or an entertainment for its supporters. It also has a philosophy of living a healthy life and achieving perfection in everything one’s do in one’s life. Some former MLB players have aged up to 80 year old . For a current MLB player, he may play as many as six days in one week and yet he has a fulfilling life in what he can achieve in his sport career wise as well as the money earned wise.

Many athletes from developing countries such as from Cuba, Panama, the Dominican Republic, with relatively poor income per capita population not unlike many Indonesian and the Philipinos in Southeast Asia, churn out many MLB athletes because those athletes had lived a life of professional athlete in term of their discipline and commitment since young ages with most of them, if not all, had to practice with just simple equipment.

Compare that to the life of a baseball athletes from both Indonesia and the Philippines which many of them are regular smokers, thus it will only make them sure not to get promoted to play in a bigger stage of competition than their own national competitions.

The Asia's best baseball competition is in Japan, famously knows as the Nippon Professional Baseball (NPB)² . Now might be the time for the NPB scouts to look into the Philippines and Indonesia's talent pools, recruiting the would be talented young athletes from those both countries, providing them with scholarships and facilitating them to move to NPB.

The two countries are densely populated and competitors in South East Asia's baseball competition. Their players should have been given the opportunity to play in a bigger league to really feel, explore and understand the true Philosophy of Baseball. Imagine what would be the mood of the people from countries such as the Philippines and Indonesia when their athletes could eventually take part in MLB.

Main body **Why baseball?**



180 px-NPBLogo

World of baseball is rarely reviewed by world media unlike football or basketball or even golf whereas many Japanese athletes also excel in those field of sports. A triumph of an athlete for instance in the sport of golf doesn't require him to pay attention to the game's time limit and as far as the winning goes it is to be determined solely by the individual player self.

The main philosophy in golf is for a player to avoid as much mistakes as possible and victory is guaranteed. I believe the philosophy of baseball is very much like the philosophy of golf but within the context of the team sport.

² http://en.wikipedia.org/wiki/Nippon_Professional_Baseball

Professional MLB began in the year 1869 .It regulation requires each team to kick “out” a minimum of 27 opponent hitters and then the difference in offence points from both playing teams that will determine the winning outcome. The similarity between baseball and golf is in the context of trying to reach the perfection in life philosophy by which it means as individuals we continuously need to get rid of our own shortcomings until we reach the perfection to the best of our ability. Thus we can conclude that the problem of life is universal and has a real present in all people regardless of their races or other physical attributes.

Baseball is a team sport that is not time-bound, consists of nine players occupying different positions on the baseball field. Each position has its own tag name, namely Pitcher, Catcher, 1stBaseman, 2ndBaseman, 3rdBaseman, Shortstopper, Leftfielder, Centrefielder and Rightfielder.

Baseball players have report cards that counting their individual statistics, either in capacity as the offense or the defense players. The database is also created and available to the team’s coaches in addition to the athletes. Player statistics system has been evolving over time so has the athletes’ paradigm and mindset that since their debuts either in NPB / MLB competition, they shall play to achieve perfection of which in this case maximal statistical data on their report cards .

Many baseball stars were born from MLB during its long history of competition, and among those stars there were always figures who considered geniuses, remembered for his consistent behavior and distinctive game eventhough they had never won MLB trophies, Don Matingly is an example. He had the honor to retire his jersey number of his club the New York Yankees and to be immortalized into the "Hall of Fame". Why? because he had always played an important role and provided all of his best for his team, eventhough by the end of the day it resulted no championship title, nicknamed a World Series title, for him.

On the contrary punishment in the MLB has been very harsh, it has preserved whenever a MLB star athlete had cheated or had immoral attitudes. For example Pete Rose, he had made several MLB records and had won three championship rings with his club Cincinatti Reds, but the name Pete Rose (who retired as an athlete MLB in 1986) was never enshrined into the " Hall of Fame ", and it was because he liked to gamble.

Now, compare this again with the behavior of football star Diego Maradona, who had been taking drugs even during the 1994 World Cup and who never forgot the incidence of " Hand of God " in 1986 World Cup. Somehow the public has not been concerned at all with all of his breaches and has sent the message that special skill is more important than anything else including good behaviours.

Method to use

 <p data-bbox="240 801 624 835">250 px-Hideki_Matsui_in_USA-7-Paint</p>	<p>Exercise is a necessity in human life. If someone exercise regularly, it will bring many good influences on one's physical development . It can increase the efficiency of the body's function, like blood circulation, respiration and digestion system. Aside from its usefulness to the growth of the human physical development, it also contributes to the development</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

of one's spiritual being

The country of Japan so far has given aid to Indonesia in the form of baseball equipment donations, and sending coaches and other personnel to aid potential players in many areas in Indonesia . However, this conventional method hasn't resulted anything that meet up the trajectory expectation that someday Indonesia will be a nation with baseball tradition like in Japan . In addition, parents in Indonesia are still reluctant to steer their children toward becoming professionals in the field of sports, if any they prefer certain sports to baseball to be their choice of employment.

Japan geographically is in close distance to Indonesia . Japanese athletes since year 2000 have played an important roles in the MLB competition, both in term as individual record holders or a member of the World Series championship teams, like Ichiro Suzuki , Koji Uehara , Hideki Matsui³. Historically , since the 18th century Japanese philosophy of reform has created a paradigm that sport can be a tool as important as the field of education in achieving national pride . Education, Culture, Sports, Science and Technology affairs are all in one ministry commonly called MEXT⁴. Japan built the MEXT system since the Meiji Government era in year 1871, it has been handling the sport affairs equal to education , culture , science and technology affairs. The Ministry also distributes five scholarships across the five affairs . It has been proven that through the MEXT, Japan has been showing to other nations that it has a system to achieve philosophy of perfection in life, of which duly emulated by other nations.

³ http://en.wikipedia.org/wiki/Hideki_Matsui

⁴<http://en.wikipedia.org/wiki/MEXT>

So if Japan seriously wants to promote baseball in Indonesia, sending coaches regularly and donating equipment is not enough, instead the Japan's MEXT system should be implemented in Indonesia. Indonesia itself has a firm baseball annually. Nevertheless in order to maximize the role of MEXT , it is required that " Standard Operating Procedure " (SOP) is not always in the form of debriefing techniques, instead it needs also to be a lifestyle, for instance a diet should be a part of it, or in short it needs to become a philosophy, philosophy of healthy living.

An ideal philosophy of life comes from good habits so that to achieve perfection, that philosophy relies on the ability of individuals' desire to always give their best albeit whatever their surrounding environment present the challenge. It is time for Japan with his MEXT program providing scholarships for talented young Indonesian players . Then whenever those Indonesian athletes had arrived in NPB , those athletes would have had an obligation to live a life in this new philosophy and regularly strive to achieve excellence. If this role had been lived through, I believe in not so distant future Indonesia would deserve a very good player born out from this project. Although to be a great player, we need to wait a little bit longer, for that I believe a good player can not be deemed to be a great player until that good player attribute can useful to others .

A case of example



Images of Toni Pratono by Home Run

A person is considered to have a talent to become a serious athlete of the person's choice field of sport, this person needs to be given the opportunity to continuously be promoted to bigger larger competition due to the person's ability to compete in his current level of competition. If the person failed to pass all the challenges at least the person would bring new thinking sets, and could soon be transferring his gained knowledge through experience to his "juniors".

Character can only be formed by good behaviors . Already a common philosophy, that to find a good athlete, first it needs to look for a good coach. Attitude / behavior

will make everybody be somebody⁵. No matter what even if one fails to be a successful baseball player at very least one could gain a new and invaluable philosophy of life that will be useful gift for the life of one's nation .

The case of example was the story of Indonesian's pride softball athlete Toni Pratono. He played for TAWA softball club in New Zealand. Albeit it is only so called lesser competitive softball than baseball New Zealand league, lets not forget as a country, New Zealand often won the softball world championships, it won't be mistaken to consider that Toni Pratono played at the world level competition.

He gained success through a self-taught, practiced very hard and created his own exercise regiment adding its portion to his existing exercise portion given by his coach. In his biography titled "National Softball Player Toni Pratono: Homerun", He had a so called 4A philosophy which are Aspiration, Attitude, Action, Achievement. He stated that he could only play in the big league, it was only because he had the paradigm of methodical yet long term mindset.

Toni was one of the original Indonesian baseball athletes started in the mid-1990s. Unfortunately, he was injured because the baseball training system of which made the athletes extremely vulnerable to injury. The injury that later forced him retire early. At the end, he was let down by exercise regiment that was not standardized to follow the right exercise procedures.

References

- [1] Fauziah Nuraini Kurdi & Sukirno, Dasar-Dasar Fisiologi Olahraga (basics of sports physiology), Unsri Press, Palembang, 2011, pp.1
- [2] Pesofbol Nasional – Toni Pratono ; Home Run, up dan down 71-73 pages, by Donny Winardi, Dede Isharudin
- [3] H. Ali Yafy dan Peunoh Daly, Islam Science Environment Health and Technology
- [4] http://en.wikipedia.org/wiki/Major_League_Baseball
- [5] http://en.wikipedia.org/wiki/Nippon_Professional_Baseball
- [6] http://en.wikipedia.org/wiki/Hideki_Matsui
- [7] <http://en.wikipedia.org/wiki/MEXT>

⁵ Pesofbol Nasional – Toni Pratono ; *Home Run, up dan down 71-73 pages*, by Donny Winardi, Dede Isharudin

ICSSAM-964

Community-based Care Model to Prevent Hypertension

Jirapa Siriwatanamethanon, RN, Ph.D.

Associate Professor, Faculty of Nursing, Chaiyaphum Rajabhat University,
Chaiyaphum, Thailand

Abstract

This participatory action research aimed to develop community-based care model for hypertension prevention, which were specific to people from high risk group in rural areas in the North-Eastern part of Thailand. The focus of this research was on providing knowledge and developing appropriate model for hypertension prevention. Sixty-nine people from high risk groups from one village were participated in the development of community-based educational model for prevent hypertension. Data was collected using demographic data and questionnaire to determine knowledge about hypertension, its causes and means to caring hypertension prevention practices.

The study revealed that the participants were actively participated in the development of hypertension care model included identifying the problems, planning of health educational sessions, organizing preventing hypertension campaign activities, participation in the activities and evaluation of the health campaign project outcomes. Paired t-test was used to determine the difference in knowledge hypertension score of people from high risk groups before and after participation in this study. Results showed that there were statistically significant differences, at $p < 0.05$, in the average knowledge hypertension among the sample. The research findings indicated that community-based care model can raise participants through mutual collaboration should implement to ensure accessing to health information in order to allow them to gain appropriate care of hypertension prevention..

Key words: community-based care model, hypertension

Introduction

Hypertension is a one of the global burden of non-communicable disease and is one of the primary risk factors for cardiovascular disease (Lewington, Clarke, Qizilbash, 2002) and cerebrovascular stroke (Whelton, 1994) kidney failure, peripheral vascular disease and Alzheimer's disease (Khan, N.A., McAlister, F.A., Lewanczuk, R.Z., et al., 2005). Hypertension continues to be important health problems worldwide, being

responsible for high number of mortality and morbidity rate. Hypertension is also the leading causes of death and disability, according to The World Health Organization's World Health Report, hypertension is the third ranked factor for disability-adjusted life year (World Health Organization [WHO], 2002). In the year 2000, the estimated number of adults with hypertension were 972 million people with hypertension and the prospect number by the year 2025 is to more than 1.56 billion (Kearney, Whelton, Reynolds, Whelton & He, 2005; Williams, 2006). In Asia, in particular, South Asia, hypertension is an increasing burden of health care system (Sharma, 2008). In Thailand, the death rates of people caused by per 100,000 population was 3.6-4.0 between 2004-2008 and rate of hypertension in-patients was 1,123.32 per 100,000 population (Ministry of Public Health [MOPH], 2008). The projection of number of people with hypertension is led by life style changing that causes the increasing of obesity and sedentary lifestyle (Williams, 2006)

Hypertension is caused by people life style with high risks on unhealthy dietary habits and low level of physical activities. According to Touys and others (2004) the risk factors for hypertension include high sodium or low potassium intake, high alcohol consumption, low physical activities, and overweight. By the study for the Strong Heart Study, the risk factors of hypertension include abdominal obesity and abdominal lipid profile (deSimone, Devereux, Chinali et al., 2006). Modifying life style to be healthier is pivotal aspect to prevent hypertension (Chockalingam, Campbell & Foder, 2006). However, it is evidence that people have less concern on their blood pressure which revealed by number of surveys (Joffres, Hamet, Rabkin, Gelskey, Hogan, Fodor, 1992; Joffres, Ghadirian, Fodor, Petrasovits, Chockalingam & Hamet, 1997; Kamadjeu, Edwards, Atanga, Unwin, Kiawi & Mbanya, 2006).

Raising hypertension awareness through Community-based hypertension prevention enables people to modify life style that lower prevalence of hypertension. Hypertension can be prevented by modifying people life style (Victoria Declaration on Heart Health, 1992; Williams, 2006). Dietary approach is one of the strategy using to prevent and treat hypertension the strategy include dietary modifications to lower blood pressure such as salt restriction, weight control, alcohol consumption (Appel, Brands, Daneils, Karanja, Elmer & Sacks, 2006). Therefore, raising awareness about hypertension is necessary to motivate people to modify their lifestyle. This concurs with the objective of World Hypertension Day in 2005 to raise awareness of hypertension is a key of hypertension prevention by informing the community (Chockalingam, 2008). It is recommendation that knowledge about hypertension is the core of prevention and management of hypertension (Campbell, Petrella &

Kaczorowski, 2006). This confirms by the study of the Canadian Hypertension Education Program which reported that the treatment and control of hypertension in Canada in 2007 was 5- fold improvement since the prior survey in 1985-1992 (Campbell, BPharm, Tremblay, Lindsay, Reid & Tobe, 2011).

Because the significance of hypertension awareness is a foundation of hypertension prevention, this study was to improve knowledge of people from high risk groups through prevention model that fit with their context. The research question addressed 1) what is a hypertension prevention model for high risk group people who live in rural areas; 2) how does community participate in development of community based educational program; 3) does it is any impacts of community-based educational program on knowledge about hypertension among people from high risk group in rural areas.

Research objectives

1. To develop hypertension prevention community-based model in rural areas
1. To compare knowledge of the participants about hypertension, causes of hypertension, and means to prevent hypertension among people from high risk group before and after participate in the community-based health education

Research methodology

This study was a participatory research using AIC techniques approach for the project planning and also organizing a health education program for raising awareness about high blood pressure, the risk factors, and ways of hypertensive prevention. The study was conducted in a one village in Northeastern Thailand. Following human ethics approval, sixty-nine people from high risk group were invited to participate in this study by purposive sampling. The participants actively participated in community-based hypertension prevention program.

The instruments

The research instruments in this study consisted of 1) collecting data instruments which were demographic information sheet, questionnaires about knowledge about hypertension and prevention practices of people from high risk group and open-ended interview guide to gain participants' opinion about the community-based hypertension prevention model; 2) handbook which was used as an guideline to encourage participants to develop and participate in hypertension prevention model. The details of each instrument are as follows.

1. Demographic information sheet developed by the researcher included age, sex, waist circumference, body mass index, and blood pressure.

2. Knowledge 20 items. The 20 items were divided into three dimensions. Dimension 1-knowledge of hypertension contains 6 items. Knowledge scoring was marked 1 for correct and 0 for incorrect. The highest score was 6, and the lowest score was 0. Dimension 2- leading causes of hypertension contained 9 items. Scoring was marked 1 for correct and 0 for incorrect. The highest score was 9 and the lowest score was 0. Dimension-3 hypertension prevention practice contains 5 items. Scoring was marked 1 for correct and 0 for incorrect. The highest score was 5 and the lowest score was 0. The reliability was 0.84.

3. The guideline to work with community based on encourage mutual community participation using AIC techniques as a tool for developing the project plans and organizing activities aim at informing people in the community about high blood pressure.

4. The handbook of hypertension prevention developed by the researchers consists of 1) handbook information about hypertension, including information on disease, causes of disease and ways to prevent hypertension, and 2) preventing hypertension prevention behaviors.

Data collection

The research proposal was submitted to and approved by the Nursing Faculty, Mahasarakham University. After gaining permission from the head of villagers, the researchers met with the participants to explain the nature of the study and study procedures. Informed consent was obtained from the participants. Data was collected by questionnaires, to attain scores of knowledge, and hypertension prevention scores prior to participation and at the end of the three month of health education sessions between June and August, 2012. All activities during the community-based health education period were recorded.

Intervention

Participants participate in prevention of high blood pressure actively. In the process of explore and set the problem priority, participants indicate the needs and their health concerns and determine what problems that they want to work through. In planning phase, the participants identify activities that suitable with their community context and strategies which can encouraging people to participate in health education sessions. In implement phase, participants cooperate in organizing the preventive high blood pressure campaign and join in the campaign activities. Finally, evaluation phase,

evaluation of the health campaign project outcomes that impact on their knowledge about the disease, risk factors and the means of high blood pressure prevention.

Data analysis

Frequency and percentage were calculated to describe the general characteristics of the participants. Mean and standard deviations were calculated to determine the knowledge, and hypertension prevention practices of the participants.

Paired t-tests were used to compare statistical differences at $p < 0.05$ of mean score of knowledge about hypertension, causes of hypertension, and hypertension prevention practices before and after participation in the preventive hypertension prevention campaigns.

Content analysis was used to analyse the participants' activities during the session of community-based health education.

Research Findings

The participants in this study consisted of 30 people from one village in the North-eastern part of Thailand. Majority of the participants were female (43%), aged between 45-54 years (46.40%). Most of female participants accounted for over waist circumference larger than 80 centimeters (74.40%). Most of the participants had abnormal body mass index included lower and higher than normal (less than 18.5 = 8.70% and larger than 22.9 = 68.1%). Average systolic blood pressure was 130.81 and average diastolic blood pressure was 80.27

Table1 Compare mean score of hypertension knowledge before and after community-based health education by using the t-test

Aspects of knowledge	Before		After		t
	Mean	SD	Mean	SD	
Hypertension disease	4.88	0.77	5.78	0.44	-8.67*
Factors relate to increase blood pressure	6.11	1.32	8.44	1.21	-10.948*
Hypertension preventive practices	4.05	0.56	4.63	0.51	-6.216*

*Statistically significant difference $p < 0.05$

The t-test showed statistically significant differences ($p < 0.05$) between the average scores of knowledge about hypertension disease, factors relate to increase blood pressure, and hypertension preventive practices from people from high risk groups before and after participating in the community-based health education. The results showed that after participating in the community-based health education, the mean scores of knowledge about hypertension disease, factors relate to increase blood pressure, and hypertension preventive practices were increased from 4.88 to 5.78, 6.11 to 8.44. and 4.05 to 4.63 respectively, as showed in Table 1. Therefore, the scores after participating were higher than before participating due to actively initiate and organized the health education activities based on the needs and expectations of people in the community.

Details of activities in the community during community-based health education

The participants were active participation in the community-based health education to prevent high blood pressure. The participants participate in problem analysis, initiate plan and create the plan for preventing hypertension. The participants actively involved in community-based hypertension prevention include health education sessions, hypertension activities, and hypertension prevention campaigns. The nature of each activity is as following:

1. Health educational sessions include the series knowledge about hypertension, hypertension symptoms, factors relating to high blood pressure, and strategies to prevent high blood pressure. The strategies include dietary, exercise and stress management by using community radio, poster presentations, home-based health education with aim at raising knowledge about high blood pressure and means of hypertension prevention.

2. The participants initiated, organized, and participated in hypertension prevention activities including exercise sessions, sport sessions, and campaign parade for high blood pressure prevention.

3. Hypertension prevention contest was also used to encourage and raise community awareness about hypertension and the disease complications. The strategies included the contest of older adult with wellness, and knowledge competition events. These activities encouraged the participants to share knowledge about disease and life experiences about ways of high blood pressure prevention.

Discussion

The findings about the characteristics of the participants point out that people in this community prone to develop high blood pressure and fatal disease relating to high blood pressure include coronary heart disease and cerebrovascular disease in the long

run. According to the average blood pressure which systolic blood pressure is 130.88 mmHg and diastolic blood pressure is 80.27(Thai Hypertension Society, 2008). According to the guideline for hypertensive prevention, the participants in this study may get hypertension within 10 years and categorized as the pre-hypertension group (Thiptaradol, 2009; The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, 2004). By the study about research on heart and blood vessels among Thai people identify hypertension is a significance cause of coronary artery disease (Supornsilchai, Chenroungroat & Praditvanich, 1992). Consideration body mass index and waist circumference of the participants indicate the participants account for obesity with over normal level of body mass index (normal is 18.5-22.9) and waist circumference (normal, male is less than 90 centimeters and female is less than 80 centrimeters) (Puntuvaet & Apinya, 2011). Based on the participants' indication, the knowledge about hypertension, factors relate high blood pressure, and means to prevent high blood pressure is significance to support the wellness of this community.

Efforts to prevent high blood pressure rely on individual awareness about the disease and the risk factors and knowledge about causes and ways to prevent the disease. The results from this study revealed knowledge of disease, risk factors of hypertension relative to proper preventive self-management (Campbell, Petrella & Naczorowski, 2006; Daneil, et al., 1999). According to Canadian Hypertension Education Program, Canada had the highest reported national rates of awareness about high blood pressure when comparing to developed countries (Campbell, 2011). The impact of community-based health education sessions included characteristics of the disease, causes, and management of risk factors relating to high blood pressure. The participation in this health educational sessions led to an increase in knowledge about hypertension, risk factors, and proper hypertensive management. The increasing in knowledge is a consequence of active cooperates and participates the educational sessions based on the needs and expectations of people in community. Health information is also made available and much easier access in community, for example, using Isan language during the educational sessions. The increasing of learning possibility is one of essential factor of knowledge improvement about health and disease prevention (Anuruang, Sindhu, Wanitkun & Sriyuktasuth, 2009).

The findings from this study indicate that community participation is essential factor of increase possibility of informing people in the community about health and illness. As can be seen from the results the success of raising awareness about high blood pressure was clearly identified the significance of community cooperation in the

health education sessions. Community participation is a critical factor of health improvements (Draper, Hewitt & Rifkin, 2010; Rifkin, 2009) which was identified in Alma-Ata declaration in 1978 (World Health Organization [WHO], 1978). The finding also indicates that it is possible to reduce number of people with hypertension in the community the knowledge is translated to appropriate health behavior of hypertensive prevention.

Recommendations

Nursing practice

1. Community-based health education impacts positively on hypertension knowledge and high blood pressure prevention practice. Therefore, providing health education should encourage cooperate and participate of people in community to ensure the most effectiveness of educate about diseases and disease prevention.
2. Ensuring mutual participation should be a focus of providing health information aim at raising community awareness and perception of illness prevention.

References

- Supornsilchai, C., Chenroungroa K., Praditvanich P. (1992). Appendix 8: Summary of Cardiovascular research. In K Tuntisirin, Y Porapukkham, & L Wongsanuphun (Eds.), Research report in project research on master plan and plan for development of wellbeing of Thai people (pp. 157-182).
- Puntuvaet, N., & Apinya, P. (2011). Trend in world hypertension campaign. Development of media for risk communication, Non-communicable disease division, Disease control department. Retrieved September 7, 2011 from Thaincd.com/document/file/news.
- Thiptaradol, P. (2009). Guideline for health professional to screen and support health communities. (2nd ed.). Bangkok: Veteran Welfare Organization.
- Anuruang, S., Sindhu, S., Wanitkun, N., Sriyuktasuth, A. (2009). Effects of empowering care program on health status and health service satisfaction among women with hypertension. Thai Journal of Nursing Council, 24 (1), 11-23.
- Thai Hypertension Society. (2008). Treatment Guideline for general practitioners of hypertension disease, 2008. Retrieved September 7, 2011 from www.Thaihypertension.org/2008quideline.pdf.
- Campbell, N.R., Petrella, R., & Kaczorowski, J. (2006). Public education on hypertension: A new initiative to improve the prevention, treatment and

- control of hypertension in Canada. *Canadian Journal of Cardiology*, 22 (7), 599-603.
- Campbell, N.R., BPharm, L.p., Tremblay, G., Lindsay, P., Reid, D., & Tobe, S.W. (2011). Canadian Hypertension Education Program: The science supporting new 2011 CHEP recommendations with an emphasis on health advocacy and knowledge translation. *Canadian Journal of Cardiology*, 27, 407-414.
- Chockalingam, A. (2008). World Hypertension Day and global awareness. *Canadian Journal of Cardiology*, 24 (6), 441-444.
- Chockalingam, A., Campbell, N.R., Fodor, J.G. (2006). Worldwide epidemic of hypertension, 22 (7), 553-555.
- Draper, A.K., Hewitt, G., & Rifkin, S. (2010). Chasing the dragon: Developing indicators for the assessment of community participation in health programmes. *Social Science & Medicine*, 71, 1102-1109.
- Joffres, M.R., Ghadirian, P., Fodor, J.G., Petrasovits, A., Chockalingam, A. Hamet, P. (1997). Awareness, treatment, and control of hypertension in Canada. *American Journal of Hypertension*, 10, 1097-1102.
- Joffers, M.R., Hamet, P., Rabkin, S.W., Gelskey, D. Hogan, K., Fodor, G. (1992). Prevalence, control and awareness of high blood pressure among Canadian adults. *Canadian Heart Health Surveys Research Group. CMAJ*, 146, 1997-2005.
- Kamadjeu, R.M., Edwards, R., Atanga, J.S., Unwin, N., Kiawi, E.C., Mbanya, J.C. (2006). Prevalence, awareness and management of hypertension in Cameroon: Finding of the 2003 Cameroon Burden of Diabetes Baseline Survey. *Journal of Human Hypertension*, 20, 91-92.
- Kearney, P.M., Whelton, M., Reynolds, K., Whelton, P.K., & He, J. (2005). Global burden of hypertension: Analysis of worldwide data. *Lancet*, 365, 217-223.
- Khan, N.A., McAlister, F.A., Lewanczuk, R.Z. et al. (2005). Canadian Hypertension Education Program. The 2005 Canadian Hypertension Education Program recommendations for the management of hypertension: Part II-therapy. *Canadian Journal of Cardiology*, 21, 657-672.
- Lewington, S., Clarke, R., Qizilbash, N. et al. (2002). Age-specific relevance of usual blood pressure to vascular mortality: A meta-analysis of individual data for one million adults in 61 prospective studies. *Lancet*, 360, 1903-1913.
- Ministry of Public Health. (2008). Public health statistic A.D. 2008.
- Rifkin, S.B. (2009). Lessons from community participation in health programmes: A review of the post Alma-Ata experience. *International Health*, 1, 31-36.
- Sharma, S. (2008). Hypertension and cardiovascular disease in South Asia: No end in sight. *Journal of the American Society of Hypertension*, 2 (3), 125-130.

- The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, (2004). US: NIH.
- Touyz, R.M., Campbell, N., Logan, A., Gledhill, N., Petrella, R., Padwal R. (2004). Canadian Hypertension Education Program. The 2004 Canadian recommendations for the management of hypertension: Part III- Lifestyle modifications to prevent and control hypertension. *Canadian Journal of Cardiology*, 20, 55-59.
- Victoria Declaration on Heart Health. (1992). International Advisory Board. Victoria: Canada.
- Whelton, P. K. 1994). Epidemiology of hypertension. *Lancet*, 344, 101-106.
- Williams, B. (2006). The year in hypertension. *Journal of the American College of Cardiology*, 48 (8), 1698-1711.
- World Health Organization. (1978). Declaration of Alma-Ata. Geneva: World Health Organization. Retrieved September 3, 2011 from http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf.
- World Health Report 2002. (2002). Reducing risks, promoting healthy life. World Health Organization, Geneva.

ICSSAM-870

The research of Racial Issue and Human Nature in Othello

Yun Chen

English department, National Kaohsiung Normal University, Taiwan

Email: chenyun311148@hotmail.com

No.209, Qionglin 1st St., Nanzi Dist, Kaohsiung, Taiwan

Abstract

In this modern society, *Othello*, *Macbeth*, *King Lear*, and *Hamlet* are the four great tragedies of Shakespeare. *Othello* has been much studied in the light of cultural consciousness and social, especially on the topics of class and race. This paper aims to analyze Shakespeare's consciousness of human nature in connection with the issues of class and race, in *Othello*. Shakespeare sets it along side an analysis of jealousy in two distinctive but connected ways; through the discussion of the human nature I focus on the metaphors of self and other. I explore the relationships among class and race based on textual analysis.

Keyword: *Othello*, Racial issue, Human nature, Barbarism

1. Introduction

Some critics believe that *Othello* is a play about race and they have evidences to prove their theories are correct. But if we examine more deeply, we will find that these theories still miss a key point of the play: why did Othello fall from his heroic position, and fall so easily? This is the dramatic centre of the play.

Before I focus on this point, however, I should still offer a few points about the approach I have mentioned. In William Shakespeare's period, Moor referred to a darker skinned people, but not to the black races of Africa. The commercial trade that brought England such close contact with these peoples had not yet developed. As historical dictionaries such as the *OED*¹ show, the racially based hostilities that co-evolved with the concept of Race, leading finally to the word Racism, were a developments of the 19th century.

It is a historical to view Shakespeare himself attitudes as equivalent to 21st century racism and we can strongly say that *Othello* is not a play about race in the modern sense. When *Othello* treats as a racial issue, I suggest we instead again use the idea of

¹ Oxford English Dictionary.

human nature. The reason is race as a dividing element in society has its roots in human nature. Thus for Iago, race is a weapon to make Othello isolated from Venetian's society or we can say white people's community. In this play, we know Iago makes Othello believe that Desdemona betray him because she falls in love with white Cassio. Shakespeare knew the power of love and human nature. Insofar as Iago makes Othello experience his own blackness as a contamination that destroys Desdemona, Othello, rather than Iago, becomes the bearer of the fantasy of inner filth. When Othello faces this kind of situation, according to Bradley: —Such jealousy as Othello's converts human nature into chaos, and liberates the beast in man; and also the most ideal of human feeling (96).

And we know when one man against the whole world. He will fail like a normal man even Othello himself is a great commander at once. Therefore, racism is merely one ingredient in the tragedy, an ingredient that we can use the frame of human nature to effectively analyze. Thus in this paper I attempt to use human nature to reframe the racial motif of *Othello*.

2. Racial Issue in *Othello*

2.1 Race and Human Nature

We can say the race issue in *Othello* is overshadowed by jealousy. Othello is not an ordinary person in this drama, and his social status is very high. How does Othello's fall occur, and why? Honigmann once said, as a tragedy, —*Othello* is Shakespeare's supreme masterpiece, and also reasons on the other side (1). Othello is a great commander who knows much about war as attested to by his stories and his rise to the rank of a general, but he knows little else. Othello's military skills are socially acknowledged for he is put in charge of the defence of Venice. In war, the enemy is clearly identifiable. Othello's self-respect is very certain, but he hardly confronts the void at his centre. And there is no one in this play with wit enough to successfully contend with Iago as a counterforce. Here is Bloom's speech:

Iago's terrible greatness is also Shakespeare's triumph over Christopher Marlowe, whose Barabas, in the *Jew of Malta*, had influenced the young Shakespeare so fiercely. We can observe that Iago transcends Barabas.... One trace of Barabas abides in Iago, though transmogrified by Shakespeare's more glorious villain. (461)

One difference is Iago's sense of humour, a successful achievement in this drama. Honigmann states, —Most of Shakespeare's major characters are endowed with their own brand of humour; Iago's, though related to the humour of Aaron and Richard 3, is also quite distinctive (39).

Moreover, wrote A. C. Bradley a hundred years ago, —I will not say, that Shakespeare set Othello as a Negro and not as a Moor, for that might imply that he distinguished Negroes and Moors precisely as we do (162). Thus in speaking to Othello, Iago does not emphasize race as much as he emphasizes the theme that women are dishonest and unchaste. While Iago does identify the lack of chastity with Venetian women, he also places himself among Venetian cuckolds. Desdemona must die —else she'll betray more men – —not ... more Moors (5. 2. 6). William Shakespeare is quite as a good philosopher; who knew the power of love and human nature. Insofar as Iago makes Othello experience his own blackness as a contamination that destroys Desdemona, Othello, rather than Iago, becomes the bearer of the fantasy of inner filth. Othello believes that Desdemona betrayed him because he is black:

To pray at fortune. Haply, for I am black
And have not those soft parts of conversation
That chamberers have, or for I am declined
Into the vale of years,—yet that's not much—
She's gone. I am abused; and my relief

...

When we do quicken. Desdemona comes:
If she be false, O, then heaven mocks itself!
I'll not believe't. (3. 3. 263–79)

When Othello says —To pray at fortune. Haply, for I am black, (3. 3. 263) this is the first time Othello believes his skin colour make Desdemona betray him. The word —appetites suggests that he too believes that perhaps Desdemona was attracted to him out of lust. Iago says to Othello that he heard the Cassio says:

Sweet Desdemona,
Let us be wary, let us hide our loves;'
And then, sir, would he gripe and wring my hand,
Cry 'O sweet creature!' and then kiss me hard,
As if he pluck'd up kisses by the roots
That grew upon my lips: then laid his leg
Over my thigh, and sigh'd, and kiss'd; and then
Cried 'Cursed fate that gave thee to the Moor!' (3. 3. 408–15)

Iago uses — “Moor” to highlight that Othello is different from Cassio and Desdemona. From now on, Othello's mind has already been poisoned by Iago and he is heading to the tragic fall.

The most fascinating part is the sexual jealousy rising in many people. It is the most painful suffering as it signifies betrayal on the part of one we loved. According to Bradley, —Such jealousy as Othello’s converts human nature into chaos, and liberates the beast in man; and also the most ideal of human feeling (178). Does Othello really love Desdemona’s soul, or only loves her because of her beauty and as forbidden fruit? The classical fear and terror are bound to the notions that we can be betrayed and mistaken, even can destroy that which we love.

Desdemona is deemed to be suspected by Brabantio and Othello because she resisted her father’s authority and chose Othello for her husband. In Venice, daughters were expected to be obedient to their father’s wishes regarding marriage. The breaking of social morals helps the audience to accept the inevitable failure as a consequence. She defends her decision by quoting the Bible and the fact that her mother had also done likewise.

My noble father

I do perceive here a divided duty. To you I am bound for life, and education:

How to respect you. You are the Lord of duty;

I am hitherto your daughter. But here’s my husband;

And so much duty, as my mother show’d

To you, preferring you before her father:

So much I challenge, that I may profess

Due to the Moor my Lord. (1. 3. 180–88)

On the other hand, Emilia, like Desdemona, is obliged to obey her husband Iago, and she does so until Desdemona is killed by Othello in the end. Why does Othello so believe in Iago’s words? In fact, it is not so easily done. One reason is that Othello was newly married and did not know much of Desdemona before his marriage; furthermore, Iago’s insinuations has awakened Othello’s jealousy and inflamed his emotions, undermining his sense of judgement. Othello gave Desdemona a handkerchief, which Desdemona no longer has; Iago had gotten Emilia, his wife, to pilfer it and then he used it as a —proof that Desdemona had given it to Cassio. Desdemona, fearful of her husband’s violent emotional reaction, makes the error of lying that it was not missing. Therefore, Bradley gives us a comment:

In Desdemona’s place, Cordelia, however frightened at Othello’s anger about the lost handkerchief, would not have denied its loss. Painful experience had produced in her a conscious principle of rectitude and a proud hatred of falseness, which would have made a lie, even one wholly innocent in spirit, impossible to her; and the clear sense of justice and right would have led her, instead, to require an explanation of Othello’s agitation which would have broken Iago’s plot to pieces. (205–06)

We see how Shakespeare sets Desdemona's character, because she does not want Othello think she loses the handkerchief because she does not love Othello anymore, so she make a decision to lie to him and this is why Iago can destroy Desdemona so easily.

Iago is the sole cause of Desdemona's death because Othello's actions can never be fully placed on Iago; it was still Othello who decides to kill her, it is his hand that carries out the act, and on such loose grounds of circumstantial evidence. The essential difference between Othello and Iago is their perceptions of themselves. Iago is relentlessly self-aware, continually verifying Emilia's assessment of the nature of jealousy. —They are not ever jealous for the cause, but they're jealous for they're jealous. It is a monster begot upon itself, born on itself (3. 4. 160–63). He accepts that jealousy can become the both cause and the motive, and says only of his actions that —Heaven is judge, never claiming righteousness. Imagery of damnation and hell also occur throughout Othello, especially toward the end of the play, when Othello becomes preoccupied with the moral judgment and religious beliefs of Desdemona and himself. After Othello learns the truth about Iago, he calls Iago a devil and a demon several times in Act V, scene 2. Othello's earlier allusion to —some monster in [his] thought ironically not only refers to the vision of an unfaithful Desdemona —monstrous, monstrous! (3. 3. 416) but also to Iago. Shortly before he kills himself, Othello wishes for physical torture and eternal spiritual torment in hell, crying out, —Whip me, ye devils, / ... / roast me in sulphur, / Wash me in steep-down gulfs of liquid fire! (V.2. 320–23). The sinister and heinous imagery takes over where the imagery of animals can go no further, presenting the jealousy-crazed characters not simply as brutish, but also as deformed, demonic and grotesque. Iago tries to justify his motivation:

I hate the Moor;
And it is thought abroad that 'twixt my sheets
'Has done my office. I know not if't be true;
Yet I, for mere suspicion in that kind,
Will do as if for surety. (1. 3. 378–82)

Iago's wife Emilia enjoys a heroic victory over Iago, in one of William Shakespeare's magnificent ironies. Emilia disobeys her husband and betrays him, albeit not sexually as he had feared. However, it is too late to save Desdemona. Bradley says, "We are never wholly uninfluenced by the feeling that Othello is a man contending with another man; but Desdemona's suffering is like that of the most loving of dumb creatures tortured without cause by the being he adores." (179) Therefore, we know

the Desdemona's love is about stupid and sacrifice herself, all we can say is her love is until the end of her final time.

2.2 Man's Fall

Interestingly, a number of critics have tried to separate Othello from the racial theme of being black. According to Michael Neill, —Othello is a work that trades in ethnic constructions that are at once misleadingly like and confusingly unlike the twentieth-century ideas of 'race' to which they are, nevertheless, recognizably ancestral (125). —Moor itself is very flexible: taken from the Greek mauros it means dark, obscure and gloomy. It could serve as a —racial category. According to Neill:

black Othello had resulted from the —common error of —mistaking the epithets applied by the dramatis personae to each other, as truly descriptive of what the audience ought to see or know: the mere fact Othello is called —black – or even that Roderigo dubs him —thick-lips(1. 1. 66), and Iago —old black ram, while Brabantio sneers at his —sooty bosom(I. 2. 70), does not mean that he was ever intended to be a veritable negro. (113)

This argument is dubious, given the epithets and racial enmity on the part of Brabantio and Iago. In the play, blackness is the visible sign of sin and not solely a racial reference. Honigmann also claims: —... 'black' was often applied loosely, to non-European races, little darker than many Europeans' (OED black, 1c), as when Cleopatra speaks of being 'with Phoebus' amorous pinches black (I, B, 28). The degree of Othello's blackness is not really germane; he is perceived as black, as —“other.”

According to Arthur Kirsch, —Othello's tragedy is that he fails to love his own body, to love himself, and it is this despairing self-hatred that spawns the enormous savagery, degradation, and destructiveness of his jealousy (32–33). Moreover, in Act 3, scene 3, Iago manages to arouse Othello with jealousy for the first time, indicating that it is actually the other way around; jealousy leads to insecurity. It is only when Othello has already become jealous that he looks for personal faults that might explain his wife's supposed adultery:

Haply for I am black,

And have not those soft parts of conversation

That chamberers have, or for I am declined

Into the vale of years – yet that's not much ... (3. 3. 267–70)

Since we know how they act upon their jealousy, it is another major factor in comparing the characters. While Othello, in his belief of betrayal, focuses his revenge on Desdemona, Iago looks not to Emilia but to the man he believed the betrayal

occurred with. Both courses of action lead to unlawful destruction. The result is still the same, murder. Othello's actions can never be fully placed on Iago – it is still Othello who decides to kill her out of outrage at a perceived sense of betrayal; Othello declares to Iago that his jealous anger is at full tide, and will never end,

Never, Iago: Like to the Pontic sea,
Whose icy current and compulsive course
Ne'er feels retiring ebb, but keeps due on
To the Propontic and the Hellespont,
Even so my bloody thoughts, with violent pace,
Shall ne'er look back, ne'er ebb to humble love,
Till that a capable and wide revenge
Swallow them up. Now, by yond marble heaven,
Kneels

In the due reverence of a sacred vow
I here engage my words. (3. 3. 453-62)

A prayer related to murder shows that Othello has become satanic, like Iago. The similarity between the two men who seems so diametrically opposed makes for the magnificent dramatic irony.

As both the judge and the executioner, Othello tells Iago to get him some poison, that he may kill Desdemona that night. The irony here is that it is Othello himself who has been poisoned by jealousy. Iago objects, —Do it not with poison: strangle her in her bed, even the bed she hath contaminated? (4. 1. 221–22). If Iago gives poison to Othello, it might be the evidence to prove that Iago is complicit and therefore guilty too. According to Evans, — Once Othello's mind is turned in this direction, Iago can consolidate his position by infecting Othello with his own gross visualizing lust; he can do so in part by insisting on what Othello will not be able to see. (1249)

William Shakespeare has Roderigo obey Iago. He believes that Iago will help him to satisfy his lust for Desdemona, and hates Othello for —stealing her from him. Iago uses this knowledge to manipulate Roderigo and to steal Desdemona from Othello. He convinces Roderigo that Desdemona's choice is based on lust and she will soon be tired of the Moor. After all, based on lust, her choice was based on —a violent commencement. Iago's view of the lascivious nature of women encourages Roderigo's hopes. Iago states: —Her eye must be fed. And what delight shall she have to look on the devil? When the blood is made dull with the act of sport, there should be a game to inflame it, and to give satiety a fresh appetite (2. 1. 228–32). He refers to —Lechery...the history of lust and foul thoughts. (2. 1. 262–63)

Unlike Othello, Roderigo does not really care that Desdemona sleeps with his rival, as long as he will wind up with her. Shakespeare clearly delineates the line between love and lust. Later, Iago tells him that Desdemona loves not only Othello but also Cassio, and that even if she leaves Othello, Cassio will be a more difficult competitor. Iago instructs Roderigo to make Cassio start a fight and lose his army position. Later, Iago and Roderigo plot to kill Cassio. While Roderigo believes that Iago is working to help him, Iago uses Roderigo's money and willingness to serve his own ends. Here is how Iago tells Roderigo that Desdemona might change her mind, —It is merely a lust of the blood ... She must change for youth: when she is sated with his body she will find the errors of her choice (I. 2). Iago promises Roderigo that he can have Desdemona, even though she is married to Othello and accompanying him to Cyprus. Moreover, having persuaded Roderigo to kill Cassio, Iago tells Roderigo that this action is crucial to everything. It will in fact get rid of a rival and Roderigo, the victim of his theft. Iago gloats:

I have rubb'd this young quat almost to the sense, And he grows angry. Now, whether he kill Cassio, Or Cassio him, or each do kill the other, Every way makes my gain: live Roderigo, ... No, he must die. (5. 1. 12–23)

Thus, we find that Iago has already set Roderigo into death because he is useless. And the best way to solve Iago's problem is Cassio and Roderigo kill each other, and make sure there will be no one to see Iago as a suspect.

In a Christian society threatened by Muslims, racism is definitely a factor in the tragedy, albeit not the key element. Due to racism, the Moor is subject to stereotyping. However, in this play, the Venetians need Othello the Moor, to lead them to defeat the enemy. As a soldier and convert, Othello is tolerated and even elevated in Venetian society, but the underlying racism of characters like Iago, Roderigo and Brabantio show that even a civilized Christian society is susceptible to satanic forces of hatred; the barbaric remains conspicuously under the thin veneer of Christian culture. The macrocosm helps to destroy the microcosm, much like the dramatic situation in *Romeo and Juliet*. Shakespeare never resorts to the obvious and the simplistic. Racism is merely one ingredient in the tragedy.

References

- Adelman, Janet. "Iago's Alter Ego: Race as Projection in Othello." *Shakespeare Quarterly* 48.2 (1997): 125-44.
- Bell, Millicent. "Shakespeare's Moor." *Raritan* 21.4 (2002): 1.
- Harold Bloom. *Shakespeare: The Invention of the Human*. Riverhead Trade. 1999.

- Boyles, David. "Othello, Race, and Cultural Memory on Cheers." *Popular Culture Review* 21.1 (2010): 11-20.
- Bradley, A. C., and John Bayley. *Shakespearean Tragedy: Lectures on Hamlet, Othello, King Lear, Macbeth*. New York: Penguin, 1991.
- Cowhig, Ruth. "The Importance of Othello's Race." *Journal of Commonwealth Literature* 12.2 (1977): 153-61.
- E. A. J. Honigmann. *The Arden Shakespeare Othello*. London: Thomas Nelson, 1997.
- Evans, K. W. "The Racial Factor in Othello." *Shakespeare Studies* V (1969): 124-40.
- Grant, Patrick. "Victims and Victimizers in Othello." *Shakespeare Quarterly* 34.3 (1983): 362-64.
- Habib, Imtiaz. "Racial Impersonation on the Elizabethan Stage: The Case of Shakespeare Playing Aaron." *Medieval & Renaissance Drama in England* 20 (2007): 17-45.
- Hadfield, Andrew. "Race in Othello: The History and Description of Africa and the Black Legend." *Notes and Queries* 45.3 (1998): 336-38.
- Howells, Elizabeth. "Shakespeare and the Politics of Culture in Late Victorian England." *ELT, 1880–1920* 43.2 (2000): 252–53.
- Hunter, G. K. "Elizabethans and Foreigners." *Shakespeare and Race*. Ed. Catherine M. S. Alexander and Stanley Wells. Cambridge: Cambridge UP, 2000. 37–63.
- Kirsch, Arthur. *Shakespeare and the Experience of Love*. Cambridge: Cambridge UP, 1981.
- Neill, Michael. "Othello and Race." *Approaches to Teaching Shakespeare's Othello*. Ed. Peter Erickson and Maurice Hunt. New York: MLA, 2005. 37-52.
- Novy, Marianne. "Speaking of the Moor: From Alcazar to Othello by Emily C. Bartels." *Critical Quarterly* 51.4 (2009): 78-85.
- Shakespeare, William. *Othello the Moor of Venice*. London: Nicholas Okes. 1623.
- Thompson, Ayanna. "Shakespeare, Race, and Performance." *Shakespeare Bulletin* 27.3 (2009): 359-61.

ICSSAM-722

A New Form of Administrative Discretion in Japan and its Regulation -Targeting Permanently Closed Public School Facilities-

Einoshin Suzuki

5322 Endo, Fujisawa-shi, Kanagawa, 252-0882, Japan

fan1016@sfc.keio.ac.jp

Abstract

The purpose of this study is to demonstrate the necessity to regulate administrative discretion observed in situations where municipalities make decisions on models for the management and operation of permanently closed public school facilities. Theories of administrative discretion in the study of Japanese public administration and administrative law have heretofore excluded discretion regarding pure policy decisions made when local governments take extra-legal action. On the other hand, in determining models for the management and operation of permanently closed school facilities, policy decisions are rendered freely by individual local governments without being subjected to legal constraints and the situation has deteriorated to the point where regulation is impossible to achieve. This study therefore seeks to identify aspects of permanently closed school facilities managed and operated by community organizations that are consistent with the above-described purpose and problematic so as to analyze the factors by which models for the management and operation of permanently closed school facilities are defined. In terms of method, quantitative analysis was carried out on the basis of a comprehensive questionnaire survey that enumerated 224 community organizations and 166 municipalities. The results of analysis revealed a high probability that models for the management and operation of permanently closed school facilities utilized by community organizations were determined arbitrarily by local governments, irrespective of the track record of community organizations prior to beginning to undertake management and operation activities, and that significant differences could be observed in the amount of government support depending on the model of management and operation.

Key Words: administrative discretion, permanently closed public school facilities, models for the management and operation, municipalities, community organizations

1. Introduction

The areas of concern in theories of administrative discretion in the study of Japanese public administration and administrative law have left room for judgments that are observed in cases where laws are applied by local governments (e.g., as discussed by Tamura [1]; Miyata [2]),

and the difficulties of observing discretion as a phenomenon relating to pure policy decisions made on occasions when local governments take extra-legal action have resulted in a relative scarcity of academic research in this area.

However, in determining models for the management and operation of the permanently closed school facilities that have been rapidly increasing as a result of recent societal transformations such as municipal mergers and demographic aging, policy decisions are rendered freely by individual local governments without being subjected to legal constraints, and the situation has deteriorated to the point where regulation is impossible to achieve. Consequently, as a result of decisions as to models for the management and operation of permanently closed school facilities being made arbitrarily by local governments, and framed in an operational format, situations may arise in which the success or failure of project operations may be determined without regard to the usage intended by the project organizations involved.

Therefore in addition to analyzing the factors by which models for the management and operation of permanently closed school facilities are defined, this study seeks to demonstrate the necessity to regulate administrative discretion in relation to these facilities.

2. Research Framework

2.1. Object of Study

For the reasons outlined below, this study will focus on community organizations that are composed exclusively of residents living in the vicinity of, and actually engaged in the management and operation of permanently closed school facilities, and the municipalities that own said facilities.

In cases where the management and operation of permanently closed school facilities is left to the private sector, local municipalities are considered to select bodies to oversee such management and operations that have appropriate track records of past activities, in order to avoid incidents such as those that might arise from gross negligence on the part of the bodies in question or project operations that contravene public order or morality. Accordingly, by focusing specifically on community organizations that are typically lacking in experience, or have uneven experience as organizations, it will be possible to consider factors other than simple arbitrariness in the determination by municipalities of models for the management and operation of permanently closed school facilities, specifically the possibility of the influence of a track record of activities prior to beginning to undertake management and operation activities.

2.2. Hypotheses

On the basis of the foregoing, this study posits four hypotheses arising from three categories.

(1) A hypothesis concerning the determination by municipalities of models for the management and operation of permanently closed school facilities

Determination of models for the management and operation of permanently closed school facilities will be government-led, regardless of the presence or absence of demand by community organizations.

(2) A hypothesis concerning the track record of the organization responsible for management and organization

Depending on the model of management and operation of permanently closed school facilities, there will be significant differences in the amount of activities carried out as a community organization prior to beginning to undertake management and operation activities.

(3) Hypotheses concerning the amount of government support received by community organizations

(3-1) There will be significant differences in the amount of government support received by community organizations prior to undertaking the management and operation of permanently closed school facilities depending on the model of management and operation.

(3-2) There will be significant differences in the amount of government support received by community organizations after undertaking the management and operation of permanently closed school facilities depending on the model of management and operation.

3. Research Methodology

This study analyzed responses to a comprehensive questionnaire-based survey of all community organizations that manage and operate permanently closed school facilities and all municipalities that own such facilities.

Postal-response questionnaires were distributed to a total of 224 community organizations and 166 municipalities that were taken as the survey population. The rates of return were 61.6% among community organizations and 68.7% among municipalities. The survey was conducted in May of 2013.

4. Hypothesis Testing

4.1. Simple Aggregate Results and Discussion Thereof

Table 1 shows the aggregate results of the various models for the management and operation of permanently closed school facilities utilized by community organizations. From these results, irrespective of our comprehensive questionnaire-based survey, it can be seen in table 1 that these models are broadly divided between Designated Management (Administrative properties) and Gratuitous or Non-gratuitous Loans (Non-administrative properties).

Table 1. Models for the Management and Operation of Permanently Closed School Facilities Utilized by Community Organizations.

Models for the Management and Operation	n	%
Designated Management	45	42.1
Gratuitous or Non-gratuitous Loans (Non-administrative properties)	39	36.4
Gratuitous or Non-gratuitous Loans (Administrative properties)	10	9.3
Subcontracting	8	7.5
Concession	4	3.7
Other	1	0.9
Total	107	100.0

From the fact that these results are of positive significance as categories for testing the arbitrary determination by municipalities of models for the management and operation, which is a specific focus of this study, we will proceed with our analysis while comparing these two models (i.e., divisions of assets) of management and operation.

4.2. Testing and Discussion of Hypothesis (1)

Significant results were apparent after conducting a chi-squared test to determine the existence of possible correlations in decision-making processes regarding the model of management and operation by Designated Management and by Gratuitous or Non-gratuitous Loans, respectively (see Table 2).

Table 2. Decision Processes in the Model of Management and Operation of Permanently Closed School Facilities.

		Government-led (with no prior demand from community organizations)	Government-led (with demand from community organizations)	Government- approved (with demand from community organizations)	Dialogue (between government and community organizations)
Designated	n	11	9	16	5
Management	%	26.8	22.0	39.0	12.2
Gratuitous or	n	3	1	30	5
Non-gratuitou s Loans	%	7.7	2.6	76.9	12.8

χ^2 (df=3, n=80)=15.192 $p<.01$

From these results, a close relationship could be seen to exist between municipal policies and actual models of management and operation, with relatively few cases in which municipalities implemented Designated Management in answer to demand by community organizations or in which municipalities took the lead in implementing either Gratuitous or Non-gratuitous Loans irrespective of demands by community organizations.

4.3. Testing and Discussion of Hypothesis (2)

Independent t-tests to determine whether or not significant differences could be seen in the amount of activities carried out by community organizations prior to undertaking the management and operation of permanently closed school facilities by Designated Management and by Gratuitous or Non-gratuitous Loans, respectively, failed to demonstrate any significant difference with regard to all activities (see Table 3).

Table 3. Track Record of Community Organizations Prior To Undertaking the Management and Operation of Permanently Closed School Facilities.

		n	mean	significance probability (two-sided)
Consultation with and petitioning towards municipal and prefectural	Designated Management	34	5.56	.401

offices (No. of times)	Gratuitous or Non-gratuitous Loans	29	6.90	
Community organization-based study groups concerning the utilization of permanently closed school facilities (No. of times)	Designated Management	34	11.3 8	.271
	Gratuitous or Non-gratuitous Loans	32	8.28	
Fact-finding visits to other permanently closed school facilities (Schools)	Designated Management	27	2.41	.549
	Gratuitous or Non-gratuitous Loans	27	2.07	
Activities held in permanently closed school facilities (No. of times)	Designated Management	30	4.97	.486
	Gratuitous or Non-gratuitous Loans	27	7.70	

From these results, it may be understood that the track record of community organizations prior to undertaking the management and operation of permanently closed school facilities does not appear to function as a factor in the determination by municipalities of the model of management and operation of permanently closed school facilities.

4.4. Testing and Discussion of Hypothesis (3)

First of all, the results of independent t-tests regarding the amount of government support received by community organizations prior to undertaking the management and operation of permanently closed school facilities reveal significant differences in the following four types of government support: “Creating rules for the use of permanently closed school facilities”, “Clerical methods”, “Methods for the maintenance and management of permanently closed school facilities”, and “Explanations of what can and cannot be done when utilizing permanently closed school facilities.” From these results, a correlation can be understood to exist between actual models of management and operation and the amount of government support prior to undertaking operations in permanently closed school facilities (see Table 4).

Table 4. Amount of Government Support Received by Community Organizations Prior To Undertaking the Management and Operation of Permanently Closed School Facilities.

		n	mean	significance probability (two-sided)
Planning of events to be held in permanently closed school facilities (No. of times)	Designated Management	27	5.78	.056
	Gratuitous or Non-gratuitous Loans	23	1.78	
Pricing of events to be held in permanently closed school facilities (No. of times)	Designated Management	25	1.28	.136
	Gratuitous or Non-gratuitous Loans	22	.59	
Creating rules for the use of permanently closed school facilities (No. of times)	Designated Management	28	2.39	.019*
	Gratuitous or Non-gratuitous Loans	21	.81	
Drawing up a prospective budget of income and expenditures (No. of times)	Designated Management	25	.60	.942
	Gratuitous or Non-gratuitous Loans	21	.57	
Clerical methods (No. of times)	Designated Management	28	1.57	.017*
	Gratuitous or Non-gratuitous Loans	20	.40	
Methods for the maintenance and management of permanently closed	Designated Management	28	2.75	.001**
	Gratuitous or Non-gratuitous Loans			

school facilities (No. of times)	Gratuitous or Non-gratuitous Loans	23	.70	
Explanations of what can and cannot be done when utilizing permanently closed school facilities (No. of times)	Designated Management	25	2.88	.011*
	Gratuitous or Non-gratuitous Loans	24	1.13	
** $p < .01$ * $p < .05$				

Out of these four types of government support, the fact that the first three (“Creating rules for the use of permanently closed school facilities”, “Clerical methods”, and “Methods for the maintenance and management of permanently closed school facilities”) are all important for community organizations performing actual management and operations as Designated Managers despite lacking the relevant expertise suggests that these are particularly necessary in comparison to other forms of government support. Additionally, it appears that the fourth type (“Explanations of what can and cannot be done when utilizing permanently closed school facilities”) is a result of the repeated explanations provided to community organizations of options available to them under the Designated Management System, which is determined arbitrarily at the municipal level.

Next, the results of independent t-tests regarding the amount of government support received by community organizations after undertaking the management and operation of permanently closed school facilities demonstrated a significant difference in six types of government support, including those in which significant differences were seen prior to the start of operations. From these results, a correlation can be understood to exist between actual models of management and operation and the amount of government support after undertaking operations in permanently closed school facilities (see Table 5).

Table 5. Amount of Government Support Received by Community Organizations after Undertaking the Management and Operation of Permanently Closed School Facilities.

		n	mean	significance probability (two-sided)
Planning of events to be	Designated	26	2.08	.029*

held in permanently closed school facilities (No. of times)	Management			
	Gratuitous or Non-gratuitous Loans	23	.65	
Pricing of events to be held in permanently closed school facilities (No. of times)	Designated Management	23	1.22	
	Gratuitous or Non-gratuitous Loans	21	.00	.000**
Creating rules for the use of permanently closed school facilities (No. of times)	Designated Management	22	1.95	
	Gratuitous or Non-gratuitous Loans	20	.10	.002**
Drawing up a prospective budget of income and expenditures (No. of times)	Designated Management	24	1.42	
	Gratuitous or Non-gratuitous Loans	21	.24	.022*
Clerical methods (No. of times)	Designated Management	25	1.84	
	Gratuitous or Non-gratuitous Loans	20	.05	.007**
Methods for the maintenance and management of permanently closed school facilities (No. of times)	Designated Management	28	2.21	
	Gratuitous or Non-gratuitous Loans	21	.86	.046*

of times)	Loans
	** $p < .01$ * $p < .05$

Out of these six types of government support, the additional categories in which significant differences were found consisted of “Planning of events to be held in permanently closed school facilities”, “Pricing of events to be held in permanently closed school facilities”, and “Drawing up a prospective budget of expenditures and income.” Conceivably, this was because municipalities provided the advice and instruction that would be necessary for community organizations when actually carrying out management and operations as Designated Managers concurrently with said management and operations. In addition, with regard to the three remaining forms of government support, a reason for the continued visibility of significant differences from before the beginning of operations appears to be due the continued provision of government support by municipalities to community organizations that lack expertise in management and operations.

5. Conclusion

This study has analyzed the factors by which models for the management and operation of permanently closed school facilities are defined on the basis of a comprehensive questionnaire survey that enumerated 224 community organizations and 166 municipalities across Japan that are in possession of the facilities in question.

As a result, irrespective of our comprehensive questionnaire-based survey, it can be seen that models for the management and operation of permanently closed school facilities utilized by community organizations are broadly divided between Designated Management (Administrative properties) and Gratuitous or Non-gratuitous Loans (Non-administrative properties). Whereas cases of Designated Management are driven by the municipality, regardless of the presence or absence of demand by community organizations, cases of Gratuitous or Non-gratuitous Loans are characterized by municipal acceptance of demands by community organizations. In addition, the track record of community organizations does not appear to function as a factor in the determination by municipalities of models for the management and operation of permanently closed school facilities.

The foregoing suggests a high probability that models for the management and operation of permanently closed school facilities are determined arbitrarily by municipalities. A consequence of this, along with the fact that these are framed in an operational format, is the success or failure of project operations may be determined without regard to the usage intended by the project organizations involved.

Indeed, from the fact that significant differences are apparent in the amount of government support provided prior to and following the beginning of operations that utilize permanently closed school facilities depending on the model of management and operation, it would appear that achieving effective utilization of permanently closed school facilities in future, it will be necessary to regulate administrative discretion on the part of municipalities that is otherwise permitted under current conditions.

6. References

- [1] Tamura, Y. 1975. The protection of the rights of citizens in administrative litigation (in Japanese) . Tokyo: Yūhikaku. pp. 89-109.
- [2] Miyata, S. 2012. Administrative discretion and its regulation density (Expanded edition) (in Japanese) . Tokyo: Shinzansha. pp. 4-5.

Economics, Finance & Management

Kyoto Research Park 4F

09:00-10:00

Friday, May 9

ICSSAM-765

Family Ownerships, Business Group and Firm Innovation: The Case of China

Hai-Chin, Yu *Chung Yuan Christian University*

Chi-Kuan Chiu *Chung Yuan Christian University*

ICSSAM-426

The Impact of Industry Commonality on Post-Merger Performance

Hsuan-Chu Lin *National Cheng Kung University*

Yi-Yun Chou *National Cheng Kung University*

ICSSAM-766

Family Firms, Diversification and Performance –Evidence of Chinese Listed Firms

Hai-Chin Yu *Chung Yuan Christian University*

Hung-Ming Liu *Chung Yuan Christian University*

ICSSAM-402

Application of Joint Operation Research and Monte Carlo Simulation for Optimizing Sales

Decisions for Bread in a Bakery

Lih-Jier Young *Chung Hua University*

Chin-Hsin Chiu *Chung Hua University*

Chi Lo *Chung Hua University*

Phinsia Young *Accton Making Partnership Work*

ICSSAM-733

Top Management Team Knowledge and Experience on Strategic Decisions and Performance

Peng-Yu Li

Fu Jen Catholic University

ICSSAM-602

Exploring the Relationship between Facades of Conformity and Employee Well-Being: the Moderating Effect of Emotional Intelligence.

Chieh-Ju Tseng

Yuan Ze University

Hung-Hui Li

Yuan Ze University

ICSSAM-643

Leader-Member Exchange Relationship and Employees Turnover Intention: The Moderating Role of Conflict Resolution

Chih-Yun Fang

Yuan Ze University

Hung-Hui Li

Yuan Ze University

ICSSAM-765
Family Ownerships, Business Group and Firm Innovation

Hai-Chin Yu

Dep. of Intl Business
Chung Yuan Christian University
Chung-Li, 32023 Taiwan
E-mail: haichin@cycu.edu.tw

Chi-Kuan Chiu

Dep. of Intl Business
Chung Yuan Christian University
Chung-Li, 32023 Taiwan
E-mail: g10192020@cycu.edu.tw

Abstract

This study examines the relationships between family ownerships, business group and firm innovation. We measure business group by the numbers of affiliated firms in a group, the numbers of industries a group covers, and group diversification. Although previous studies concluded that most of the family firms exhibited limited the innovation activities due to finite resources. We believe that when a family firm is affiliated with a group, larger resources can be provided to improve a firm's innovation activity. These resources include financial capitals, knowledge, valuable experience and technology.

Using data from TEJ and CSMAR databases, this paper examines if family ownerships affiliated with business group are having stronger innovation. Our sample of Chinese listed firms are from Shanghai and Shenzhen A shares over a 11-year period from 2001 to 2011, with a total of 21,978 observations after removing the financial firms. We measure a firm's innovation by the patent numbers a firm owned in each year, and the related R&D expenditure ratio. Other variables like ownership structures, business group influence, firm characteristics, industry dummies, year dummies, and event dummies are being controlled in this model. The preliminary results of this study show that family-owned firms have higher innovation than nonfamily-owned enterprises. Besides, we find the firms affiliated with a group exhibited higher innovation than non-affiliated firms. Our study contributes to the innovation literature by putting their sight on business group factors and family-owned firm innovation.

JEL Classification: L21, L22, G32, G34

Keywords: Family-owned firms, Innovation, Patents, Business group.

The Impact of Industry Commonality on Post-Merger Performance

Hsuan-Chu Lin¹ and Yi-Yun Chou²

National Cheng Kung University

hsuanchu@mail.ncku.edu.tw¹, u4mp6716@yahoo.com.tw²

The purpose of this paper is to identify the impact of industry commonality on post-merger performance and further examine whether the acquiring firms have the abnormal returns after mergers and acquisitions which is evidenced by many prior studies. Through the US sample of 3016 observations consisting of 1732 related and 1284 unrelated acquisitions from 1995 to 2009, we find that the abnormal returns of acquisitions during three years are all negative, but the post-performances of related acquisitions is significantly better than those of unrelated acquisitions. Moreover, while insignificant in the first year, the related acquisitions have significantly positive impact on market performances in the second and third years.

Key Words: Industry Commonality, Merger and Acquisition, Post-merger Underperformance

JEL Codes: G34; L2; L16

1. Introduction

Being able to respond to the global competition, companies need to expand their business and take up challenges. There are two methods for enterprises to choose, internal development and mergers and acquisitions (M&A). Enterprise enhances its economic scale and keeps the competitive strength by M&A. Synergy, the most basic motivation of M&A, occurs if the value of the combined firm after the merger is greater than the sum of the value the acquiring firm and the value of the acquired firm before the merger.

There are five waves in the history of M&A which originated from the United States. In the 19th century, the first peak period of mergers and acquisition, approximately 75 percent of U.S. companies disappeared due to M&A. Large enterprises rapidly increased their market shares and monopolized in all walks of life. In the early 20th century, enterprises began to adopt the vertical merger. A vertical merger is the one in

¹ Hsuan-Chu Lin. Department of Accounting and Graduate Institute of Finance and Banking, National Cheng Kung University. E-mail: hsuanchu@mail.ncku.edu.tw

² Yi-Yun Chou. Graduate Institute of Finance and Banking, National Cheng Kung University. E-mail: u4mp6716@yahoo.com.tw

which a firm combines with a supplier or a distributor to form a trust organization. The main markets of industrial countries were generally monopolized by few enterprises. In the 1950s, the major industrial countries began the third M&A wave. Major developed countries have carried out a large-scale investment in fixed assets. The size and speed of this wave are more than two previous ones. In the fourth waves, the scale of M&A is much bigger than before, and financial industries played an important role. Enterprises mainly used the leverage buyout and expanded business to abroad. In the beginning of the 1990s, cross-border M&A became the main way of foreign direct investment due to the economic globalization. Foreign direct investment is direct investment into production in a country by a company located in another country, either by buying a company in the target country or by expanding operations of an existing business in that country.

In order to confirm the increase of firm value rather than the useless expanding, it is important to observe the performance of firm after M&A. In relevant theories, we can find that many factors which can affect the post-merger performance. According to Kusewitt(1985), Healy, Palepu, and Ruback(1992), Markides and Ittner (1994) and Linn and Switzer (2001), all of them took industry commonality into account but the result is entirely different.

In the general M&A theory, it argues that diversification cannot produce increases in value. A business's variability of return can be separated into two parts, unsystematic and systematic. Systematic variability cannot be eliminated by diversification, so mergers will not eliminate this at all. Unsystematic can be diversified away, but investors can diversify more easily rather than firms. The risk of firms which implement industry diversification by mergers is higher than investors who change their portfolios. However, some empirical theories have the different views. Ghosh (2001) though that the unrelated acquisitions can increase more the operating cash flow of acquiring firms.

Under the relevant theories, there is no consistent conclusion between the industry commonality and performance. For example, Healy (1992) and Switzer (1996) consider the performance of related acquisitions is better than unrelated. However, Linn and Switzer (2001) propose that there is no positive relation between the industry commonality of mergers and acquisitions and the long-term performance. Huang (2009), the study in Taiwan also indicates that whether the industry-related M&A can bring more benefits to acquiring firms is not significant. Some of these results violate the general theory which firms can obtain the maximum benefit if they

focus on their original business and put all resources in one field. Due to this inconsistent result, we are interested in exploring whether the industry commonality is positively correlated with the performance. Since M&A is the main method which firms adopt to expand business, it is worth to identify the relationship between industry commonality and post-merger performance.

We hope this paper can provide an indication before mergers. We gather 3016 acquisitions from 1995 to 2009 and use two methods to calculate the post-merger performance over three years. The results show that both related and unrelated acquisitions have negative abnormal return after merger completion. The significantly positive relationship between industry commonality and post-merger performance although is demonstrated. It is important for both investors and the management. As investors, when the firm adopts the unrelated acquisitions, they can adjust the portfolio to avoid the loss. As the management of companies, they should do more evaluations and consider other factors before doing unrelated acquisitions since most of them may harm the value of firms.

The remaining of this paper is organized as follows. In section two, we would review the relevant literatures on the performance of M&A, diversification, and factors that could influence firm performance. Section three presents the data selection and methodology which are used in this paper. In Section four, we would provide the outcome on empiric and analyzes the results. Section five makes the conclusion.

2. Literature Review

Performance of Mergers and Acquisitions

The performance of M&A is a principal issue in recent studies. Many previous studies discuss and categorize it into two parts, pre-acquisition and post-acquisition. Pre-acquisition mainly focuses on the selection process which could bring in the synergy. Post-acquisition is the implementation stage of the acquisition process of organizational fit.

Recently, scholars have increasingly begun to focus on factors influencing the management of post-acquisition relationships as potentially critical in acquisition success or failure. Seth (1990) reviews theoretical and empirical issues regarding synergistic benefits of acquisitions, empirically tests propositions regarding gains associated with different acquisition strategies, and argues that value creation necessarily depends on the combination of characteristics of the two merging firms rather than those of each of the firms considered alone. In this paper, we mainly focus

on the firm performance after fit and measures how much value M&A could bring to the acquiring firms. Therefore, it is important to analyze how to measure the performance of M&A and what factors can affect it.

Many previous studies examine different measures of M&A performance. Kusewitt (1985) uses the regression analysis which dependent variables are two measures of the financial performance, accounting return on assets (ROA) and market return. Relative size, acquisition rate, asset acquisition rate, industry commonality, acquisition timing, type consideration, targets profitability, and price paid are independent variables. Fowler and Schmidt (1989) explore the relationships between commonly discussed strategic acquisition factors and long-term financial performance measures of acquiring firms. The financial performance measures include both accounting and capital market data. The factors of interest include relative size, previous acquisition experience, organizational age, industry commonality, contested versus uncontested acquisitions, and percentage of stock acquired. Agrawal and Mandelker (1992) use the cumulative average abnormal return to examine the post-merger performance of acquiring firms. Healy, Palepu and Ruback (1992) examine post-acquisition performance for the 50 largest U.S. mergers between 1979 and mid-1984. Merged firms show significant improvements in asset productivity relative to their industries, leading to higher operating cash flow returns. Bruton, Oviatt and White (1994) use one dichotomous explanatory variable (business commonality), three continuous explanatory variables (acquisition experience, relative firm sizes, and relative firm sizes squared), and one continuous control variable (change in the net income of the target) to predict acquisition performance.

Ooghe and Balcaen (2000) provide ten indicators about the performance of mergers including the current ratio, operating margin, ROE, ROA, cash flow/capital, stockholders equity/ total asset, cash flow/ total debt, cash and short-term invest/ current asset, per margin, and marginal personnel expenditures. Walker (2000) uses the regression model to test the determinants of acquiring-firm shareholder wealth, cumulative market-adjusted return, and matched-firm-adjusted return. The factors which affect the return include geographic expansion, broaden product line, increase market share, cash offer, tender offer, related acquisition, and multiple bidders. Ghosh (2001) uses employees to sales, operating expenses to sales, sales growth, and cash flow margin as measures and find no evidence that operating performance improves following acquisitions when using firms matched on performance and size as a benchmark.

Barkema and Schijven (2008) measure firm performance through ROA since ROA has been shown to be the least sensitive to biases due to changes in leverage or bargaining power caused by acquisitions. Kumar and Bansal (2008) measure the financial performance and check on five parameters to see the overall financial health of merging and acquiring companies. These five parameters are liquidity position, operating efficiency, overall efficiency, return to equity shareholders, and financing composition. The results indicate that in many cases of M&A, the acquiring firms are able to generate synergy in long run that may be in the form of higher cash flow, more business, diversification, cost cuttings and so on. Zhu and Malhotra (2008) examine the short-term stock performance of a sample of Indian firms acquiring U.S. firms. It shows that Indian stock market reacts positively to the acquisition announcement, however, the positive abnormal return lasts for only three days. Afterward, the returns become negative.

Some scholars generalize some factors which might influence the performance after M&A. David, Dan, Catherine and Jeffrey (2004) conclude that the post-acquisition performance research has commonly examined the impact of four variables: whether the acquisition is made by a conglomerate firm, whether the acquisition is of a related firm, the method of payment (i.e., cash or equity) used for the acquisition, and whether the acquiring firm has prior acquisition experience. Leger and Quach (2009) examine factors which can affect the performance of M&A and categorize these factors into macro (exchange rate, economic condition and culture difference), organization (prior acquisition experience, size of the organization and corporate governance structure), industry commonality (related-level and type of mergers and acquisitions) and characteristic of deal (the method of payment and how much the shares of the target firms).

Diversification

Based on the above studies, we can find that the industry commonality is often used to discuss the impact of mergers and acquisitions performance. If the acquiring and target firms are not related when making acquisitions, we can see it is the diversification strategy of acquiring firms. Malcolm and Wolf (1978) claim that when a company has the ability to export or import surplus skills or resources useful in its competitive environment, related diversification is an attractive strategic option. When a company possesses the skills and resources to analyze and manage the strategies of widely different businesses, unrelated diversification can be the best strategic option. Amihud and Lev (1981) infer that if managers are not properly diversified, they would diversify the holdings of the firm to reduce the risk even

though diversification offers few benefits to shareholders. Donaldson and Lorsch (1983) conclude that managers would try to enter new lines of business to assure the survival and continuity of the firm even when shareholder wealth maximization dictates shrinkage or liquidation.

However, many theories consider the diversification would decrease the firm's value. Morck, Shleifer and Vishny (1990) demonstrate that the returns to acquiring shareholders are lower when their firm diversifies, when it buys a rapidly growing target, and when its managers performed poorly before the acquisition. Markides (1992) argues that if firms do much diversify, the cost of co-ordination between different businesses could increase and reduce the economy of scale. Pajan (2002) find that when a firm diversifies, the resources which in different sectors would reset. It causes these resources to flow to the ineffective sector and reduce the firm value. According to Jose and Simi (2002), firms that refocus their operations would have suffered a significant decrease in value if they had remained diversified.

Industry Commonality

Some studies investigate the definition of commonality. The commonality of acquired firms to their acquirers (where commonality is defined in terms of resource or product-market similarity) is often assumed to impact the post-acquisition performance of the acquiring firms (King et al, 2004). Seth (1990) proposes that diversification acquisition strategies differ essentially with regard to the degree of relatedness of the combining firms. Merging firms may be considered related when a common skill, resource, market, or purpose applies to each. That is, if they employ similar production techniques, serve similar markets and use similar distribution systems, and employ science-based research. According to the previous studies, we conclude that the relation between acquiring firm and target firm can also be categorized into two parts, related and unrelated. If acquiring firms and target firms have similar resources, markets and products, it is called related M&A. If they are in different markets and do not compete directly, it is called unrelated M&A.

Many scholars consider that there is a positive relation between the industry commonality and the performance of M&A. Kusewitt (1985) provides some evidence that the degree of business commonality between acquiring and target firm is positively related to performance on the average. Acquisitions should be made in related businesses to enhance synergy and management effectiveness. Singh and Montgomery (1987) investigate the conceptual argument that acquisitions related in product/market or technological terms create higher value than unrelated acquisitions.

Acquired firms in related acquisitions have substantially higher gains than acquired firms in unrelated acquisitions. These findings indicate that related target firms benefit more from acquisition than unrelated target firms. Shelton (1988) finds that business fits in which the assets of either the target or the bidder are used more intensively-identical, related-complementary and related-supplementary-create value. However, acquisitions that permit expansion into new markets or within the same business create the most value. If the purpose of takeover is to enter the new and highly relevant to the original industry, it is possible to create the greatest value. Healy (1992) provides the empirical result that the performance of related acquisitions is better than unrelated when he uses the operating cash flow as the indicator. Switzer (1996) follows the research method of Healy (1992) by increasing the sample and period numbers and obtains a consistent result with Healy (1992). Markides and Ittner (1994) evidence that the related acquisitions are positively associated with wealth creation in United States international acquisitions and related acquisitions create much more value than unrelated ones.

Zantout (1996) indicates that abnormal returns to the shareholders of an acquiring firm are greater when the target operates in a related industry. This finding is the evidence that shareholders do not look favorably at diversification programs. They prefer a corporate strategy that exploits the commonality of the business units. According to Hitt, Harrison, and Ireland (2001), industry familiarity can eliminate or significantly diminish the need for acquiring firm managers to “learn” the business of the target firm, and facilitate learning from the acquisition process. Hagedoorn and Duysters (2002) demonstrate that compared with unrelated M&As, related M&As show superior economic performance because of synergetic effects that follow from economies of scale and scope. Frank (2004) finds that related construction mergers create wealth for shareholders of the target firms by examining the financial performance of UK construction companies, which have been involved in construction related M&A on acquiring firms' and target firms' stock performance in the UK construction industry.

On the other hand, there are many opposite opinions on the relation between the industry commonality and the performance of mergers and acquisitions. Seth (1990) indicates that value is created in both unrelated and related acquisitions. Further, the data do not appear to indicate that related acquisitions create more value than unrelated acquisitions on average. Agrawal, Jaffe, and Mandelker (1992) analyze the impact of mergers and acquisitions on shareholder wealth and mentioned both the related and unrelated mergers and acquisitions cannot bring benefits to shareholders

especially related acquisitions. Datta and Puia (1995) choose 112 cross-border M&A cases which have significant cumulative abnormal returns in before and after the 15 days when they announce the news about cross-border M&A. However, the impact of commonality on shareholder value creation is not clear. Flanagan (1996) does not support that acquiring firm's shareholders benefit more in purely related acquisitions than in purely unrelated acquisitions by improving the classification of industries and including strategic fits between enterprises. Linn and Switzer (2001) use the return of cash flow before tax to evaluate the long-term performance after M&A. It shows that the acquiring firm can benefit from M&A, but is not sensitive to factors such as offer size, the commonality of bidder's and target's business, nor bidder leverage. Ghosh (2001) find that there is a significant relation between the methods of payment and commonality and the operating cash flow after acquisitions. In particular, the unrelated-acquisition can increase more operating cash flow.

According to above theories, I choose Kusewitt (1985) and Agrawal, Jaffe, and Mandelker (1992) which infer opposite views and use their methods to examine the relation between industry commonality and performance in the next section.

3. The Methodology and Model

Sample and Data Selection

The sample of the acquiring firms in this paper is from the period 1995 to 2009. The first step is gathered all mergers and acquisitions events during the study period from the Security Data Company (SDC). Second, we chose these acquiring firms which have the complete three years monthly return after the effective date of acquisitions and financial information from COMPUSTAT and CRSP. In addition, if one acquiring firm has more than one acquisition in three years, we only choose the first acquisition. We end up with the final sample of 3016.

As a result of the purpose of this paper is examining the influence of industry commonality on the post-performance after acquisitions, we classified 3016 acquisitions events as related and unrelated by their SIC code. Some relevance theories provide the criteria about differentiating industry commonality. Haunschild (1994) developed a measure of commonality that classified acquisitions as horizontal, related. An acquisition in which the acquiring firm's SIC code matched the acquired firm was classified as "horizontal" at the 4-digit level and "related" at the 2-digit level. Walker (2000) used the SIC code to classify the acquisition as related (i.e. the acquiring and target firms have the same primary two-digit SIC code) or unrelated.

Following the previous studies, if the acquiring and target firms have the same largest 2-digit SIC code, it was viewed as the related acquisitions. Then, the final sample is 3016 which consists of 1732 related and 1284 unrelated acquisitions. The selection process and acquisitions frequency distribution are shown in Table 1.

Methodology

According to previous researches, there are many different measures which are used to examine the firm's performance after the acquisition. Asquith (1983) analyzed the abnormal stock price performance of NYSE firms and displayed the negative abnormal returns after the acquisition over three years. However, others lack the consistent findings. Franks, Harris, and Titman (1991) do not show the significantly underperformance and conclude that previous findings of poor performance over three years after takeover are likely due to benchmark errors rather than mispricing at the time of the takeover. Based on these relevance theories, we used three years as the study period. In our first method, we have to use the market return to calculate the beta of acquiring firm, so we choose the monthly return that measuring the post-merger performance in this paper and a unit of period is one year.

In order to find the relation between post-merge performance of the acquiring firm and the industry commonality, we used two alternative methodologies to examine the post-merger performance.

Model1:

We use the methodology which following Dimson and Marsh (1986), Lakonishok and Vermaelen (1990) and Agrawal, Jaffe and Mandelker (1992) to examine the acquisition abnormal performance. They adjusted the both beta risk and market capitalization since the stock performance can be significantly affected by the beta risk and firm size in the short and long-term returns.

The adjustment of firm size and beta risk is setting the control group which has the same level with the samples in this paper. The size control groups are ranked all stocks which are from COMPUSTAT (North America) and CRSP by their market capitalization at the end of each year and allocated them to 10 decile portfolios. For beta risk, there is an assumption which each beta is the same when firms completed the acquisition.

$$\varepsilon_{i,t} = R_{i,t} - R_{s,t} - (\beta_i - \beta_s)(R_{m,t} - R_{f,t})$$

where

ε_{it} = the stock i 's abnormal performance

R_{it} = the return on stock i over month t .

R_{st} = the equally weighted average return during month t on the control group of all firms in the same size decile as firm i , based on the market value of equity at the end of the previous year.

β_i = the beta of security i . We estimated β_i using monthly data over the period from month 1 to 36 after the acquisition completion.

β_s = the beta of the control group. We estimated β_s over months 1 to 36 which matched the completion month.

R_{mt} = the return on the market index. We used the S&P composite index. .

R_{ft} , = the risk-free rate in month t , as measured by the one-month Treasury bill.

The average abnormal return (AAR) over all stocks in month t is:

$$AAR_t = \frac{1}{N_t} \sum_{i=1}^{N_t} \varepsilon_{it}$$

where N = the number of securities in the sample with a return in event month t .

The event period of this paper is month 1 to 36, and we separated it into three periods which are 1~12, 13~24 and 25~36 month.

The cumulative average abnormal return (CAAR) from event month t_1 to t_2 is:

$$CAAR_{t_1}^{t_2} = \sum_{t=t_1}^{t_2} AAR_t$$

According to the months after merger completion, we could get two outcomes of ARR and examine whether these outcome are significant or not. Then, test statistics for abnormal return between related and unrelated events follow the Two-Sample T-test.

Model2:

Based on Kusewitt (1985), we use statistical analysis of historical data to measure the post-merger performance. In addition, we also control acquiring firm size, acquisition timing, organizational slack and duplicate acquisition events of acquiring firm which are influence on firms' performance.

$$R_{it} = \alpha + \beta_1 \text{Dummy_relation} + \beta_2 \text{Size} + \beta_3 \text{Dummy_acquisitions} + \beta_4 \text{OS} + \beta_5 \text{Timing}$$

where

R_{it} = the return on stock i over month t

Dummy_relation = the industry commonality

Size = the firm size of acquiring firm.

Dummy_acquisitions = the duplicate acquisitions of acquiring firm.

OS = organization slack

Timing = acquisition timing.

Dependent Variables: Firm Performance (R_{it})

R_{it} is the return on a stock i over month t . We use the monthly return from CRSP

Independent Variables: Industry Commonality (*Dummy_relation*)

If the acquiring and target firms have the same largest 2-digit SIC code,

Dummy_relation is equal to one. If the acquiring and target firms do not have the same largest 2-digit SIC code, *Dummy_relation* is equal to zero.

Control Variables:

Firm size (*Size*)

Dimson and Marsh (1986) though firm size is an important factor which would influence the long-run performance. We measured the firm size by the total assets of the acquiring firm at the end of year before completion of the merger. Since the volatility of total assets is steeper which shown in Table 2, we adjust the extreme values to decreasing the heavily influence by Winsorize.

Acquisitions events within three years (*Dummy_acquisitions*)

In order to rule out the interactive impact on stock return, we only chose the first event if any acquiring firm has several acquisitions events within three years. We

define dummy as 1 if the acquiring firm has more than one acquisition event during the three years.

Organizational slack (OS)

Wan and Yiu (2009) suggested that organizational slack would improve firm performance and accentuate the positive relationship between corporate acquisitions and firm performance during an environmental jolt. It would have negative impact on firm performance and make the acquisition-performance relationship more negative before and after a jolt. Organizational slack is defined as a cushion of resources that allows an organization to adapt to internal or external pressures as well as to initiate changes in strategy in regard to the external environment. We form a measure of organizational slack using the ratio of the debt to equity at the end of year before completion of the merger.

Acquisition timing (Timing)

Followed the Kusewitt (1985), the market timing measure was found to be significantly negatively related to market return. The acquisition timing measure is the ratio of the Standard and Poor 500 average value for the third month prior to the effective date of acquisitions to the Standard and Poor trend value for that month. The trend was from monthly averages of this index from January 1995 through December 2009.

4. The findings

Abnormal Return

First, we use the abnormal return to measure the post-merger performance and the sample includes 3016 mergers over 1995~2009. Results are shown in Table 3.

$$\varepsilon_{i,t} = R_{i,t} - R_{s,t} - (\beta_i - \beta_s)(R_{m,t} - R_{f,t})$$

Where $R_{i,t}$ and $R_{s,t}$ are the monthly stocks returns on firm i and its size control group ; β_i and β_s are betas measured over 36 months after merger ; $R_{m,t}$ and $R_{f,t}$ are the return in month t on the S&P composite index and one-month Treasury bills.

First, we can observe all abnormal returns are negative for holding periods of one, two and three years. The result shows that both related and unrelated acquisitions cannot bring any excess return to acquiring firms. It is similar with Flanagan (1996) who though that both of related and unrelated show the negative abnormal returns. I note approximately 50% of acquisitions events have the positive abnormal return after merger completion. Although half of acquisitions have positive abnormal return, the negative impact is significantly larger than positive impact.

Second, we examine the performance of both related and unrelated for each period in our sample. We find that ARR has been trending down over three years after completion. The abnormal returns of related acquisition are -1.7%, -1.37% and -5.01% during the three year and the unrelated acquisitions are -1.21%, -8.24% and -11.99%. It implies that the negative impact of merger on performance is more significant in the long run. In addition, the CAARs for both groups of acquiring firms show negative performance (-8.08% and -21.45%) over the three years post-merger period.

The differences of related and unrelated acquisitions are 6.87%, 6.97% and 13.35% on the second, third AAR and Cumulative AAR which are significant with 0.0106, 0.0199 and 0.060 of P-value after merger completion. The industry commonality can affect the post-merger performance significantly, although both coefficients of them are negative. The related acquisitions are better than the unrelated acquisitions. As time goes on, the difference of ARR between related and unrelated become larger. It implies that the effect of industry commonality for acquiring firms is more significant in the long term.

In contrast with the same methodology which we follow Agrawal, Jaffe and Mandelker (1992), they found the related acquisition is worse than the unrelated acquisition. They considered the possibility that the related mergers were concentrated in poorly performing industries. Thus, it could explain the poor post-merger performance of acquiring firms in related mergers. We infer two reasons from the result. First, we choose acquisitions events from SDC which include all industries, it does not exist the problem of few industries. Another reason is that it is biased for they only have limited related mergers in their sample (79 related and 686 unrelated mergers) since they defined the related acquisitions by four-digit SIC code rather than largest 2-digit.

Multivariate Regression

Our second approach of examining the influence of industry commonality on post-merger performance is followed the Kuseitte (1985) and Wan and Yiu (2009) with considerations for firm size, acquisition timing and organization slack. For each month t relative to the month of completion, we estimate the following regression:

$$R_{it} = \alpha + \beta_1 \text{Dummy_relation} + \beta_2 \text{Size} + \beta_3 \text{Dummy_acquisitions} + \beta_4 \text{OS} + \beta_5 \text{Timing}$$

Where R_{it} is the return on a stock i over month t ; *Dummy_relation* is the industry commonality which is defined by SCI code; *Size_W* is the total asset of acquiring and doing winsorize; *Dummy_acquisitions* is equal one if acquiring firm has duplicate acquisition; *OS* is the ratio of debt to equity; *Timing* is measured by S&P 500 average value for the third month prior to the effective date of acquisitions to the Standard and Poor trend value. The sample includes 3016 mergers over 1995~2009.

As Table 4 shows, significantly positive relationships are found between industry commonality and market return (p -value < 0.01) over the second year, third year and average three years after merger completion. In agreement with Kusewitt (1985), Markides and Ittner (1994) and our original expectation, the return of related acquisitions are significantly higher than the unrelated and in accordance with the general M&A theory which infer that diversification cannot produce increases in value.

No significant statistical relationships are found between the industry commonality and the performance at the first year after merger acquisition. We infer that is due to the temporary conflict between acquiring firm and target firms at the beginning of merger. After the internal integration, the related acquisitions generate the synergy for acquiring firms. Industry commonality is significantly positive related to the post-merger performance. The relationship between related and unrelated acquisitions is the consistent in two results in spite of using the different method to measure other variables which can affect the performance. The related acquisition is more profitable for acquiring firms than unrelated acquisitions.

Analysis indicates significant and negative relationships between the adjusted firm size and market return ($p < 0.01$). We infer that the large acquiring firms need more efforts and time to integrate the organization after mergers so it is difficult for the stock price of large acquiring firms to increase significantly since the only one transaction.

Organizational slack is no significantly related to the performance. Based on Wan and Yiu (2009), the organization slack has the impact on the relationship between acquisitions and firm performance during or before and after an environment jolt. Owing to the long study period of this paper, the impact of organization slack on performance does not exist.

It is not significant negative relationships between duplicate acquisitions and market return. About 57% of the samples have more than one acquisition within the three year. The result implies that it is uncertain for the firm to make profits when adopts more acquisitions. It proves the result of our first method that the acquisition cannot bring any abnormal return for acquiring firm.

The market timing measure is found to be significantly negatively related to market return ($p < 0.0001$). It shows that acquiring firms' stock would benefit more from market highs because of larger price/earnings multiples during these periods than from the target firms. The result is same with the Kusewitt (1985).

5. Summary and Conclusions

This study examines the relation between the industry commonality and post-merge performance of firms and use two different methods. The result for a sample of 3016 acquisitions indicates that the industry commonality between acquiring and target firms is significantly related to the post-merge performance of acquiring firms. According to two measures and taking different variables into account, we obtain the consistent result.

First, the measure of abnormal return adjusts the firm size and beta risk by using the control group. Although the abnormal returns of acquisitions during three years are negative, the abnormal return of related acquisitions is significantly better than unrelated acquisitions. The outcome implies that both related and unrelated acquisitions do not have abnormal return. Perhaps companies should do more evaluating before mergers or consider another way to achieve the same target.

Second, we run the regression and control organization slack, firm size, market timing and duplicate acquisitions which significantly affect the post-merger performance. The related acquisitions have significantly positive relation with market performance in the second and third years.

Our results are consistent with the explanations offered by Kusewitt (1985) and Markides and Ittner (1994) for that the significant relationship between industry commonality and post-merge performance. In addition, we observe the related effect is more significant after one year of merger completion. It concludes that the impact of industry commonality on post-merger performance for acquiring firms is significant in the long run. A future research can continue and try to find out which industry is affected most by industry commonality when the mergers happen.

References

- Agrawal, A., J. Jaffe, and G. Mandelker, 1992, 'The post-merger performance of acquiring firms: a re-examination of an anomaly', *Journal of Finance*, vol. 47, pp.1605-1621.
- Asquith, P., 1983, 'Merger bids, uncertainty and stockholder returns', *Journal of Financial Economics*, vol. 11, pp. 51-83.
- Barkema, H. G. and M. Schjven 2008, 'Toward unlocking the full potential of acquisitions: the role of organizational restructuring', *Academy of Management Journal* , vol. 51, no. 4, pp. 696–722.
- Brown, S. J. and J. B. Warner, 1980, 'Measuring security price performance', *Journal of Financial Economics*, vol. 8, pp. 205-258.
- Bruton, G. D., B. M. Ovlatt and M. A. White 1994, 'Performance of acquisitions of distressed firms', *Academy of Management Journal*, vol. 37, no. 4, pp. 972-989.
- Campa, J. M. and S. Kedia, 2002, 'Explaining the diversification Discount', *Journal of Finance*, vol. 57, no. 4, pp. 1731–1762.
- Constantinos C. Markides and Christopher D. Ittner 1994, 'Shareholder Benefits from Corporate International Diversification: Evidence from U.S. International Acquisitions', *Journal of International Business Studies*, vol. 25, no. 2, pp.343-366.
- Dimson, E. and P. Marsh, 1986, 'Event study methodologies and the size effect: The case of UK Press recommendations', *Journal of Financial Economics*, vol. 17, pp. 113-142.
- Fowler, K. L. and D. R. Schmidt, 1989, 'Determinants of tender offer post-acquisition financial performance', *Strategic Management Journal*, vol. 10, no. 4, pp. 339-350.
- Franks, J. R., R. S. Harris, and S. Titman, 1991, 'The post-merger share price performance of acquiring firms', *Journal of Financial Economics*, vol. 29, pp. 81-96.

- Ghosh, A. 2001, 'Does operating performance really improve following corporate acquisitions', *Journal of Corporate Finance*, vol. 7, no. 2, pp. 151-178.
- Haleblian, J. and S. Finkelstein, 1999, 'The influence of organizational acquisition experience on acquisition performance: a behavioral learning perspective', *Administrative Science Quarterly*, vol. 44, no. 1, pp. 29-56.
- Haunschild, P. R., 1994, 'How much is that company worth? : Interorganization relationships, uncertainty and acquisition premiums', Working paper. University of Wisconsin-Madison.
- Hayward, M. L. A., 2002, 'When do firms learn from their acquisition experience? Evidence from 1990-1995', *Strategic Management Journal*, vol. 23, no. 1, pp. 21-39.
- Healy, P.M., K.G. Palepu, and R.S. Ruback, 1992, 'Does corporate performance improve after mergers', *Journal of Financial Economics*, vol. 31, no. 2, pp. 135-175.
- Jaffe, J. F., 1974, 'Special information and insider trading', *Journal of Business*, vol. 47, pp. 410-428.
- Jensen, M. C. and R. S. Ruback, 1983, 'The market for corporate control: The scientific evidence', *Journal of Financial Economics*, vol. 11, pp. 5-50.
- King, D. R., D. R. Dalton, C. M. Daily, and J. G. Covin, 2004, 'Meta-analyses of post-acquisition performance: indications of unidentified moderators', *Strategic Management Journal*, vol. 25, pp. 187-200.
- Kumar, S. and L. K. Bansal, 2008, 'The impact of mergers and acquisitions on corporate performance in India', *Management Decision*, vol. 48, no. 10, pp. 1531-1543.
- Kusewitt, J. B., 1985, 'An exploratory study of strategic acquisition factors relating to performance', *Strategic Management Journal*, vol. 6, no. 2, pp. 151-169.

- Laamanen, T. and T. Keil, 2008, 'Performance of serial acquirers: toward an acquisition program perspective', *Strategic Management Journal*, vol. 29, pp. 663–672
- Lakonishok, J. and T. Vermaelen, 1990, 'Anomalous price behavior around repurchase tender offers', *Journal of Finance*, vol. 45, pp. 455-477.
- Leger, P. M. and L. Quach, 2009, 'Post-merger performance in the software industry: The impact of characteristics of the software product portfolio', *Technovation*, vol. 29, no. 10, pp.704-713.
- Linn, S. C. and J. A. Switzer, 2001, 'Are cash acquisitions associated with better postcombination operating performance than stock acquisition', *Journal of Banking and Finance*, vol. 25, no. 6, pp. 1113-1138.
- Mandelker, G., 1974, 'Risk and return: The case of merging firms', *Journal of Financial Economics*, vol. 1, pp. 303-335.
- Ooghe, H. and S. Balcaen, 2000, 'De financiële toestand van de Belgische ondernemingen: sleutelratio's en risico-indicatoren 1991–1999', *Diegem: Kluwer/Ced.Samson*
- Salter, M. S. and W. A. Weinhold 1978, 'Diversification via acquisition: creating value', *Harvard Business Review*.
- Seth, A., 1990, 'Value creation in acquisitions: a reexamination of performance issues', *Strategic Management Journal*, vol. 11, pp. 99-115.
- Walker M. M., 2000, 'Corporate takeovers, strategic objectives, and acquiring-firm shareholder wealth', *Financial Management*, vol. 29, no. 1, pp. 53-66
- Wan, W. P. and D. W. Yiu 2009, 'From crisis to opportunity: Environmental jolt, corporate acquisitions, and firm performance', *Strategic Management Journal*, vol. 30, pp. 791-801.
- Zhu, P. C. and S. Malhotra, 2008, 'Announcement effect and price pressure: an empirical study of cross-border acquisitions by Indian firms', *International Research Journal of Finance and Economics*, vol. 13, no. 1, pp. 24-41.

Appendix

Table 2 Sample Selection Process

Year	Acquisitions from SDC	Completed market and financial information	Related	Unrelated
1995	28,558	131	75	56
1996	30,053	139	76	63
1997	30,798	123	73	50
1998	35,866	223	120	103
1999	39,106	193	110	83
2000	43,615	197	110	87
2001	34,051	38	24	14
2002	29,859	284	159	125
2003	32,925	281	158	123
2004	35,250	204	128	76
2005	38,451	260	144	116
2006	44,205	277	170	107
2007	51,107	264	153	111
2008	50,357	235	144	91
2009	45,954	167	88	79
Total	541,97	3,016	1732	1284

Table 3 Descriptive Statistics of Variables

Variable	Mean	Std. Dev.	Min	Max
Firm Performance (R_{it})	1.024424	14.08286	-86.65339	275
Industry Commonality (<i>Dummy_relation</i>)	0.574271	-0.4944554	0	1
Firm size (<i>SIZE</i>)	20839.44	122150.5	.817	3510975
Acquisitions events within three years (<i>Dummy_acquisitions</i>)	0.570623	0.4949895	0	1
Organizational slack (<i>OS</i>)	2.288674	16.49251	-689.679	263.272
Acquisition timing (<i>Timing</i>)	.9448893	7.612753	-28.6179	16.33716

Table 4 Post-Merger Performance of Acquiring Firms after Adjustment for Firm Size and Beta Risk

Months After Merger Completion	Average Abnormal Return		Difference	Percent of Positive abnormal return
	Related (N=1732)	Unrelated (N=1284)		
1~12	-1.70%	-1.21%	-0.49% (0.858836)	50.23%
13~24	-1.37%	-8.24%	6.87% (0.010610 ^{**})	52.54%
25~36	-5.01%	-11.99%	6.97% (0.019957 ^{**})	49.08%
Cumulative AAR	-8.08%	-21.45%	13.35% (0.060636 [*])	52.83%

t statistics in parentheses , * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5 Regression of Market Return

Rit	Months After Merger Completion			
	1-36	1-12	13-24	25-36
intercept	0.943 (10.86 ^{***})	1.239 (8.16 ^{***})	0.788 (5.29 ^{***})	0.800 (5.34 ^{***})
Dummy_relation	0.288 (3.35 ^{***})	-0.0917 (-0.62)	0.516 (3.47 ^{***})	0.439 (2.93 ^{***})
Size_W	-0.00000315 (-4.56 ^{***})	-0.00000279 (-2.53 ^{**})	-0.00000250 (-2.23 ^{**})	-0.00000415 (-3.09 ^{***})
Dummy_acquisitions	-0.0348 (-0.39)	0.198 (1.31)	0.0957 (0.62)	-0.398 (-2.57 ^{**})
OS	0.000887 (0.40)	-0.00223 (-0.47)	0.00154 (0.49)	0.00335 (1.01)
Timing	-0.0193 (-3.33 ^{***})	-0.0464 (-4.33 ^{***})	-0.0173 [*] (-1.77)	0.00590 (0.62)

t statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

ICSSAM-402

Application of Joint Operation Research and Monte Carlo Simulation for Optimizing Sales Decisions for Bread in a Bakery

¹Lih-Jier Young, ^{*2}Chin-Hsin Chiu, ³Chi Lo, ⁴Phinsia Young

¹Department of Transportation Technology and Logistics Management, Chung Hua University, Taiwan,
E-mail:young@chu.edu.tw

^{*2}Ph.D. Program of Technology Management, Chung Hua University, Taiwan,
E-mail:chiutiffany2002@yahoo.com.tw

³Department of Hospitality Management, Chung Hua University, Taiwan,
E-mail:chilo@chu.edu.tw

⁴Department of Project Plan, Accton Making Partnership Work

Abstract

The products of a bakery include bread, cookies and cakes. Of these products, bread loaves are the top sellers and the most profitable. The objective of this research is to identify the optimal solution regarding maximum profits using sixteen limited ingredients and other fixed costs. This research will show how a bakery can maximize profits by determining the quantity of five different types of bread loaves (whole wheat bread, pain de mie bread, raisin bread, red bean bread and bacon onion bread) to be produced. Two different methods are employed: operations research (OR) and Monte Carlo simulation (MCS). Method one (OR) uses linear programming, which is the most commonly used method in operations research to provide optimal solutions. However, such solutions may not align well with actual market demand; therefore, method two (MCS) is also used to determine the optimal solution for this situation. A computer is used to generate 60,000 possible results, and those that do not meet the criteria are discarded. The results of this research show that the optimal solution obtained by MCS is notably similar to that obtained by OR.

Keywords: Bakery, Operations Research, Monte Carlo Simulation

Nomenclature

P: profit

x: productivity for whole wheat bread

y: productivity for Pain de Mie

z: productivity for raisin bread

w: productivity for red bean bread

q: productivity for bacon onion bread

*s*₁: slack variable for high-gluten flour

*s*₂: slack variable for whole wheat flour

*s*₃: slack variable for eggs

*s*₄: slack variable for sugar

*s*₅: slack variable for water

*s*₆: slack variable for salt

*s*₇: slack variable for milk

*s*₈: slack variable for yeast

*s*₉: slack variable for butter

*s*₁₀: slack variable for wheat protein

*s*₁₁: slack variable for Levain

*s*₁₂: slack variable for whole milk powder

*s*₁₃: slack variable for raisins

*s*₁₄: slack variable for red beans

*s*₁₅: slack variable for onions

*s*₁₆: slack variable for bacon

1. Introduction

In the current economic climate, people's dietary habits have gravitated toward healthy food (Rozin P, 2005). While the choice of primary food has also shifted from traditional whole grains such as rice, barley, rye and wheat, to the use of flour made from grain (Stiegert, K.W., & Peng, H.M., 1998). The advantage of using flour is that not only does it have high nutritional value, but also the cooking process is faster, simpler and more convenient than that for whole grain. Cooking food using flour thus allows for greater versatility (Bradford, et al., 2010). Based on the 2013 data from Taiwan's Ministry of Economic Affairs, it also shows that Taiwan's main wheat flour imports in the last three decades have increased 300-fold (Ministry of Economic Affairs, R.O.C., 2013).

In general, wheat can be made into flour and the wheat flour can be made into noodles, bread, biscuits, cakes and many other varieties of foods (Mondal, A., & Datta, A.K., 2007). Of these products made with flour, bread takes up the largest percentage of the market and is also the

most profitable. This is because with so many different kinds of bread available, customers are given a wide range of choices that tailors to each individual's needs (Fraser, I., & Haddock-Fraser, F., 2012).

Bread making process has a direct impact on consumer purchase selection. From the objective perspective, consumer choice has to do with taste, creativity, attractiveness of the bread based on the bread colour, and the overall aesthetic presentation (Hart et al., 2011). In addition, consumers expect the baking industry to use fresh ingredients and to produce healthy, tasty, safe, and affordable bread. Therefore, the quality of the ingredients directly affects the final product result (Ba ́rcenas, M.E., & Rosell, C.M., 2007).

When we consider the expenses involved in the bread industry, there are other costs to be considered besides the cost of the ingredients. These other costs include both software and hardware items. Examples of these costs are personnel costs, store rental, appliance costs, utilities, and sales tax. All of these affect the baking industry's profits. Since there are many varieties of bread, it is necessary to determine a more scientific way assess the cost of the daily production of bread, in order to maximize the profit of the bakery (Graaf, R.d., & Duin, P.v.d., 2013).

The goal of this research is to apply both operations research in linear programming (Hiller, F.S., & Lieberman, G.J., 2010) and Monte Carlo simulation (MCS), (Purlis, E., 2011; Helton, J.C., & Davis, F.J., 2003) in order to determine the optimal daily bread production quantity for a bakery that can result in the maximum profitability. The research target chooses five kinds of bread: whole-wheat bread, Pain de Mie, raisin bread, red bean bread, and bacon onion bread. This research also limits the ingredients pool to 16 common types used in bread baking (high-gluten flour, whole wheat flour, eggs, sugar, water, salt, milk, yeast, butter, wheat protein, Levain, whole milk powder, raisins, red beans, onions, and bacon. Other fixed costs are also assumed.

2. Literature Review

This chapter details the review of the literature related to operations research and linear programming, MCS, random number generation, optimization and the baking industry.

2.1. Operation Research and Linear Programming

Operations Research (OR) is a form of applied mathematics and interdisciplinary scientific research that uses statistical, mathematical models and algorithms and other methods to find the optimal solution for complex problems. OR is used to solve complex problems in real life, especially to improve or optimize the efficiency of existing systems, including the basics of operations research, such as real analysis, matrix theory, stochastic processes, discrete

mathematics and algorithms (Hiller, F.S., & Lieberman, G.J., 2010). In the application, more consideration is given to warehousing, logistics, and other areas related to algorithms (Chen et al., 2011). Therefore, OR applied mathematics, industrial engineering, computer science and other professional technologies are closely related.

In mathematics, linear programming (LP) is a method to optimize the problem where both the objective function and the constraints are linear. LP optimization is an important area of research. Many practical problems in operations research are described using LP. In individual economics and business administration (Liu., 2007), it is widely used to maximize or minimize the LP revenue of the cost of the production process problems (Shi, C., & Gershwin, S.B., 2009).

2.2. Monte Carlo simulation

Monte Carlo simulation (MCS) is a numerical method that uses random sampling simulation and is used for practical problems. In mathematics, a random number generator uses a given set of numbers that contain a selected number, or a collection of randomly selected sequence number (Feyissa., et al., 2012; Regier., et al., 2007) A number is a uniform random numbers if the chances of selection are equal.

The spirit of the law of large numbers is based on empirical method: the greater the number of experiments, the more likely it is that the average value is close to the theoretical value. This method was first used in subatomic particle motion simulation and analytical solutions under non-striking circumstances. This method is also used to model error estimation to estimate social risks (David, E.B., & Anderson, P.D., 1994).

In scientific applications, MCS is a random quantity with an approximate value that is used to solve the complicated mathematical and physical problem, with a simple structure and expected control error as its two main characteristics. In the nineteenth century and early twentieth century, statistical problems sometimes used random selection for a solution by MCS. However, since the amount of manual simulation random process was limited, before the advent of computer, it was very difficult to enact. This method could not be widely used before computers. With the advent of computers, MCS has become a very common numerical processing method. It is a random event process, similar to the scientific experimental process (Vorechovský, M., 2012). MCS is also called a statistical test. It is used in many research fields, such as statistical engineering, biomedicine, psychology, atmospheric science, management science, but this application to decisions for the optimization of bread sales is new.

2.3. Random number generator

A random number is a number that is determined totally by chance. That is, the number has no predictable relationship to any other number or event. Statistical experiments require

different random numbers; for example, for the statistical extraction of a representative sample, or when a bakery uses an experimental test group that represents a different process. More specifically, the use of a MCS in a calculation process (Jennings, A.A., & Mohan, S., 1991) uses a random number generator to generate the random number using many different methods.

Pseudo-Random Numbers are commonly known as "virtual" random numbers. When applied to human problems, they are known as the sequences principles (Liang, Y., & Whitlock, P.A., 2001). They have values between 0 and 1, with independent values, and can be reproduced from the generating sequence. And since they can be replicated, they cannot be true random numbers. Thus they are given the designation of "virtual" random numbers, or simply "random numbers". Thus, random numbers are not really random, but exists certain statistical properties. For that reason, a random number must have two important statistical properties; uniformity and independence. Each random number between 0 and 1 must be continuous and must have a uniform distribution over the independent samples extracted.

In general, virtual random numbers are generated by computer-based "random number generator". The design of this random number generator usually needs to take into consideration of speed and portability across different computers and different programming languages (Sezgin, F., & Sezgin, T.M., 2013).

2.4. Optimizations

In order to optimize the discovery of an optimal solution from the set of all the possible solutions, in an efficient and systematic way (Rong et al., 2011), any optimization procedure must change certain conditions, called decision variables. This is in order to maximize or minimize a pre-defined criteria (e.g. product quality, or profits), which is usually known as "objective function". Possible solutions are those which meet a certain set of requirements, called constraints. Therefore, to optimize a process, the set of decision variables must be found (Banga et al., 2013), for example, maximizing profitability while meeting a set of constraints.

2.5. Bakery-Related Literature Review

It is known that the bakery industry has undergone a big revolution in the past 150 years. The small artisan bakeries, which were present in every village, have made way for the highly technological bakery industry. Industrial mono-production took over from variety bakeries, so that bread could be produced in a more efficient way. Productivity became the key for success. Different baking technologies were developed to respond better to new market demands (Decock and Cappelle, 2005). The art of bread baking has become more sophisticated, as new and refined materials and ingredients have been introduced. There is

continuous research to achieve a higher quality product that is also nutritionally superior and more economically feasible (Mondal A. Datta A.K., 2008).

While the baking process has been continually improving in the area of research, the importance of the role of ingredients themselves must not be neglected. A basic bread recipe uses water, sugar, salt, yeast and shortening. Each of these ingredients plays a vital part. Flour and water affect the crumb and texture, sugar enhances the fermentation process and salt strengthen the gluten and helps to convert the action of the yeast to control the expansion of the dough. The shortening is important, because it makes the bread easier to slice. (Mondal A. Datta A.K., 2008). Bread fresh from the oven should have an attractive brownish and crunchy crust, a pleasant aroma, can be easily sliced, have a soft and elastic crumb texture and yet is still moist in the mouth (Giannou et. al., 2003). The aesthetic appeal of fresh bread, as well as the taste, has a significant effect on consumer perception (Heenan et. al., 2009).

3. Research Methods

In order to simplify the study, only five types of bread were considered: whole wheat bread, Pain de Mie, raisin bread, red bean bread, and bacon onion bread. The goal was to optimize the necessary ingredients and their cost (high-gluten flour, whole wheat flour, eggs, sugar, water, salt, milk, yeast, butter, wheat protein, Levain, whole milk powder, raisins, beans, onions and bacon) and any other cost involved in the production of the five breads in order to achieve maximum profit.

Table 1 shows the weight in grams of sixteen necessary ingredients required for each bread (column 2-6), the daily purchase amount (column 7), the daily cost of each ingredient (column 8) and the selling price of each kind of toast (raw 1).

Table 1

The ingredients required for each type of bread

ingredients	whole wheat bread: x (90NT/a loaf)	Pain de Mie: y (70NT/a loaf)	raisin bread: z (100 NT/a loaf)	red bean bread: w (100NT/a loaf)	bacon onion bread: q (120 NT/a loaf)	ingredients per day (g)	cost (NT\$)
high-gluten flour	125	250	250	250	250	22000	680
whole wheat flour	125	--	--	--	--	22000	700
eggs	25	25	25	25	62.5	10393	600
sugar	25	25	25	25	40	24000	864
water	110	110	110	110	75	20000	2
salt	3.75	3.75	3.75	3.75	3	1000	15
milk	55	55	55	55	12.5	12000	540
yeast	3	3	3	3	2.5	1000	230
butter	50	50	50	50	12.5	25000	2800
wheat protein	7.5	--	--	--	--	5000	100
Levain	25	--	--	--	--	1000	100
milk powder	--	7.5	7.5	7.5	--	1400	420
raisins	--	--	55	--	--	13620	1400
red beans	--	--	--	55	--	3000	325
onions	--	--	--	--	75	5000	33
bacon	--	--	--	--	37.5	3000	540

3.3. Objective function and constraints equation set

As seen, the price of whole wheat bread is 90 NT dollars (New Taiwan Dollars); the Pain de Mie price is 70 NT dollars; the raisin bread price is 100 NT dollars; the red bean bread price is 100 NT dollars and the bacon onion toast price is 120 NT dollars. Therefore, the objective function for the maximum profit, P , is:

$$\text{Max } P = 90x + 70y + 100z + 100w + 120q . \quad (1)$$

For the sixteen ingredients and five bread flavors, the 16 equation of constraint are:

$$125x + 250y + 250z + 250w + 250q \leq 22000, \quad (2)$$

$$125x \leq 22000, \quad (3)$$

$$25x + 25y + 25z + 25w + 62.5q \leq 10393, \quad (4)$$

$$25x + 25y + 25z + 25w + 40q \leq 24000, \quad (5)$$

$$110x + 110y + 110z + 110w + 75q \leq 20000, \quad (6)$$

$$3.75x + 3.75y + 3.75z + 3.75w + 3q \leq 1000, \quad (7)$$

$$55x + 55y + 55z + 55w + 12.5q \leq 12000, \quad (8)$$

$$3x + 3y + 3z + 3w + 2.5q \leq 1000, \quad (9)$$

$$50x + 50y + 50z + 50w + 12.5q \leq 25000, \quad (10)$$

$$7.5x \leq 5000, \quad (11)$$

$$25x \leq 1000, \quad (12)$$

$$7.5y + 7.5z + 7.5w \leq 1400, \quad (13)$$

$$55z \leq 13620, \quad (14)$$

$$55w \leq 3000, \quad (15)$$

$$75q \leq 5000, \quad (16)$$

$$37.5q \leq 3000. \quad (17)$$

The number after each equation represents the condition for each row of table to be satisfied. Because the daily production of the bread cannot be negative, the non-negative constraints are:

$$x \geq 0, \quad (18)$$

$$y \geq 0, \quad (19)$$

$$z \geq 0, \quad (20)$$

$$w \geq 0, \quad (21)$$

$$q \geq 0. \quad (22)$$

3.4. The method for the optimal solution

Linear programming (LP) is a technique in operation research for the optimization of a linear objective function, subject to linear equality and linear inequality constraints. Its feasible region is a convex polyhedron, which is a set defined as the intersection of many finite half spaces, each of which is defined by a linear inequality. Its objective function is a real-valued affine function defined on this polyhedron. A linear programming algorithm determines a point in the polyhedron where this function has the smallest (or largest) value if such a point exists. Linear programs are problems that can be expressed in canonical form:

$$\text{maximize } \mathbf{c}^T \mathbf{x}$$

$$\text{subject to } \mathbf{Ax} \leq \mathbf{b}$$

$$\text{and } \mathbf{x} \geq \mathbf{0}$$

where \mathbf{x} represents the vector of variables (to be determined), \mathbf{c} and \mathbf{b} are vectors of (known) coefficients, \mathbf{A} is a (known) matrix of coefficients, and is \mathbf{c}^T the transpose of vector \mathbf{c} . The expression to be maximized or minimized is called the objective function ($\mathbf{c}^T \mathbf{x}$ in this case). The inequalities, $\mathbf{Ax} \leq \mathbf{b}$ and $\mathbf{x} \geq \mathbf{0}$ are the constraints that specify a convex polytope over which the objective function is to be optimized.

In comparison to LP methodology, MCS iteratively evaluates a deterministic model, using sets of random numbers as inputs. The steps in MCS corresponding to the uncertainty propagation are fairly simple. There are 5 steps, listed below:

Step 1: Create a parametric model, $y = f(x_1, x_2, \dots, x_q)$.

Step 2: Generate a set of random inputs, $x_{i1}, x_{i2}, \dots, x_{iq}$.

Step 3: Evaluate the model and store the results as y_i .

Step 4: Repeat steps 2 and 3 for $i = 1, 2, \dots, n$.

Step 5: Analyze the results, using histograms, summary statistics, confidence intervals, etc.

4. Research Results

4.1. Linear Programming results

In this research, LP is the first method that is used to determine the maximum selling price of five different flavor of bread in a given mathematical model, for some list of ingredients requirements, which are represented as linear relationships. The problem can be expressed using the following linear programming problem in the standard form:

$$\text{Max } P = \mathbf{c}^T \mathbf{x} = 90x + 70y + 100z + 100w + 120q,$$

where $\mathbf{c}^T = [90 \ 70 \ 100 \ 100 \ 120]$, $\mathbf{x}^T = [x \ y \ z \ w \ q]$, i.e. maximize the selling price (P) is the "objective function".

Subject to: $\mathbf{Ax} \leq \mathbf{b}$

and $\mathbf{x} \geq \mathbf{0}$,

where $\mathbf{A} = \begin{bmatrix} 125 & \dots & 250 \\ \vdots & \ddots & \vdots \\ 0 & \dots & 37.5 \end{bmatrix}$ and $\mathbf{b}^T = [22000 \ 22000 \ \dots \ 5000 \ 3000]$, i.e. limits of the daily

ingredients used, which are the “problem constraints”, and the daily production of loaves cannot be a negative quantity.

According to the optimal solution using OR, shown in Table 2, the following theoretical solution is derived: The daily production quantity of whole wheat bread is: $x=40$, that for Pain de Mie: $y=0$, that for raisin bread: $z=1$, red bean bread: $w=0$, and bacon onion bread: $q=67$. According to previous distribution of each ingredient, this solution culminates into the objective function, to get the following

$$\text{Max } P = 90x + 70y + 100z + 100w + 120q = 11733$$

$$\text{When } x = 40, y = 0, z = 4/3, w = 0, q = 200/3, \text{Max } P = 35200/3$$

$$\begin{aligned} \text{Max } P &= 90(40) + 70(0) + 100(4/3) + 100(0) + 120(200/3) \\ &= 3600 + 400/3 + 8000 \\ &= 10800 + 400 + 24000/3 \\ &= 35200/3 \end{aligned}$$

As previously mentioned, under the current circumstance, when the variable set $(x, y, z, w, q) = (40, 0, \frac{4}{3}, 0, \frac{200}{3})$, the optimal solution is $\text{Max } P = \frac{35200}{3}$.

However, because y , w , and q have the same condition, if variable q is replaced by y , the variable set is $(x, y, z, w, q) = (40, \frac{200}{3}, \frac{4}{3}, 0, 0)$ and, of course, if q is replaced by w , the variable set is $(x, y, z, w, q) = (40, 0, \frac{4}{3}, \frac{200}{3}, 0)$. It is therefore concluded that no matter which of these variable sets is considered, its optimal solution is always $\frac{35200}{3}$. The results are shown in Table 2. The procedure that gives the optimal solution is shown in Tables 5a-5c in the appendix.

Table 2

The Optimal Solution of Operation Research

Basic Variable	Coefficient of																							Right side	Ratio
	P	x	y	z	w	q	s_1	s_2	s_3	s_4	s_5	s_6	s_7	s_8	s_9	s_{10}	s_{11}	s_{12}	s_{13}	s_{14}	s_{15}	s_{16}			
P	1	0	30	0	0	0	2/5	0	0	0	0	0	0	0	0	0	8/5	0	0	0	4/15	0	35200/3		
z	0	0	1	1	1	0	1/250	0	0	0	0	0	0	0	0	0	-1/50	0	0	0	-1/75	0	4/3		
s_2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-5	0	0	0	0	0	17000		
s_3	0	0	0	0	0	0	-1/10	0	1	0	0	0	0	0	0	0	-1/2	0	0	0	--1/2	0	5193		
s_4	0	0	0	0	0	0	-1/10	0	0	1	0	0	0	0	0	0	-1/2	0	0	0	-1/5	0	20300		
s_5	0	0	0	0	0	0	-11/25	0	0	0	1	0	0	0	0	0	-11/5	0	0	0	7/15	0	31360/3		
s_6	0	0	0	0	0	0	-3/200	0	0	0	0	1	0	0	0	0	-3/40	0	0	0	1/100	0	645		
s_7	0	0	0	0	0	0	-11/50	0	0	0	0	0	1	0	0	0	-11/10	0	0	0	17/30	0	26680/3		
s_8	0	0	0	0	0	0	-3/250	0	0	0	0	0	0	1	0	0	-3/50	0	0	0	1/150	0	628/3		
s_9	0	0	0	0	0	0	-1/5	0	0	0	0	0	0	0	1	0	-1	0	0	0	1/2	0	22100		
s_{10}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-3/10	0	0	0	0	0	4700		
x	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1/25	0	0	0	0	0	40		
s_{12}	0	0	0	0	0	0	-3/100	0	0	0	0	0	0	0	0	0	--3/20	1	0	0	1/10	0	1090		
s_{13}	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	13620		
s_{14}	0	0	-55	-55	0	0	-11/50	0	0	0	0	0	0	0	0	0	-11/10	0	0	1	11/15	0	2180/3		
q	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1/75	0	200/3		
s_{16}	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/2	1	500		

4.2. Monte Carlo simulation Results

This study uses MCS to determine the cost of the limited ingredients and any of the other costs under the fixed daily requirements for the five types of bread. It shows the quantity to be produced in order for the production to have the maximum price and to achieve maximum profit. The following details the MCS steps:

1. Create the objective function $P = 90x+70y+100z+100w+120q$.
2. Generate a random variable $x_i, y_i, z_i, w_i,$ and q_i from Uniform (0, 100) distribution.
3. Calculate $P_i = 90x_i+70 y_i+100z_i+100w_i+120q_i$.
4. Repeat steps 2 and 3, for $i=1,2,\dots,60000$.
5. Select the results that satisfy all 16 constrains.
6. List the sorting numbers, P_i , in descending order.

The MCS optimal solution uses 60,000 cases, with attention given to 16 cases. This results in the total limiting equation of 11225 and an optimal solution of: whole wheat bread: $x=40$, Pain de Mie: $y=0$, raisin bread: $z=8$, red bean bread: $w=7$, and bacon onion bread: $q=50$, the Max $P = 90x+70y+100z+100w+120q=11115$. Table 3 uses the 11225 data gives the top of twenty results as follows:

Table 3

The twenty optimal solutions of Monte Carlo simulation

case	whole wheat bread: x	Pain de Mie: y	raisin bread: z	red bean bread: w	bacon onion bread: q	P	ingredients cost
1	40	0	8	7	50	11115	2401
2	38	4	6	13	45	10929	2439
3	40	0	23	7	37	10891	2510
4	40	9	6	5	47	10877	2416
5	37	6	21	3	39	10877	2455
6	39	8	19	0	40	10870	2428
7	39	1	38	3	26	10794	2554
8	36	10	7	9	45	10793	2441
9	32	2	4	23	42	10783	2416
10	38	2	12	25	29	10759	2521
11	38	4	3	7	50	10746	2309

12	37	6	6	17	39	1074 3	2432
13	38	8	9	17	34	1074 1	2463
14	40	3	34	8	23	1072 5	2578
15	28	1	20	10	43	1071 2	2407
16	37	9	6	15	39	1068 9	2441
17	27	5	19	2	48	1068 8	2340
18	39	1	39	6	21	1068 1	2549
19	34	5	17	4	43	1067 9	2379
20	35	2	17	8	41	1067 5	2400

For both of these methods, the optimal solution shows that only the whole wheat bread and bacon onion bread results do not meet the market demand. Consequently, the result lists the MCS for 20 optimal solutions, such as case 8, shown in Table 3 with bold letters, which gives a daily production quantity for whole wheat bread: $x=36$, Pain de Mie: $y=10$, raisin bread: $z=7$, red bean bread: $w=9$, and bacon onion bread: $q=45$. Substituting the objective function into the Max $P=90x+70y+100z+100w+120q$ gives a value of 10793. This result meets the market demand, though not the Max P , but it is still close. The above mathematic takes into consideration the cost of the ingredients and other fixed expenses, shown in the last column of Table 3.

Therefore, in addition to the near optimal solution the MCS can also provide the bakery industry with information on market demand, and to give the daily production quantity for

the five types of bread, the price (profit), although it is not the largest, is still close to the maximum.

4.3. Comparison of Optimal Solutions of OR and MCS

It is worth mentioning that, due to production and sale of the bread, the values of all basic variables of the optimal solution must be integers. Therefore, according to Sec. 4.1 the optimal solution after rounding off decimals of each basic variable is

$(x, y, z, w, q) = (40, 0, 1, 0, 67)$, which gives the maximum profit $Max P = 90x + 70y + 100z + 100w + 120q = 11733$. This value is slightly different to the theoretical solution of OR, which is $\frac{35200}{3}$.

As described in Table 3 Sec. 4.2, the optimal solution of MCS, shown in row 8, is $(x, y, z, w, q) = (40, 0, 8, 7, 50)$, which gives a maximum profit, $Max P = 90x + 70y + 100z + 100w + 120q = 11115$. A comparison of optimal solutions using OR and a MCS is shown in Table 4.

Table 4

Comparison of optimal solutions using OR and MCS

	whole wheat bread: x (90NT/a loaf)	Pain de Mie: y (70NT/a loaf)	raisin bread: z (100 NT/a loaf)	red bean bread: w (100 NT/a loaf)	bacon onion bread : q (120 NT/a loaf)	Maximum
OR	40	0	4/3	0	2180/3	$P = 90x + 70y + 100z + 100w + 120q$ $= 35200/3$
MCS	40	0	8	7	50	$P = 90x + 70y + 100z + 100w + 120q$ $= 11115$

It is obvious that the result of the MCS is very close to the result of OR.

5. Conclusion and Future Research

5.1. Conclusion

The use of OR and MCS methodologies in the bakery industry is a novel research attempt. In this study, five flavors of bread (whole wheat bread, Pain de Mie, raisin bread, red bean bread, and bacon onion bread), are used to obtain the maximum profit for a bakery store by determining the optimal production quantity for each type of the bread. Two different approaches: OR and MCS, are employed. The cost of sixteen ingredients: high-gluten flour, whole wheat flour, eggs, sugar, water, salt, milk, yeast, butter, wheat protein, Levain, whole milk powder, raisins, beans, onions and bacon are considered. The OR result shows that the basic variables of the optimal solution are $(x, y, z, w, q) = (40, 0, 1, 0, 67)$ after rounding off the decimal portion, which gives the maximum profit of 11733. This translates to an optimal daily production quantity of 40 whole wheat bread, 0 Pain de Mie, 1 raisin bread, 0 red bean bread, and 67 bacon onion bread. In contrast, the MCS result shows that the basic variables of the optimal solution are $(x, y, z, w, q) = (40, 0, 8, 7, 50)$ which gives a maximum profit of 11115. This translates to an optimal daily production quantity of 40 whole wheat bread, 0 Pain de Mie, 8 raisin bread, 7 red bean bread, and 50 bacon onion bread.

Therefore the result of this research shows that both methods can be successfully applied to this novel optimization problem concerning bakery profit. In the case of this study, optimal solution of either approach converges to similar results.

5.2 Future research

This study focuses on only five varieties of bread. In the future, however, this can be extended to all types of bread in the bakery industry. Both approaches can also be used for other flour products, such as cakes and cookies. In addition, other costs that were not considered in this research, such as electricity or labor costs, can also be taken into account to increase the breadth of the scope to even more correctly reflect real-life problems. Furthermore, this research can also be extended to more complex situations where the bakery contains chain stores. Overall, the application scope is very broad and can be very beneficial to optimizing different problems in the bakery industry.

Appendixes

Table 5a

The initial Simplex Tableau

↓ Input variable

Basic Variable	Coefficient of																				Right side	Ratio			
	P	x	y	z	w	q	s_1	s_2	s_3	s_4	s_5	s_6	s_7	s_8	s_9	s_{10}	s_{11}	s_{12}	s_{13}	s_{14}			s_{15}	s_{16}	
P	1	-90	-70	-100	-100	-120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
s_1	0	125	250	250	250	250	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22000	88
s_2	0	125	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22000	
s_3	0	25	25	25	25	62 1/2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10393	10393/62.5
s_4	0	25	25	25	25	40	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24000	600
s_5	0	110	110	110	110	75	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20000	800/3
s_6	0	3 3/4	3 3/4	3 3/4	3 3/4	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1000	1000/3
s_7	0	55	55	55	55	12 1/2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12000	960
s_8	0	3	3	3	3	2 1/2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	500	200
s_9	0	50	50	50	50	12 1/2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	25000	200
s_{10}	0	7 1/2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5000	
s_{11}	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1000	
s_{12}	0	0	7 1/2	7 1/2	7 1/2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1400	
s_{13}	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	13620	
s_{14}	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3000	
s_{15}	0	0	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5000	200/3
s_{16}	0	0	0	0	0	37 1/2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3000	80

Output variable ←

Table 5b

The simplex Tableau to obtain all optimal basic feasible solution

Input variable



Output

variable ←

Basic Variable	Coefficient of																					Right side	Ratio		
	P	x	y	z	w	q	s ₁	s ₂	s ₃	s ₄	s ₅	s ₆	s ₇	s ₈	s ₉	s ₁₀	s ₁₁	s ₁₂	s ₁₃	s ₁₄	s ₁₅			s ₁₆	
P	1	-90	-70	-100	-100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	8000	
s ₁	0	125	250	250	250	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-10/3	0	16000/3	64/3
s ₂	0	125	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22000	
s ₃	0	25	25	25	25	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-5/6	0	18679/3	18679/75
s ₄	0	25	25	25	25	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-8/15	0	64000/3	2560/3
s ₅	0	110	110	110	110	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	-1	0	15000	1500/11
s ₆	0	3.75	3.75	3.75	3.75	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-3/75	0	800	640/3
s ₇	0	55	55	55	55	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-1/6	0	33500/3	6700/33
s ₈	0	3	3	3	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-1/30	0	1000/3	1000/9
s ₉	0	50	50	50	50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	-1/6	0	72500/3	1450/3
s ₁₀	0	7 1/2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5000	
s ₁₁	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1000	
s ₁₂	0	0	7 1/2	7 1/2	7 1/2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1400	560/3
s ₁₃	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	13620	
s ₁₄	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3000	
q	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1/75	0	200/3	
s ₁₆	0	0	0	0	3.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/2	1	500	

Table 5c

The simplex Tableau to obtain all optimal basic feasible solution

↓ Input variable

Basic Variable	Coefficient of																				Right side	Ratio						
	P	x	y	z	w	q	s ₁	s ₂	s ₃	s ₄	s ₅	s ₆	s ₇	s ₈	s ₉	s ₁₀	s ₁₁	s ₁₂	s ₁₃	s ₁₄			s ₁₅	s ₁₆				
P	1	-40	30	0	0	0	2/5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4/15	0	30400/3		
z	0	1/2	1	0	1	0	1/250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/75	0	64/3	128/3	
s ₂	0	125	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22000	176	
s ₃	0	12 1/2	0	0	0	0	-1/10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/2	0	17079/3	34158/75
s ₄	0	12 1/2	0	0	0	0	-1/10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/5	0	20800	1664
s ₅	0	55	0	0	0	0	-11/25	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7/15	0	37960/3	7592/33
s ₆	0	1.875	0	0	0	0	-3/200	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1/100	0	720	384
s ₇	0	27 1/2	0	0	0	0	-11/50	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	17/30	0	29980/3	11992/33
s ₈	0	1 1/2	0	0	0	0	-3/250	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1/150	0	808/3	1616/9
s ₉	0	25	0	0	0	0	-1/5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1/2	0	23100	924
s ₁₀	0	7 1/2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5000	2000/3	
s ₁₁	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1000	40	
s ₁₂	0	3 3/4	0	0	0	0	-3/100	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1/10	0	1240	992/3
s ₁₃	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	13620		
s ₁₄	0	-27 1/2	-55	-55	0	0	-11/50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11/15	0	5480/3	
q	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1/75	0	200/3	
s ₁₅	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1/2	1	500	

← Output variable

References

Banga, J.R., Balsa-Canto, E., Moles, C.G., & Alosa, A.A., 2003. Improving food processing using modern optimization methods. *Trends in Food Science and Technology* 14 (4), 131-144.

Ba ́rcenas, M.E., & Rosell, C.M., 2007. Different approaches for increasing the shelf life of partially baked bread: Low temperatures and hydrocolloid addition. *Food Chemistry* 100 (4), 1594-1601.

Bradford, T., Serrano, E.L., Cox, R.H., & Lambur M., 2010. Development and Testing of a nutrition, food safety, and physical activity checklist for EFNEP and FSNE adults programs. *Journal of Nutrition Education and Behavior* 42 (2), 123-130.

Chen L., Langevin A ́., & Riopel D., 2011. A tabu search algorithm for the relocation problem in a warehousing system. *International Journal of Production Economics* 129 (1) 147-156.

- David, E.B., & Anderson, P.D., 1994. Principles of Good Practice for the Use of Monte Carlo Techniques in Human Health and Ecological Risk Assessments. *Risk Analysis* 14 (4), 477-481.
- Decock, P., Cappelle, S., 2005. Bread technology and sourdough technology. *Trends in Food Science and Technology* 16 (1–3), 113–120.
- Feyissa, A.H., Gernaey, K.V., & Adler-Nissen, J., 2012. Uncertainty and sensitivity analysis: Mathematical model of coupled heat and mass transfer for a contact baking process. *Journal of Food engineering* 109 (2), 281-290.
- Fraser, I., & Haddock-Fraser, F., 2012. Food choice, health information and functional ingredients: An experimental auction employing bread. *Food Policy* 37 (3), 232-245.
- Giannou, V., Kessoglou, V., Tzia, C., 2003. Quality and safety characteristics of bread made from frozen dough. *Trends in Food Science and Technology* 14 (3), 99–108.
- Graaf, R.d., & Duin, P.v.d., 2013. Collective Innovation: A new approach for dealing with society induced challenges. A case study in the Dutch Bakery Sector. *Procedia-Social and Behavioral Sciences* 75 (3), 139–145.
- Hart, D.J., Fairweather-Tait, S.J., Broadley, M.R., Dickinson, S.J., Foot, I., Knott, P., McGrath, S.P., Mowat, H., Normang, K., Scotth, P.R., Stroudf, J.L., Tucker, M., White, P.J., Zhao, F.J., & Hurst, R., 2011. Selenium concentration and speciation in biofortified flour and bread: Retention of selenium during grain biofortification, processing and production of Se-enriched food. *Food chemistry* 126 (4), 1771-1778.
- Heenan, S.P., Hamid, N., Dufour, J.P., Harvey, W., & Delahunty, C.M., 2009. Consumer freshness perceptions of breads, biscuits and cakes. *Food Quality and Preference* 20 (5), 380-390.
- Helton, J.C., & Davis, F.J., 2003. Latin hypercube sampling and the propagation of uncertainty in analyses of complex systems. *Reliability Engineering & System Safety* 81 (1), 23-69.
- Hiller, F.S., & Lieberman, G.J., 2010. *Introduction to Operations Research* 9th. McGraw-Hill Publishing Company.
- Jennings, A.A., & Mohan, S., 1991. Testing random number generators for microcomputer applications of Monte Carlo simulation. *Environmental software* 6 (4), 176-193.
- Liang, Y., & Whitlock, P.A., 2001. A new empirical test for parallel pseudo-random number generators. *Mathematics and Computers in Simulation* 55 (1-3), 149-158.
- Liu S.T., 2007. Profit maximization with quantity discount: An application of geometric programming. *Applied Mathematics and Computation* 190 (2), 1723–1729.
- Ministry of Economic Affairs, R.O.C., 2013. www.moea.gov.tw
- Mondal, A., & Datta, A.K., 2008. Bread baking – A review. *Journal of Food Engineering* 86 (4), 465-474.

- Purlis, E., 2011. Bread baking: Technological considerations based on process modelling and simulation. *Journal of Food Engineering* 103 (1), 92-102.
- Regier, M., Hardy, E.H., Knoerzer, K., Leeb, C.V., Schuchmann, H.P., 2007. Determination of structural and transport properties of cereal products by optical scanning, magnetic resonance imaging and Monte Carlo simulations. *Journal of Food Engineering* 81 (2), 485–491.
- Rong, J.H., Liu, X.H., Yi, J.J., & Yi, J.H., 2011. An efficient structural topological optimization method for continuum structures with multiple displacement constraints. *Finite Elements in analysis and Design* 47 (8), 913-921.
- Rozin P., 2005. The meaning of food in our lives: A cross-cultural perspective on eating and well-being. *Journal of Nutrition Education and Behavior* 37 (2), 101-112.
- Sezgin, F., & Sezgin, T.M., 2013. Finding the best portable congruential random number generators. *Computer Physics Communications* 184 (8), 1889-1897.
- Shi, C., & Gershwin, S.B., 2009. An efficient buffer design algorithm for production line profit maximization. *International Journal of Production Economics* 122 (2), 725–740.
- Stiegert, K.W., & Peng, H.M., 1998. Liberalization of the Taiwan wheat milling industry. *International Food and Agribusiness Management Review* 1 (2), 227-224.
- Vořechovský, M., 2012. Correlation control in small sample Monte Carlo type simulation II: Analysis of estimation formulas, random correlation and perfect uncorrelatedness. *Probabilistic Engineering Mechanics* 29, 105-120.

ICSSAM-733

How Do TMT Knowledge and Experience Affect Innovative Strategic Decision and Performance?

Peng-Yu Li

Department of Finance and International Business, Fu-Jen Catholic University
pyli@mail.fju.edu.tw

Abstract

Using insights from a resource-based view and an upper echelon perspective, this study examined the effects of top management team (TMT) characteristics on the innovative strategic decisions of companies regarding innovation and internationalization. We focused on the functional background heterogeneity and international experience of TMTs that reflect their ability to make innovative and international strategic decisions. Thus, the relationships among innovation, internationalization, and performance were empirically investigated in a sample comprising 365 Taiwanese listed companies in the electronics manufacturing industry. This results find a positive relationship between TMT international experience and internationalization. Engaging in internationalization contributes to the performance of a company. However, a negative relationship between TMT functional background heterogeneity and innovation contradicted our expectations. In addition, no evidence of a relationship between innovation and internationalization was observed, and a negative relationship between innovation and performance was also identified.

Introduction

Prior studies more focus on the role of TMT as a driver of innovation (i.e. Bantel and Jackson, 1989; Hoffman and Hegarty, 1993) and examine the impact of TMT on strategic decision and performance sampled from developed countries (i.e. Hambrick, Cho, and Chen, 1996; Finkelstein and Hambrick, 1990; Wiersema and Bantel, 1992; Carpenter and Fredrickson, 2001; Herrmann and Datta, 2005; Tihanyi et al., 2000.). They propose demographic background shaped perception, cognitive, value and preferences of managers and which further built TMT's knowledge and skills. Managers' experimental knowledge and experience affect their strategic decisions such as innovation and internationalization (Carpenter and Fredrickson, 2000; Hambrick, Cho, and Chen, 1996; Herrmann and Datta, 2005).

Although scholars have rich studies about the role of TMT in the decision to innovation, however, the decision to internationalization still underdeveloped (Tihanyi et al., 2000).

Little research has investigated the role of TMT on strategic decision, i.e innovation and internationalization, focused on firms from emerging markets. Scholars suggest investigate and extend the TMT effect on decision outside American and European countries (Barkema and Shvyrkov, 2007; Carpenter and Fredrickson, 2001; Lee and Park, 2006).

We extend this research by exploring how the experience and knowledge of TMT affect strategic decision, namely innovation and internationalization, of firms from emerging markets. For the firms from emerging economies, relied on TMT's knowledge and experience is important to contribute to innovative and international activities because of lacking of innovation and international experience, and resources (Tan and Meyer, 2010). Accumulating and deploying managerial resource lead the firms with less innovative and international skills can exploit these resources on various activities repeatedly and grow unlimitedly (Penrose, 1959; Mahoney, 2005).

Investigating the TMT effect in firms from emerging markets can more understand how the firms engaged in strategic decision based on limited managerial resources. How TMT of firm in emerging market exploit their prior experimental knowledge and experience to new strategic decision and contribute to performance.

This study focused on two task-related characteristics, functional background and international experience, both of which are relevant to TMT's strategic decision of innovation and internationalization. Firms engaged in both of two strategic decisions could contribute to performance. Moreover, innovation is one of sources drive the firms from emerging markets engage in internationalization, thus, we also investigate the reverence of two strategic decisions. .

Research background and Hypotheses development

The effect of TMT's functional heterogeneity background on strategic decision

Functional background heterogeneity represents the level of different work experiences owned by the executives. The diversified functional background heterogeneity is associated with TMT's openness and tolerance of risk and environment change. It makes him/her with more open and risk-taking orientation to make investments in innovation. Different work experience background enable TMT with higher possibilities to receive creative ideas derived from more considerations. TMT with experience different functional tasks will have higher willingness to receive and undertake novel and unprecedented strategies. It is also easier to receive changes, bring knowledge to organization and pursue risky strategies.

Moreover, innovation is more likely when people of different disciplines, background, and areas of expertise share their thinking. Appropriate heterogeneity of TMT is crucial in the innovation process. To the innovation requirement, it is essential to have people approaching a problem from different perspectives used for reduce uncertainty and ambiguity. The complexity of a problem demands diversity, creativity from different perspective. Diversified functional background enhances managers' task-related knowledge, industrial technology trends. Thus, diversified groups are expected to be more externally focused and creative when making decisions (Jackson, 1992).

H1-1: the TMT's functional background heterogeneity is positively related to innovation.

Exception of the influence of functional background heterogeneity on innovation, it also affects a firm's internationalization. The higher levels of TMT functional background heterogeneity contribute to firms to gather information from diversified sources. The heterogeneous characteristics of TMT represents TMT owed broader knowledge, skill, network and differences in the way of thinking (Finkelstein and Hambrick, 1996). While a firm entry a foreign country, it usually faced higher uncertainty and environment change. TMT with diversified knowledge, skills and network benefits firms to identify risk and opportunity and further overcome environmental challenge (Bantel and Jackson, 1989; Jackson, 1992). It also expands TMT's knowledge and capability to solve complex problems (Barkema and Shvyrkov, 2007).

The experiences across different functions benefit for firms to consider external factors and then integrate and connect with previous resources, skills and capability, then further have more effective international investment decisions. Heterogeneous functional background helps for team members to inspire more creative and comprehensive solutions for foreign investment decisions. TMT members are also with higher capability to observe opportunities and threats of foreign markets and respond environment uncertainty flexibly.

H1-2: the TMT's functional background heterogeneity is positively related to internationalization.

The effect of TMT's international experience and strategic decision

Those international experiences can be gained from foreign education or working aboard experience. International education and work experience are viewed as important determinants of executive global skills and global mind-sets (Hannerz, 1996; Hordes et al., 1995; Carpenter and Fredrickson, 2001). Global mind-sets training let the executives with higher tolerance with environment uncertainty, particularly, innovation is needed a long term strategic investment and may not have performance currently.

Moreover, TMT with international experience can have greater understanding on environment change and increase firms' flexibility. Prior international experience leads TMT have better sensitivity of environment change. TMT leverage their knowledge and capabilities to evaluate and manage environmental changes effectively and take a response to uncertain environment quickly.

H2-1: the TMT's international experience is positively related to innovation.

The international knowledge associated with international environments help the firms to reduce the awareness of the uncertainty of foreign market. TMT's international experience further can lower the time of learning foreign market and probability of failure in foreign market. Entering new foreign countries are confronted with a new macroeconomic, cultural, and institutional environment, a firm need to acquire necessary knowledge for success in foreign markets. While entering foreign market, firms face more complex information and higher competition from global market. Those international educational training also let the manager with higher ability and creditability to evaluate international investment decision. Thus, the TMT with more international experience, they have more international view and capabilities to deal with international business.

TMT have more international experience and knowledge about international markets, such as how to deal and negotiate with other foreign firms, the way to build overseas ties to cooperate with local partners, and higher understanding of different culture, can help TMT to overcome the difficulties in foreign market. Moreover, managers with special knowledge and resource related to foreign market can assess market opportunities emerging in the environment. It let the managers deploy resources efficient and effectively (Kor and Mahony, 2005) and also can exploit organizational capabilities to allocate and deploy resource in internationalization. It benefits to access potential foreign suppliers and customers and progress in foreign expansions.

H2-2: the TMT's international experience is positively related to internationalization.

Innovation and Internationalization

The firms with more firm specific advantages or ownership advantages tend to have more foreign direct investment (Dunning, 1988). Firms exploit those firm specific advantages in foreign market. Those advantage lead the firms can overcome the liabilities of foreignness and compete with local firms in host country (..). Firm specific advantage was identified as managerial and marketing skill, technology, production differentiation (Hymer, 1960; Caves, 1971; Dunning, 1988).

Innovative capability, in terms of R&D activity, was viewed as a source of monopoly advantage and highly related to international activities (Caves, 1974). Firms can use those advantages to operate in host country to earn higher profit and grab foreign market share. Furthermore, more R&D activities represent firms have greater capability to develop products (Li, 1999). The firms with higher innovative activities also upgrade the firms' learning capabilities and competitiveness. Innovative activities make the firms have better production and managerial process which help for upgrading product quality, competitiveness and lowering cost. By tapping resources or serving customers across nations, firms can take on more opportunities to innovate new products and services. In more complex and higher competitive global market, better innovative capabilities help the firms to developing new products and assess more opportunities to tap into new markets. It is further benefit for exploring foreign markets.

H3: Firms with more innovation will have the higher degree of internationalization.

Innovation, Internationalization and performance

Facing dynamic market change, innovative activities make firms can upgrade competitive position against other competitors. Innovation can provide production with higher quality, lower production cost and enhance operation efficiency. It also helps to attract more market and contribute to performance (Hitt et al., 1994; Kim and Mauborgne, 2002).

Despite of the innovation, possessing international activities is also another innovative strategic decision. organization can obtain benefits from sharing risk, lowering cost, and increase sales while entering foreign markets characterized by similar demands (Dominguez and Sequeira, 1993). Firms also can accumulate foreign market experience through intentional expansion (Johanson and Vahlne, 1977). The learning effect force firms can leverage their related skill and technology to different foreign market and resulting in higher performance (Kim, Hwang, and Burgers, 1993).

H4-1: Firms with more innovation will have better performance.

H4-2: Firms with more internationalization will have better performance.

Methods

Sample and Data

The sampled firms were Taiwanese firms in electronic manufacturing industry sector which is listed of Taiwan Stock Exchange Corporation(TSEC) and The Gre Tai Securities Market(GTSM) in 2007. Innovation and firms' performance were collected from *Taiwan Economic Journal*. In this study, TMTs was defined as the officers who were members of the manager board or executive committee as identified in the firm's annual reports. Demographic background information of TMT's characteristics and firms'

internationalization were gained from companies' annual reports. Information about the TMTs' functional background and international experience was collected from executive biographies published in company annual reports. After excluding the firms with uncompleted information of TMT characteristics, innovation and internationalization, we got 365 companies finally.

Measurement

Dependent Variables

Innovation In this study, we measure firm innovation as the ratio of expenditures by a firm on research and development to the firm's sales, namely R&D intensity. It is also widely used in previous studies (Caves, 1971; Delios and Beamish, 1999; Kogut and Chang, 1991; Lall and Siddharthan, 1982).

Internationalization In this study, we measure internationalization as the number of foreign subsidiaries of the firm (Grant, 1987; Geringer, Beamish and daCosta, 1989; Collins, 1990; Tallman and Li, 1996).

Performance A variety of measurements have been used in previous studies to measure firm performance. Return of assets (ROA) is often considered an indicator of performance. This measurement is useful assessing the performance implications of business strategies because it captures the degree of a firm to manage and deploy assets effectively (Oster, 1990). It is also a subjective assessment of a firm's performance.

Independent Variables

Functional Background Heterogeneity We follow previous studies to measure functional background heterogeneity (Bantel and Jackson, 1989; Tihanyi et al. 2000). We aggregated the data based on Blau's (1977) heterogeneity measure. The score is more close to one indicates the TMT with higher heterogeneous functional background.

International Experience Consistent with the previous studies, we measured international experience by using the number of TMT members who has experience of study or work abroad (Wiersema and Bantal, 1992; Bantel, 1994; Daellenbach, McCarthy and Schoenecker, 1999). We code one if the executive had experience educated or worked outside Taiwan and zero if they do not have any study or working experience outside Taiwan. We sum the number of TMT members who has international experience and divide to total number of TMT members.

Control Variables

TMT size was measured by the number of individuals on each firm's TMT. These data were available from company annual reports. A firm's age may also influence its experience and ability to undertake strategic decisions such as innovation and internationalization. Thus we include this variable in our analysis and use the years of a firm has been existence in 2007. Innovation and internationalization need financing investment which depend on the firm's financial condition to leverage resource (Li and Meyer, 2009). Thus, we measure leverage capability as the ratio of total debt to total assets in this study.

Results

The descriptive statistics and the correlations among variables was provided in Table 1. It indicates firms owned 6.43 subsidiaries and spent 4.30% R&D expenditure to total sales in average. Moreover, the average functional background heterogeneity of team managers is 0.77 and 21.7 managers have study or work abroad experience for every 100 executives.

Table 2 shows the results of the effects of TMT characteristics on two strategic decisions. Model 1 was based model and Model 2 showed that the relationship between TMT characteristics and innovation. The findings show functional heterogeneity were negatively related to firm innovation ($\beta=-0.111$, $p<0.05$). This result is contrary to our proposition and Hypothesis 1-1 was not supported. Moreover, the result indicates a statistically significant positive relationship between international experience and innovation ($\beta=0.163$, $p<0.001$). Thus, Hypothesis 1-2 was supported.

Model 4 shows the relationship between the impact of TMT characteristics on internationalization. The results indicate that both of functional background heterogeneity and international experience affect firm's internationalization ($\beta=0.137$, $p<0.5$; $\beta=0.110$, $p<0.5$). Therefore, Hypothesis 2-1 and 2-2 were supported.

The result of the influence of innovation on internationalization was showed on Table 2. It indicates the effect of innovation on internationalization was insignificant in Model 5 ($\beta=-0.15$, $p>0.1$). This finding suggested that a firm's innovative activities do not drive a firm's internationalization, which did not support Hypothesis 3. In Model 6, it shows the influence of innovation and internationalization on performance. The results indicates innovation is negatively related to performance ($\beta=-0.239$, $p<0.01$). This finding suggested that a firm commit to innovative activities may hamper firm performance, which is contrary to the proposition of Hypothesis 4-1. However, the result also shows a positively relationship between international and performance ($\beta=0.103$, $p<0.1$), indicates a firm's internationalization contribute to performance. Firms with more international activities will lead to better performance. Thus, Hypothesis 4-2 is supported.

Discussion and Conclusion

TMTs with heterogeneous background tend to induce the degree of innovation. Advantages of functional background heterogeneity may increase at a diminishing rate due to the information overload or conflicts arise from different ways of thinking. Moreover, success internationalization needs to be complemented with other factors, such as advertising and marketing ability. Thus, it cause the positive effect of innovation on internationalization not be supported. This statement of more innovation performed better is not supported due to the lag effect of innovation on performance. It takes long time for a new developed product into a market, therefore, a firm research expenditure will be completed far before any goods are sold and revenue generated. Thus, it shows the negative effect on performance and then has the positive benefit after current year.

This study has several limitations. First of all, the cross sectional study does not consider causality of TMT characteristics on strategic decision and performance. Particularly, the environment of emerging markets is highly uncertainty and change fast. We suggest future study use longitudinal data for further examine the influence of TMT characteristics on strategic decision and performance of firms from emerging markets. Second, sample used in this paper consist of listed companies in electronic industry, the sample representative might be insufficient to generalize the overall conditions of the industry. It suggested that future studies can be expanded to other industries, particularly comparing with service industries which may have different type of innovative and international activities.

References

- Athanassiou, N., and Nigh, D. (2000). Internationalization, Tacit Knowledge and the Top Management Teams of MNCs. *Journal of International Business Studies*, 31(3): 471–487.
- Bantel, K.A., and Jackson, S. (1989).”Top Management and Innovations in Banking: Does the Composition of the Top Team Make a Difference”, *Strategic Management Journal*, Vol. 10(2), pp.107-124.
- Barkema and Shvyrkov (2007). “Does Top Management Team Diversity Promote or Hamper Foreign Expansion?”, *Strategic Management Journal*, Vol. 28, pp.663-680.
- Barney, J. (1991). Firm Resources and Sustained Competitive. Advantage, *Journal of Management*, 17, 99-120.
- Boeker W. (1997a). “Executive Migration and Strategic Change: The Effect of Top Manager Movement on Product Market Entry”, *Administrative Science Quarterly* Vol. 42, pp.231–236.

- Carpenter, M. A., and Fredrickson, J.W. (2001),” Top Management Team, Global Strategic Posture, and the Moderating Role of Uncertainty”, *Academy of Management Journal*, 44: 553-546
- Carpenter, M. A., Pollock, T. G., and Leary, M. (2003). “Governance, the Experience of Principals and Agents, and Global Strategic Intent: Testing a Model of Reasoned Risk-Taking”, *Strategic Management Journal*, Vol. 24, pp.803–820.
- Carpenter, M.A., Geletkanycz, M.A., and Sanders, W.G. (2004). “The Upper Echelons Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition”, *Journal of Management*, Vol. 60, pp.749-778.
- Collins, J. M. (1990). “A Market Performance Comparison of U.S. Firms Active in Domestic Developed and Developing Countries”, *Journal of International Business Studies*, Vol. 21 (2), pp. 271-87.
- Delios, A., and P.W. Beamish (1999). “Geographic Scope, Product Diversification, and the Corporate Performance of Japanese Firms”, *Strategic Management Journal*, Vol. 20(8), pp. 711-727.
- Dominguez, Luis V., and Carlos G Sequeira. (1993), “Determinants of LDC Exporters' Performance: A Cross-National Study”, *Journal of International Business Studies*, Vol. 24(First Quarter), pp.19-40.
- Dunning (1988). “The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions”, *Journal of International Business Studies*, Vol. 19(1), pp. 1-31.
- Finkelstein, S., and Hambrick, D. C. (1990). ‘Top management team tenure and organizational outcomes: the moderating role of managerial discretion’. *Administrative Science Quarterly*, 35, 484–503.
- Geringer, J. M., P. W. Beamish., and R. C. daCosta (1989). “Diversification Strategy and Internationalization: Implications for MNE Performance, *Strategic Management Journal*, Vol. 10(2), pp. 109-119.
- Grant, R. M. (1987). “Multinationality and Performance Among British Manufacturing Companies, *Journal of International Business Studies*, Vol. 18(3), pp. 79-89.
- Hambrick, D.C. (1995). “Fragmentation and the other problems CEOs Have with Their Top Management Teams”, *California Management Review*, Vol. 37(3), pp. 110-127.
- Hambrick, D.C., T.S. Cho., and M-J. Chen (1996), "The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves”, *Administrative Science Quarterly*.
- Hermann, P., and Datta, D. K. (2005). Relationships between top management team characteristics and international diversification: An empirical investigation. *British Journal of Management*,16(1), 69–78.

- Hitt, M. A., Lee, H., and Yucel, E. (2002). ‘The Importance of Social Capital to the Management of Multinational Enterprises: Relational Networks among Asian and Western Firms’, *Asia Pacific Journal of Management*, Vol. 19, pp.353–72.
- Hitt, M.A., Hoskisson, R.E., and Ireland, R.D., (1994). “A Mid-Range Theory of the Interactive Effects of International and Product Diversification on Innovation and Performance”, *Journal of Management*, Vol. 20, pp.297– 326.
- Hordes, M., Clancy, J., and Baddaley, J., (1995). “A Primer for Global Start-ups”, *Academy of Management Executive*, Vol. 9(2), pp.7-11.
- Johanson, J., and Vahlne, J-E. (1977). “The Internationalization Process of the Firm – A Model of Knowledge Development and Increasing Foreign Market Commitments”, *Journal of International Business Studies*, Vol. 8(1), pp.23-32.
- Kim, W. C., and R. Mauborgne (2002). “Charting Your Company's Future”, *Harvard Business Review*.
- Kim, W. C., P. Hwang and W. P. Burgers (1993). “Multinational Diversification and the Risk Return Trade Off”, *Strategic Management Journal*, Vol. 14 (4), pp.275-286.
- Kogut, B., and S. J. Chang, (1991). “Technological Capabilities and Japanese Foreign Direct Investment in the United States”, *Review of Economics and Statistics*, Vol. 73(3), pp. 401-413.
- Kor, Y.Y., and Mahoney, J.T. (2005). How Dynamics, Management, and Governance of Resource Deployments Influence Firm-level Performance. *Strategic Management Journal*, 26(5): 489–496.
- Lall, S., and N. S. Siddharthan (1982). “The Monopolistic Advantages of Multinationals: Lessons from Foreign Investment in the U.S., *The Economic Journal*, Vol. 92, pp. 668-683.
- Li T. (1999). ”The Impact of the Marketing–RandD Interface on New Product Export Performance: A Contingency Analysis”, *Journal of International Marketing*, Vol. 7(1), pp.10–33.
- Luo, Y., and Tung, R. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481-498.
- Sambharya, R.B. (1996). “Foreign Experience of Top Management Team and International Diversification Strategies of U.S. Multinational Corporations”, *Strategic Management Journal*, Vol. 17(9), pp.736-746.
- Tan, J. and Peng, M. W. (2003). Organizational Slack And Firm Performance During Economic Transitions: Two Studies From An Emerging Economy, *Strategic Management Journal*, 24, pp.1249-1263.
- Tallman, S., and J. Li (1996). ”Effects of International Diversity and Product Diversity on the Performance of Multinational Firms”, *Academy of Management Journal*, Vol. 39(1), pp. 179-196.

- Tihanyi, L., Ellstrand, A.E., Daily, C.M., and Dalton, D.R.(2000). "Composition of the Top Management Team and Firm International Diversification", *Journal of Management*, Vol. 26, pp.1157-1177.
- Wiersema, M.F., and Bantel, K.A. (1992). "Top Management Team Demography and Corporate Strategic Change", *Academy of Management Journal*, Vol. 35(1), pp.91-121.
- Finkelstein S., and Hambrick D.C. (1996). "Strategic Leadership: Top Executives and Their Effects on Organizations", West: Minneapolis/St Paul, MN.
- Hannerz, U. (1996). Cosmopolitans and locals in world culture. In U, Hannerz (Ed.), *Transnational connections: Culture, people, places*: 102-111. London: Routledge.
- Hoffman, R., and Hegarty, W. (1993). Top management influence on innovations: Effect of executive characteristics and social culture. *Journal of Management*, 19: 549–574.
- Hymer, S. (1960). "The International Operations of National Firms: A Study of Direct Investment", Ph.D. Thesis, MIT : Published by MIT Press under Same Title in 1976.
- Oster, Sharon M. (1990). "Modern Competitive Analysis", New York: Oxford University Press.
- Penrose, E. T., *The Theory of the Growth of the Firm*, Oxford: Blackwell 1959.
- Bantel, K. A. (1994), "Strategic planning openness: The Role of Top Team Demography", *Group and Organization Management*, Thousand Oaks: Vol. 19(4), pp.406-424.
- Bloodgood, J. M., Sapienza, H. J., and Almeida, J. G. (1996). "The Internationalization of New High-Potential US Ventures: Antecedents and Outcomes", *Entrepreneurship Theory and Practice*, Vol. 20, pp.61–76.
- Caves, R. (1974). "Multinational Firms, Competition and Productivity in Host-Country Markets", *Economica*, Vol.41(162), pp.176-93.
- Caves, R. E. (1971). "International Corporation: The Industrial Economic of Foreign Investment," *Economica*, pp.1-27.
- Daellenbach, U. S., McCarthy, A. M., and Schoenecker, T. S. (1999). "Commitment to Innovation: The Impact of Top Management Team Characteristics", *R & D Management*, Vol. 29(3), pp.199-208.
- Jackson SE. (1992). "Consequences of Group Composition for the Interpersonal Dynamics of Strategic Issue Processing", *In Advances in Strategic Management*, Vol. 8, Shrivastava P, Huff A, Dutton J (eds). JAI Press: Greenwich, CT, pp.345–382.

Table 1 Descriptive Statistics and Correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7
1 Performance	6.756	12.295	1.000						
2 Innovation	4.296	5.775	-0.032	1.000					
3 Internationalization	6.430	10.465	0.062	-0.091*	1.000				
4 Functional Heterogeneity	0.774	0.234	0.008	-0.086	0.1525**	1.000			
5 International Experience	0.217	0.187	0.070	0.1997**	0.1174*	0.075	1.000		
6 TMT Size	10.353	6.570	0.042	-0.082	0.2891**	0.049	0.1058**	1.000	
7 Age	19.299	8.219	-0.033	-0.2100**	0.1648**	-0.007	-0.1409**	0.077	1.000
8 Debt Ratio	40.981	18.266	-0.4229**	-0.3846**	0.1560**	-0.032	-0.061	0.2222**	0.076

significant at the 0.01 level***; 0.05 level** ; 0.1 level* (2-tailed)

Table 2The effect of TMT characteristics on innovation, internationalization and performance

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Base		Innovation		Base		Internationalization		Performance		Performance	
	Beta	t	Beta	t	Beta	t	Beta	t	Beta	t	Beta	t
Functional Heterogeneity			-0.111**	-2.360			0.137*	2.800				
International Experience			0.163**	3.410			0.110*	2.210				
Innovation									-0.008	-0.150	-0.239***	-4.74
Internationalization									0.259***	5.070	0.103*	2.12
TMT Size	0.015	0.320	0.000	0.000	0.259***	5.080	0.236**	4.650	0.137**	2.680	0.120*	2.48*
Age	-0.183***	-3.820	-0.160***	-3.370	0.138**	2.70	0.155*	3.130	0.085	1.540	-0.067	-1.42
Debt ratio	-0.374***	-7.640	-0.366***	-7.590	0.088*	1.720	0.103*	2.040	-0.008	-0.150	-0.552***	-10.91
F-Value	26.58***		19.82***		15.08***		12.05***		11.28***		24.53***	
R ²	0.1809		0.2164		0.1113		0.1437		0.1114		0.2546	
Adj R ²	0.1741		0.2054		0.1040		0.1318		0.1015		0.2442	

significant at the 0.01 level***; 0.05 level** ; 0.1 level* (2-tailed)

ICSSAM-602

Exploring the Relationship between Facades of Conformity and Employee Well-Being: the Moderating Effect of Emotional Intelligence.

Chieh-Ju, Tseng

Yuan-Ze University

135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.

Y.A.E.M.Ebei@gmail.com

Hung-Hui, Li

Yuan-Ze University

135 Yuan-Tung Road, Chung-Li, Taiwan 32003, R.O.C.

hhlee@saturn.yzu.edu.tw

Abstract

To live in a social community which is fully filled with others perspective and expectation, people try to getting false and insincerity. In the work place, the success of organization depends on if employees comply with the organization's values or not. Recently, many researchers are focus on “facades of conformity” .In order to meet organizational values, employees inhibit their own ideas and hide personal values so that can help themselves survive in the organization. It will influence the satisfaction of employee if employees have been under the facades of conformity for a long time. In the contemporary trends in business management, more and more scholars believe that the creation of employee well-being is not only under moral pressure on corporate social responsibility, but also a way to achieve competitive advantage. In additionally, how emotions of individuals through their emotional intelligence is to improve the research topic of concern, therefore, this study take emotional intelligence as moderator to realize how it affect the relationship between facades of conformity and emotional intelligence. This research applies questionnaire survey approach and collects 400 workers in Taiwan as a sample group questionnaire. According to the results of the analysis, it providing companies understand and manage employees, furthermore, lead to better performance for enterprises to achieve win-win situation.

Keywords: Facades of Conformity, Employee Well-Being, Emotional Intelligence

ICSSAM-643

Leader-Member Exchange Relationship and Employee's Turnover Intention: The Moderating Role of Conflict Resolution

Chih-Yun Fang

Yuan Ze University
ss850280@gmail.com

Hung-Hui Li

Yuan Ze University

Due to the limited organizational resources, leaders couldn't fair distribution to every subordinate its resources. So leaders will according to the capacity and reliability of each subordinate, develop a varying degree of exchange relationship quality (Graen,1976; Graen & Cashman,1975). This exchange relationship is based on the exchange of emotional support and important resources (Graen & Scandura,1987). Studies show that leader-member exchange relationship with turnover intention, may be U-shaped curve (Harris, 2005). According to the study, low exchange relationship employees will feel marginalized in the organization who is negative and have a higher rate of turnover intention; high exchange relationship employees may have better job opportunities, resulting in higher turnover intention. Among them, the confliction is the important variables in the exchange relationship.

In an organization, when an individual or groups for benefits or cognitive or emotional is not the same, it may conflict(Donaldson & Simpson, 1995; Laue, 1987). Robbins(1998)finds to many traditional management scholars that the confliction is bad. But the confliction is not only negative effects, conflictions can be some decisive function in groups or in other social relationships. The confliction can achieve positive effects, depending on how to resolution conflict. Conflict resolution method has high, medium and low degrees of self-concern and concern for others (Rahim, 2001; Wall & Callister, 1995). The conflict formation process is very complex, and depending on the different object may use a different approach. Therefore this study wants to explore different levels of exchange relationship, whether due to different ways of resolution with confliction, caused different turnover intention.

This research applies questionnaire survey approach and collect 400 workers in Taiwan as a sample group questionnaire. According to the results of the analysis, it providing companies understand and manage employees, reduce employee turnover intention to achieve a win-win situation.

Psychology

Kyoto Research Park 4F

09:00-10:00

Friday, May 9

ICSSAM-452

The Relation between Materialism and Compulsive Buying: Moderated Mediation Effects of General Decision Making Style and Buying Motives

Hyo Jin Kim *Chungbuk National University*

Seo Yeong Chae *Chungbuk National University*

Sung Moon Lim *Chungbuk National University*

ICSSAM-454

The Relationship between Internet Pornography and Sexual Aggression: Moderating Effects of Five Factors of Personality, Empathy, Rape Myth Acceptance

Hyo Jin Kim *Chungbuk National University*

Seo Yeong Chae *Chungbuk National University*

Sung Moon Lim *Chungbuk National University*

ICSSAM-567

Intimate Relationship: Relationships among the Perception of Parental Marital Relationships, Attachment to Parents, and Love Attitudes in College Students

Yu-Jhen Chen *Chung Shan Medical University*

Mein-Woei Suen *Chung Shan Medical University*

Liang-Ju Chiu *Chung Shan Medical University*

ICSSAM-768

Resource Allocation in Goal Competition: Does an Unattainable Goal Conserve Self-Control Strength?

Ryosuke Sakurai *University of Tokyo*

Takumi Watanabe *University of Tokyo*

Kaori Karasawa *University of Tokyo*

ICSSAM-568

Effects of Age, Gender and Gender Characteristics on Bullying Behavior

Liang-Ju Chiu

Chung Shan Medical University

Mein-Woei Suen

Chung Shan Medical University

Yu-Chen Jhen

Chung Shan Medical University

ICSSAM-452

The Relation between Materialism and Compulsive Buying: Moderated Mediation Effects of General Decision Making Style and Buying Motives

Hyo Jin Kim

Chungbuk National University, Korea

fatariro@hanmail.net

Seo Yeong Chae

Chungbuk National University, Korea

seoyeong08@naver.com

Sung Moon Lim

Chungbuk National University, Korea

sungmoon@chungbuk.ac.kr

Abstract

The present study tested the dual path model in which materialism affects identity buying motive and emotion regulation buying motive, and then these two buying motives affect compulsive buying. First, based on previous researches the study model and the competitive models were deduced, and we tried the procedure to confirm the model which is the fittest to the data among suggested models. Furthermore, it was investigated whether there were gender differences on the paths of the accepted model. Second, it was tested whether the mediation effects of identity buying motive and emotion regulation buying motive were moderated by general decision making style in the relationship between materialism and compulsive buying. 465 college students in Korea completed the questionnaires of research variables. Data were analyzed using structural equation modeling, hierarchical regression analysis, and moderated mediation analysis. The results were as follows. First, it was the accepted model which materialism influenced identity buying motive and emotion regulation buying motive, and then identity buying motive did not influence compulsive buying but emotion regulation buying motive influenced compulsive buying. And there was no gender difference on the paths of the accepted model. Second, emotion regulation buying motive had a full mediation effect in the relation between materialism and compulsive buying. And the spontaneous style in general decision making style had interaction effects in the pathway from emotion buying motive to compulsive buying. Finally, the spontaneous style had moderated mediation effects through emotion regulation buying motive in the relationship between materialism and compulsive buying. We discussed the meanings of these results and the implications for further study.

key words: Materialism, Compulsive buying, Buying motive, General decision making style

The Relation between Materialism and Compulsive Buying: Moderated Mediation Effects of General Decision Making Style and Buying Motives

Hyo Jin Kim, Seo Yeong Chae, Sung Moon Lim

Chungbuk National University, Korea

Abstract

The present study tested the dual path model in which materialism affects identity buying motive and emotion regulation buying motive, and then these two buying motives affect compulsive buying. First, based on previous researches the study model and the competitive models were deduced, and we tried the procedure to confirm the model which is the fittest to the data among suggested models. Furthermore, it was investigated whether there were gender differences on the paths of the accepted model. Second, it was tested whether the mediation effects of identity buying motive and emotion regulation buying motive were moderated by general decision making style in the relationship between materialism and compulsive buying. 465 college students in Korea completed the questionnaires of research variables. Data were analyzed using structural equation modeling, hierarchical regression analysis, and moderated mediation analysis. The results were as follows. First, it was the accepted model which materialism influenced identity buying motive and emotion regulation buying motive, and then identity buying motive did not influence compulsive buying but emotion regulation buying motive influenced compulsive buying. And there was no gender difference on the paths of the accepted model. Second, emotion regulation buying motive had a full mediation effect in the relation between materialism and compulsive buying. And the spontaneous style in general decision making style had interaction effects in the pathway from emotion buying motive to compulsive buying. Finally, the spontaneous style had moderated mediation effects through emotion regulation buying motive in the relationship between materialism and compulsive buying. We discussed the meanings of these results and the implications for further study.

key words: Materialism, Compulsive buying, Buying motive, General decision making style

ICSSAM-567

Intimate Relationship: Relationships Among the Perception of Parental Marital Relationships, Attachment to Parents, and Love Attitudes in College Students

Yu-Jhen Chen¹, Mein-Woei Suen^{*1,2,&3}, Liang-Ju Chiu¹

1 School of Psychology and Institute of Clinical Psychology, Chung Shan Medical University, Taichung City 40201, Taiwan, ROC.

E-mail: amygdgme@yahoo.com.tw

2 Chung Shan Medical University Hospital, Taichung City 40201, Taiwan, ROC.

E-mail: blake5477@yahoo.com.tw

3 Social and Gender Issue Research Center, Chung Shan Medical University, Taichung City 40201, Taiwan, ROC.

According to the psycho-social developmental theory, college students are in crisis stage (intimacy vs. isolation), individuals at this stage need to seek intimacy and belonging. How do college students develop an intimate relationship? Previous research indicates that by observing the parents' marital interactions, children construct a view of the close relationship (Huang, 2010; Huang & Wang, 2012). However, Hazan and Shaver (1987) considered that love is an attachment process, individual and significant others formed affection bonds, were translated into terms appropriate to adult romantic love. This study, thus, explored the relationships among perception of parental relationship, attachment to parents, and love attitudes in college students. In total, 196 college students in Taiwan completed “the Perception of Parental Marital Relationships Scale”, “Attachment to Parental Scale” and “Love Attitude Scale” (5 types of love). The statistical analysis reveal results : (1)perception of parental marital relationship can significantly predict logical love ($p < .05$) and companionate love ($p < .05$); (2)attachment relationships to mothers can significantly predict game-playing love ($p < .05$), logical love ($p < .01$) and companionate love ($p < .05$) ; (3)attachment relationships to father can significantly predict logical love ($p < .001$) and companionate love ($p < .01$) ; (4)attachment to parental were examined as a mediator of the associational between perception of parental marital relationships and logical love ($Z = 3.46$, $p = .000$; $Z = 2.95$, $p = .003$) ; (5)attachment to parental were examined as a moderator of the associational between perception of parental marital relationships and companionate love ($\beta = .27$, $p < .01$; $\beta = .17$, $p < .05$). In addition, the study also explores the factor which may influence the love attitude. More details and findings are discussed in this paper.

Keywords: love attitude, attachment, perception of parental marital relationship

ICSSAM-768
Resource Allocation in Goal Competition:
Does an Unattainable Goal Conserve Self-Control Strength?

Ryosuke Sakurai^{a,*}, Takumi Watanabe^{a,b}, Kaori Karasawa^a

^aUniversity of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan

^bJapan Society for the Promotion of Science,
5-3-1 Kojimachi, Chiyoda-ku, Tokyo, Japan

E-mail address: 0016610774@mail.ecc.u-tokyo.ac.jp

Abstract

Existing research shows that participants who anticipate a resource-demanding competing goal conserve self-control strength for its own attainment, and poorly perform in focal goal pursuit. However, motivational intensity theory indicates that participants do not invest their limited resources in goals unattainable based on the law of parsimony. Extending these findings, we predicted that competing goals, when unattainable, will neither invoke the conservation of self-control strength nor inhibit focal goal pursuit. Fifty students at the university of Tokyo participated in this study. Participants were randomly assigned to one of three conditions (unattainable, control-a [resource-demanding + attainable], and control-b [not resource-demanding + attainable]). All participants were instructed that they would complete two separate tasks, the first of which was a Stroop task (focal goal) and the second of which was a number-memory task (competing goal). In the number-memory task, participants were asked to memorize presented numbers within ten seconds. Varying a digit of numbers participants need to memorize, we conducted the manipulation. One-hundred-digit numbers in the unattainable condition, ten-digit numbers in the control-a condition, and one-digit numbers in the control-b condition were instructed to be presented. After the manipulation, participants completed Stroop task. Analysis revealed that participants in the unattainable condition showed better Stroop task performances than those in two control conditions, indicating that unattainable competing goal did not conserve self-control strength. Stroop task performances did not differ across the two control conditions. Confirming our hypothesis, results imply that resource allocation in goal competition is guided by the law of parsimony.

Keyword: Self-Control, Goal Pursuit, Motivation

ICSSAM-568

Effects of Age 、 Gender and Gender Characteristics On Bullying Behavior

Liang-Ju Chiu¹, Mein-Woei Suen^{*1,2,&3}, & Yu-Chen Jhen¹

¹School of Psychology and Institute of Clinical Psychology, Chung Shan Medical University, Taichung City 40201, Taiwan, ROC.

²Chung Shan Medical University Hospital, Taichung City 40201, Taiwan, ROC.

E-mail: blake5477@yahoo.com.tw

³Social and Gender Issue Research Center, Chung Shan Medical University, Taichung City 40201, Taiwan, ROC.

Recent researches reviewed gender differences in aggression, male were more physical-styled aggression (PA) and women were more relational-styled aggression (RA), and developmental trends in aggression (i.e. Björkqvist, 1994 ; Crick & Grotpeter, 1995 ; Archer & Coyne, 2005), This phenomenon was probably by learning as aspects of different gender role (Eagly & Steffen, 1986 ; Lagerspetz, Björkqvist & Peltonen, 1988). In many cultures, males were expected to have more masculine characteristics, and females were expected to have more femininity characteristics. Therefore, there was different socialization between genders (Mchale, Crouter, & Tucker, 1990). Except the social expectation, however, " characteristic" may also direct influence aggressive behavior. This study aim at exploring that the effect of "age" 、 "gender" and " characteristic" on aggressive behavior . There were 249 undergraduates ($M_{age}=20.24$; $SD_{age}=1.58$) and 251 eighth-grade students ($M_{age}=13.48$; $SD_{age}=.56$) participated in a self-report survey, and evaluated their aggressive behavior and characteristic. Our results show that: (1) In undergraduate sample, men can positive predict both of PA and RA ($p<.05$). In junior high sample, males can also positive predict PA ($p<.01$) but RA ($p=.915$); (2) In undergraduate sample, males' masculine and femininity characteristics can't predict PA and RA (all $ps>.184$), however, females' masculine characteristics ($p<.05$) can positive predict PA but RA ($p=.439$), and females' femininity characteristics can't predict PA and RA (all $ps>.139$). In junior high sample, males' masculine characteristics can positive predict PA (marginal significant $p=.088$) but RA ($p=.977$), and males' femininity characteristics can't predict PA and RA (all $ps>.139$) ; females' masculine characteristics can positive predict PA ($p<.05$) but RA ($p=.455$), and females' femininity characteristics can negative predict PA ($p<.05$) but RA ($p=.878$). The result suggest that interaction of age, gender and characteristics influence individual's aggressive behavior. More detailed and discuss are shown in this article.

Keywords: gender characteristics, gender role, age-related difference, aggressive behavior