2015

ABRIC

Advances in Business Research International Conference

Advances in Business Research International Conference

Advancing Knowledge, Transforming Life

ISBN 978-967-958-168-3

9 789679 581683 >

Conference Proceedings

17 - 18 NOVEMBER 2015 | ADYA HOTEL, LANGKAWI, KEDAH, MALAYSIA

CONFERENCE PROCEEDINGS

ADVANCES IN BUSINESS RESEARCH INTERNATIONAL CONFERENCE 2015

17TH – 18TH NOVEMBER 2015

LANGKAWI, KEDAH,

MALAYSIA

Organised by:

Centre for Postgraduate and Professional Studies

Faculty of Business Management

Universiti Teknologi MARA,

MALAYSIA

Advances in Business Research International Conference 2015

Proceedings of the Advances in Business Research International Conference 2015

Langkawi, Kedah, Malaysia

All rights reserved.

No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of both copyright owner and the publisher, CPPS.

Copyright©2015 Respective authors
ISBN 978-967-958-168-3
Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

Foreword

It is indeed a great pleasure for the Organising Committee to welcome you to Advances in Business Research International Conference 2015 in the beautiful island of Langkawi, Kedah.

The main objective of ABRIC2015 is to provide a platform for academics, researchers and practitioners as well as industrial professionals from all over the world to present, disseminate and discuss their current research findings and also to explore and promote recent developments, current practices and future trends in the area of business research. Thus, with the theme "Advancing knowledge, Transforming Life," ABRIC2015 hopes this conference would meet it objectives in not only fostering collaborative efforts but also as a platform for networking and discussion in various interests from around the world.

It is our hope that all of you will enjoy this conference and this legendary, enchanting island, Langkawi, Kedah, Malaysia. Our sincere gratitude to Keynote Speakers, LADA, other sponsors and all committee members for their strong commitment in organizing this Advances in Business Research International Conference 2015 (ABRIC2015).

Happy conferencing and enjoy your stay in Langkawi, Malaysia.

ABRIC2015 Organising Committee

COMMITTEE MEMBERS

Patron
YBhg. Tan Sri Dato' Prof. Ir. Dr Sahol Hamid Bin Abu Bakar, FASc, Vice Chancellor

Advisor 1
Professor Dr Haji Zaini Abdullah

Advisor 2
Dr Abdul Kadir Othman

Chairperson
Professor Za'faran Hassan

Deputy Chairperson
Mohd Khalid Mohd Abas

Bursary
Dr. Norlida Jaafar

Secretaries
Shereen Noranee
Sarinah Sabar

COMMITTEE MEMBERS

Editors
Professor Dr Fauziah Noordin
Dr Abdul Kadir Othman

Program Book
Rodiah Sharif
Muhammad Naim Hussin
Assoc. Prof. Noorlaila Hj Yunus
Assoc. Prof. Dr. Anizah Zainuddin

Reviewers
Prof. Madya Dr.Normala Daud
Assoc. Prof. Dr. Noorlaila Hj. Yunus

Administration
Rodiah Sharif
Norlela Mohd Yasin

Logistic
Rodiah Shariff
Professor Dr Fauziah Noordin
Dr Masrur Mohd Khir
Nur Farhana Mohd Sah
Mohamad Naqiuddin Md Mansor
Nor Sara Nadia Muhamad Yunus
Mumtaz Ahmad
Kamaruzaman Muhammad

Colloquium
Dr Norashikin Hussein
Lailatul Faizah Abu Hasan
Norlela Mohd YasinMariam Khiri

Program Scheduling
Assoc. Professor Dr Noorlaila Hj. Yunus
Kadulliah Ghazali
Lailatul Faizah Abu Hasan

Journal
Lailatul Faizah Abu Hassan
Nurliana Kori
Mohd Khirzan Badzli A. Rahman
Emi Normalina Omar
Nur Atiqah Rochin Demong
Mohammad Zaim Mohd Salleh
Ainunnazlee Mohd Ali

Technical
Mohd Izzat Mohd Jaafri
Abdul Hakam Abdul Hassim
Muhammad Naim Hussin

Promotion and Marketing
Mohd Khirzan Badzli A. Rahman
Mohammad Zaim Mohd Salleh
Azmi Mat
Ainunnazlee Mohd Ali
Nurliana Kori

Website and Graphics Design
Nur Atiqah Rochin Demong
Muhammad Naim Hussin
Nazarina Abd Ghani

Event Management and Dinner ABRIC 2015
Assoc. Prof. Hajah Haslina Ahmad
Mohd Khalid Mohd Abas
Nor Azzura Nordin
Rodiah Sharif

UNIVERSITI TEKNOLOGI MARA
CAWANGAN KEDAH
COMMITTEE MEMBERS

Patron
Dr Asmadi Mohammed Ghazali

Advisor
Dr Hj. Abdul Majeed Hj. Ahmad

Chairperson 1
Tuan Kamarudin Othman

Deputy Chairperson
Dr Kardina Kamaruddin

Secretary
Siti Hajar Mohd Hussain

Program (Abstract/Full Paper/Proceeding)
Norfaizah Mohd Nasir

Reviewer (Content)
Professor Dr Maznah Wan Omar

Publicity & Public Relations
Azlan Abdul Rahman

Reviewer (Language)
Bawani Selvaraj

Registration/Protocol
Mohd Najmi Osman

Logistics & Spirituality
Abdul Hadi Mohamad

REVIEWERS

ACKNOWLEDGING THE CONTRIBUTIONS OF REVIEWERS

Abdul Kadir Othman, Dr

Abdul Rahman Abdul Rahim, Assoc Prof Dr

Anizah Zainuddin, Assoc Prof Dr

Balkis Haris, Dr

Carol Boon Chui, Dr

Ehsan Fansuree Mohd Surin, Dr

Erne Suzila Hamzah, Dr

Faridah Hassan, Prof Dr

Fauziah Noordin, Prof Dr

Fauziah Pawan, Assoc Prof Dr

Geetha Subramaniam, Assoc Prof Dr

Hairulnizam Hashim, Dr

Hamizah Hassan, Dr

Jamaliah Haji Yusof, Dr

Masrur Mohd Khir, Dr

Masturah Main, Dr

Naffisah Mohd Hassan, Dr

Noorlaila Mohd Yunus, Assoc Prof Dr

Noormala Amir Ishak, Prof Dr

Norashikin Hussein, Dr

Norlida Jaafar, Dr

Normala Daud, Assoc Prof Dr

Nur Atiqah Rochin Demong

Rabiah Abdul Wahab, Assoc Prof Dr

Raja Munirah Raja Mustafa, Assoc Prof Dr

Rohana Ngah, Dr

Rohani Mohd, Dr

Rosilawati Amiruddin, Dr

Rozilah Abdul Aziz

Roshidi Hassan, Assoc Prof Dr

Siti Asiah Mohd Shahid, Dr

Siti Ayu Ahmad, Dr

Siti Norsuariani Ma’on, Dr

Syed Abdul Jamal Nasir Syed Ahmad, Assoc Prof Dr

Zainab Ahmad, Assoc Prof Dr

TABLE OF CONTENTS

Foreword	iv
Committee Members	v
Reviewers	vii
Conference papers	viii

CONFERENCE PAPERS

TRACK 1: MANAGEMENT AND EDUCATION

No.	Title of Paper and author(s)
1.	Academia's Perception on Quality of Work Life and Organizational Commitment in Public Institution of Higher Learning: An empirical study *Normala Daud, Yazlinda Yaakob & Siti Nur Musliha Ghazali*
2.	An Exploration of Emotion Driven Organizational Citizenship Behavior – A Phenomenological Approach K. K. Ramachandran & A. Sarasu
3.	Assessing Security Threats Within The Event Management Domain Masrur Mohd Khir; Nur Atiqah Rochin Demong; Melissa Shahrom
4.	Assessing the Influence of Personality Traits on Knowledge Sharing among Employees in University Malaysia Sarawak, Malaysia Muhammad Omar, Dean Mojolou, Pauline Achan, Susana William Jalil & Habiel Zakariah
5.	Attaining Life Satisfaction Through Work-Life Balance and Happiness Siti Hartini Najamudin & Muhamad Khalil Omar
6.	Can good Muslims also become good consumers? Exploring the link between Islamic Personality and Customer Citizenship Behavior Muhammad Iskandar Hamzah & Abdul Kadir Othman
7.	Emotional Distress and Work Presenteeism among Administrative Workers: A Mediator Role of Upper-Extremity Musculoskeletal Disorders Mohd Zulkifli Abdullah, Abdul Kadir Othman, Maria Justine, Naliza Solat & Zuria Akmal Saad

8.	Emotional Intelligence, Ulul Albab Leadership Styles and Employees Commitment Nurul Naimah Zakaria, Abdul Kadir Othman & Erne Suzila Kassim
9.	Incorporation of Mobile Learning Approaches in Staff Training Ros Aizan Yahaya, Norhaizan Mohamed & Mohd Khalid Mohd Abas
10.	Knowledge Sharing Intention among Tertiary Students in Malaysia: Individualism versus Collectivism Norashikin Hussein, Ainie Hairianie Aluwi & Nor Azian Abd Rahman
11.	Leadership Style and its Influence on the Quality of Life Among School Teachers Mohd Khalid Mohd Abas, Ros Aizan Yahaya, Narehan Hassan & Ervinna Manggas
12.	Motivation In The Workplace: A Study On The Support Group Employees Of Public University Rohana Ngah, Saiful Azwan Mustapha & Amily Fikry Aziz
13.	Organizational Climate, Job Satisfaction and Intention-to-Leave among Academic and Administrative Staff in Malaysia Fauziah Noordin, Hasliza Haji Hadadak & Suraya Hani Samsuddin
14.	Relationship between Prosocial Motivation and Subordinate Self-Rating of Leader-Member Exchange Quality at Public Universities Shereen Noranee, Noormala Amir Ishak, Raja Munirah Raja Mustapha & Rozilah Abdul Aziz
15.	The Impact of Reward Structures on Job Satisfaction among Academic Staff in Universiti Kuala Lumpur Mohd Hafizul Ismail and Siti Nur Dina Hj Mohd Ali
16.	The Impact of Transformational Leadership Styles towards Employees Job Performance: The Moderating Effect Of Trust Noorlaila Yunus and Mohd Akmal Mohd Aduros
17.	The Influence of Health Administration Graduates' Competencies on Employability Ahmad Suffian Mohd Zahari, Abdul Kadir Othman & Mohamad Shahril Mohamad Besir
18.	The Influence of HRM Practices in Determining the PHEIs Non-Academic Staff Intention to Stay: A Conceptual Model Shariff Harun, Siti Asiah Md Shahid & Abdul Kadir Othman
19.	The Influence of Leaders' Interpersonal Communication Skills on Employees' Innovative Behaviour DarmaTasiyah Gumbri, Siti Asiah Md Shahid & Abdul Kadir Othman
20.	The Influence of Leader's Sources of Power on Organizational Citizenship Behaviour in Call Centre Industry *Noor Azlina Mohamed Yunus, Noorlaila Hj Yunus, Kadulliah Ghazali & Norfadzilah Abd Razak*
21.	The Influence of Managers' Communication Styles on Employees' Job Satisfaction among Local and Expatriate Managers Abdul Kadir Othman, Muhammad Iskandar Hamzah & Zaini Abdullah

22.	The Influence of Personality Traits on Job Satisfaction Amongst Teachers in Klang, Selangor Maimunah Mohd Shah, Zarini Ahmad Rashid & Mohd Syamim Hariri
23.	The Influence of Structural Design on Managerial Innovativeness: Does Formalization and Centralization Impact on Managerial Information Seeking Behavior Za'faran Hassan
24.	The Relationship between Occupational Safety and Health Practices and Employees Behaviour Rabiah Abdul Wahab, Noor Azura Dahalan, Farah Nadia Ismail & Nor Azairiah Othman
25.	The Relationship between Talent Management Practices and Employee Retention in the Information and Technology (IT) Organizations in Selangor, Malaysia Nurul Ezaili Alias, Roshidi Hassan and Rozana Othman
26.	Understanding Determinants of Customer Retention among Three Service Providers in Malaysia Syukrina Alini Mat Ali, Noor'ain Mohamad Yunus & Siti Fatiany Abd Kader Jalani

TRACK II: MARKETING, ENTREPRENEURSHIP AND COMMUNICATION

No.	Title of Paper and author(s)
1.	A Conceptual Framework on the Impact of Entrepreneurial Competencies on Small and Medium Enterprises Business Performance in the Malaysian Hospitality and Tourism Industry Samuel Adeyinka-Ojo, Shehnaz Tehseen & Vikneswaran Nair
2.	A Confirmatory Factor Analysis in a Study of Consumer Complaint Behaviour, Satisfaction with Complaint Handling and Relationship Quality in the Malaysian Mobile Phone Services Industry Mohd. Khirzan Badzli A Rahman, Sharifah Azizah Haron, Laily Paim, Syuhaily Osman, Abdul Kadir Othman
3.	A Research Study towards the Perception of Organic Products in India Kumari Archana & Archana Singh
4.	Customer Experience Creation in Retail Industry Muhammad Hanif Abdul Gafar & Nor Amira Mohd Ali
5.	Determining Gender Differences among Customer towards Satisfaction in Retail Industry Ibhrahim Zakaria, Mohammad Zaim Mohd Salleh & Ainunnazlee Mohd Ali
6.	E-Business Adoption among Homestay Business: Sarawak Experience Muhammad Omar, Jati Kasuma, Roystance Asit, Pauline Achan & Dean Mojolou
7.	Exploring the Determinant Factors Affecting Online Purchase Intention Via Social Media Azmi Mat; Mohammad Zaim Mohd Salleh; Nurliana Kori; Ainunnazlee Mohd Ali; Zarina Abdul Munir
8.	Exploring the Influence of Behavioral Components on Market Orientation in a Government Link Company Thahira Bibi TKM Thangal & Noor Hanim Rahmat
9.	Impact of Strategic Entrepreneurship on Firm Performance among SME Firms in Malaysia Najihah Shukor & Amran Awang

10.	Individual Entrepreneurial Orientation (IEO) of University Students Wei-Loon Koe
11.	Knowledge and Attitude towards Consumers' Patronize Halal Store Noor Liyana Binti Karim, Noor Haninah Binti Hasri, Nur Arifah Binti Muhamad Ihwal, Nur Zalekha Binti Azizan, Muhammad Azraai Bin Abdullah Sani & Mohammad Nasir Bin Abdullah
12.	Recognition of Sustainable Development Opportunities among SMEs Entrepreneurs in Malaysia Shazwani Amran & Sarina Mohamad Noor
13.	Selective System Dis-Integration improves Supply Chain Efficiency & Organizational Performance Sarit Maitra & Dhanapal Durai Dominic
14.	The Impact of Customer Satisfaction on Purchase Intention in Malaysian Takaful Industry Lailatul Faizah Abu Hassan
15.	The Implementation of Halalan-Toyyiban Supply Chain Management Standards (MS2400) on the Performance of the Malaysia Hypermarket Grocery Retailers: A Preliminary Study Anizah Zainuddin & Sariwati Shariff
16.	The Relationship of Servicescape towards Customer Satisfaction in Higher Learning Institution Mohammad Zaim Mohd Salleh; Ainunnazlee Mohd Ali; Azmi Mat; Nor Sara Nadia Muhamad Yunus

TRACK III: FINANCE AND ECONOMICS

No.	Title of Paper and author(s)
1.	A Study on Capital Structure and Financial Performance of Indian Textile Industry K.K.Ramachandran & M.M.Madhumathy
2.	Analyzing the Impact of Globalization on Malaysia Labor Market using Multivariate Cointegration Analysis Adibah Hussin, Azniza Ahmad Zaini, Mohd Elfee Ab Rashid & Nik Azma Wail
3.	Does Microfinance Really Help the Poor? A Review o the Existing Literature Noor Izam bt. Mohd Fadzil & Song Saw Imm
4.	Fundamentals and Country Specific Determinants of FDI: Evidence from United States and Malaysia Catherine S F Ho and Lena Booth
5.	Housing Affordability among Generation Y in Malaysia A Conceptual Analysis Geetha Subramaniam& Amira Aishah Mohd Shoed
6.	Personal Bankruptcy Prediction in Malaysia Sharifah Heryati Syed Nor
7.	Reliability and Construct Validity of Knowledge, Perception and Acceptance towards Implementation of Goods and Services Tax (GST) Questionnaire Rugayah Ahmad, Nur Farhana Mohamed Zaki, Nur Athirah Fatini Zulkiflee, Nursyazana Norazman, Muhammad Azwa Daud & Mohammad Nasir Abdullah
8.	Work Environment and Fertility Rate in Malaysia - A Comparison between Formal and Informal Sectors Geetha Subramaniam; Nurfarahain Mohd. Saleh

TRACK IV: ETHICS, SOCIAL RESPONSIBILITY AND OTHERS

No.	Title of Paper and author(s)
1.	A Model For the Performance Monitoring and Evaluation of Organizations to Migrate to the Cloud Based on System Approach Jalal Sarabadani & Ayoub Mohammadian
2.	Android Based Vehicle Tracking System Omer Ali Abubakr Abd Elrhman, Asim Mohammed Ahmed, Tarig Hyder Mekki & Ghassan Mohammed Taha
3.	Exclusive Breast Feeding among Women Workers as Efforts To Reduce The Risk of Death and Improve Children Intelligence in Indonesia Riani Rachmawati & Mega Cinderakasih
4.	Gaining Tacit Knowledge based on Deterministic Approach for Risk Analysis in the Real Estate Industry Nur Atiqah Rochin Demong, Melissa Shah rom & Masrur Mohd Khir
5.	Green IT Motivation Model Erne Suzila Kassim
6.	State of Itil Practices in Corporate Sector with Focus on Service Oriented Approach. Talha Monis & Asad Naveed
7.	Sustainable Business Event and Information Technology Norol Hamiza Zamzuri
8.	The Imprecise Navigation and Performance Measurers Melissa Shahrom, Nur Atiqah Rochin Demong, Masrur Mohd Khir and Norshima Humaidi

Note: The proceeding papers are publishes in their original form as submitted by the authors.

TRACK I

MANAGEMENT AND EDUCATION

Academia's Perception on Quality of Work Life and Organizational Commitment in Public Institution of Higher Learning: An Empirical Study

Normala Daud[1], Yazlinda Yaakob[2], Siti Nur Musliha Ghazali[3]
1Coordinator (Research), Centre for Postgraduate and Professional Studies,
Faculty of Business and Management, Universiti Teknologi MARA,
40450 Shah Alam, Selangor, MALAYSIA.
normala648@salam.uitm.edu.my
2 Doctoral Candidate, Universiti Teknologi Malaysia, Skudai, Johor, MALAYSIA.
yazlinda.yaakob@gmail.com
3 Marketing Manager, Rich Uptrend Sdn Bhd, MALAYSIA.
sn_musliha@yahoo.com

ABSTRACT

The objective of this study is to identify the significant dimensions of quality of work life (QWL) of academic staff in one of the major public institutions of higher learning (IHL) in Malaysia. The study also tries to investigate the relationship between the QWL and Organizational Commitment (OC) among the academic staff. This study uses a survey approach through online distribution of questionnaire where 250 respondents were selected. The results indicate that job characteristics, supervision and role conflict represent the quality of work life dimensions of the academic staff. There is a strong relationship between job characteristics and affective commitment while supervision and role conflict have a moderate relationship with affective commitment. Job characteristics and role conflict have a moderate relationship with continuance and normative commitment. Role overload on the other hand has minimal and insignificant relationship with all the three dimensions of OC. The study suggests that Universities should focus on certain dimensions of QWL to garner commitments among the academic staff.

Key words: Academic; Organizational Commitment; Quality Work Life.

1. INTRODUCTION

With the upgrading status of colleges and universities, teaching, whether in public or private institutions of higher learning is no longer considered as an "easy" career. Today, the job of an academic is becoming more and more demanding where academic are expected to not only deliver lectures, they assume supervisory role in students research, be actively involved in paper presentation at conferences, publish research works and other additional responsibilities in the institutions.

Das and Gujrati (2013) stressed that academic are the knowledge generator. They create, share and develop the knowledge and play a critical role of modeling the behavior of their students. Competent, committed and satisfied teachers are the greatest assets for any educational institution (Ishwara & Laxmana, 2008).

Having to juggle between the demanding careers in teaching as well as family life on the other hand may sometimes takes a toll on the quality of work life (QWL) of these academic.

Wilkins and Beaudet (1998) stated that stress at work not only caused the academic having to leave the job but it also affects their physical and mental health. Hence understanding the QWL and its relation to organization commitment (OC) would give an advantage to the PIHL and the Ministry of Higher Education (MOHE) on curbing the problem and significantly contributed to the academic system transformation. In addition, by applying this understanding, the level of commitment and motivation among the academic could be increased and thus becoming more productive.

Most studies confirm that there is a positive relationship between QWL and OC (Daud, 2010a; Bashir & Ramay, 2008; Hyde, Gill, Agrawal, Gupta & Sethi, 2012). A study done by Daud (2010b) in local public university, has adopted the QWL dimensions in a firm environment namely; participation, growth and development, supervision, physical environment, pay and benefits, and workplace integration. The study confirms that participation and growth effects the affective and normative commitment, supervision has effects on normative commitment, while physical environment and pay and benefit effects the continuance commitment.

Not many research has been conducted to assess the QWL of academic, this paper focuses on the QWL and OC of academic in public IHL in Malaysia. Thus, the study aims to analyze the perception of academic towards OC and QWL using the indicators of QWL. Specifically, the objectives of this study are: i) to identify the significant dimensions of QWL of academic in the public IHL within the Business and Management cluster; and, ii) to determine the level of relationship between the QWL and OC.

2. LITERATURE REVIEW

Organizational Commitment (OC) refers to individual's power of attachment or involvement in an organization (Mowday, Porter & Steers, 1982). Meyer and Allen (1991) explained the three dimensions of OC as follows: A desire (Affective Commitment); where the staff wanted to be part of the members in the faculty or university. A need (Continuance Commitment); where the staff feels that they have been in the university for years and had invested many efforts and therefore, they feel that it is a waste for leaving the organization or starting new at other places. An obligation (Normative Commitment); where the staff has the strong desire to be in the organization due to the high sense of responsibility and willingly to be attached to the department.

A study by Lew (2009) suggests that the academic will give greater commitment to the university if they receive a good support by the department in achieving their goals. Taking care of the academic's well-being would develop a normative commitment among the staff to the faculty (Normal, Md Nor, & Ishak, 2015). Recognition from the university in appreciating the academic contributions will encourage a high impact research production and the delivery of extensive teaching quality in aiming the world class university status.

Boas and Morin (2013) and Lew (2009) both agreed that having affective commitment would reduce the chance of the academic leaving. Having a high need to commit in the organization would only means that the staff will only work just to ensure that they are still working in the organization. Whereas, staffs that have high desire to commit will give maximum contributions to the organization.

Many definitions of QWL were put forth by many researchers. Quality of Work Life refers to the favourableness or unfavourableness of a job environment for people; the sum total of values, both material and nonmaterial, attained by a worker throughout his career life. This includes aspects of work-related life such as wages and hours, work environment, benefits and services, career prospects and human relations, which is possibly relevant to worker satisfaction and motivation. (Bindu & Yashika, 2013). A study made by Arif and Ilyas (2013) quoted a

previous study made by Edwards, Van Laar, Easton and Kinman (2009) found that QWL is a subjective construct of organizational, human, social aspect and in-dissociable relationship between quality of life and quality of work life. QWL is what will differentiate good companies from poor companies. The concept allows the company to value employees more than just internal customers, and appreciate the concept of "employee first and the customer second" (Collins & Smith, 2006) as cited by Arif and Ilyas (2013).

A study made by Sajjad and Abbasi (2013) defines QWL as an employee's reaction to their job, especially its personal consequences in satisfying the needs and mental health. Sajjad and Abbasi also stated a finding from a previous research made by Feldman (1993) that defines QWL as the quality of relationship between the staff and with the total working environment. He reminds that in the programs and the activities that is conducted to enhance the quality of work life, along with technical and economic aspects which are more concern to the organizations, human affairs should also be considered. Quality of work life also emphasizes on organization's ability in fulfilling individuals' important needs through experiences.

A study by Parvar, Allameh and Ansari (2013) refers from a previous study made by Walton (1974) explains that QWL is backed by eight conditions of employment. Using methods of increasing QWL will increase employee's commitment, and doing their job more effective. Similar results were showed by a study done by Daud (2010a) in Malaysia, where the QWL has a positive relationship on OC.

QWL provide the opportunity for an organization to endure growth and development. Carrying out training sessions for employees will enhance the job satisfaction. Other than that, the job satisfaction will improve when work environment is conducive and congenial. A significant relation between job satisfaction, personal growth, and team effectiveness can be seen even in the academic. However, a high QWL is required in order to ensure the growth and the development of both the employees and the organization. A study conducted in India among academic was made, and the result shows that the QWL level is low (Bindu & Yashika, 2013). Hence, a huge change is needed in order to improvise the level of QWL among academic in the IHL.

2.1 Quality of Work Life dimensions

Role stress characteristics as mentioned by Winter, Taylor and Sarros (2000), is a condition of academic's role expectations and demands at work which consists; role ambiguity, role conflict, and role overload. Role stress leads to psychological strains among academic and it affects the quality of teaching, research and publications among Malaysian academic (Idris, 2011).

Role ambiguity is a condition where an individual feels uncertain on the role or job function. In this case, lack of feedback from the superior creates uncertainty among the lecturers on their job performance. Lack of support from the Department Head will makes the new lecturers unsure on how to teach effectively (Idris, 2011). Role overload is a condition where expectations are greater than the individual abilities to perform the job and role conflict refers to a condition where the staff has multiple roles at one time and could not perform all tasks (Idris, 2011).

Winter et al., (2000) also highlighted that role stress is shown by high level of role overload. This indicates that overworked and increased workloads caused the role stress among the lecturers. Uncontrolled job related stress among the lecturers will affect their intellectual and social abilities. Hence, it is very important for IHL to provide minimal level of unhealthy role stress and focus in providing a healthy and happy working environment to avoid problems in the future (Ahsan, 2009).

A study conducted by Greenberger and Strasser (1986) as recently cited by Obi, Chiamaka and Tochukwu (2013) defined job characteristics as the extent that a job is structured

to provide regular feedback as well as a sense of task completion, and for employees to monitor their own behavior and gain an increased sense of personal control. Personal control later explained by Obi, et al. (2013) as an individual's belief that can affect a change in a desired direction. Besides that, Chiu and Chen (2005) described job characteristics as job attributes which have motivational functions for employees. Permarupan, Al-Mamun and Saufi (2013) stated that most of the research shows that organizational commitment was oriented to job characteristics and work experience instead of age.

Winter, et al. (2000) revealed that academic are attached to their work activities, however their level of attachment to the institutions are not the same as their work attachment. He also found that OC was significantly different by age where the academic have better commitment at the range of age 30 to 50 compared to the employee between the age of 20 to 29 and 60 to 65. This is might due to between the age 20-29 they are still young and still searching what they want to do. By the age of 30 they had some experiences and feel comfortable and suitable with the organization which results in good commitment towards the organization.

In terms of the relationship between job characteristics and organizational commitment, Allen, Lambert, Pasdupuleti, Tolar and Ventura (2004) found there is a statistically significant relationship between job characteristics and organizational commitment. However Bashir and Ramay (2008) revealed in their study that there is no significant relationship between job characteristics and organizational commitment. This finding is also supported by Dockel (2003) study. The contradiction of findings here might be due to different sample population and different working environment which Bashir and Ramay (2008) research was actually conducted in Pakistan within the scope of IT professionals.

Arora and Kamalanabhan (2010) quote a study from a group of researchers; Eisenberger, Stinglhamber, Vandenberge, Sucharski and Rhoades (2002) who defines supervisor as the employees' belief concerning on how supervisors value their commitments and concern on the employees' well-being. Motivation is needed by the employees to expand and improve in the scope of work especially in innovative tasks. A supervisor that practices their individual consideration toward an employee, this will cause the employee to perceive the warmth and consideration. This makes the employee often feel obligated to return the supervisor's kindness by helping supervisors to achieve their goals.

Hawkins and Shohet (2000) stated that, a good supervisor is a supervisor that is versatile in the arrangement of the plan on supervision. Knowledge, competence and experience are the base of getting to a good supervisor. However a supervisors also need to set up on a supervisory work that will them to be able to monitor and maintain a continuous professional and personal development.

According to a study by Onn, Peng and Lung (2014), supervisors are entitled with the responsibility to guide their subordinates in completing their task in effective and efficient way. Not just that but supervisors will also need to monitor and evaluate their subordinate so that they will have a clear vision on the task given to them. Employees will be greater in terms of loyalty to the organization when they receive a great support from the supervisors (Casper, Harris, Taylor-Bianco and Wayne (2011).

According to Casper, et al., (2011), supervisors act as the catalysts that enhance the affective organizational commitment of a participant. This means that the support from supervisors reflects the organizational commitment of employees towards the organization. The support from the organization makes the employee to see them as a benefit from the organization which makes the employee to have emotional attachment and make them prefer to stay in the organization willingly rather than feeling being forced to stay in the organization.

3. METHODOLOGY

A survey type of study using questionnaire is used in order to gather and gain inputs from the chosen population. Adopting survey study provides understanding of what dimensions of QWL that driven the OC amongst these academic. The sample size of this study is 250 samples that were randomly selected from a total population of 771 academic from the Business and Management cluster in this public IHL. Four faculties in this cluster were involved, which are labeled as Faculty A, Faculty B, Faculty C and Faculty D.

Stratified random sampling is used because it is the least biased and more effective than other sampling technique (Pallant, 2005). List of academic was obtained from the official website of the IHL and from the list; since the number of academic represented in each faculty is not the same; samples are stratified by the faculty according to the percentage of the population contribution in order for the sample to be representative. Hence, the sampling is calculated and chosen as shown in the Table 1 below:

Table 1: Number of Respondents for Each Faculty

Faculty	% Population Contribution	Sample Head Count
Faculty A	20	50
Faculty B	55	138
Faculty C	14	35
Faculty D	11	27
Total	100	250

The data was collected through online survey using Monkey Survey server which was emailed to the identified academic using mail chimp email blast. Online survey is used for the convenience of the academic and to maintain the confidentiality of the respondents as the system collects the feedback without identifying who the respondents are.

4. RESULTS

The questionnaire survey was emailed to 250 respondents; however, only 129 respondents had returned a complete feedback. Majority of the respondents are female with a percentage of 77.5 percent. The highest range of age is between 41 to 50 years (31 percent). Majority of the respondents are from Faculty B which is 63.6 percent out of 100 per cent. Most of the respondents (70.5 percent) earn a monthly basic salary RM5001 and above. Approximately 37.2 percent of the respondents have been working with the IHL between 1 to 10 years; 37.2 percent have worked between 11 to 20 years. Most of the respondents are senior lecturer with a percentage of 49.6 percent and 31.8 percent are junior lecturer. Majority of the respondents are permanent staff of IHL.

Factor analysis with varimax rotation was performed separately for items indicating the QWL and OC variables. From the output, there are three factors solutions in OC, two factors in role stress, one factor in job characteristics and one factor in supervision with eigenvalues exceeding 1. Each variable are factor analyzed using a varimax rotation. From the rotation, role stress however, produced two sub dimensions namely; role conflict and role overload which are labeled accordingly.

Reliability test was done to ensure that the survey is consistent and stable in measuring the components and the quality work life dimensions. Table 2 depicts the Cronbach's alpha values are between 0.797 and 0.921 for all the variables tested.

Table 2 Reliability Statistic and Mean Values

Variables	No of Items	Cronbach's Alpha	Mean values
Affective Commitment	7	0.908	3.959
Continuance Commitment	5	0.835	3.409
Normative Commitment	5	0.877	3.223
Role Conflict	9	0.869	3.363
Role Overload	2	0.797	3.767
Job Characteristics	6	0.824	3.667
Supervision	5	0.921	3.487

Table 3 shows the result of regression analysis done on QWL and OC. The adjusted R square of 0.32 means that only 32% of the total variance in the dependent variable (affective commitment) can be explained by the independent variables (supervision, role overload, role conflict and job characteristics). The rest of 68% in affective commitment is explained by other variables.

The adjusted R square of 0.189 means that only 18.9% of the total variance in the dependent variable (continuance commitment) can be explained by the independent variables (supervision, role overload, role conflict and job characteristics). The rest of 81.1% in continuance commitment is explained by other variables.

Table 3: Summary of Multiple Regression between QWL and OC

QWL Factor	Affective	Normative	Continuance
Role conflict	**.260***	.053	.114
Role overload	-.132	-.159	-.071
Job characteristics	**.471****	**.489****	**.506****
Supervision	-.159	-.085	**-.238***
R Square	0.32	0.209	0.189
** P < 0.001 , *P < 0.05			

For the regression coefficients, it shows that 1% increase in job characteristics will increase the continuance commitment by 50.6% with significant value of 0.000. However, 1% increase in job supervision will reduce the continuance commitment by 23.8% with significant value of 0.042. The adjusted R square of 0.209 means that only 20.9% of the total variance in the dependent variable (normative commitment) can be explained by the independent variables (supervision,

role overload, role conflict and job characteristics. The rest of 79.1% in normative commitment is explained by other variables.

5. DISCUSSION AND CONCLUSION

This research suggests that there are two sub dimensions under role stress namely; role conflict and role overload. Based on the result shown in the regression model and coefficient tables, role conflict and job characteristics have significant relationship with OC (Affective) with 0.029 and 0.000 significant value respectively. Job characteristics and supervision have a significant relationship with OC (Continuance) at 0.000 and 0.042 significant value respectively while job characteristics has significant relationship with OC (Normative) at 0.000 significant value. Therefore, the QWL dimensions of academic in IHL in the Business and Management cluster are job characteristics, role conflict, and supervision. Academic's motivation would increase when their work is valued and has meaningful purpose. Providing chances of growth would also makes academic more committed to the organization. Having a well-managed role conflicts at work and supportive superior makes the organization a better place to work.

This finding provides similar evidence in research done by Daud (2010b), when participation, growth and development of academic, supervision, workplace integration were tested as the dimensions of the QWL. It also has similarity with findings from Winter, et al., (2000), Rao and Gebremichael (2013), Saad, Samah and Juhdi (2008), where positive job characteristic, great support from the superior and a good handling of work conflict are motivation factor for the academic to be stay connected with the university. Results suggest that most academic agree that they have role overload as the mean score is 3.767. This indicates that the time pressure that is measured in role overload does not affect the academic's commitment towards the institution.

These findings benefit the IHL in focusing the desired group to motivate that would bring the organization to a greater height from where they are now. A productive academic would produce more high quality graduates, publications and willingness to grow together with the IHL. This study provides input for the IHL administrator on the motivation factor that attracts academic to stay committed with the institution.

In conclusion, this study provides evidence that there is a significant linear relationship between supervision, role conflict and job characteristics with affective and normative commitment. However, only two independent variables (job characteristics and supervision) have significant relationship with continuance commitment. Surprisingly, role overload has no significant relationship with all the organization commitment. Academic that has affective and normative commitment will be more attached to the institution when they have a good support from the head of department.

A healthy work environment and highly manageable role conflict at work will increase their commitment towards the organization. Academic appreciates good feedbacks, growth opportunity and welcome tasks that give them value in their contribution to the society. Based on the findings, most academic have affective commitment at the highest means score of 3.959. Role overload has the highest mean score among the QWL dimensions at 3.767. This indicates that academic are facing role overload (time pressure) but it does not affect their commitment to the institution.

The academic will be more motivated and committed if the IHL provides greater job characteristics (positive job attributes) to them. Hence, it will result to the high quality of graduates and publications. It is also found that there is significant linear relationship between role conflict and job characteristics with OC (affective, normative and continuance). These findings provide a platform to retain the academics and to improve their QWL that would lead to greater commitment to the institution. It is recommended that qualitative research could be used to get a better result on this issue. A bigger sample size would perhaps give a different results

and adding other variables would be able to provide findings on a stronger significant relationships to the OC. Since this study was conducted in four faculties of the public IHL, thus the findings of the study could not be generalized to other public IHL as well as private IHL.

REFERENCES

Ahsan, N., Abdullah, Z., Fie, D. G., & Alam, S. S. (2009). A study of job stress on job satisfaction among university staff in Malaysia: Empirical study. *European Journal of Social Sciences*, *8*(1), 121-131.

Allen, R. I., Lambert, E. G., Pasupuleti, S., Tolar, T. C., & Ventura, L.A. (2004). The impact of job characteristics on social and human service workers. *Social Work and Society*, 2(2), 173-188.

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), 1-18.

Arif, S., & Ilyas, M. (2013). Quality of work-life model for teachers of private universities in Pakistan. *Quality Assurance in Education*, *21*(3), 282-298.

Arora, V., & Kamalanabhan, T. J., (2010). Linking Supervisor and Coworker Support to Employee Innovative Behavior at Work: Role of Psychological Conditions. Report No. 13079. aabri.com.

Bashir, S., & Ramay, M. I. (2008). Determinants of organizational commitment: A study of information technology professionals in Pakistan. *Journal of Behavioral & Applied Management*, 9(2).

Bindu, J., & Yashika, S. (2014). Quality of work life with special reference to academic sector. *Research Journal of Management Sciences,* 3(1), 14-17.

Boas, A. A. V., & Morin, E. M. (2013), Quality of working life in public higher education institutions: the perception of Brazilian and Canadian professors. *International Journal of Business and Social Science,* 4(12), September.

Boshoff, C., & Mels, G. (1995). A causal model to evaluate the relationships among supervision, role stress, organizational commitment and internal service quality. *European Journal of Marketing*, 29(2), 23-42.

Casper, W. J., Harris, C., Taylor-Bianco, A., & Wayne, J. H. (2011). Work–family conflict, perceived supervisor support and organizational commitment among Brazilian professionals. *Journal of Vocational Behavior*, 79(3), 640-652.

Chao, K. L. (2010). Relationship among organizational commitment, job characteristics, job satisfaction, and turnover intention within Kindergartens: An empirical study in Malaysia. *教育研究學報* 44(1), 179-204.

Chiu, S. F., & Chen, H. L. (2005). Relationship between job characteristics and organizational citizenship behavior: The mediational role of job satisfaction. *Social Behavior and Personality: An International Journal,* 33(6), 523-540.

Collins, C. J. & Smith, R.K. (2006). Knowledge exchange and combination: the role of human resource practices in the performance of high technology firms, *Academy of Management Journal*, 49, 544-560.

Das, S. C. & Gujrati, R. (2013). As assessment of Indian Academician's satisfaction level with workplace environment: a descriptive study. *Pacific Business Review International*, 5(8), 13-22.

Daud, N. (2010a). Investigating the relationship between quality of work life and organizational commitment amongst employees in Malaysian firms. *International Journal of Business & Management*, *5*(10).

Daud, N. (2010b). Quality of work life and organizational commitment amongst academic staff: Empirical evidence from Malaysia. *2010 International Conference on Education, Management and Technology (ICEMT),* (pp. 271-275).

Edwards, J. A., Van Laar, D., Easton, S., & Kinman, G. (2009). The work-related quality of life scsle for higher education employees. *Quality in Higher Education* 5(3), 207 – 209.

Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565.

Feldman, P. H. (1993). Worklife improvements for home care workers: Impact and feasibility. *The Gerontologist*, 33(1), 47-54.

Greenberger, D.B. & S. Strasser. (1986). The development and application of a model of personal control in organizations. *Academic of Management Review*, 11, 164 – 177.

Hawkins, P., & Shobet, R. (2000). *Supervision in the helping professions: An Individual, Group and Organizational Approach*, Maidenhall, Open University Press.

Hyde, A.M., Gill, M., Agrawal, K., Gupta, B., & Sethi, M. (2012). A Study of quality of work life and organizational commitment amongst academician. *Pacific Business Review International*, 4(4), 131-144.

Idris, M. K. (2011). Over time effects of role stress on psychological strain among Malaysian public university academics. *International Journal of Business and Social Science*, *2*(9), 154-61.

Ishwara, P. & Laxmana, P. (2008). Job satisfaction of higher education*. The Indian Journal of Commerce*, 61(3), 101-112.

Lew, T. Y. (2009). The relationships between perceived organizational support, felt obligation, affective organizational commitment and turnover intention of academics working with private higher educational institutions in Malaysia. *European Journal of Social Sciences*, *9*(1), 72-87.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *1*(1), 61-89.

Mowday, R. T., Porter, L. W., & Steers, R. (1982). Organizational linkages: The psychology of commitment, absenteeism, and turnover. San Diego, CA: Academic Press

Normal, MJ, Khalid, M., & Ishak. I (2015). Influence of normative beliefs on behavioral intention of Malaysian digital gamers to continue playing digital games. *International Journal of Computer System*, 2(3), 72-75.

Obi, H., Chiamaka, J.A, & Tochukwu, O., (2013). Job Characteristics as Predictors of Organizational Commitment Among Private Sector Workers in Anambra State, Nigeria. *International Journal of Asian Social Science*, 3(2), 482-491.

Onn, C. Y., Peng, T. L., & Lung, C. K. (2014). Supervisory Support, Organizational Justice and Perceived Organizational Support: A Review and Research Agenda. *Information Management & Business Review*, 6(5).

Pallant, J. F. (2005). SPSS Survival Manual – A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 12). Allen & Unwin.

Parvar, M.R.F, Allameh, S. M., & Ansari, R. (2013). Effect of quality of work life on organizational commitment by SEM (case study: OICO company). *International Journal of Academic Research in Business and Social Sciences*, 3(10), 135-144.

Permarupan, P.Y., Al-Mamun, A., & Saufi, R.A. (2013). Quality of Work Life on Employees Job Involvement and Affective Commitment between the Public and Private Sector in Malaysia. *Asian Social Science*, 9(7), 268-278.

Rao, B. P. & Gebremichael, H. (2013). Job satisfaction and organizational commitment between academic staff and supporting staff (Volaita Sodo University-Ethiopia as a case). *Far East Journal of Psychology and Business*, *11*(2), 11-32.

Saad, H. A., Samah, A. J. A., & Juhdi, N. (2008). Employees' perception on quality work life and job satisfaction in a private higher learning institution. *International Review of Business Research Papers*, *4*(3), 23-34.

Sajjad, N. K., & Abbasi, B. (2014). Studying the Relationship between Quality of work life and Organizational Commitment. *Research Journal of Recent Sciences,* 3(2), 92-99.

Wilkins, K., & Beaudet, M. P. (1998). Work stress and health. *Health Reports*,10(3), 47-62.

Winter, R., Taylor, T., & Sarros, J. (2000). Trouble at mill: Quality of academic worklife issues within a comprehensive Australian university. *Studies in Higher Education*, 25(3), 279-294.

An Exploration of Emotion Driven Organizational Citizenship Behavior - A Phenomenological Approach

Dr. K. K. Ramachandran

Director
GRDInstitute of Management
Dr. G.R.D. College of Science
Coimbatore – India

A. Sarasu

Assistant Professor
GRD Institute of Management
Coimbatore – India

Abstract:

The purpose of this research is to investigate the relationships between servant leadership and organizational justice towards OCB. The study also evaluates the legitimacy of OCB in estimating emotional quotient and whether or not it is mediated by social exchange. This study comprehends the subsisting research gaps in the literature by studying the recommendations from previous studies and through extending the introspection on OCB among IT professionals towards organizational backdrop. A questionnaire is employed as a research instrument to collect the data from the respondents. Standardized questionnaires are modified to Indian context and used as research instrument. Multi-stage random sampling technique that belongs to the category of probability sampling is applied to choose the potential unbiased respondents into the sample. Eliminating and revising double-barreled, ambiguous, and misleading statements, 231 completely filled questionnaires remained at a response rate of 83.69%. The results of multiple linear regression observed that among the servant leadership and organizational justice variables – emotional healing, creating value, helping subordinates, procedural justice, interpersonal justice, and informational justice are significant with OCB. The conceptual framework – "KKR Emotion Propelled OCB Model" that integrates all the ascertained attributes determining OCB is suggested. Managerial implications and recommendations for future research are also discussed in the later part of this research.

Keywords: Servant Leadership, Organizational Justice, OCB, Emotional Quotient, and Social Exchange

1. INTRODUCTION

The organizational justice blankets the employees' awareness about the precision of organizational decisions and executions, and the effects of such perceptual experience on employees' performance (Givarian and Farkoush, 2012; Greenberg, 1990). In an organizational setting, a new era of contemporary leadership practices prompted new ways of looking at leadership skills (Greenleaf, 1977; Hawkinson and Johnston, 1993; Walumbwa, Hartnell, and Oke, 2010). Dissimilar to most leadership theories, servant leadership measures the classical hierarchical structure exercised within organizations (Agosto, 2005; Frick, 2004; Stevens and Schoberg, 1990; Young, 1999). In this socio-economic stratum, a substantive amount of attention has been conceded to the concept of Organization Citizenship Behavior (OCB), which is a discretional individual behaviors that employees exhibit normally above and beyond formal role demands of the workplace and is completely individual's discretion (Organ, 1988; 1990; 1997; Organ, Podsakoff, and MacKenzie, 2006; Organ and Ryan, 1995; Podsakoff, 1990; Podsakoff et al., 1993; Podsakoff et al., 2000).

Over the decades, inter-departmental dynamics have been probed through various attributes; however, one dimension, the social exchange attribute, has yet to be compelled systematically towards measuring inter-departmental alliances (Chadwick-Jones, 1976; Cook and Emerson, 1987; Zeinabadi, 2013). One of the elemental concerns of today's human resource managers is to enhance the OCB among their employees, by which, heightening the outcome of OCB with regard to emotional quotient. In spite of the substantial impact of servant leadership and organizational justice towards OCB, the social exchange factor as mediating effect and emotional quotient as the outcome are found to be largely neglected.

1.1 Problem Statement

The cybernation of the organization in India has intensified enormously over the last decade. The revolution in Information Technology (IT) is encountering globally at a great pace. This IT revolution has not only developed an economic boom but also has extended to raising and escalating concerns in the workplace. For having a rigorous insight towards the IT professions, it is substantial to look into the personality factors and organizational constituents that determine the OCB and its aftermaths in terms of emotional balance. Given the vehemence on the servant leadership and organizational justice mediated by social exchange towards OCB, it is astounding to know how very limited researchers have focused in these areas. Consequently, this present research will shed light on these very authoritative but less researched spheres.

1.2 Purpose & Scope of the Study

The purpose of this research is to investigate the relationships between servant leadership and organizational justice. The study assesses the legitimacy of OCB in estimating emotional quotient and eventually evaluates whether or not it is mediated by social exchange. This study comprehends the subsisting research gaps in the literature by studying the recommendations from previous studies and through extending the introspection on OCB among IT professionals towards organizational backdrop. A conceptual model that explicates the expression of the constructs is suggested in the later part of this study. The scope of this study is to formulate a research framework that determines OCB. By purposing a conceptual model, this research imparts to the IT professionals, IT industry, and academes. This study bestows to the contemporaneous body of knowledge related to OCB by rendering additional information pertaining to the relationship between servant leadership and organizational justice. This research is a modest step ahead in the on-going line of research on social exchange and emotional drive.

1.3 Research Questions

The background of the study exposes that there is only a little investigated knowledge about the study constructs. Hence, following research questions are stimulated:

a) What is the determination of servant leadership and organizational justice with regard to organizational citizenship behavior?
b) Does social exchange mediate servant leadership and organizational justice towards organizational citizenship behavior?
c) Does the organizational citizenship behavior contribute emotional quotient?

1.4 Objectives

With regard to answering the above listed research questions, following objectives are developed:

(i) To ascertain the impact of servant leadership and organizational justice towards organizational citizenship behavior.
(ii) To determine the mediating effects of social exchange on servant leadership and organizational justice towards organizational citizenship behavior.
(iii) To evaluate the role of organizational citizenship behavior in terms of emotional quotient.

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Servant Leadership

Servant Leadership is brought in by Greenleaf (1977) who conceives the leader as a servant. The scriptural roots of servant leadership are established by Akuchie (1993) that explicate the religious and spiritual articulations of the construct. But the author failed to formulate a clear framework for understanding servant leadership. Spears (1995) formulated 10 features of a servant leader: healing, awareness, persuasion, listening, conceptualization, empathy, commitment, foresight, stewardship, and community building. A hierarchical framework of servant leadership was demonstrated by Farling, Stone, and Winston (1999). Servant leadership is normally discerned into three predominant leadership paradigms – the trait, the behavioral, and the contingency patterns of leadership (Barbuto and Wheeler, 2002; Dennis and Winston, 2003; Hawkinson and Johnston, 1993; Smith, Montagno, and Kuzmenko, 2004). Liden et al. (2008) associated five key principles of the servant-leadership: emotional healing, creating value, empowering, helping subordinates, and behaving ethical.

2.2 Organizational Justice

Organizational justice refers to perceptions of staff concerning fairness of intervention experienced from an organization and staff's behavioral reaction to such perceptions (Alexander and Ruderman, 1987; Cropanzano, 1993; Elanain, 2010; Deutsch, 1975; Greenberg, 1990; 1996; Lam, Schaubroeck, and Aryeeet, 2002; Leventhal, 1973; Lind and Tyler, 1988; Pillai, Scandura, and Williams, 1999; Sweeney and McFarlin, 1993). A two-dimensional approach, distributive justice and procedural justice, of organizational justice is found to be widely used in the literature (Folger and Konovsky, 1989; Leung et al., 1996; Pillai et al., 1999; Suliman, 2007; Yoon, 1996). Tang and Sarsfield-Baldwin (1996) foregrounded that organizational justice leads to organizational effectiveness. Lam et al. (2002) manifested that researches of the outcomes of distributive and procedural justice do not provide reproducible and reciprocally ancillary conclusions as to extrapolate organizational justice across cultures. Colquitt (2001) identified four components of organizational justice: procedural justice, distributive justice, interpersonal justice, and informational justice.

2.3 Social Exchange

Social exchange theory was conceptualized to probe interpersonal exchanges that were not believed to be exclusively economic (Bignoux, 2006; Homans, Hamblin, and Kunkel, 1977).

The social exchange theory studies social behaviour in terms of exchanges of information (Blau, 1964; Levine and White, 1961). Blau (1964) narrates social exchange relation as the socio-emotional expressions of the employee-employer relationship, and thus the comprehended fictitious character of the employment relationship. Das and Teng (2003) mentioned social exchange theory as it is fabricated and preserved by the scarcity of resources, prompting individuals to engage with one another to obtain valuable inputs. Sub-constructs of social exchange are leader-member exchange and perceived organizational support (Ahmed et al., 2013; Aselage and Eisenberger, 2003; Bal, Chiaburu, and Jansen, 2010; Eisenberger et al., 1986; Katrinli et al., 2008; Liao, Hu, and Chung, 2009; Lo et al., 2010; Rhoades and Eisenberger, 2002).

2.4 Organizational Citizenship Behavior

Organ (1988, p. 4) defined OCB as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization". Van Dyne, Cummings, and Parks (1995) contemplated OCB as positive intentions with the primary impulse to assist someone else or the organization itself rather than to care one's self. Smith, Organ, and Near (1983) classified OCB as beneficial actions taken for the sake of the system. Turnipseed (2002) formulated OCB as extra-role behaviors that are discretionary outside the realm of those evaluated by conventional job evaluations which welfare the organization. Bogler and Somech (2004) presented OCB to be an essential organizational factor as it facilitates to encourage organizational efficiency without the need for formal organizational resources. OCB has continued to remain as a focal construct to researchers in the fields of Human Resource Management (Bateman and Organ, 1983; Cohen and Avrahami, 2006; Smith et al., 1983).

2.5 Emotional Quotient

In spite of the possibility of intelligences beyond memory and problem solving, it was not acknowledged until early 1990s comparatively grievous attempts were made to conceptualize emotional quotient (Brown, Bryant, and Reilly, 2006; Cooper and Sawaf, 1997; Goleman, 1995; Goleman, Boyatzis, and McKee, 2002; Weisinger, 1998). Emotional quotient is the ability to sense, empathize, and efficaciously enforce the judgment and insightfulness of emotions to alleviate high levels of cooperation and productivity (Bar-On and Parker, 2000; Goleman, 1998; Lynn, 2005). Ngah, Jusoff and Rahman (2009) commented that concentrating on emotional quotient of employees would contribute towards more adequate to participate in innovation at work place.

2.6 Research Hypotheses

Subsequently reviewing the extant literature following research hypotheses are explicated:

H_1: There is a significant relationship between Servant Leadership and Organizational Justice towards Organizational Citizenship Behavior.

H_2: Social Exchange significantly mediates Servant Leadership and Organizational Justice towards Organizational Citizenship Behavior.

H_3: There is a significant relationship between Organizational Citizenship Behavior and Emotional Quotient

2.7 Conceptual Framework

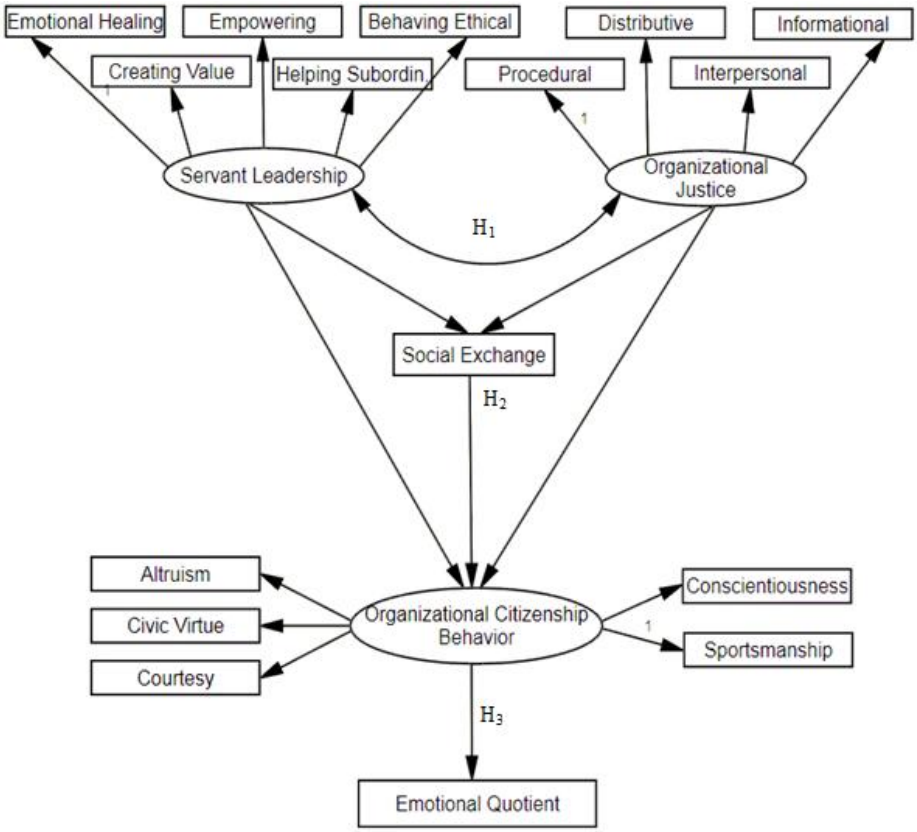


Figure 1: Conceptual Framework – "KKR Emotion Propelled OCB Model"

3. RESEARCH METHODOLOGY AND STRATEGIES

3.1 Subject and Procedure

In general, research refers to a deliberate investigation or inquiry especially in search of new facts in any branch of knowledge (Jha, 2008; Ketchen and Bergh, 2004; Newman and Benz, 1998; Picciano, 2004; Punnett & Shenkar, 1996; Samuels, Biddle, and Emmett, 2009; Scruggs and Mastropieri, 2006). The research design adopted in this research is of Descriptive type. Descriptive research is an empirical interrogation that delineates the attribute of affairs as it remains at the time of study (Kane, 1985; Kirsch and Sullivan, 1992; Oakes and Ji, 2012; Salkind, 2010).

3.2 Research Instrument

In this research, a questionnaire is employed as a research instrument to collect the data from the respondents. The sub-scales that determine Servant Leadership, Organizational Justice, Social Exchange, Organizational Citizenship Behavior, and Emotional Quotient are supported from an extensive literature search. The sub-scales of Servant Leadership are emotional healing, creating value for the community, empowering, helping subordinates grow and succeed, and behaving ethical; adopted from "Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment" developed by Liden et al., 2008. The sub-scales of Organizational Justice are procedural justice, distributive justice, interpersonal justice, and informational justice; constructed by using the modified Japanese version of the Organizational Justice Scale developed by Colquitt (2001) used in the study "On the dimensionality of Organizational Justice: A construct validation of a measure". The Social Exchange factors sub-scales are leader-member exchange and perceived organizational support; framed using the modified Leader–Member Exchange Scale developed by Graen and Uhl-Bien (1995) used in the study "Relationship-Based Approach to Leadership: Development of Leader–Member Exchange (LMX) Theory of Leadership Over 25 Years: Applying a Multi-Level, Multi-Domain Perspective" and Perceived Organizational Support Scale developed by Eisenberger et al. (1986) used in the study "Perceived organizational support". The sub-scales of Organizational Citizenship Behavior are Altruism, Civic Virtue, Courtesy, Conscientiousness, and Sportsmanship; adopted from the modified Italian translation of Organizational Citizenship Behavior Scale formulated by Podsakoff et al. (1990) in the study "Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors". The sub-scales of Emotional Quotient are intrapersonal, interpersonal, and adaptability; adopted from the modified Bar-On Emotional Quotient Inventory developed by Bar-On and Parker (2000). The respondents are requested to establish their degree of agreement with each statement on a five-point Likert Scale ranging from "1-Strongly Disagree" to "5-Strongly Agree".

3.3 Sampling Technique

The geographical area refers to Coimbatore – the employees of IT & ITES companies. The sample units covered for this research are the employees of companies occupied at 2 major IT campuses in Coimbatore. Applying Krejcie & Morgan (1970) sample size determination model, at 99% confidence level and 5% margin of error, the sample size of this research is computed as 276. Multi-stage random sampling technique that belongs to the category of probability sampling is applied to choose the potential unbiased respondents into the sample. Initially, the locations where the IT & ITES companies operate are classified into

geographical clusters: Hub-1 and Hub-2. Later, IT & ITES companies in each hub are determined by selecting the respondents randomly. Accordingly, the researcher prepared 276 questionnaires and distributed them to the respondents. Eliminating and revising double-barreled, ambiguous, and misleading statements (Churchill, 1979), 231 completely filled questionnaires remained at a response rate of 83.69%.

3.4 Statistical Tools

Using the statistical packages, IBM SPSS V.21 and AMOS V.18, the empirical assessment of the above mentioned conceptual framework is tested using Stepwise Multiple Linear Regression, Mediating Effects, Analysis of Variance, and Structural Equation Modelling (SEM) with Maximum Likelihood Estimation as the statistical techniques.

4. DATA ANALYSIS AND FINDINGS

The sample adequacy of the constructs is measured using KMO and Bartlett's test. It is understood that the factor model cannot be accepted if the KMO score is less than 0.5 and the Bartlett's test score is more than 0.5 (Pishghadam and Noghani, 2011; Sreejesh, Mohapatra, and Anusree, 2014). The KMO score is found to be more the 0.761 and Bartlett's score is 0.00 for all the selected constructs. Hence the factor model is acceptable for further analysis. Cronbach's Alpha reliability coefficient is tested to measure the reliability of the items. The outcomes of Cronbach's Alpha reliability coefficient range from 0.722 to 0.906, which is said to be a good degree of internal consistency (Leech, Barrett, & Morgan, 2008; Parsons, 1998; Salkind, 2014).

Objective 1: A Multiple Linear Regression is performed to measure the impact of servant leadership and organizational justice towards organizational citizenship behavior. Furthermore, Stepwise Linear Regression is also executed, each time withdrawing the weakest correlated variable, and the most effectual sets of independent variables that interpret the distribution best are summarized. The outcomes of multiple linear regression noted that among the Servant Leadership and Organizational Justice variables - Empowering, Behaving Ethical, and Distributive are not significant with OCB; and Emotional Healing, Creating Value, Helping Subordinates, Procedural Justice, Interpersonal Justice, and Informational Justice are significant with OCB. Stepwise Linear Regression revealed a total of six significant models – Emotional Healing, Helping Subordinates, Creating Value, Procedural, Informational, and Interpersonal to be significant with OCB. It is noticed that "Emotional Healing" accounts for 9.9%, "Emotional Healing, Helping Subordinates" account for11.4%, "Emotional Healing, Helping Subordinates, Creating Value" account for 18.5%, "Emotional Healing, Helping Subordinates, Creating Value, Procedural" account for 21.3%, "Emotional Healing, Helping Subordinates, Creating Value, Procedural, Informational" account for

26.8%, and "Emotional Healing, Helping Subordinates, Creating Value, Procedural, Informational, Interpersonal" account for 28.7% of variance in OCB. Hence, it is interpreted that when an independent variable is introduced the model, the R^2 value undergoes a considerable change. These are in consensus with the findings of Zehir et al. (2013) and Cohen-Charash and Spector (2001) who found that Organizational Justice perceptions can improve organizational-relevant attitudes and Servant Leadership behavior is positively associated with Organizational Justice, and at the same time, Servant Leadership and Organizational Justice shares a significant and positive correlation with OCB.

Objective 2: This study seeks to evaluate the degree to which the effect of the independent variables (Servant Leadership and Organizational Justice) on the dependent variable (OCB) via the mediator (Social Exchange). Using AMOS, the mediating effect is further studied. From the regression weights of the direct model, it is interpreted that among the independent variables, Servant Leadership is found to be significant with OCB and Organizational Justice is not found to be significant with OCB. It can be observed for the mediating effect that Social Exchange significantly mediates Servant Leadership and Organizational Justice towards OCB. This determination is in line with the findings of Ishak and Alam (2009) and Moideenkutty and Schmidt (2011) who found social exchange to mediate the relationship between leadership and OCB.

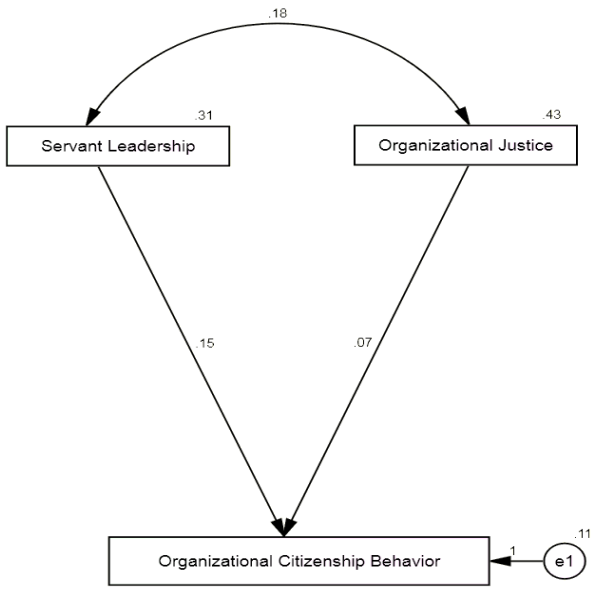


Figure 2: Path Diagram of Direct Effect

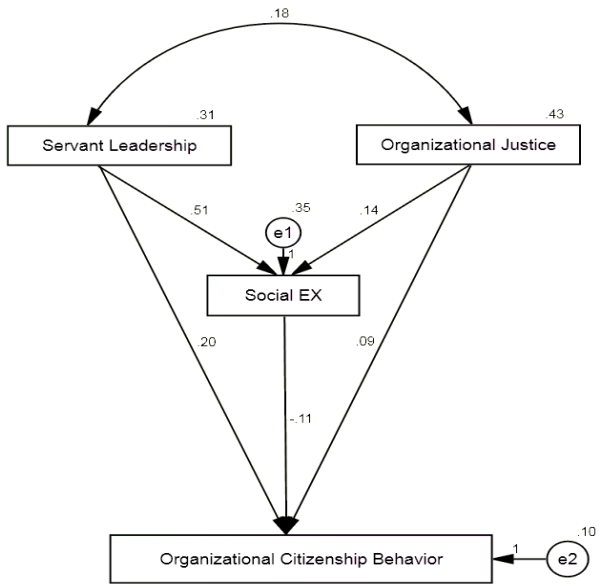


Figure 3: Path Diagram of Mediating Effect

Objective 3: To measure the role of OCB towards Emotional Quotient of the respondents, ANOVA is executed. It is observed that there is significant relationship between all the sub-scales of OCB and Emotional Quotient. This result can be further validated by the

findings of James, Velayudhan, and Gayatridevi (2010) who illustrated that OCB is positively correlated with Emotional Quotient. Therefore, it is apparently generalized that OCB contribute significantly towards Emotional Quotient of the employees.

Comforting all the primary assumptions, the KKR Emotion Propelled OCB Model is performed using AMOS. The Chi-Square value is found to be significant (p = .000) (Browne and Mels, 1992). CMIN/DF is determined to be 4.137 establishing an acceptable fit (Marsh and Hocevar, 1985). GFI is ascertained to be 0.992 evidencing a satisfactory fit (Tanaka and Huba, 1985). AGFI is discovered to be 0.987 showing a good fit (Tanaka and Huba, 1985). RMR is observed to be 0.041 conveying a very good fit (Arbuckle, 2010). CFI is noticed to be 0.921 exhibiting a borderline fit (McDonald and Marsh, 1990). IFI is noted to be 0.930 proving a satisfactory fit (Bollen, 1986). PCLOSE of this KKR Emotion Propelled OCB Model is 0.000 imparting a perfect fit (Browne and Cudeck, 1993). Considering the aforesaid fit indices it can be extrapolated that the KKR Emotion Propelled OCB Model has an adequate fit (Arbuckle, 1997; Bollen, 1986; Brown, 2015; Byrne, 2013; MacCallum, 1986; Preacher, 2003; Raykov and Marcoulides, 2006).

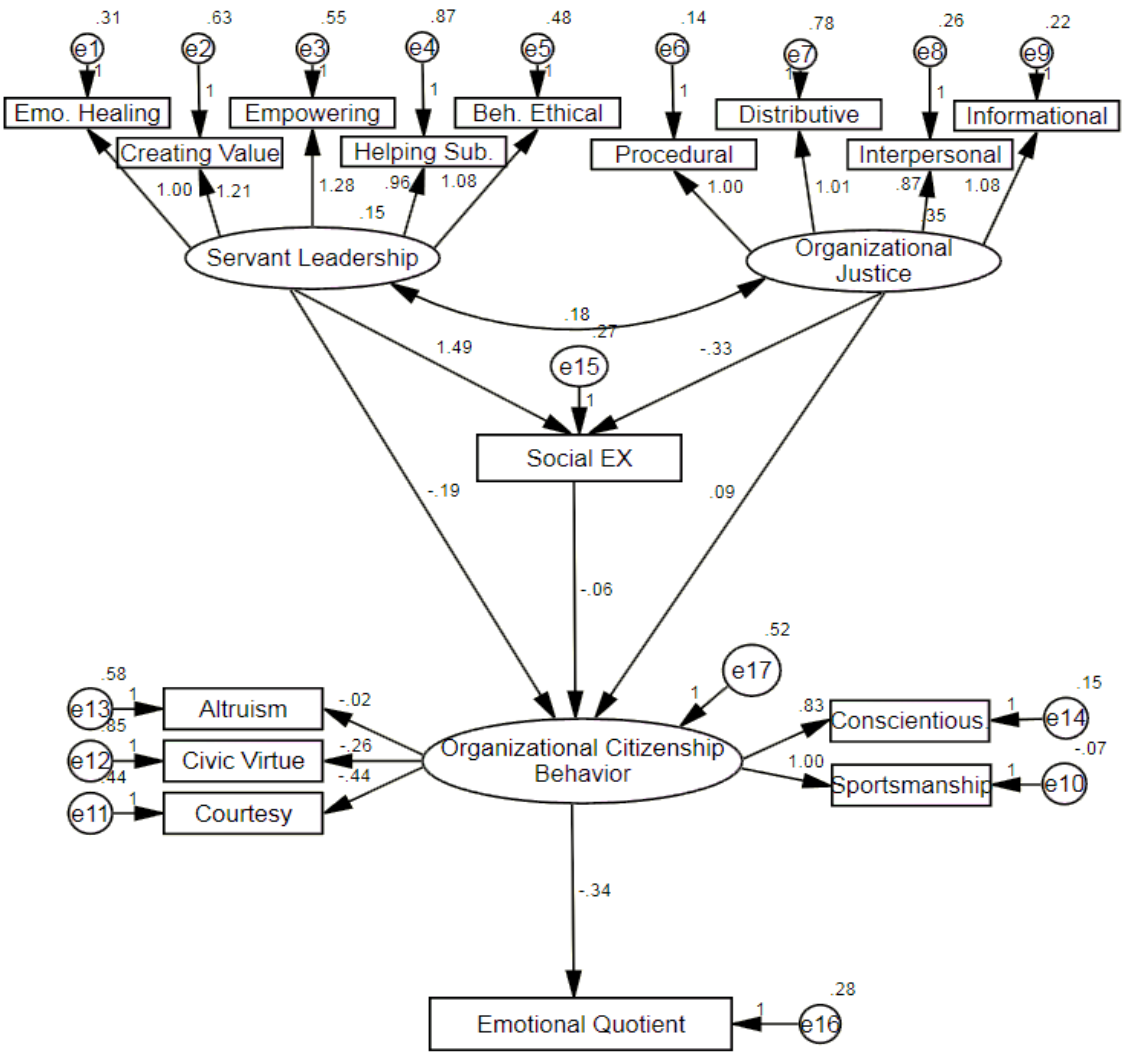


Figure 4: Unstandardized Estimates of the proposed "KKR Emotion Propelled OCB Model"

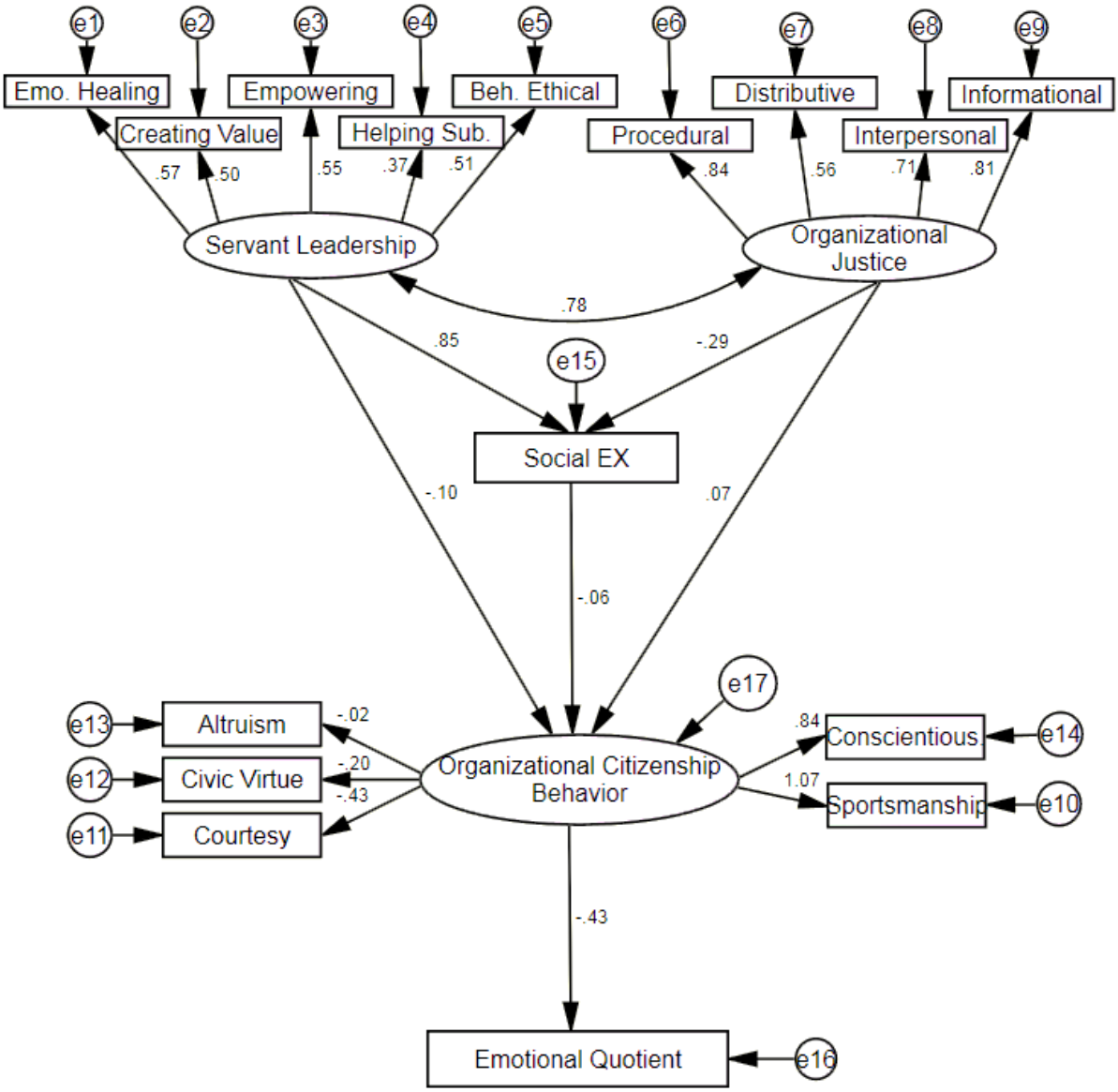


Figure 5: Standardized Estimates of the proposed "KKR Emotion Propelled OCB Model"

5. CONCLUSION

The concept of OCB can be habituated as an attribute that bridges various patterns to construct well emotionally balanced workforce in organizational contexts. The vitality of OCB model is based on the insight and the big picture the model depicts from personality factors and organizational factors. This study proposes novel apprehensions from Servant Leadership and Organizational Justice, including Social Exchange as mediating element, to explicate the antecedents of OCB. The research findings impart to the existing literature by identifying the bracing patterns that ascertain OCB. This study has also integrated Emotional Quotient of the respondents furthered by OCB. The conceptual framework – "KKR Emotion

Propelled OCB Model" that integrates all the ascertained attributes determining OCB is suggested.

5.1 Limitations

This research is subject to couple of limitations could have determined the research findings. Given the working population in the IT & ITES sectors along with the immense size and cultural diversity of the nation, as the data were gathered from IT & ITES companies belonging to Coimbatore, the results cannot be generalized for the whole sector. Limited availability of literature relevant to Indian context of IT & ITES sector served as a serious limitation. The research findings depend purely on the responses provided by the respondents that are circumstantial and relational.

5.2 Managerial Implications

The findings of this research provide awakening phenomena by appending empirical endorsement to the existing theoretical knowledge. Not a final statement on the research theme, though, this study contributes to the growing body of evidence that OCB encourages to perform considerably better in organizations. By recognizing how employees emotionally balance in organizations, it is possible to observe new pathways towards creating emotion propelled OCB framework. Intrinsically, this study extends to positive organizational scholarship literature that facilitates to reveal dynamics toward OCB in human systems.

5.3 Recommendations for Future Research

This study has stretched out the doors for many interesting discussions in OCB domain. Irrespective of the fact that the proposed "KKR Emotion Propelled OCB Model" manifested a satisfactory fitness towards formulating OCB, there is always a chance for a better model to exist. There are other dimensions, like: behavioral factors, talent management, performance management, organizational commitment, discipline, employee engagement, and efficacy still remain unexplored in this sphere. Meta-analysis could be employed in future research on elucidating the relationships. Furthermore, studies related to OCB can be conducted focusing on societal factors.

REFERENCES

AbuAlRub, R. F. (2004). Job Stress, Job Performance, and Social Support among Hospital Nurses. *Journal of Nursing Scholarship*, *36*, 73-74. doi:10.1111/j.1547-5069.2004.04016.x

Agosto, E. (2005). *Servant leadership: Jesus & Paul*. St. Louis, MO: Chalice Press.

Ahmed, I., Ismail, W. K., Amin, S. M., & Nawaz, M. M. (2013). A social exchange perspective of the individual guanxi network Evidence from Malaysian-Chinese

employees. *Chinese Management Studies*, *7*(1), 127-140. doi:10.1108/17506141311307640

Akuchie, N. D. (1993). The servants and the superstars: An examination of servant leadership in light of Matthew. *The Christian Education Journal*, *16*, 39-43.

Alexander, S., & Ruderman, M. (1987). The role of procedural and distributive justice in organizational behavior. *Social Justice Research*, *1*, 177-198. doi:10.1007/BF01048015

Arbuckle, J. (1997). *Amos user's guide, version 3.6*. Chicago, IL: Marketing Division, SPSS Inc.

Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: a theoretical integration. *Journal of Organizational Behavior*, *24*, 491-509. doi:10.1002/job.211

Bal, P. M., Chiaburu, D. S., & Jansen, P. G. (2010). Psychological contract breach and work performance: Is social exchange a buffer or an intensifier? *Journal of Managerial Psychology*, *25*(3), 252-273. doi:10.1108/02683941011023730

Barbuto, J. E., & Wheeler, D. W. (2006). Scale Development and Construct Clarification of Servant Leadership. *Group & Organization Management*, *31*(3), 300-326. doi:10.1177/1059601106287091

Bar-On, R., & Parker, J. D. (2000). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. San Francisco, CA: Jossey-Bass.

Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee citizenship. *Academy of Management Journal*, *26*(2), 587-595.

Bignoux, S. (2006). Short-term strategic alliances: a social exchange perspective. *Management Decision*, *44*(5), 615-627. doi:10.1108/00251740610668879

Blau, P. M. (1964). *Exchange and power in social life*. New York: J. Wiley.

Bogler, R., & Somech, A. (2004). Influence of teacher empowerment on teachers' organizational commitment, professional commitment and organizational citizenship behavior in schools. *Teaching and Teacher Education*, *20*(3), 277-289. doi:10.1016/j.tate.2004.02.003

Bollen, K. A. (1986). Sample size and bentler and Bonett's nonnormed fit index. *Psychometrika*, *51*, 375-377. doi:10.1007/BF02294061

Browne, M. W., & Cudeck, R. (1989). Single Sample Cross-Validation Indices for Covariance Structures. *Multivariate Behavioral Research*, *24*, 445-455. doi:10.1207/s15327906mbr2404_4

Browne, M. W., & Mels, G. (1992). *RAMONA user's guide*. The Ohio State University, Columbus, OH.

Brown, F. W., Bryant, S. E., & Reilly, M. D. (2006). Does emotional intelligence - as measured by the EQI - influence transformational leadership and/or desirable outcomes? *Leadership & Organization Development Journal*, *27*(5), 330-351. doi:10.1108/01437730610677954

Brown, T. A. (2015). *Confirmatory factor analysis for applied research*.

Byrne, B. M. (2013). *Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming, Second Edition*. Hoboken: Taylor and Francis.

Chadwick-Jones, J. K. (1976). *Social exchange theory: Its structure and influence in social psychology*. London: Published in cooperation with European Association of Experimental Social Psychology by Academic Press.

Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, *16*(1), 64-73.

Cohen, A., & Avrahami, A. (2006). The Relationship between Individualism, Collectivism, the Perception of Justice, Demographic Characteristics and Organisational Citizenship Behaviour. *Service Industries Journal*, *26*(8), 889-901. doi:10.1080/02642060601011707

Cohen-Charash, Y., & Spector, P. E. (2002). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, *86*(2), 278-321. doi:10.1016/S0749-5978(02)00040-7

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, *86*(3), 386-400. doi:10.1037//0021-9010.86.3.386

Cook, K. S., & Emerson, R. M. (1987). *Social exchange theory*. Beverly Hills, CA: SAGE Publications.

Cooper, R. K., & Sawaf, A. (1997). *Executive EQ: Emotional intelligence in leadership and organizations*. New York: Grosset/Putnam.

Cropanzano, R. (1993). *Justice in the workplace*. Hillsdale, NJ: L. Erlbaum Associates.

Das, T. K., & Teng, B. (2003). Partner analysis and alliance performance. *Scandinavian Journal of Management*, *19*, 279-308. doi:10.1016/S0956-5221(03)00003-4

Dennis, R., & Winston, B. E. (2003). A factor analysis of Page and Wong's servant leadership instrument. *Leadership & Organization Development Journal*, *24*(8), 455-459. doi:10.1108/01437730310505885

Deutsch, M. (1975). Equity, Equality, and Need: What Determines Which Value Will Be Used as the Basis of Distributive Justice? *Journal of Social Issues*, *31*, 137-149. doi:10.1111/j.1540-4560.1975.tb01000.x

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500-507. doi:10.1037//0021-9010.71.3.500

Elanain, H. M. (2010). Testing the direct and indirect relationship between organizational justice and work outcomes in a non-Western context of the UAE. *Journal of Management Development*, *29*(1), 5-27. doi:10.1108/02621711011009045

Farling, M. L., Stone, A. G., & Winston, B. E. (1999). Servant Leadership: Setting the Stage for Empirical Research. *Journal of Leadership Studies*, *6*, 49-72. doi:10.1177/107179199900600104

Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, *32*, 851-866.

Frick, D. M. (2004). *Robert K. Greenleaf: A life of servant leadership*. San Francisco, CA: Berrett-Koehler Publishers.

Givarian, H., & Farkoush, F. D. (2012). Study of the effects of organizational justice onorganizational commitment. *African Journal of Business Management*, *6*(4), 1338-1347. doi:10.5897/AJBM11.1193

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.

Goleman, D., Boyatzis, R. E., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Press.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, *6*(2), 219-247. doi:10.1016/1048-9843(95)90036-5

Greenberg, J. (1990). Organizational Justice: Yesterday, Today, and Tomorrow. *Journal of Management*, *16*(2), 399-432. doi:10.1177/014920639001600208

Greenberg, J. (1996). *The quest for justice on the job: Essays and experiments*. Thousand Oaks, CA: Sage Publications.

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.

Hawkinson, J. R., & Johnston, R. K. (1993). *Servant leadership*. Chicago, IL: Covenant Pub.

Homans, G. C., Hamblin, R. L., & Kunkel, J. H. (1977). *Behavioral theory in sociology: Essays in honor of George C. Homans*. New Brunswick, NJ: Transaction Books.

Ishak, N. A., & Alam, S. S. (2009). Leader-Member Exchange and Organizational Citizenship Behavior:the Mediating Impact of Self-Esteem. *International Journal of Business and Management*, *4*(3), 52-61.

James, J. K., Velayudhan, A., & Gayatridevi, S. (2010). Organizational Citizenship Behaviour andEmotional Intelligence of Corporate Executives. *Journal of the Indian Academy of Applied Psychology*, *36*(2), 262-267.

Jha, N. K. (2008). *Research methodology*. Chandigarh: Abhishek Publications.

Kane, E. (1985). *Doing your own research: Basic descriptive research in the social sciences and humanities*. London: M. Boyars.

Katrinli, A., Atabay, G., Gunay, G., & Guneri, B. (2008). Leader-member exchange, organizational identification and the mediating role of job involvement for nurses. *Journal of Advanced Nursing*, *64*(4), 354-362. doi:10.1111/j.1365-2648.2008.04809.x

Ketchen, D. J., & Bergh, D. D. (2004). *Research methodology in strategy and management: Volume 1*. Amsterdam: Elsevier.

Kirsch, G., & Sullivan, P. A. (1992). *Methods and methodology in composition research*. Carbondale, IL: Southern Illinois University Press.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research. *Educational and Psychological Measurement*, *30*, 607-610.

Lam, S. S., Schaubroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: a cross-national study. *Journal of Organizational Behavior*, *23*(1), 1-18. doi:10.1002/job.131

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008). *SPSS for intermediate statistics: Use and interpretation*. New York: L. Erlbaum Associates.

Leung, K., Smith, P. B., Wang, Z., & Sun, H. (1996). Job Satisfaction in Joint Venture Hotels in China: An Organizational Justice Analysis. *Journal of International Business Studies*, *27*, 947-962. doi:10.1057/palgrave.jibs.8490158

Leventhal, G. S. (1973). The distribution of reward and resources in groups and organizations. *Advances in Experimental Social Psychology*, *9*, 91-131.

Levine, S., & White, P. (1961). Exchange as a conceptual framework for the study of inter-organizational relationships?,. *Administrative Science Quarterly*, *5*(4), 583-601.

Liao, S., Hu, D., & Chung, H. (2009). The relationship between leader-member relations, job satisfaction and organizational commitment in international tourist hotels in Taiwan. *International Journal of Human Resource Management*, *20*(8), 1810-1826. doi:10.1080/09585190903087222

Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *Leadership Quarterly*, *19*, 161-177. doi:10.1016/j.leaqua.2008.01.006

Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.

Lo, M., Ramayah, T., Min, H. W., & Songan, P. (2010). The relationship between leadership styles and organizational commitment in Malaysia: role of leader?member exchange. *Asia Pacific Business Review*, *16*(1/2), 79-103. doi:10.1080/13602380903355676

Lynn, A. B. (2005). *The EQ difference: A powerful plan for putting emotional intelligence to work*. New York: Amacom.

MacCallum, R. (1986). Specification Searches in Covariance Structure Modeling. *Psychological Bulletin*, *100*, 107-120. doi:10.1037/0033-2909.100.1.107

Marsh, H. W., & Hocevar, D. (1985). Application of Confirmatory Factor Analysis to the Study of Self-Concept: First and Higher Order Factor Models and Their Invariance Across Groups. *Psychological Bulletin*, *97*, 562-582. doi:10.1037/0033-2909.97.3.562

McDonald, R. P., & Marsh, H. W. (1990). Choosing a multivariate model: Noncentrality and goodness of fit. *Psychological Bulletin*, *107*, 247-255. doi:10.1037//0033-2909.107.2.247

Moideenkutty, U., & Schmidt, S. M. (2011). Leadership tactics: enabling quality social exchange and organizational citizenship behavior. *Organization Management Journal*, *8*(4), 229-241. doi:10.1057/omj.2011.35

Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale, IL: Southern Illinois University Press.

Ngah, R., Jusoff, K., & Rahman, Z. A. (2009). Emotional Intelligence of Malaysian Academia towards Work Performance. *International Education Studies*, *2*(2), 103-112. doi:10.5539/ies.v2n2p103

Oakes, M. P., & Ji, M. (2012). *Quantitative Methods in Corpus-Based Translation Studies: A practical guide to descriptive translation research*. Amsterdam/Philadelphia: John Benjamins Pub. Co.

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, Ma: Lexington Books.

Organ, D. W. (1990). The motivational basis of OCB. *Research in Organizational Behavior*, *12*, 43-72.

Organ, D. W. (1997). Organizational Citizenship Behavior: It's Construct Clean-Up Time. *Human Performance*, *10*(2), 85-97. doi:10.1207/s15327043hup1002_2

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedent, and consequences*. Thousand Oaks, CA: Sage.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*, 775-802. doi:10.1111/j.1744-6570.1995.tb01781.x

Parsons, L. S. (1998). *Psychometric evaluation of the Running Addiction Sale*.

Picciano, A. G. (2004). *Educational research primer*. London: Continuum.

Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and Organizational Justice: Similarities and Differences across Cultures. *Journal of International Business Studies*, *30*, 763-779. doi:10.1057/palgrave.jibs.8490838

Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and Organizational Justice: Similarities and Differences across Cultures. *Journal of International Business Studies*, *30*, 763-779. doi:10.1057/palgrave.jibs.8490838

Pishghadam, R., & Noghani, R. M. (2011). *The Construct Validation of a Questionnaire of Social and Cultural Capital*. Canadian Center of Science and Education.

Podsakoff, P. M. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, *1*, 107-142. doi:10.1016/1048-9843(90)90009-7

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, *26*(3), 513-563. doi:10.1016/S0149-2063(00)00047-7

Podsakoff, P. M., Niehoff, B. P., MacKenzie, S. B., & Williams, M. L. (1993). Do Substitutes for Leadership Really Substitute for Leadership? An Empirical Examination of Kerr and Jermier's Situational Leadership Model. *Organizational Behavior and Human Decision Processes*, *54*, 1-44. doi:10.1006/obhd.1993.1001

Preacher, K. J. (2003). *The role of model complexity in the evaluation of structural equation models*.

Punnett, B. J., & Shenkar, O. (1996). *Handbook for international management research*. Cambridge, MA: Blackwell Business.

Raykov, T., & Marcoulides, G. A. (2006). *First course in structural equation modeling, A*. CRC Press.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, *87*, 698-714. doi:10.1037//0021-9010.87.4.698

Salkind, N. J. (2010). *Encyclopedia of research design*. Thousand Oaks, CA: Sage.

Salkind, N. J. (2014). *Statistics for people who (think they) hate statistics*.

Samuels, W. J., Biddle, J., & Emmett, R. B. (2009). *Research in the history of economic thought and methodology: A research annual*. Bingley: Emerald JAI.

Scruggs, T. E., & Mastropieri, M. A. (2006). *Applications of research methodology*. Amsterdam: Elsevier JAI.

Smith, B. N., Montagno, R. V., & Kuzmenko, T. N. (2004). Transformational and Servant Leadership: Content and Contextual Comparisons. *Journal of Leadership and Organizational Studies*, *10*, 80-91. doi:10.1177/107179190401000406

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*(4), 655-663. doi:10.1037/0021-9010.68.4.653

Spears, L. C. (1995). *Reflections on leadership: How Robert K. Greenleaf's theory of Servant-leadership influenced today's top management thinkers*. New York: John Wiley.

Sreejesh, S., Mohapatra, S., & Anusree, M. R. (2014). *Business research methods: An applied orientation*. Heidelberg: Springer.

Stevens, R. P., & Schoberg, G. (1990). *Servant leadership*. Wheaton, IL: Harold Shaw Publishers.

Suliman, A. M. (2007). Links between justice, satisfaction and performance in the workplace: A survey in the UAE and Arabic context. *Journal of Management Development*, *26*(4), 294-311. doi:10.1108/02621710710740075

Sweeney, P. D., & McFarlin, D. B. (1997). Process and outcome: gender differences in the assessment of justice. *Journal of Organizational Behavior*, *18*, 83-98. doi:10.1002/(SICI)1099-1379(199701)18:13.0.CO;2-3

Tanaka, J., & Huba, G. J. (1985). A Fit Index of Covariance Structure Models under Arbitrary GLS Estimation. *British Journal of Mathematical and Statistical Psychology*, *38*, 197-201.

Tang, T. L., & Sarsfield-Baldwin, L. J. (1996). Distributive and procedural justice as related to satisfaction and commitment. *SAM Advanced Management Journal*, *61*(3), 25-31.

Turnipseed, D. L. (2002). Are good soldiers good?: Exploring the link between organization citizenship behavior and personal ethics. *Journal of Business Research*, *55*(1), 1-15.

Van Dyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors: in pursuit of construct and definitional clarity. *Research in Organizational Behavior*, *17*(1), 215-286.

Walumbwa, F. O., Hartnell, C. A., & Oke, A. (2010). Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes, and Organizational Citizenship

Behavior: A Cross-Level Investigation. *Journal of Applied Psychology*, *95*(3), 517-529. doi:10.1037/a0018867

Weisinger, H. (1998). *Emotional intelligence at work: The untapped edge for success*. San Francisco: Jossey-Bass Publishers.

Yoon, J. (1996). Fairnes issues and job satisfaction among Korean employees: The significance of status value and procedural justice in work orientation. *Social Justice Research*, *9*, 121-143. doi:10.1007/BF02198076

Young, D. S. (1999). *Servant leadership for church renewal: Shepherds by the living springs*. Scottdale, PA: Herald Press.

Zehir, C., Akyuz, B., Eren, M. S., & Turhan, G. (2013). The Indirect Effects of Servant Leadership Behavior on Organizational Citizenship Behavior and Job Performance: Organizational Justice as a Mediator. *International Journal of Research in Business and Social Science*, *2*(3), 1-13. Retrieved from www.ssbfnet.com

Zeinabadi, H. R. (2013). Social exchange outcomes of transformational leadership Comparing male and female principals of public primary schools in Iran. *International Journal of Educational Management*, *27*(7), 730-743. doi:10.1108/IJEM-04-2012-0051

Assessing Security Threats within the Event Management Domain

Masrur Mohd Khir[1], Nur Atiqah Rochin Demong[2] and Melissa Shahrom[3] Nur Farhana Mohd Sah[4]

1 Institute of Business Excellence, Universiti Teknologi Mara, masrur@puncakalam.uitm.edu.my
2 Faculty of Business Management, rochin@puncakalam.uitm.edu.my
3 Faculty of Business Management, Universiti Teknologi Mara, melissa@puncakalam.uitm.edu.my
4 Faculty of Business Management, Universiti Teknologi Mara, nurfah0237@puncakalam.uitm.edu.my

ABSTRACT

This study explored the significance of risk and safety in the event management context, but has undertaken a microscopic view to examine the risks and/or threats related to the security hazards. It explores the importance of the security facet from the perception of event planners and venue managers within the event management industry in Malaysia. A lack of empirical studies in this area resulted in this study to undertake a qualitative exploratory case study approach using semi-structured interviews which has been conducted using a grounded approach aiming at exploring and identifying several important themes within the research context. The sample participants were recruited based on purposive and snowballing sampling technique comprising of eleven event planners and venue managers from various events related organisations in Malaysia. The findings identify several major themes of security threats within an event management domain which are terrorism and bombings, as well as other security related crimes such as thefts and snatch thefts, pickpocketing, etc. There were also other security issues emerged from this study in relation to the importance of security enforcement and security control concerning the management of security personnel within an event site.

Key Words: event management; risk; safety; security.

INTRODUCTION

The aspect of security and its threats to the tourism industry is well documented. Most people defined security as safety aspects due to the notion that its concept was interrelated and sometimes overlapped with each other. In discussing the risk related to crowd safety, Abbott and Geddie (2001), stressed that "security may represent an aspect of crowd control, especially as it pertains to emergency procedures, but it may also be effectively utilised as a part of a broader crowd management plan." Hence, this article has elicited out a part of a broader security angle which relates to the risk management function. Due to their interchanging concepts (between aspects related to safety and security), some respondents in this study struggled to differentiate between aspects related to safety and security when being asked mostly at the beginning of the interview sessions. Most issues relating to security concerns focused on crime and safety that happens within the event management context.

> *"I think on the event is OK actually, for instance like for the public we will put more focus on the security and safety aspects, that was all."*

> *"All been included, public liability insurance, security, ambulance, all I have included. This is how you… this is what event management all about! They consult the client, [because] client does not know, they consult the client."*

Hence, the security aspect identified in this study was discussed from two perspectives: first, it related to crowd safety (including the organisers/planners and venue management) and secondly, security hazards pertaining to the equipment such as props, and so on. Also included in the discussion was the security of personal effects belonging to the crowd and event/venue managers and their management team. Among the emergent themes were security issues such as crimes related to theft, snatch theft and pickpocketing, terrorism and bombing, the security management team, the security of venue and some other threats.

RESEARCH METHODOLOGY

The area of investigation focused in this study has never been attempted in its proposed domain. The study employed a qualitative approach and used semi-structured in-depth interviews with event practitioners from several event related organizations in Malaysia. The nature of the research problem is a valid reason for choosing qualitative methods (Corbin and Strauss, 2008). As this study is exploratory, it was crucial for the researcher to explore this topic at the stage when its variables and theory base are unknown. Robson (1993) stated that exploratory studies are usually based on qualitative methods, and researchers should use it to explore a topic when the variables and theory base are unknown (Creswell, 2009). Thus, the in-depth interviews with event practitioners were important to gather primary data based on the respondents' experience. So, this study was designed particularly to identify the initial themes (important emergent themes) that were related to the security threats from the event management industry point of view.

The data collection has involved formal in-depth interviews with a total of eleven event practitioners from the two classification organizational categories, comprising event management organisations and event venue providers. The selection of interviewees was based on the researcher's judgement and was preceded by snowballing sampling techniques pursued until the stage of data saturation, which ultimately signalled the end of the data collection process. In short, this study is justified as an exploratory study because there is certainly a lack of empirical research on the subject of security to event management domain especially in Malaysia (Mohd Khir, 2010).

FINDINGS AND DISCUSSIONS

Terrorism and Bombings

The first security hazard that has been identified from this investigation was the global threat of terrorism and bombings. Since the tragedy of 9/11 in New York, terrorism and bombings had become the most critical issue in relation to safety and security all over the world particularly in the realm of tourism, which includes the event management industry (Arana and Leon, 2008). In recent years, mega-events had to increase safety and security budgets, as well as implement stringent anti-terrorism measures (George and Swart, 2012). But in this context, it is found that most of the participants did not really put a major concern on threats related to terrorism and bombings, maybe due to the fact that until now Malaysia had never been involved in such a disaster. Unlike some other neighboring countries such as Indonesia and Thailand, which had suffered such catastrophes, Malaysia was fortunate to escape such calamities. The researcher assumed that this was maybe the reason for the security threats of terrorism and bombings were only mentioned by three out of the total thirty-three participants in the study's sample. But the absence of terrorist incidents was not supposed to make event managers and venue operators eliminate such risk and regard this hazard as a forgone issue, as been portrayed by the following informant.

> *"Take for granted, partly because one thing maybe it is good in one sense because we are not behaving like the western people who are knee jerk, knee jerk meaning they over respond to the issues pertaining to terrorism."*

It was noted that the threats of terrorism and bombings were comparatively more evident in Western literatures (Kennedy et al., 2003; Oriol, 2004; Weinberg, et al., 2004; Taylor and Toohey, 2006; Arana and Leon, 2008), where it was regarded as a major risk issue particularly to the West

as most of the terrorist attacks including failed or interrupted attempts happened there. However, that was not justification for the above respondent to feel so secure and belittle this type of risk, also substantially undermined mass efforts taken to mitigate threats.

The next respondent had a totally different opinion regarding this aspect. His views were based on his experience in relation to terrorism and bombings hazards, in which case he had suffered a fatal blow to one of his major events that happened post 9/11. He was supposed to have a big international event which turned out disastrously because of the September 11th Attack in the United States.

> *"We did run a very large event called Le Man Race, that was 19...2003, but that was also September 11, that event... I mean, I have been running event from the 70's, from tour events. That was a very big event but we didn't buy insurance, now that one September 11 didn't...was nothing to do in Malaysia but the drivers were all from America, the organiser is American, so with September 11 we lost an event just overnight without Malaysia didn't have anything [to do with it].…"*

According to this participant, the 9/11 incident has generally caused a major downturn in the tourism industry worldwide (including to the event management sector) which lasted for a couple of years before it started to recover. He stated that although the September 11th tragedy was not supposed to affect Malaysia, he later learned a bitter experience, having found that the impact was so severe for the tourism and event industry, even in the Malaysian context. His opinion was supported by Kennedy et al. (2003) and Oriol (2004) who both established that immediately after 9/11 safety and security-related processes in airports, embassies and public venues, such as event venues and sport stadia, were re-examined, and additional surveillance equipment and personnel were required. All these inevitably affected the tourism and travel businesses including a drop in the attendances at events all over the world. Hence, the situation faced by the above respondent was hard evidence that event planners and venue managers in Malaysia should be putting efforts to avoid such threats domestically. Another informant supported the idea.

> *"That's why I said it's very subjective you cannot say as such that I have made [prepared] 100% perfect, risk management is not… [for example] like you have prepared everything smoothly, your concert going to be in two days time suddenly there is a bombing near to the event's site, you have to cancel the concert!"*

The findings of the study suggest that the perceived threat of terrorism had minimal impact on the event/venue managers in the Malaysian event management industry. Most respondents did not present notable safety fears concerning terrorism. It can be anticipated that their perceptions were based on the general feeling among Malaysians that Malaysia is a safe destination and provided safe event environments. Therefore, it was not entirely surprising that these respondents were not constrained by perceptions of terror as they did not perceive any risk. However, Malaysian event organisers and venue operators must always ensure that appropriate actions are taken to handle the risk of terrorism and must not in any way downgrading security measures to the extent that they are risking the safety of all event stakeholders (Taylor and Toohey, 2007).

Snatch thefts

The next important theme in relation to security related hazards was the incidence of thefts and crimes or also known as crime-risk that often occurred within the vicinity of events and/or venue facilities. According to George and Swart (2012), this kind of crime-risk perception referred to crime-safety issues that could affect the respondents' perceptions and potentially their future decisions in managing risk and safety. Theft incidents such as snatch thefts and pickpocketing have been identified as part of the security incidents that were frequently raised.

During the data collection phase of this study, snatch thefts cases were a major issue highlighted almost every day in the country's mainstream media. According to Social Amplification Risk Framework (SARF) by Kasperson et al. (1988), media is an important filtering agent to either attenuate or amplify information in shaping the public risk perception. One of the research

participant took the opportunity to highlight this issue when reporting about several snatch thefts cases happened within the event management scenario. He even expressed his concerns that this certain crime-risk would jeopardise the reputation of the country in the tourism and travel business sector (ibid, 2012).

> *"You talk about health and safety there's something we don't want to over exaggerating, Malaysia at the moment I mean… […] …we have a lot of snatch thieves especially created some accidents. How do you tell the customer that KL [Kuala Lumpur] got issues in certain area that snatch theft [incidents] is taking place? You heard of it, you read about it in the newspaper isn't it? People snatching the bag and handbag of ladies! …. [How] to tell the customers on this [incident] to prevent it? When we talk of…. health and safety, nothing to do with us but happening outside an event site, outside the hotel they go around shopping that can happen. So, when we tell customer on this is a little bit difficult you know… How Malaysia is not a safe place? It's difficult isn't it? This is part of risk assessment safety issue."*

One would argue that snatch theft incidents might not have a direct impact on the security planning of an event, as most cases usually happened outside an event venue. However, a responsible event/venue manager would have applied certain measures to minimise the risk by at least warning the crowd so as to avoid them falling victim to such incidents. This respondent's concern was actually supported by George and Swart (2012) who argued that the negative image formed through the lack of safety and security may harm the tourism industry due to negative word-of-mouth communication. Hence, the media also play a significant role in any risk perception theories (Slovic, 1987; Kasperson et al., 1988; Renn et al., 1992).

Pickpocketing

On the other hand, the study found that pickpocketing incidents were the most common cases within the context of the event management industry in Malaysia. As an event is a means of gathering people in a certain venue at a specific time, huge crowd attendances inside the same facility triggered the opportunity to commit the crimes of pickpocketing. Events such as mega sporting events which attracted large audiences, provide an increased opportunity for criminal activity at the event site (Barker et al., 2003). Jarrel and Howsen (1990) who investigated this aspect concluded several factors for the increase of crime in a crowded area such as an event site. Firstly was that it can be expected that as the number of unidentified people increases in an area criminals are less likely to be easily identified, and secondly, the large number of strangers provides a large pool of potential victims and thirdly, these unidentified people are attractive targets as they may carry money or other valuable assets (ibid, 1990). Most respondents recognised that the risk of thefts and pickpocketing was common especially in events that have large crowd attendances such as concerts, festivals, fairs, exhibitions, carnivals, etc. These concerns were supported by Mykletun (2011, p.342) who highlighted that festivals and events often "attract high numbers of visitors in limited areas and involve material goods and properties of considerable value, and they may also be arranged in vulnerable environments." After all, maybe the crimes of pickpocketing were not just happening within the events' vicinity but also in all other crowded areas in other locations and with other circumstances.

> *"Let say other than that there were some cases like pickpockets, can it be included as well? […] Yes, that is one of the factors. […] we have lots of experiences on outdoor events as well as in confined areas. When [we talk about] the risk of what to say… this pickpockets, they're just the same whether in open spaces [outdoor] or indoors. What's important for them is that they got the opportunities, when there are opportunities so it becomes easy for them [to commit the pickpocket crime]. […] They just don't care!"*

> *"…..because often… for instance, there was at times the audiences came at once and it was very crowded. So, when lots of crowd the risk of….pickpockets [incidents] definitely will be high."*

Thefts

Thefts involving the loss of items belonging to event organisations have been identified as another emergent sub-theme resulted from a lack of security control before, during and after an event being held. These were normally assets used to stage an event, items such as event props, support equipment, and so forth. According to Wood (2009), these organisational assets which support the event business objectives always required protection. He argued that the call of security management procedures was important in the aspect of risk and business continuity of an organisation, and this includes the event management organisations. It was true that a crowded event area would result in more vulnerable targets and more motivated offenders, however, there should also be more capable guardians provided by the event/venue managers (Andresen and Tong, 2012). Lots of traces can be found in which the respondents reported various kinds of items being stolen due to a lack of security control within the event/venue management team. The items stolen ranged from electrical cables and other equipment belonging to event organisations to personal effects of the event attendees such as motorbikes, handbags and laptops. The following two excerpts were instances when the event organisers/planners had some of their equipment lost or stolen right before the event day.

> *"In terms of our things [event props and equipment], one of the major risk actually when the shipments arrives we will put everything in the storage. When it was like two or three days after when we are going to use it suddenly the things has gone, they've lost! Or in other case when we targeted [a specific time] but the shipment did not arrive, whereas it was very nearly to the event day… […] … loss of things and equipment were quite top actually, especially the cables people like to steal cables, I just don't know why…"*

> *"Safety incidents such as like, when we erected the equipment. When we erect the equipment maybe there was an accident, and then some items are lost. When the items lost and at that time there were items that we didn't insured. Insurance at that time was… […] … [on the] equipment, equipment. At that time Malaysia doesn't have insurance for all these equipment, just not yet, not yet at that time… after a year or two then only have [the insurance]…."*

Still on the similar matter, but from a different dimension, several respondents acknowledged that audiences and the crowd also sometimes become the victims of theft occurrences when they attended events, such as the loss of their personal belongings. Although these respondents did not want to be held liable for such incidents, it can be argued that as event organiser or venue provider, it was their responsibility to provide a safe environment for all event attendees (Eisenhauer, 2005), and that includes undertaking certain security procedures in ensuring the safety not just to the crowd wellbeing but also ensuring the security of crowd's belongings as well (Wood, 2009). It was highly likely that personal theft or knowing someone that has been the victim of theft while attending events would also somehow impact on the likelihood of the person attending the event.

> *"OK, on another risk that I can perceive is like let say we have a big event in **xxxx** [deleted for anonymity], sometimes the outsiders can take opportunities. […] what I meant was like… we had some of these cases previously. For example like when it was during the event, when the event is running suddenly we got like thefts incidents, the cases of loss motorbikes… […] because all people focused there [at the event], for example during convocation fiesta when we had convocation expo, the security will not stop the crowd because that event we open it to the public. So, people will come and enter the facility, so sometimes the outsiders can take the opportunities at that particular times [to commit crimes and thefts]."*

Mykletun (2011) acknowledged that the number of crowd and open access often make it unlikely that individual security checks may be undertaken. So, the crime of thefts has not been exclusive to respondents from the event venue category either. Two venue managers from two different event facilities admitted that they had experienced similar incidents in which some items belongings to the facilities had been stolen by irresponsible crowd who attended the events staged at their venues.

> *"…. We would never know on the safety aspect we had lots of different kinds of people attending an event, right? Whether the person really wanted to attend the expo or not… Like one of the case in*

last year… we had a case when a crowd came into this facility and took advantage. […] Yes, he went into the office and steals lots of our items, because we cannot determine [each crowd's intention of] why they came to the facility actually. Because convention centres like us were always open to the public, so we would not know which kind of person they are, right?"

"Maybe… I am not sure, not really like into this… last time like into just to security everything happen to be like there was something… quite expensive items stolen, broken, sometimes we've been… sometimes the lost was not our fault but at the end [because it was] our event so we have to be responsible."

Security Enforcement and Control

Due to a number of reported cases involving thefts and stolen items, the researcher then tried to dig deeper and explore this matter further by asking questions related to the enforcement of security procedures undertaken by the respondents. Due to the fact that planned events would always have the potential to have a significant impact on crime (Andresen and Tong, 2012), several respondents claimed that they had taken the necessary measures in relation to security such as deploying specific personnel to safeguard the items and enforcing certain strategies such as implementing access control system to minimise such crime.

"Normally we would ask the workers to remain on the place to safeguard the item, that's the normal practice. Because at that particular times there were lots of opportunists [thieves]…."

"Temporary passes for them to enter to do work. When there is an event the security will monitor, so we will know every time belongs to the… […] …. Control, because we were afraid that there might be outsiders coming in, those who are not supposed to…. So, when something came and they didn't understand the whole operation, that was how we control actually."

Now, let us draw the attention to an interesting response given by a participant involved in organising sporting events for children. He revealed something which was far more serious compared to the above cases on loss of items. He revealed about the loss of children within an event facility, maybe due to the fact that his events would often involve lots of under aged children, some even participated in the events without being accompanied by their parents. But he was fortunate that none of the reported missing children incidents involved fatalities as all of them had been found safe and sound within the event premises. Although there is still limited data on the standard of care provided for children at mass gatherings and special events (McQueen, 2010), this exploratory study has given us another important element within the risk and safety aspect required for us to pay attention to. This respondent agreed that special precautions need to be undertaken by event/venue managers so that the cases of missing children can be handled in a quick and efficient way to avoid any fatalities or other unwanted incidents. Both McQueen (2010) and Mykletun (2011) supported this view by stating that those involved in event planning should include measures to ensure that appropriately trained personnel and equipped medical teams were used at festivals to safeguard the welfare of children who may attend.

*"OK, sometimes when we organise, let say a carnival, soccer carnival. Sometimes children went missing, kids went missing….so these kinds of, wallets missing… I still remembered… […] … those incidents actually because sometimes the children was not aware, and they tend to walk away…and the parents also was not aware because they was too focused on the big brother [other child] who was playing football at the field so these things happen. But luckily we found them, because the venue and facility that we organise the event also played an important part. A good example is like this sporting complex of **xxxx** [deleted due to maintain anonymity], children would not [be able] gone far to the roadside."*

Security Management and Personnel

The final part of this research findings will discuss the aspect of security in terms of its management and personnel. Most of the participants in this study from both categories of event planners and venue operators agreed that security was needed in order to minimise or mitigate risk and safety issues. According to Connell (2009), security has a greater role in liaising with event patrons with regards to the crowd's wellbeing. Thus, the security responsibility for an event

organising team as well as event venue management was mostly dependent on the individuals and personnel appointed to handle such matters.

In terms of security control, Ammon and Fried (1998) suggested that the event/venue managers employ searchers at the gate and doors to prevent prohibited items such as bottles and cans from entering the event facility. But the findings of this study proposed several common practices in terms of handling security aspects in relation to the event management context in Malaysia. Some of the event management organisations tended to leave aspects related to security to the authorities such as the Police and FRU (federal reserve unit), whereas some preferred to handle this important matter by themselves, within their own management team. There were also those who favoured contracting out this aspect by employing security consultants or security companies from outside. Connell (2009) claimed that it had become a norm that additional resources such as an increase in security personnel for policing and other security measures for most event/venue managers nowadays. Such traces can be found within the following statements, with the first two quotations claiming that they handled matters regarding security internally within their own organisation.

> *"Ok, if we can relate… relate with the authorities, safety can be divided into two, one is the safety aspect of the staffs and the other is the safety aspect of the event itself and so on, right? So, if related to the staffs the risk that we need to calculate is the security of the staff which like an example when we install [event preparation] at night we would prepare somebody as security or we make sure that our crew is someone who is what to say… experience in this aspect [security] actually…"*

> *"Lots of workers, and that not yet even the case of a concert. For concerts, I had an experience of handling all crews involved from security, ticketing, aaaa….floor crew, production crew, all totalling about 850 individuals, all I handled. […] I handled them all […] I did a Hindi concert, bring down 14 Hindi artists, the biggest concert with the most crowd attendance. I got only on security [personnel] 200 persons."*

But on the other hand, another respondent here opted to leave security related matters in the hands of the authorities.

> *"It is very important, of course, very important for in organising and planning for the event. But as since you touch on the risk assessment just now, or the event safety risk assessment, since we are in the government so all our event we involved the security like the Police to come in...."*

The study however found that most of the event planners would let this specific aspect of security risk be handled by the venue managers and the facility management team. Their argument was that at most times they were paying the rental for that venue and the fees charged were inclusive of certain services that needed to be provided by the venue facility. Thus, the security services were among the most important aspect that would come under the responsibility of the venue operators, some event planners even claiming that it was clearly stipulated in the contractual agreement between the event manager/planner and the venue host.

> *"Ok, for example like in the **xxxx** [extracted due to anonymity issue]… because normally when we rented a venue it will be included with the…. their security officers as well. So, their security officers would be responsible to monitor all aspects throughout the whole program right from the start until its end. […] Yes, they will involve… so they will get involve, because it is the normal practice when we rented a venue we will include, because we paid for the [security] services. […] We even had that in the contract between us and the venue provider."*

The importance of event venue facility in terms of security management was enhanced further by another two informants representing both categories of event planners and venue operators. However, the following respondent suggested a good practice by having security personnel from both the planners' team as well as the venue management.

"…. OK, in terms of security, in terms of the security how to say…. venue, venue. Venue is actually the most important [in terms of security] because of what, because we need to know doors, all [entrance and exit] doors we must have our own people and the venue's staff as well. It is because some venues in Malaysia like the stadiums, they have their own security personnel. It was because they must have their people controlling the entrance and exit gates. So, we have to collaborate with them, the venue staff. So, the venue staff would be in our team and we will give them briefing as well."

"Yes, he is actually the most important person. So, at the event we must have like a floor manager, he must make sure everything is in order. Then so, because… for every… when already known how many people then he will prepare the passes, temporary security passes for all the contractors… "

The negligence of not having a safety officer post in most government agencies was revealed by several respondents. One event venue provider owned by the government actually faced the same problem of the non-existence of a safety officer in his organisation but insisted that they did have an established position with regards to the security aspect, and assumed that the same person would handle both matters regarding safety and security. However, this informant also mentioned that most of the liabilities with regards to risk and safety will be under the appointed maintenance contractors. The situation in Malaysia regarding this aspect was very different compared to some of the developed countries particularly the United Kingdom which have the post of 'Event Safety Officer' described by White (2009) whose job is to handle risk and safety aspects of any events.

"For the event [safety] aspect is none, but we do have a security officer but he is more towards the security of the building…"

"….. [risk and safety is] to be inside the contractor maintenance company here. On our side we only have a security officer, but security means security per say, security of the building not of the events. But again as I said [to] Mr Masrur that when we are talking about the safety of the building indirectly it means safety of the events also actually, indirectly. But probably we are not thinking specifically directly towards safety of the events but in terms of making sure that safety of the building is well maintained so that the event is [safe], we [should] have the permanent post, so the event is well taken care. […] No, safety officer no! Security officer, yes!"

CONCLUSIONS

All the above discussions described that security is an important aspect in relation to risk and safety. It has become an utmost concern for any event planners and venue managers in developing the risk management plan for any types of special events. The findings of this study correlate with Connell's (2009) view that it can never be a doubt that security have a greater role in liaising with event patrons, especially the event attendees and crowd with regards to their wellbeing in attending any kind of events, festivals, concerts, conventions, and so forth.

According to Kim et al. (2006), the perceptions of high crime rates and incidents of crime, especially those involving foreign tourists were likely to tarnish the image of the event host destination as well as the organiser and planner themselves. According to George and Swart (2012) risk is itself a multidimensional measure, hence, health issues and crime threats such as theft and muggings are considered major risk dimensions within the emerging markets of events and festival management. Event attendees, including the tourists may develop a negative image if they feel that their personal safety will be at risk whilst attending such events (Botterill and Jones, 2010; George and Swart, 2012). Although most of these security issues discussed above were understandably remote and not comparatively high, it is imperative for Malaysia's event planners and venue managers to at least ensure that these crime incidents would not escalate further.

REFERENCES

Abbott, J., & Geddie, M. W. (2001). Event and venue management: Minimizing liability through effective crowd management techniques. *Event Management*, 6(4), pp. 259-270.

Ammon Jr, R., & Fried, G. (2004). Crowd management practices. *Journal of Convention & Exhibition Management,* 1, pp. 119-150.

Andresen, M. A., & Tong, W. (2012). The Impact of the 2010 Winter Olympic Games on Crime in Vancouver. *Canadian Journal of Criminology and Criminal Justice,* 54(3), pp. 333-361.

Araña, J. E., & León, C. J. (2008). The impact of terrorism on tourism demand. *Annals of Tourism Research,* 35(2), pp. 299-315.

Barker, M., Page, S. J., & Meyer, D. (2003). Urban visitor perceptions of safety during a special event. *Journal of travel research,* 41(4), pp. 355-361.

Botterill, D., & Jones, T. (2010). *Tourism and Crime: key themes*. Oxford: Goodfellow Publishers

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. California: Sage

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. California: Sage

Eisenhauer, S. (2005). *Sports events and risk management in New Zealand: How safe is safe enough?* Masters Thesis, University of Otago, Dunedin.

George, R., & Swart, K. (2012). International tourists' perceptions of crime–risk and their future travel intentions during the 2010 FIFA World Cup™ in South Africa. *Journal of Sport & Tourism,* 17(3), pp. 201-223.

Jarrell, S., & Howsen, R. M. (1990). Transient crowding and crime. *American Journal of Economics and Sociology,* 49(4), pp. 483-494.

Kasperson, R. E., Renn, O., Slovic, P., Brown, H. S., Emel, J., Goble, R., . . . Ratick, S. (1988). The social amplification of risk: A conceptual framework. *Risk analysis,* 8(2), pp. 177-187.

Kennedy, P., Perrottet, C., & Thomas, C. (2003). "Scenario planning after 9/11: managing the impact of a catastrophic event". *Strategy & Leadership,* 31(1), pp. 4-13.

Kim, H. J., Gursoy, D., & Lee, S.-B. (2006). "The impact of the 2002 World Cup on South Korea: comparisons of pre-and post-games". *Tourism Management,* 27(1), pp. 86-96.

McQueen, C. P. (2010). Care of children at a large outdoor music festival in the United Kingdom. *Prehospital and disaster medicine,* 25(03), pp. 223-226.

Mohd Khir, M. (2010, December). *Event Safety Risk: A Malaysian Perspective*. Paper presented at the Association of Tourism in Higher Education Annual Conference 2010, Canterbury, Kent.

Mykletun, R. J. (2011). Festival Safety–Lessons Learned from the Stavanger Food Festival (the Gladmatfestival). *Scandinavian Journal of Hospitality and Tourism,* 11(3), pp. 342-366.

Oriol, P. S. (2004). Fear and fantasy: The elsewheres of post 9/11 tourism. *e-Review of Tourism Research (eRTR),* 2(4). Available at http://ertr.tamu.edu/commentaries.cfm?articleid=42 [Accessed 27 March 2009]

Renn, O., Burns, W. J., Kasperson, J. X., Kasperson, R. E., & Slovic, P. (1992). The social amplification of risk: Theoretical foundations and empirical applications. *Journal of Social issues,* 48(4), pp. 137-160.

Robson, C. (1993). *Real world research: A resource for social scientists and practitioner-researchers.* Oxford: Blackwell Publishing

Slovic, P. (1987). Perception of risk. *Science,* 236(4799), pp. 280-285.

Taylor, T., & Toohey, K. (2007). Perceptions of terrorism threats at the 2004 Olympic Games: Implications for sport events. *Journal of Sport & Tourism,* 12(2), pp. 99-114.

Weinberg, L., Pedahzur, A., & Hirsch-Hoefler, S. (2004). The challenges of conceptualizing terrorism. *Terrorism and Policical Violence,* 16(4), pp. 777-794.

White, M. J. (2009). Local authorities and events: The need for standardisation. *Journal of Crowd Safety and Security Management,* 1(2), pp. 16-21.

Wood, P. (2009). Security management - will you see it through to the end? . *Journal of Crowd Safety and Security Management,* 1(2), pp. 81-85.

Assessing the Influence of Personality Traits on Knowledge Sharing Among Employees in University Malaysia Sarawak, Malaysia

Muhammad Omar[1], Dean Nelson Mojolou[2], Pauline Achan[3], Susana William Jalil[4] and Habiel Zakariah[5]

1 Faculty of Business Management, UiTM Sarawak, muhammad@sarawak.uitm.edu.my
2 Faculty of Business Management, UiTM Sarawak, deann065@sarawak.uitm.edu.my
3 Faculty of Business Management UiTM Sarawak, paulineachan@sarawak.uitm.edu.my
4 Faculty of Business Management UiTM Sarawak, susanna@sarawak.uitm.edu.my
5 Faculty of Business Management UiTM Sarawak, habiel053@sarawak.uitm.edu.my

ABSTRACT

The purpose of this study is to investigate the relationship between the personality traits and knowledge sharing amongst the employees. For the purpose of this research, a total of 66 respondents were undertaken at the Centre for Information and Communication Technology Services (CICTS), University of Malaysia Sarawak (UNIMAS). The study applies survey research through questionnaires that was adapted from McShane, Steven Lattimore (2013) and Pei-Lee The, Chen-Chen Yong, Chin-Wei Chong and Siew-Yong Yew (2011). No sampling was used as this study utilized the total population of 80 staff to participate in completing the individual questionnaire. The data was analyzed using IBM SPSS Statistics Version 20 in order to identify statistically significant associations. The findings suggested that, there is a significant correlation between the Big Five Personality traits dimension and knowledge sharing. It is discovered that those persons who belong to agreeableness dimension are likely to apply as compare to those with other personality traits, its correlation value showing, p=.000 (<.05), r =.851. Therefore, the findings indicate the personality traits of the CICTS' staff at UNIMAS are significantly correlated with knowledge sharing.

Key Words: *Knowledge sharing, Big Five Personality traits*.

1. INTRODUCTION

According to Angela (2010) as cited in Quigley et.al (2007), knowledge sharing is increasingly viewed as critical to organizational effectiveness in the knowledge-based economy. With the fast moving global environments, the storage of information or knowledge about opportunities and threats within markets becomes more important (Boom & Pennink, 2012). Housel and Bell (2001) as cited by Boom & Pennink (2012) stated that the quality of knowledge and the knowledge processes in organizations are seen as the key business activities that make an organization successful in competitive marketplaces. In other related study, Angela (2010) stated that most researches on knowledge sharing have been conducted in private sector organizations (e.g. Hara and Hew, 2007; Land et al., 2009; Li et al., 2010) or among students (e.g. Kwok and GAO, 2005). Furthermore, she added that only few studies focus on knowledge sharing in the public sector (Sandhu et al., 2011; Yusof et al., 2012).

Knowledge is understood as information processed by individuals including ideas, facts, expertise, and judgments relevant for individual, team, and organizational performancell (Wang and Noe, 2010). Conversely, knowledge sharing refers to the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures (Wang and Noe, 2010). Besides that, Boom and Pennink (2012) cited from many (3) researchers namely Lin, Lee, and Wang (2009), knowledge sharing as a social

interaction culture involving the exchange of employee knowledge, experiences and skills through the whole department or organization.

As cited by Chao, Cheng, and Li (2012), Di As organizations have the right to knowledge, to know the nature of knowledge to develop and share, it is crucial for such organizations to encourage the culture of sharing and learning from each other. Management influences the performance of every employee within the organizational structure and consequently affects organizational performance (Agrawal & Henderson, 2002) as cited by Alrawi et.al. (2013). An organization‘s culture in which the operations factors of knowledge can come to optimum advantages laid its focus on the stimulation and exploitation of the creativity of its employees. Creating, managing, and sharing knowledge is at the top of the agenda for a growing number of organizations, (Chong, 2006) as cited by Alrawi et.al stated that through employees‘ knowledge sharing, firms could enhance overall innovation and capability and assemble individual knowledge into organizational memory to increase the knowledge base. For organizations, this multiplier effect is a kind of core capability which underlines the importance and influence of knowledge sharing (Mao, 2010). Chao, Cheng, and Li (2012) also cited from Darroch (2005), who suggested that organizations implement various knowledge management activities to confirm, share and use organizational knowledge in order to increase organizational innovation and performance.

2. LITERATURE REVIEW

According to Polanyi (1962) as cited by Krishnaveni & Sujatha (2012), knowledge is one of the critical driving forces for business success in nowadays organizations, either public or private sector and this statement was supported by Davenport & Prusak (1998) as quoted from Irene & Kimiz (2013) that knowledge is widely recognized as a critical resource for organizational performance. Wilkesmann et. al. (2009), indicated that the movement of knowledge within the organization is a distinct experience, not a gradual process of dissemination and depends on the characteristics of everyone involved, and while, Wellman (2009), maintained that today, more than ever, an organization‘s competitiveness depends on what it knows, how well it uses what it knows, how fast it can adapt what it knows to the rapidly changing environment, and how quickly it can acquire new knowledge. Huang, et. al. (2010), stated that knowledge sharing is absolutely essential to the knowing, learning and improvement process within an organization. In reviewing the knowledge sharing literature, Jackson et.al. (2006) as quoted from Irene & Kimiz (2013), described organizational knowledge sharing is an activity through which knowledge is exchanged between and among individuals, communities and within and among teams, organizational units, and other organizations. According to him also, as a knowledge-centred activity, knowledge sharing is the fundamental means through which employees can contribute to knowledge application, innovation, and ultimately the competitive advantage of the organization.

Big-Five Personality

The study of individual differences in cross- situational behavioural and response tendencies, that is the study of personality and personality traits, dates back to at least the ancient Greeks, who proposed four personality types or humours (sanguine, phlegmatic, melancholic, and choleric), and has been a major line of inquiry in modern psychology since its beginnings, (Funder, 2008) as cited by Kurt Matzlera et.al. (2011). Based on his study, in the late twentieth century, personality psychology was challenged by findings of at best modest relationships between traits and behaviours and by scientific fragmentation; innumerable traits and measures were offered in the literature, while little effort was made to synthesize those disparate constructs or to integrate empirical findings. According to him, over the past two decades, however, advances in theory and methods have brought about a revitalization of personality psychology, in regard to disappointing trait–behaviour relationships, recognition of the joint effects of traits and situations, recognition of the need for corresponding levels of measurement, along with improved methods and analytic techniques, have ameliorated findings. As cited from John and Srivastava (1999) and McCrae (2009) by Kurt Matzlera (2011), the structure of personality and the integration of findings, an important consensus has emerged regarding the organization of personality: personality is hierarchical, with broad traits or domains at the highest, most general

level subsuming numerous narrower, lower level, more specific traits or facets.‘ Five fundamental dimensions, Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience (also labelled Intellect), explain most of the meaningful variance in personality; this structure emerges across paradigms 17 (including the lexical and questionnaire approaches) and across rates, across the lifespan, and across cultures. These five traits have been related to behaviours and consequential outcomes such as health and the quality of interpersonal relationships, as well as to heredity and underlying physiological and genetic structures (for recent reviews).

Extraversion

This is one of the dimensions in Big Five Personality and most frequently this is called as Extraversion or Surgency (Botwin & Buss, 1989; Digman, & Chock, 1981; Hogan, 1983; Howarth, 1976; Norman, 1963). The major traits include outgoing, gregarious, assertive, talkative, and energetic. Hogan (1986) considers this dimension as of two components. The first one is ambition’ that includes initiative, assurgency, ambition, and impetuous and the other one is sociability’ that includes sociable, exhibitionist, and expressive. In a research, extraversion is found to be positively related to the attitude towards knowledge sharing (Teh, Yong, Chong, & Yew, 2011).

Agreeableness

People who score high on Agreeableness are good- natured, forgiving, courteous, helpful, altruistic, generous, and cooperative (Barrick and Mount 1991; Graziano and Eisenberg 1997; Liao and Chuang 2004): _Agreeableness contrasts a prosocial and communal orientation toward others with antagonism and includes traits such as altruism, tender mindedness, trust, and modesty (John and Srivastava 1999, p.121; emphasis in original). Agreeableness has been linked directly to workplace performance and, although the mechanism mediating that relationship has not been well explored, it has been reasonably supposed that cooperative interactions explain the relationship (Witt, Burke, Barrick and Mount 2002).

Conscientiousness

Conscientiousness describes socially prescribed impulse control that facilitates task-and goal-behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks.(John and Srivastava 1999). Individuals with high Conscientiousness are dependable, responsible, organized, hardworking, and achievement oriented (Barrick and Mount 1991) and, as a result, Conscientiousness is generally recognized as the single best trait predictor of job performance, with robust effects across aspects of performance (Barrick et al. 2001).

Neuroticism

Neuroticism means any trend to experience negative emotions like feelings of anxiety, fear, sadness and stress against emotional stability and composure. Neurosis is a streak of personality in which high emotional stability and low anxiety exist in one direction and emotional instability and anxiety exist on another direction (Howard & Howard, 1998).

Openness to Experience

The individuals who receiving high mark on openness to experience are curious on their inner and outer world and their life is empirically rich. Openness to experience describes the extent, depth, complexity and innovative nature of mental life and individual experience against a closed mind (John & Serivastava, 1999).The results with respect to Openness to Experience suggest some fruitful areas for future research.

Motivation toward Knowledge Sharing

Many knowledge sharing studies have demonstrated the value of studying intrinsic and extrinsic motivations, employee motivation is a main concern of any manager, it has been one of the most studied factors in knowledge sharing (Bock et al., 2005; Hung et al., 2011; Wasko & Faraj, 2005). According to Stenmark (2001), knowledge sharing seldom occurs without strong individual motivation. Motivation is one of the most important factors influencing employees

‘intentions to share their knowledge, regardless of the type of knowledge to be transferred (Vera-Mu˜noz, Ho, & Chow, 2006). Especially, rational action theory regards social interaction, such as knowledge sharing, as social exchange (Scott, 2000).

Benefits of Knowledge Sharing

According to Siemsen et al. (2007) as cited by Chieh- Peng Lin & Sheng-Wuu Joe (2011), an organization may gain a lot of benefits from the implementation of knowledge sharing. They also stated that knowledge sharing enables the sharing of relevant experiences and information between organizational members, whereas, inter employee helping allows individuals to complement one another with mutual assistance in operations. Besides that they also stated that, previous literature has overemphasized the tangible incentives that induce knowledge sharing in workgroups by assuming that employees share their knowledge and help others to gain rewards.

3. METHODOLOGY

A. Research Design

The study took correlational research because it is conducted to measure the relationship between independent variables (IV) and dependent variables (DV). It may be of interest to know that attempts are sometimes made to establish cause and affect relationships through certain types of correlational analysis. The IV are measures of Personality Traits in the workplace (Agreeableness, Extraversion, Conscientiousness, Neuroticism, Openness to Experience) while the DV is Knowledge Sharing.

B. Population

The population for this study consists of 80 employees who are working as executive and non-executive in Centre for information and communication technology services (CICTS), UNIMAS.

C. Sample Size

From the previous proposal, the researcher was planning to take the entire population of Centre for information and communication technology services (CICTS), UNIMAS employees as the sample on this study. All 80 employees of CICTS, UNIMAS were taken as respondents of this study.

D. Sampling Technique

The researcher used no sampling technique “census” to conduct this study. All employees of CICTS, UNIMAS were taken as respondents of this study.

E. Measurement

The questionnaires were distributed personally by the researcher to all the staff at Centre for Information and Communication Technology Services (CICTS), UNIMAS. The researcher allocated five (5) days for the respondents to complete the questionnaire. After the given time ended, the researcher was personally collecting the questionnaires from the respondents. A cover letter was also attached together with the questionnaires which explaining the purpose of the study.

Table 1: Elements of Personality Traits

ELEMENTS	NO. OF ITEMS
Extraversion	6
Agreeableness	6
Conscientiousness	6
Neuroticism	6
Openness to experience	6

Table 2: Elements of Knowledge Sharing

ELEMENTS	NO. OF ITEMS
Attitude toward Knowledge Sharing	5
Motivation toward Knowledge Sharing	5

4. FINDINGS

For this study, the sample size is eighty (80) respondents which is the entire population in the Centre for Information & Communication Technology Services (CICTS), UNIMAS. The respondents consisted of different gender, age, highest level of education, department of service, length of service and also employment status. From the overall total set of questionnaires [eighty (80) sets], only sixty-six (66) questionnaires was been returned by the respondents. It shows that out of sixty six (66) questionnaires that was analyzed, 56.1% (n=37) were female, while, 43.9% (n=29) were male. The majority who answered the questionnaires were in the age range between 31 to 40 years old which is 42.4% (n=28) of the total respondents. This is followed by those in the age range of 18 to 30 years old, 39.4% (n=26), followed by 12.1% (n=8) of age between 41 to 50 years old and 6.1% (n=4) 51 to 60 years old respectively.

A. *Normality Test*

According to Coakes (2012), data screening and transformation technique are useful in making sure that the data is correctly entered and that the distributions of variables that are to be used in analysis are normal. She also stated that skewness and kurtosis refer to the shape of the distribution, and are used with interval and ratio level data. She stated also the value for skewness and kurtosis are zero if the observed distribution is exactly normal. Hence, it could be concluded that the sample of data collected from the population is normally distributed.

Table 3: Normality Test (n=66)

VARIABLES	SKEWNESS	KURTOSIS
Extraversion	-.042	-.310
Agreeableness	.264	-.880
Conscientiousness	-.339	1.142
Neuroticism	.266	-.522
Openness to experience	.485	.037
Knowledge Sharing	-1.008	2.519

B. *Bivariate Correlation Analysis*

Bivariate correlation analysis was used to explore the strength of the relationship between two continue variables. A positive correlation indicates that as one variable increases, so does the other, while negative correlation indicates that as one variable increases, the other decrease.

Table 4 below, shows the guideline to interpret the meaning of the correlation coefficient suggested by Cohen (1988).

Table 4: Cohen (1988) guidelines for interpreting correlation based on r values

DEGREE OF CORRELATONS	R VALUES
Very strong	± 0.8 and 1.0
Strong	± 0.6 and 0.8
Moderate	± 0.4 and 0.6
Weak	± 0.2 and 0.4
Very weak	± 0.2

The relationship between personality traits and knowledge sharing were measured using Pearson product-moment correlation coefficient. Table 5 shows that there is a relationships between this two variables (r=.617, p<0.01). Based on the results the hypothesis H1 is accepted. It is conclude that, the Personality variables (extroversion, agreeableness, conscientiousness, neuroticism and openness to experience) and knowledge sharing variables (attitude and motivation) among the employees correlation in CICTS, UNIMAS.

Table 5: Correlation between Personality Traits and Knowledge Sharing (n=66)

		Knowledge Sharing	Personality Traits
Personality Traits	Pearson Correlation	1	.617
	Sig. (2-tailed)		.000
	N	80	80
Knowledge Sharing	Pearson Correlation	.617	1
	Sig. (2-tailed)	.000	
	N	80	80

**. Correlation is significant at the 0.01 level (2-tailed)

C. *The highest influence of Personality Traits toward Knowledge Sharing*

Table 6 below summarizes the results of Pearson Correlation between elements of Personality Traits and Knowledge Sharing. The highest relationship is Agreeableness and the lowest is openness to experience. The findings show that, the employees in CICTS, UNIMAS who are categorized under the agreeableness dimension will naturally apply knowledge sharing in the workplace. Teh, P.L. et al. (2011), also agree that, since knowledge sharing is a particular form of individual helpfulness, cooperation and collaboration, and getting along with others within interpersonal relationships with co-workers, employee's course-mates and friends, individual high in agreeableness are more likely to share knowledge. According to de Vries, van den Hoof, and de Ridder (2006), teams with members who scored high on the agreeableness were more likely to share knowledge. Similarly, Matzler et al. (2008) found that agreeableness was positively related to knowledge sharing.

Table 6: Summary of Pearson Correlation between IV and DV

PERSONALITY TRAITS (IV)	KNOWLEDGE SHARING (DV)
Extraversion	(r=.578, p<.05)
Agreeableness	(r=.851, p<.05)
Conscientiousness	(r=.707, p<.05)
Neuroticism	(r=.665, p<.05)
Openness to experience	(r=.472, p<.05)

From the hypotheses findings, Table 7 below is the summarized results for this study.

Table 7: The summary of overall hypotheses

HYPOTHESES	OVERALL RESULTS	
	RELATIONHIP	RESULT
H1: There is a significant relationship between personality Traits and Knowledge Sharing.	Significant Relationship	Accepted (r=.617, p<0.01)
H2: There is a significant relationship between Extraversion and Knowledge Sharing.	Significant Relationship	Accepted (r=.578, p<0.01)
H3: There is a significant relationship between Agreeableness and Knowledge Sharing.	Significant Relationship	Accepted (r=.851, p<0.01)
H4: There is a significant relationship between Conscientiousness and Knowledge Sharing.	Significant Relationship	Accepted (r=.707, p<0.01)
H5: There is a significant relationship between Neuroticism and Knowledge Sharing.	Significant Relationship	Accepted (r=.665, p<0.01)
H6: There is a significant relationship Openness to experience and Knowledge Sharing.	Significant Relationship	Accepted (r=.472, p<0.01

5. CONCLUSION

The findings of this research demonstrate that the Big Five Model of Personality among the public sector employees influence knowledge sharing. Therefore, in the case of University Malaysia Sarawak (UNIMAS), the employees who are working at the Centre for Information and Communication Technology Services (CICTS) were categorized based on the dimensions of Big Five Model of Personality (namely: conscientiousness, agreeableness, neuroticism, extraversion and openness to experience) to sharing knowledge. Based on the analysis of the result, it positively indicates that there is a significant correlation between the independent variable (IV) – Big Five Dimensions and dependent variable (DV) – knowledge sharing (attitude and motivation). This study was developed to provide some insights about the knowledge sharing behavior amongst the employees in CICTS, UNIMAS, in relation to their individual personality traits through the Big Five Model of Personality. Based on the results, it can be proven that those who belong in the agreeableness dimension are more likely to apply knowledge share as compared to those from the other personality dimensions. This finding supports the finding from a study by Witt et al. (2002), who stated that, agreeableness has been shown to influence knowledge-sharing most when collaboration and cooperation amongst workers are essential. The findings suggested in general, the employees in CICTS, UNIMAS who were naturally included in one of the Big Five Personality dimensions are involved in knowledge sharing.

REFERENCES

Agrawal, A., & Henderson, R. (2002). Putting Patents in Context: Exploring Knowledge Transfer from MIT. *Journal Management Science , 48* (1), 44-60.

Mehairi, H. A. (2013). Cultural Influences on Knowledge Sharing Behaviours Through Open System Vs. Closed System Cultures: The Impact of Organisational Culture on Knowledge Sharing. *10th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning ICICKM-2013* (p. 475). Reading: Academic Conferences and Publishing International Limited.

Andrawina, L., Govindaraju, R., Samadhi, T. A., & Sudirman, I. (2008). Absorptive Capacity Moderates the Relationship between Knowledge Sharing Capability and Innovation Capability. *Proceedings of the 2008 IEEE IEEM.* Singapore: IEEE.

Amayah, A. T. (2011). Knowledge Sharing, Personality Traits and Diversity: A Literature Review. *Midwest Research-to Practice Conference in Adult, Continuing, and Community Education.*

Blair, D. C. (2002). Knowledge Management: Hype, Hope, or Help? *JOURNAL OF THE AMERICAN SOCIETY FOR INFORMATION SCIENCE AND TECHNOLOGY* , 1019–1028.

Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of knowledge management* (3), 101-115.

Abdul, J. H., Paul, T., & David, T. (2011). Exploring Employee Perceptions of the Relationships Among Knowledge Sharing Capability, Organisational Culture and Knowledge Sharing Success: Their Implications for HRM Practice. *Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning.*

Housel, T., & Bell, A. H. (2001). *Measuring and Managing Knowledge.* McGraw Hill.

Huang, T.-T., Chen, L., & Stewart, R. A. (2010). The moderating effect of knowledge sharing on the relationship between manufacturing activities and business performance. *Knowledge Management Research & Practice* , 285-306.

Matzlera, K., Renzlb, B., Mooradianc, T., Kroghd, G. v., & Muellera, J. (2011). Personality traits, affective commitment, documentation of knowledge, and knowledge sharing. *The International Journal of Human Resource Management , 22* (2), 296-310.

Lin, H.-F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower , 28*, 315-332.

McCrae, R. R. (2012). *The Five-Factor Model of personality traits: consensus and controversy*. Cambridge University Press.

Attaining Life Satisfaction through Work-Life Balance and Happiness

Siti Hartini Najamudin[1], Muhamad Khalil Omar, Ph.D[2]

1. Faculty of Business and Management, MARA University of Technology, Selangor 42300, Malaysia (tinienajamudin@ymail.com)
2. Faculty of Business and Management, MARA University of Technology, Selangor 42300, Malaysia (mkhalil.omar@gmail.com)

ABSTRACT

The issue of happiness in organization has been debated among academicians, practitioners, and policy makers nowadays. This is because it provides an index of how well things are going within the organisational context. The ability for an organisation to track front-line employee's happiness over time is a very useful in order to achieve organization successful policies and practices. Some previous studies conducted to measure the relationship contribute of work-life balance effects in quality in life, life satisfaction and wellbeing. Also, the impact of decreased income on happiness has hardly been studied except through the drop in income due to unemployment. Therefore, this paper analyses to be link the relationship of work-life balance and happiness to attain life satisfaction. The main problem is to relate the situation on Malaysian banking work-life balance with sense of happiness. Money buys life satisfaction but not happiness. Is there any relationship between work-life balance, happiness and life satisfaction? Perhaps for these reasons, towards the end of this paper, an estimation called happiness is proposed to be measure in theory context by linking with work-life balance to achieve satisfaction of life.

Key Words: Work-Life Balance,Happiness, Life Satisfaction

1. INTRODUCTION

The purpose of this study is to investigate organizational factors relating to work-life balance (WLB) that may influence levels of employee health and happiness. Moreover, under the heading of work-life balance may have a range of outcomes consists of life satisfaction and happiness. Happiness can be classified as a basic emotion characterized by a positive emotional state, marked by the sensation of well-being and pleasure, together with a feeling of success associated with a clear understanding of the world. These phenomena put a clear limit on the extent of an employees can become happier through the connections of life satisfaction and work-life balance.

In previous studies, Bhutan has famously adopted the policy goal of Gross National Happiness (GNH) rather than Gross National Product. This principle is dedicated to measuring life satisfaction and happiness in a reliable and systematic way over time. It seems clear reviewed by Veenhoven(2001),express that according to set-point theories of subjective well-being, people react to events, but then return to initial levels of happiness and satisfaction over time. Nevertheless, previous studies identified connections of work-life balance with life satisfaction, quality of life and well being. Refers to past studies, not much researcher's shows the relationship between work-life balance with happiness. Therefore, this study is proposed to be measure in theory context by clearly linking with work-life balance and happiness in order to achieve

satisfaction of life. This study will proposed to use subjective happiness scale is being used by National Happiness 1972.

2. BACKGROUND OF THE SUBJECT

Recently, there has been a movement in the work environment as a result of advances in technology. Nowadays, employees have numerous techniques, such as emails, computers, and cell phones, which enable them to fulfil their work beyond the physical limits of their office. Employees may respond to an email or whatsapp during the weekend or after available time, regularly while not formally "at work". In other words, companies use email and distribute smartphones to empower their employees with the business notwithstanding when they are not in the workplace. By doing this method, researchers found that employees who consider their work roles to be an important component of their identities will be more likely to apply these correspondence advances technologies to work while in their non-work domain.

The purpose of this research paper is descriptive which explaining about the relationship between work-life balance and happiness. This study is important to prove the hypotheses of this research which is there is a relationship between work-life balance and happiness (H1), there is relationship between work-life balance and life satisfaction (H2), there is relationship between happiness and life satisfaction (H3) and there is mediates variable of happiness between work-life balance and life satisfaction (H4).The measurements that researcher used in this research paper are nominal and interval. Researcher hope that this report will support and inform policymakers and employers who are considering introducing measures to make the workplace more supportive of their workers' need to balance employment commitments with family life and happy surrounding.

2.1. Research Questions

a) Is there any relationship between work-life balance and happiness?

b) Is there any relationship between work-life balance and life satisfaction?

c) Is there any relationship between happiness and life satisfaction?

d) Is there mediates variables of happiness to work-life balance and life satisfaction?

2.2. Objective

a) To determine that there is a relationship exists between work-life balance and happiness.

b) To determine the relationship of work-life balance and life satisfaction.

c) To determine the relationship between happiness and life satisfaction.

d) To determine there are mediates variables of happiness to work-life balance and life satisfaction.

2.3. Relationship between Work-Life Balance and Happiness

Work-life balance is the degree to the flexible working arrangements that allow both parents and non-parents to avail of working arrangements that provide a balance between work responsibilities and personal obligations. For some organization, work-life balance is important in order to attain employee happiness. Some managers believed that happy employee will increase the level of life satisfaction. Cooper. C (2013) remarked that in order that people may be happy in their work, these three things are needed: they must be fit for it, they must not do too much of it,and they must have sense of success in it. Sometimes the word of happiness (also commonly referred to as subjective well-being) has attracted a plethora of cross-disciplinary research in recent years (e.g., see reviews by Dolan et al. 2008;Lyubomirsky et al. 2005).

In view of Veenhooven .R (2015) stated that satisfaction with life represents the inner outcomes of life. That is, the quality of a life in the eye of the beholder. As we deal with conscious humans, this quality boils down to subjective satisfaction with life. This is commonly referred to by terms such as 'subjective well-being,' 'life satisfaction,' and 'happiness' in a limited sense of the word.Other study found that, happy staff will go that extra mile for their employer and boost its bottom line, but this should not necessarily be the end goal of a wellbeing strategy (Bettelley.C. 2012).

All humans want a satisfying life for themselves and their children and this shows up in high ranking of happiness in the value hierarchy of students everywhere throughout the world (Diener and Oishi 2004). Individually people look for approaches to an additionally satisfying life and in Western societies this quest manifests in soaring sales of 'how-to-be-happy books', such as 'The art of happiness' by the Lama and Cutler (1998). It also reflects in the improvement of life-coaching businesses. In the other words, balancing work and life will reflects happiness. Futhermore, happiness can also contribute more to society, not only because including more working hours over life-time, but also because specialization becomes more profitable. Veenhooven .R (2005) argued that the happiness of citizens has also positive effects on a nation. Happy people tend to be more dynamic and imaginative and are more agreeable. Thusly, the rise of individual happiness that accompanied societal modernization may include an accelerating effect and add to societal performance.

Based on Greenhaus et al. (2003) study, he approached that work-life balance attracts consideration regarding the quality of an individual's work-life balance is not just about the amount of time spent in work and non-work activities. Satisfaction and involvement in all exercises are also important considerations in the examination and understanding of work-life balance. Work-life balance has implications for employee attitudes, behaviours, wellbeing as well as organizational effectiveness (Eby et al., 2005).This study has constrained associations to introduce interventions to help employees deal with the competing demands of work and family lives while being productive at the work place.

Therefore, this study is aimed to propose the clear relationship between work-life balance and happiness/wellbeing to attain life satisfaction.

2.4. Relationship between Work-life Balance and Life Satisfaction

The term of "Work-life Balance" can be characterized as the degree to which an individual's effectiveness and satisfaction in work and family roles are compatible with the individual's life role priorities at a given point in time (Greenhaus and Allen, 2010).In addition, work–life balance is an idea including fitting organizing between "work" (profession and desire) and "way of life" (wellbeing, delight, recreation, family and otherworldly improvement/contemplation). Which means, relies on individuals to balance their priorities between work and life in order to get higher life fulfillment and happiness. But nowadays, numerous employees who work with a computer face an ascent in versatile e-work where they can be continually associated with their work and online at

home day in and day out by means of mobile phones, tablets, and day in and day out worldwide work plans (Kossek and Lautsch, 2008).Krassner (1963), commented that anthropologists utilize a meaning of happiness that is to have as little separation as could be expected under the circumstances "between your work and your play". The expression "work–life balance" was initially used as a part of the United Kingdom in the late 1970s to portray the harmony between work and life.

Some studies remarked that work-life balance practices and policies focus on removing gender-based structural barriers to women's advancement. Practices such as flexitime, shorter working hours, job-sharing, tele-working, childcare services and special maternity leave arrangements help women to reconcile family and work-life. The concept of work-life balance is a state of equilibrium in which the demands of both a person's job and personal life are equal. Frame, P., & Hartog,M.(2003), defined work–life balance as "...achieving satisfying experiences in all life domains," and as they pointed out, "to do so require personal resources such as energy, time, and commitment are well distributed across domains" (p. 81).In other words, work-life balance involves having individual's effectiveness and satisfaction in work and family roles are compatible with the individual's life role priorities at a given point in time (Greenhaus and Allen, 2010). A good work life balance means that employees feel that they are freely able to utilize flexible working hour programs to balance their work and different responsibilities like family, hobbies, art, travelling, studies and so forth.

Nevertheless, according to prior studies, there are no significance in the differences of work-life balance among demographic groups of gender, age, marital, management level, and varying number of dependents (Dash, M., Anand, V., & Gangadharan, A.,2012).Hence, the author confirmed that work-life balance as a gender, age, marital, and job is a neutral construct, although many perceive that, women, adults, married and those having more family and job responsibilities as persons require more work-life balance.

Valcour, M. (2007) concentrated on idea of satisfaction with work-family balance was an overall level of happiness resulting from an assessment of one's degree of success at meeting work and family role demands. Using hierarchical regression analysis, the unifying construct of satisfaction with work-family balance, was operationalised among full-timers. She found that satisfaction with work-family balance was negatively predicted by work hours and also positively related with perceived control of work hours. Thus, the adjusted construct of satisfaction with work-family balance should be renamed as satisfaction with work-life balance. In view of Valcour, M. (2007)'s study, the construct was measured by seven items including the assessment of three major forms of psychological considerations of work and non-work interactions; time, strain, and behaviour based, as suggested by Greenhaus, J. H., & Beutell, N. J. (1985).

Using structural equation modeling, Karatepe (2012) concluded that those employees with heavy workloads had low WLB, were less likely to be embedded in their jobs and showed poor job performance. The author believed that imbalance between work and family life is in fact a stronger risk factor than work stress for inducing mental disorders among employees and significantly affects employee health.The outcomes recommended that employees who have heavy workloads and are unable to build up a work-life balance role are emotionally exhausted. Such employees in turn are less embedded in their jobs and display poor performance in the service delivery process.
Having established the argument on the studies of Bhutan's Gross National Happiness indicators using to measure happiness are by psychological well-being, time use, community vitality, culture, health, education, environmental diversity, living standard and governance.

2.5. Relationship between Happiness and Life Satisfaction

Happiness in organizations has been linked to employees making personal sacrifices for the sake of clients, despite the fact that these sacrifices were neither required nor be remunerated by the organization.In an organizational encompasses a social unit of people that is structured and managed to meet a need or to pursue collective goals. From the past studies, organizational comprise of employees, management and institutional partners, society, suppliers, clients and

customers. Hence, all of them is reflects each others to fulfill every each of needs and goals. The term of 'happiness' is defined as an essential feeling characterized by a positive emotional state, marked by the sensation of well-being and pleasure, together with a feeling of success associated with a clear understanding of the world. According to Fisher (2010), happiness is not a term that has been extensively used in the academic world. The author believes instead of this concept, a distinct number of constructs, which reflect some form of happiness or positive effect, have been used in research. Thus, during the past years several so-called positive concepts have gained relevance, including work engagement (Bakker & Leiter, 2010), job satisfaction (Judge, Thorensen,Bono, & Patton, 2001), flow at work (Csikszentmihalyi, 1990), positive emotions at work (Vacharkulksemsuk & Fredrickson, 2013), and work enjoyment (e.g., Bakker, 2008).In addition,organizational happiness from the perspective of management is satisfying employees, management and institutional partners and satisfies the society, suppliers and its clients and customers. As happiness is derived from satisfaction, organizational happiness target the importance of customers, employees, partners and suppliers and states that the relationships with them contain value which is intangible in nature.

The past research argue and assume that at the end of the working day was positively predicted by daily family-work conflict, job-related exhaustion, and search for meaning in life(Alfredo,2013). One of the most accepted findings in this field is that work contributes quite substantially to well-being and happiness (Fisher, 2010; Warr, 2007).According to Clark, Diener,Georgellis, & Lucas,(2008)unemployment is related with significant decreases in well-being, from which individuals only recover when they find a job again. Furthermore, it has also been shown that employee well-being is critical for achieving organizational success (Page & Vella-Brodrick, 2009).For some individuals, having the capacity to make the schedules of ordinary life work, such that positive sentiments command over negative emotions coming about because of day by day bothers may be similarly imperative for their happiness. According to Olsson, L. E .(2012) suggests that for many people happiness is being able to make the routines of everyday life work, such that positive feelings dominate over negative feelings resulting from daily hassles. The relationship between economic factors and happiness was investigated using multiple linear regressions to figure out how they explain of the happiness variance and the changes in happiness, together with demographic factors, health and social relationships.

Problems have centered on influences the employee attitude of happiness and how happiness then influences discretionary behavior and a range of performance outcomes. Recent studies in Bhutan using "Gross National Happiness" to measure the initial level of happiness. Despite that, by adopting lifestyles and technologies that improve happiness (or life satisfaction) while reducing human damage to the environment. "Sustainable Development" is the term given to the combination of human well-being, social inclusion, and environmental sustainability (Jeffrey D. Sachs,2012). Alfredo(2013) found that an indirect effect of daily work enjoyment on partner's well-being via employees' well-being. The author highlights the relevance of positive experiences at work, which may be transferred to the home domain.

However, there is a dearth of studies on relationship between work-life balance and organizational happiness. Alfredo (2013) hope that the positive focus of this special issue may serve to encourage further research in the domain of happiness and wellbeing at work.This is because most studies focus more on productivity and happiness to organization. As such, there is a pressing need for researcher to answer questions such as: What are the outcomes gained by organizational happiness? Are there a positive relationship between work-life balance and organizational happiness? What are the outcomes gained by participants as a result of being involved in the studies? Hence, there are the same questions that this study intends to address.

2.6. Mediates variable of happiness between work-life balance and life satisfaction

In overall, work-life balance is directly involved with the happiness and life satisfaction. Nowadays, the economic changing in the country can cause many aspects involved such as happiness, life satisfaction and how people deal with their work-life balance through this following situation. All humans want a satisfying life for themselves and their children and this shows up in high ranking of happiness in the value hierarchy of students everywhere throughout the world (Diener and Oishi 2004). It also reflects in the improvement of life-coaching businesses. In the other words, balancing work and life will reflects happiness. Futhermore, happiness can also contribute more to society, not only because including more working hours over life-time, but also because specialization becomes more profitable.

As most previous studies, researchers have been able to relate the relationship between work-life balance and life satisfaction throughout our life and work. Therefore,this study proposed newly relationship to mediates variables of happiness between work-life balance and life satisfaction.

2.7. Proposed Research Framework

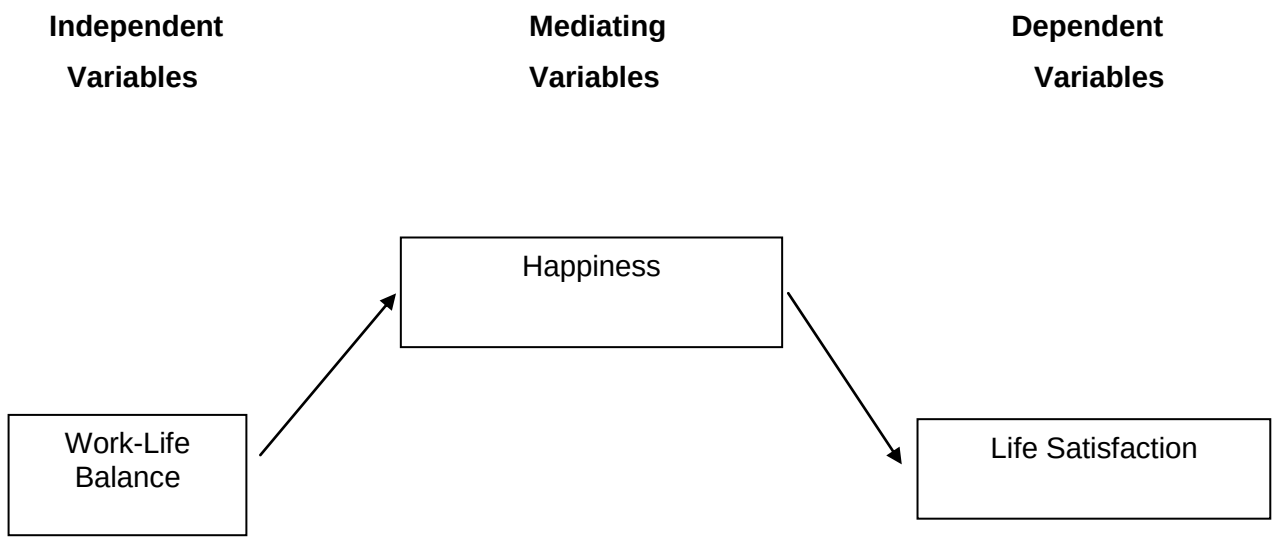


Figure 2.6 Theoretical Framework

2.7. Hypotheses

A hypothesis is couched in term of the particular independence and dependent variables that will proposed in this study. For this research, the hypotheses are :

H1 : There is a relationship between work-life balance and happiness.

H2 : There is relationship between work-life balance and life satisfaction.

H3 : There is relationship between happiness and life satisfaction

H4 : There is mediates variable of happiness between work-life balance and life satisfaction

3. PROPOSED RESEARCH METHODOLOGY

Using Statistical Package for the Social Science (SPSS),Version 18,the data were analyzed for a descriptive statistics and hypothesized conceptual model.

3.1 Research Design

The descriptive study will be proposed to use in order to determine and be able to descriptive the characteristic of the variable of interest in a situation.This section assists the researcher to analyze the qualitative method that will be used in this study. A research design is a framework or blue print for conducting a research project. It details the procedure necessary for obtaining the required information ant its purpose is to design a study that will test hypothesis of interest, determine the possible answer to the research question and provide the information needed for decision making (Malhotra,1996).In this study, the researcher decided to use descriptive study in order to ascertain and be able to describe the characteristics of the variables of interest in a situation (Uma Sekaran, 2003). Descriptive study provides researcher with aspect that influence or gives impacts on organizational commitment.

3.2 Population

In this study, the researcher proposed to use questionnaires as our method to collect data. The data were target to collect from a few staff from Malaysian Financial Institutions area. The target respondents of this study would be minimum of 100-200 staffs of any rank/level from each Malaysian financial Institution and totaling minimum of 200 respondents. The distribution of the questionnaire is using the convenient sampling. Later, the questions will be validated by using SPSS software.

3.4 Sampling Size

This study proposed to conduct by issuing a questionnaire to 100-200 staffs from any rank/level in each department of Malaysian Financial Institution. The questionnaires were distributed to the employees in person or by hand to get their feedback .Once completed, the respondents then gave the questionnaires back to the researcher for data evaluation and analysis.

3.5 Data Collection Method

In this research, researcher proposed to distribute 100-200 questionnaires to get primary data, and also using past researcher as secondary data.

3.5.1 Journal

One of the primary sources of information in this study is journal where the researcher can get the information about the interest in the study. The journals are found at www.emeraldinsight.com ,Uitm Database and scholar.google.com.my

3.5.2 Internet

In addition, internet also is one of the sources to get the information regarding interest of this study. The website use by researcher is company's official website, www.yahoo.com, and the www.google.com.

3.6 Measurement and Instrument

In this study, interval scale will be used as a scaling technique in order to measures information collected where respondents will indicate whether they strongly disagree and strongly agree with the statement in the questionnaire. The scale researcher used up to five points which are strongly agree, agree, neither agree nor disagree, disagree and strongly disagree.

In order to get the result of dependent variables (DV) influence most, Likert Scale type was design to examine how strongly subject agree or disagree with statement on 5-point scale (5-Strongly Agree, 4-Agree, 3-Moderate, 2-Disagree, 1-Strongly Disagree). A copy of the questionnaire can be found in Appendix.

3.7 Data Analysis

All primary data will be processed and analyzed using Statistical Package for Social Science (SPSS). In data analysis, to get the result between variables from the questionnaire, researcher has to use reliability test. Frequency distribution is to determine how many respondent respond to the questionnaire also to see if there is missing answered by respondent. Pearson correlation analysis was utilized to test the relationship between dependent variables (DV) and Independent Variables (IV). Data were entered into the computer using Microsoft Word, Excel and SPSS. Results were presented through frequency count and other descriptive statistics.

3.8 Validity of Instrument

To ensure the validity of the questionnaire, the validity of instrument was tested for both face and content validity. Instruments that will be used in this study are valid because it has been used in the previous research. The reliability of scale is stated by Cronbach's Alpha coefficient.

4. CONCLUSION

Thus, in conclusion this study analyses to be link the relationship of work-life balance and happiness. The main problem is to relate the situation on Malaysian Banking work-life balance with sense of organizational happiness. Happiness as defined here can be measured by means of questioning. Various cases despite what might be expected have been disproven empirically (Veenhoven, 1984: ch 3). In spite of the fact that measurable in principle, not all the questions and scales that are used measure this kind of happiness validly. The study proposed here were located by means of the World Database of Happiness (Veenhoven, 1992). Perhaps for these reasons, towards the end of this paper, an estimation called organizational happiness is proposed to be measure in theory context by linking with work-life balance to achieve satisfaction of life.

5. REFERENCES

1. Bakker, A. B., & Leiter, M. P. (Eds.) (2010). *Work engagement: A handbook of essential theory and research*. New York: Psychology Press.

2. Bakker, A. B. (2008). The Work-Related Flow Inventory: Construction and initial validation of the WOLF. *Journal of Vocational Behavior, Vol.72*, 400-414.

3. Boswell, W. R.; Olson-Buchanan, J. B. (2007). "The Use of Communication Technologies After Hours: The Role of Work Attitudes and Work-Life Conflict". *Journal of Management*,Vol. 33 (4),592.

4. Cifre, E., Vera, M., Rodríguez-Sánchez, A., & Pastor, C. (2013). Job-person fit and wellbeing from a gender perspective. *Revista de Psicología del Trabajo y de las Organizaciones,Vol. 29,* 161-168.

5. Clark, A. E., & Oswald, A. J. (1994). Unhappiness and unemployment. *Economic Journal*, Vol.104, 648–659.

6. Cooper,C .(2013).Joy Revision. *The safety And Health Practitioners,51*

7. Csikszentmihalyi, M. (1990). Flow*: The psychology of optimal experience. New York:Harper Collins.*

8. Dash, M., Anand, V., & Gangadharan, A. (2012).Perceptions of work-life balance among IT professionals. *The IUP Journal of Organizational Behavior*, Vol.XI(1), 51-65.

9. Diener, E., & Oishi, S. (2004). Are Scandinavians happier than Asians? Issues in comparing nations on subjective well-being. In: F. Columbus (Ed.), *Asian economic and political issues*,Vol. 20,1–25.

10. Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy: A review of the economic literature on the factors associated with subjective well-being? *Journal of Economic Psychology, 29*, 94–122.

11. Eby, L.T., Casper, W.J., Lockwood, A., Bordeaux, C. and Brindley, A. (2005).“Work and family research in IO/OB: content analysis and review of the literature (1980-2002)”, Journal of Vocational Behaviour, Vol. 66, pp. 124-97.

12. Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews*,Vol.*12*, 384-412.

13. Frame,P. and Hartog, M.(2003)."From rhetoric to reality. Into the swamp of ethical practice: implementing work-life balance", *Business Ethics: A European Review*, Vol.12, 358-67.

14. Greenhaus, G.H. and Allen, T.D. (2010).“Work-family balance: a review and extension of the literature”, in Tetrick, L. and Quick, J.C. (Eds), Handbook of Occupational Health Psychology, 2nd ed., American Psychological Association, Washington, DC, pp. 165-183.

15. Greenhaus, J.H., Collins, K. and Shaw, D. (2003).“The relation between work-family balance and quality of life”, *Journal of Vocational Behaviour, Quality of worklife balance,* Vol. 63 No. 3, 510-31

16. Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review,*Vol.10, 76–88.

17. Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological bulletin*,Vol.127, 376-407.

18. Karatepe, O.M. (2012).“Perceived organizational support, career satisfaction, and performance outcomes: a study of hotel employees in Cameroon”. *International Journal of Contemporary Hospitality Management*, Vol. 24 No. 5,735-752.

19. Kossek, E. E., & Lautsch, B. (2008). CEO of me: Creating a life that works in the flexible job age. Philadelphia, PA: Pearson/Wharton School Publishing.

20. Lama, D., & Cutler, H. (1998). The art of happiness. A handbook for living. New York: Riverhead Press.

21. Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology,* Vol.*9*, 111–131.

22. Olsson,L.E(2012). Happiness and Satisfaction with Work Commute. 255-263

23. Omar,M.K. (2011). Conceptualising Work-Life Balance;Extension of Work-Family Balance. *American Scientific Publishers,* Vol.4, 400-407.

24. Page, K. M., & Vella-Brodrick, D. A. (2009). The ‘what’, ‘why’ and ‘how’ of employee well-being: A new model. *Social Indicators Research*, Vol.90(3), 441-458.

25. Vacharkulksemsuk, T., & Fredrickson, B. L. (2013). Looking back and glimpsing forward: The Broaden-and-Build Theory of Positive Emotions as applied to organizations*.* In A. B. Bakker (Eds.),Advances in Positive Organizational Psychology.*Bingley: Emerald Group Publishing Limited,*Vol.1,45-60.

26. Valcour, M. (2007).Work-based resources as moderators of the relationship between work hours and satisfaction with work–family balance*. Journal of Applied Psychology*, Vol.*92*(6), 1512–1523.

27. Veenhoven R (2015a) World database of happiness. Erasmus University Rotterdam, Netherlands. http://worlddatabaseofhappiness.eur.nl

28. Veenhoven, R. (2005b). Is life getting better? How long and happy do people live in modern society?European Psychologist, 2005, Special section on ‘Human development and Well-being’, Vol.10,330–343.

Can Good Muslims also become Good Consumers? Exploring the Link between Islamic Personality and Customer Citizenship Behavior

Muhammad Iskandar Hamzah[1] and Abdul Kadir Othman[2]
1 Faculty of Business and Management, Universiti Teknologi MARA 40450 Shah Alam, iskandarh@salam.uitm.edu.my
2 Faculty of Business and Management, Universiti Teknologi MARA 40450 Shah Alam, abdkadir@salam.uitm.edu.my

ABSTRACT

Presently, businesses are experiencing high competition in the market among other things due to the existence of a great amount of players in the industry. Companies are required to continuously improve their offerings so that they can differentiate themselves from others and achieve competitive advantage. One of the approaches is to obtain assistance from their customers, which is known as customer citizenship behavior. However, not all customers are willing to engage in CCB as this behavior is expected to be influenced by their personality traits. Therefore, this study is meant to investigate the relationship between Islamic Personality traits and CCB among general public. A total of 85 respondents participated and the results of Multiple Regression Analysis indicate that all four Islamic Personality Traits; namely, Righteousness, Trustworthiness, Social Obligation and Intellect significantly influence CCB. The findings of this study signify that managers should consider Islamic Personality Traits as the important aspect in segmenting their customers so that they are able fully optimize the contribution made by their customers. Other implications are discussed.

Key Words: Islamic Personality Traits, Customer Citizenship Behavior, Islamic Marketing, Muslim Consumer Studies.

1.0 INTRODUCTION

The advent of globalization era has brought significant impact on businesses. Most of the trade barriers are removed as a result of less stringent laws and regulations imposed by the government. This is the requirement for the countries participating in regional or international trade agreement such as AFTA, NAFTA and the like. This situation opens the new horizon for new and existing businesses to expand their market that was previously regarded as impenetrable. As a consequence, the competition in the market is getting stiffer than ever before. Some companies are able to excel in this turbulent market environment and others find it difficult even to survive. Those who are able to excel have implemented various strategies to differentiate themselves from the rest of the industry players in order to achieve competitive advantage.

The varying strategies implemented by the businesses include those fall under the customer relationship management approach such as partnership. This approach refers to the willingness of customers to act as employees to the businesses to assist other customers in using the service and the willingness of the customers to provide information to continuously improve the current service offerings by the businesses.This is where customer citizenship behavior (CCB) comes into play. Groth (2005, p.11) defined CCB as “voluntary and discretionary behaviors that are not required for the successful production and/or delivery of the service but that, in the aggregate, help the service organization overall”.

Based on that original definition and within the altruism context, the definition of CCB is further refined and simplified as “the willingness of the customers to engage in extra role behavior to provide feedback, promote the company and its service, offer assistance to other customers and tolerate with the problems in service delivery”. This concept is originally known as Organizational Citizenship Behavior, which has been applied to assess the employees’ willingness to engage in voluntary behavior for the wellbeing of the organization (Organ, 1994; Borman & Motowidlo, 1997). Realizing the importance of having similar concept to assess voluntary behavior of customers, the concept has been extended from human resources perspective to consumer behavior perspective.

Among the earliest ideas which paved further interest on CCB was pro-social service behavior, a term which denotes the presence of altruism when customers are engaged with individual service providers (Bettencourt & Brown, 1997). These self-less and ‘going beyond the ordinary’ acts are regarded as citizenship behaviors, which are not only subjected to employees, but also customers. There are a number of factors that contribute to explaining CCB. Co-production and satisfaction were found to be the predictors of CCB, which further suggest that further involvement and satisfaction will lead to enhance customers’ behavioral pattern for the subsequent service encounters (Groth, 2005). Nevertheless, other psychological and sociological reasons that may better explain CCB should not be ruled out, and be further investigated (Fowler, 2014). In terms of its respective outcome, when the higher level of CCB is instilled among customers, they are less likely looking forward to dissolve their relationship with service providers (Revilla-Camacho, Vega-Vázquez & Cossío-Silva, 2015).

Groth (2005) argued that citizenship behavior among customers are voluntary (beyond expectations) instead of requirement (within expectation), which is in parallel with the general understanding of OCB except that it deals employees rather than customers. Since personality traits have been linked to OCB (Organ, 1994), the nearly-similar nature of CCB may warrant it to be an outcome of individual differences (Patterson, Razzaque & Terry, 2003). Personality traits have been extensively researched and researchers have come to common agreement that personality traits are the stable constructs that influence the way people behave (Organ, 1994; Motowidlo, Borman & Schmit, 1997; Ilies, et al., 2009). Due to the comprehensive effort on personality research over the years, various theories and models of personality have been developed and the most popular one is the Big Five theory of personality, which claims that most people can be characterized by five different types of personality; namely, Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (Costa & McRae, 1992). Other prominent personality instruments used among behavioral scholars are the IPIP-International Personality Inventory Pool (Goldberg, 1999), RIASEC-Realistic, Investigative, Artistic, Social, Enterprising and Conventional (Holland, 1997), CEI-Claims Examiner Inventory (Arneson, Millikin-Davies & Hogan, 1993), and CPI-California Psychological Inventory (Johnson, 1997).

The proponents of the personality theory claim that the Big Five theory of personality is universal and applicable to everyone regardless of nationality and culture (Rolland, 2002; Schmitt, McRae & Benet-Martinez, 2007). However, the model is not unsusceptible to critics. Becker (1999) who performed assessments of the Big Five dimensions remarked that there were associations and redundancy between them, and even proposed ‘Hedonism’ as the sixth-factor trait beyond the Big Five. There is also a concern of the Big Five's weak replicability in non-Western languages and cultures, especially on the fifth Big Five factor which is openness to experience (John & Srivastava, 1999).

Generally believed in the Islamic faith, a human is a complement of the tangible physical appearance (zahir) and intangible entity that co-exist within the physical body (batin).Therefore, personality is construed in two forms which are outward form (physical) that is visually perceived, and inward self (spiritual) that can be perceived through personal insight (Ali, 1995). The need for a fresh Islamic Personality model is justified following the failure of the Big Five model’s applicability within the Muslim socio-psychological context (Othman, Hamzah & Hashim, 2014).

Thus, the Islamic Personality Model is worthy of an academic investigation due to the adaption of Islamic teachings into employees' everyday work-related activities.

There are a number of studies that found that the Big Five personality theory has its limitation in terms of its application especially among Muslim communities. In a study among Malaysian Malays (who are generally Muslims), it was found that Openness, and Extraversion factors unsuccessfully replicate the original structure of the Big Five personality facets (Mastor, Jin & Cooper, 2000). Although Karim, Zamzuri and Nor (2009) claimed that the Big Five Personality Trait model is relevant to the Malaysian context (specifically students of IIUM which are predominantly Muslims), their method of conducting factor analyses of the Big Five construct by conducting them separately based on each pre-determined grouping variables are indeed questionable. Meanwhile, based on a Big Five personality study in Indonesia (largest Islamic country by population) conducted by Halim, Derksen and van der Staak (2004), there are indications of low internal reliabilities for some facets of the Big Five inventory, and the Openness to Experience domain fails to produce a high congruence coefficient. Table 1 below summarizes important concepts pertaining to personality from different authors.

Table 1: Summary of existing Islamic Personality Models

Proponents (Year)	Concept/Inventory Name	Theoretical Foundation & Dimensions (if available)
Ali (1995)	Islamic Personality	Al-Ghazali's (reknowned Muslim scholar) conceptualization of human disposition
Krauss *et al.* (2005)	Muslim Religiosity-Personality Measurement Inventory (MRPI)	General framework consisting of Islam's pillars of tawhid (faith) and ibadah (worship)
Othman (2011)	Ummatic Personality Inventory (UPI)	Principal Component Analysis yielded3 constructs namely Ibadah (worship), amanah (responsibilities) and ilm (knowledge). 78 items were developed based on Quran, Sunnah and works of Muslim scholars.
Al-Ammar, Ahmed & Nordin (2012)	Moral Character of Muslim Personality (MCMP)	21 items through 8 sub-construct comprising of cooperation, striving with wealth and self, reconciliation, voluntary charity, truth, fulfilment of promises, forgiveness and steadfastness were validated through CFA.
Abu-Raiya (2012)	Qura'nic Personality	Based on the interpretation of Quran and theoretical suggestion of Al-Ghazali, eight building blocks of personality were identified namely nafs (psyche), nafsammarah besoa' (evil-commanding psyche), alnafs al-lawammah (the reproachful psyche), roh (spirit), a'ql (intellect), qalb (heart),al-nafs al-mutmainnah (the serene psyche) and al-nafs al-marid'a (the sick psyche).

2.0 THE ISLAMIC PERSONALITY MODEL

The uniform outlook will help the reader to follow the proceedings. This can be obtained most easily if authors use this template file to construct their papers. Please note the following details: this template is an A4 format. All text paragraphs should be single spaced, with first line intended by 10 mm (0.4 inch). Double spacing should only be used before and after headings and subheadings as shown in this example. Position and style of headings and subheadings should follow this example. No spaces should be placed between paragraphs.

Realizing the need to have a valid and reliable personality traits measure to accurately assess the personality of Muslims, the Islamic Personality Model is proposed, which contain four different dimensions; namely, Righteousness, Trustworthiness, Social Obligation and Intellect. These dimensions are identified by examining the characteristics of Prophet Muhammad PBUH. These values are evidenced and adapted from the Quran and the Sunnah (examples attributed to the Prophet). This is consistent with the following Prophet's message pertaining to sources that Muslims should refer to,*'I have left among you two matters by holding fast to which, you shall never be misguided: the Book of God and my Sunnah'*.

2.1 Righteousness

Righteousness or 'Birr' refers to the extent to which the individuals are telling the truth. The act of righteousness must be based on strong faith and constant practice of the religion. According to hadeeth, "*Righteousness is good character, and sin is whatever bothers you and you do not want people to know.*" (Saheeh Muslim). Besides, the concept of righteous in Islam is emphasized in the Quran. "Righteousness is not that you turn your faces to the east and the west [in prayer]. But righteous is the one who believes in God, the Last Day, the Angels, the Scripture and the Prophets; who gives his wealth in spite of love for it to kinsfolk, orphans, the poor, the wayfarer, to those who ask and to set slaves free. And (righteous are) those who pray, pay alms, honor their agreements, and are patient in (times of) poverty, ailment and during conflict. Such are the people of truth. And they are the God-Fearing." (Quran 2:177). Righteousness requires inner conscience, whereby a person may differentiate things that are right from wrong.

Islam places major emphasis on personal responsibility whereby individual choice is considered as the sole cause of behaviour, as opposed to personality theorists' view that 'human action is constrained by the influences outside the control of the individual' (Smither & Khorsandi, 2009). Ali (2009) described righteousness as 'Mutamainna', or a person's personal values who are certain with their choices in life. Furthermore, Muslims with a high sense of righteousness may not be tempted to further satisfy their social or self-esteem needs as they are content and at peace with what they already have. At this particular stage also, a person attains his spiritual fulfilment through intellectual and social involvement (Ali, 2009). It is important to note that the 'righteousness' factor used in this study is different from that of Ahmad (2015), whose study is focused on marketers' halal branding personality.

2.2 Trustworthiness

Trustworthiness or 'Amanah' concerns the extent to which the individuals are regarded as responsible. Amanah is recognized as one of the factors of the Ummatic Personality Inventory (UPI), other than Ibadah and Ilm (Othman, 2011). Generally, a muslim is obliged to be responsible to God, fellow human beings and the environment. Muslims are accountable to have good relationship with God by obeying His orders (*Hablumminallah*) while at the same time, they are responsible to maintain warm relationships with other people (*Hablumminannas*). Trust is also regarded as a divine symbol that is applicable across businesses, which is highly evident through Islamic banking practices. According to Triyuwono (2004) who presented a case study of two Indonesian Islamic banks, the focal responsibility of the banks' management on yielding profits is a form of honoring the trust of their shareholders instead of functioning purely on handing out charities. Besides, trustworthiness (amanah) is considered as one of the three important criterion of Islamic ethics apart from justice (adl) and benevolence (ihsan), which is also a form of business ethics exercised by the firm for the benefit of its shareholders (Beekun & Badawi, 2005).

2.3 Social Obligation

Social Obligation or 'Iltizam Al-Ijtima'in' reflects the extent to which the individuals are willing to contribute towards the wellbeing of others. Such philanthropic values are incorporated through the obligation of 'zakat' (alms) and encouragement of 'sadaqah' (donation) among capable Muslims. By adhering to the integrative social contract theory, the ethical roles played by business

in society is bonded through implicit social contract between the two parties (Donaldson & Dunfee, 1994). Dusuki (2005) further elaborated that the elements of social responsibility are deeply inscribed within the principles of Sharia (Islamic law) and thus, concluded that consumers and ordinary citizens ought to benefit from it.

2.4 Intellect

Intellect or 'Aql' refers to the extent to which the individuals are using their intellectual capabilities in their actions and are willing to engage in intellectual discourse to enhance their intellectual abilities. Intellectual need is recognized as one the five categories of needs in Islam apart from physiological, material, psychological and, spiritual and mental needs (Al-Jasmani, 1996; Glaachi, 2000). A Muslim intellectual needs are concerned with maximization of contributions, and continuous learning and development (Ali, 2009). Ali (1995) who analyzed the work of Islam's renowned scholar, al-Ghazali, asserted that intellect is one of the four defined human entities aside from heart, selfish needs and soul), and cognitive outcomes depended on the spiritual state of the person. Scientists widely agreed that intellectual capabilities are the main advantage that distinguish human from other creatures, and the Quran also recognized it. The intellectual element of a muslim personality was highlighted in more than six hundred Quranic verses (Al-Ammar, Ahmed & Nordin, 2012).

3.0 THE ISLAMIC PERSONALITY MODEL AND CUSTOMER CITIZENSHIP BEHAVIOR

There are ample previous studies on the effects of personality traits and citizenship behavior. For example, studies done by Organ (1994), Motowidlo, Borman and Schmit (1997), Chiaburu, et al. (2011), have proven the role personality trait approach in the prediction of extra-role and contextual performance among employees. However, such relationships that involve consumer's trait and their citizenship behavior are a matter of compelling interest among the academia due to its apparent scarcity in the marketing literature streams. Similarly, very few research have divulged on the causal-effect relationship between religion aspects of personality and citizenship behaviors.The following paragraphs shall elaborate and substantiate each of the ensuing hypotheses proposed for this research.

Righteousness is about telling and upholding the truth. Generally, it is expected to be related to customers' willingness to provide feedback to the service employees or the company. Customers with this trait have the tendency to inform what they actually feel and experience. Assuming that they do not hold any personal agenda, customers should be treated fairly by service providers in order to continuously improve the currently offered services. Instrumental motivation helps to motivate individuals if they think their behavior will lead to certain tangible outcomes (Barbuto, 2001). Henceforth, a customer who uphold righteousness may tend to do things that will benefit other customers by providing the appropriate feedback. These can be either communicating directly to the firm, or complaining to the respective agencies if they involve negative customer experiences. Based on the discussion, the following hypothesis is highlighted:

Hypothesis 1 (H1): Righteousness significantly influences customers to provide feedback.

Trustworthiness is regarded as responsibility to perform the expected duties as customers. Trustworthy customers assume that they are responsible as customers and when they experience certain levels of services, this experience will be conveyed to the service employees or the company so that the company knows its service level and will take appropriate action to improve the service. A trustworthy individual is the one who is highly committed. Erdheim, Wang and Zickar (2013) found that two dimensions of personality, neuroticism and conscientiousness, were both positively correlated with continuance commitment. Committed customers would will ensure that their thoughts about the consumed products or service, are delivered to those who are responsible. Based on the discussion, the following hypothesis is put forth:

Hypothesis 2 (H2): Trustworthiness significantly influences customers to provide feedback.

Social obligation concerns the individuals' assumption that as members of a community, they are socially responsible to ensure the well being of the community where they belong. With regard to services they received, they tend to provide feedback to the service employees or the company pertaining to the status of the services so that other customers will enjoy the same quality service that they received or other customers will not experience the same weaknesses in service. Daneshfard (2012) observed positive correlation between agreeableness and commitment, and concluded that a person with strong sense of agreeableness is essentially a sympathetic philanthropist who is eager to cooperate. In consumerism point of view, such cooperation encompasses responses and feedbacks from the user directly to the provider. Based on this premise, the hypothesis below is constructed:

Hypothesis 3 (H3): Social Obligation significantly influences customers to provide feedback.

Intellect relates to those who can think rationally about certain things, events or other occurrences. They are able to weigh the right and wrong, the required and non-required actions, and the consequences of their actions. Since feedback is considered as the appropriate action that should be taken by customers, those with intellect characteristic are willing to engage in this behavior. With respect to service delivery that involves physical environment, Bitner (1992) associated cognitive responses as one of the determinants of approach or avoidance behavior of customers. Customers are known to appraise events that happened surrounding them, and translated into positive, negative or mixed mental states that affects their behavior (Watson & Spence, 2007). Therefore, the following hypothesis is suggested:

Hypothesis 4 (H4): Intellect significantly influences customers to provide feedback.

Righteous customers tend to tell the truth about the company's product and services. Thus, a company needs to ensure that these customers' expectation of the service is fulfilled. Otherwise, they become the liability for the company. Mowen, Park and Zablah (2007) indicated that consumers' personality traits are related with their word-of-mouth communication. In their study, consumers who are value conscious and possess 'openness to experience' trait, are likely to be involved in word of mouth activities. Based the general premise, the following hypothesis is highlighted:

Hypothesis 5 (H5): Righteousness significantly influences customers to promote companies to others.

Trustworthy individuals assumed that they have different responsibilities in life. As customers, they are responsible to ensure that company that is currently helping them in terms of providing the required service is able to remain competitive in the market. By gaining the trust and portraying honesty (by only promising of what they are capable of delivering), a marketer is operating in line with Islamic promotional ethics (Yousaf, 2014). Islam encourages its followers to exhibit kindness for people who involve in fair and trustworthy dealings. Therefore, it is likely that they will repay the deeds of the company by promoting its branding and services to others. Besides, a recent study in the tourism sector indicated the positive link between trust and CCB, albeit the aspect of promoting others are well embedded in the single CCB construct (Cheng, Wu, Yen & Chen, 2015). Based on the discussion, the following hypothesis is constructed:

Hypothesis 6 (H6): Trustworthiness significantly influences customers to promote companies to others.

Customers who assumed social obligation towards the society tend to promote the company that has made their lives better to others. They want others to also experience the same quality service that they had, provided that the services are satisfactory. By guiding his work based on a prominent view of a Turkish scholar, Cetin (2006) asserted that 'muslims are one's brothers and sisters in religion, while non-muslims are one's brothers and sisters in humanity'. Thus, it

implicates that each person, who took the role of a consumer, has a moral duty to renounce self-interest and serve for the betterment of others. Based on the discussion, the hypothesis below is suggested:

Hypothesis 7 (H7): Social Obligation significantly influences customers to promote companies to others.

Customers with intellectual disposition, tend to promote the company that provide them the required services to other people if they think that by doing so provides more advantages than disadvantages to others. In creating Islamic branding, word of mouth is considered as a powerful tool for marketers to reach to a wider population of Muslim consumers (Temporal, 2011). Based on the general premise, the following hypothesis is put forth:

Hypothesis 8 (H8): Intellect significantly influences customers to promote companies to others.

Customers with the tendency to tell the truth are willing to help other customers as those with this characteristic want to ensure that other people are able to receive the right things and the right treatment. Conscientiousness are quite similar with righteousness, in terms of the ability of a person to remain loyal and consistent in upholding the truth. In this manner, previous study by Organ (1994) found that conscientiousness are strongly correlated with OCB. Based on the discussion, the hypothesis below is highlighted.

Hypothesis 9 (H9): Righteousness significantly influences customers to help other customers.

Trustworthy customers are willing to help other customers. They always perceive that it is their responsibility to help others to get the best thing in their lives. In a study pertaining to viral marketing using emails among consumers by Phelps, et al. (2004), the messages easily spread from consumer to consumer on the basis of pro-social motivation (helping others) rather than pro-business reasons (acquire new customers), especially when the communication is credible and honest. Based on the discussion, the following hypothesis is proposed.

Hypothesis 10 (H10): Trustworthiness significantly influences customers to help other customers.

As required by the religion, Muslims have social obligation to help others especially those in a dire need. Islam places high value on the act of helping others. Muslims believe that those who contributed in helping and alleviating people from their sufferings through good deeds will be exalted and rewarded by God. In accordance with the rules of social exchange and reciprocation of good deeds, individuals who provide favorable treatment will trust that the debt will be repaid (Deckop, Cirka & Andersson, 2003). Besides, helping others is considered in Islam as the social aspects of worship (ibada) that if carried out with sincerity to God, the contributor will be rewarded in the Hereafter (Çetin, 2006). A study by Balaji (2014) showed that trust, which is a dimension of relationship quality, is positively related to customer citizenship behavior. Therefore, those who are high in trustworthiness tend to offer assistance to other customers and this assumption leads to the following hypothesis:

Hypothesis 11 (H11): Social Obligation significantly influences customers to help other customers.

Islam requires its followers to use their intellectuality for the benefit of themselves and those around them. The concept of Islamic personality has similarities with the western theories in terms of socio-cognitive approach, whereby mental strength and consciousness over choices being made are precursor to positive social behaviors such as establishing warm interpersonal relationships (Smither & Khorsandi, 2009). Thus, customers with high levels of consciousness and intellectual ability are willing to help other customers in solving their current problems. Therefore, the following hypothesis is put forth:

Hypothesis 12 (H12): Intellect significantly influences customers to help other customers.

Righteous customers are those who are always telling the truth. Those with this characteristic are able to accept any difficulty in life. When there are problems in service delivery, they welcome them as normal occurrences that might not give significant impact to their lives. This is of course, unless these problems deal with aspects that are deemed haram (forbidden) in Islam, which are not tolerable especially when they involve interest-bearing loan (Metwally, 1997) or non-halal food consumption (Wilson & Liu, 2011). Muslims who abide to Sharia rules are more likely to have a strong sense of righteousness, and they will certainly justify the amount of tolerance that they are willing to provide. Based on the discussion, the hypothesis below is proposed:

Hypothesis 13 (H13): Righteousness significantly influences customers to tolerate problems in service delivery.

People with high trustworthiness understand their responsibilities and those of others. When there are problems in service delivery, they are likely to tolerate the problems as they perceive that the service providers have done their best to avoid the unfavorable situations to occur and those problems are beyond the service providers' control. Parasuraman, Berry and Zeithaml (1991) coined the term zone of tolerance to highlight the distance between the adequate and the desired levels in service delivery. Once the customers have achieved optimum trust and confidence, the scale of the zone of tolerance for their next purchases shrinks as their expectation increases. However, customers are willing to tolerate in terms of paying a higher price for products which they are committed to, which resulted from their high level of trust towards those brands (Delgado-Ballester & Luis Munuera-Alemán, 2001). Therefore, the following hypothesis is suggested:

Hypothesis 14 (H14): Trustworthiness significantly influences customers to tolerate problems in service delivery.

People with high tendency in social obligation have been in various kinds of situation or difficulties. When problems occur during service delivery, they might tolerate them as they think that they are just like other hiccups in normal life. Austerity or modesty is emphasized as a noble act in Islam, whereby Muslims are encouraged to be grateful, happy and contented with what they already have and received, rather than struggling for the endless pursuit of perfection (Ali, 2009). Besides, Muslims who care and have respect for others, are traditionally inclined to portray tolerance and solve misunderstanding on an informal interpersonal basis in order to restore harmony and warm climate between themselves and others (Natlianis & Raja, 2002).Therefore, the hypothesis below is highlighted:

Hypothesis 15 (H15): Social Obligation significantly influences customers to tolerate problems in service delivery.

Customers with intellectual ability are able to think rationally. They know what is right and what is wrong, what is appropriate and what is not appropriate. In exercising toleration while not getting deprived of entitled rights, Muslims will need to achieve the right balance using *nafs al-lawamah* (conscience towards needs) and *aq*l (use of intellect in making judgments), which are among components of the Qura'nic personality concepts proposed by Abu-Raiya (2012). When there is something wrong with the service delivery, they are able to tolerate with the problems because they can rationalize the problems and this assumption leads to the hypothesis below:

Hypothesis 16 (H16): Intellect significantly influences customers to tolerate problems in service delivery.

4.0 METHODOLOGY

This study is intended to establish the predictive validity of newly developed Muslim Personality Measure on the CCB. The items for Muslim Personality Measure were developed based on the extensiveliterature discussions of the Prophet characteristics (primarily derived in accordance to the source of Quran and Hadith) that are sourced from refereed and peer-reviewed publications. A total of 40 items were used to gauge Muslims personality characteristics. As for CCB, a total of 13 items developed by Yi and Gong (2013) were used to assess the willingness of customers to engage in extra-role behaviors.

Respondents for this study were conveniently selected among those who were patronizing SACC Mall, one of the popular venues for shopping in Shah Alam. A total of 85 customers were selected using purposive sampling and were personally given the questionnaire to be completed. A 100 percent response rate was recorded due to the immediate nature of face-to-face survey responses. The collected data were entered into the SPSS version 20 and analyzed to answer the research objectives. Five entries were removed due to missing and incomplete responses.

Table 2: Demographic Profile of Respondents

Variables	Descriptions	Percentages
Gender	Male	36.3
	Female	63.8
Age	<25	35.0
	25-30	37.5
	31-35	11.3
	36-40	6.3
	41-45	3.8
	>46	6.3
Marital Status	Single	63.3
	Married	34.2
	Others	2.5
Education	Master	12.5
	Bachelor	31.3
	Diploma	28.8
	STPM/SPM	21.3
	Others	6.3
Employment	Government	13.8
	Private	50.0
	Own business	6.3
	Student	20.0
	Others	10.0
Income	<RM2000	56.4
	RM2001-RM3000	20.5
	RM3001-RM4000	7.7
	RM5001-RM6000	7.7
	>RM6001	7.7

Data from 80 respondents are analyzed for descriptive findings. Male respondents comprise 36.3 while female respondents constitute of 63.8. With regards to age distribution, 35% of the respondents aged less than 25 years old, 37.5% of them aged between 25 to 35 years old, 11.3% of them aged between 31 to 25 years old, 6.3% of them aged between 36 to 40 and more than 46 years old and only 3.8% of them aged between 41-45 years old. Majority of the respondents are single (63.3%) while the rest are married or divorced. Pertaining to the educational qualification, majority of the respondents had bachelor degree (31.3%), followed by those with diploma (28.8), STPM/SPM (21.3%), master degree (12.5%) and other academic qualifications (6.3%).

Concerning the employment status of the respondents, half of them work in the private sector (50%), some of them are students (20%), 13.8% of them work in the government sector, 6.3% of them own their businesses and 10% of them did not specify their employment status. Regarding the income groups of the respondents, 56.4% of them received monthly salary of less than RM2000, 20.5% of them were paid in between RM2001 to RM3000, and 7.7% of the respondents received monthly salary between RM3001 to RM4000, RM5001 to RM6000, and more than RM6001, respectively. Table 2 illustrates the distribution of the demographic profiles among the respondents.

Table 3: Factor Analysis of the Islamic Personality Model

Items		Component			
		1	2	3	4
R1	Every person should tell the truth.				.823
R2	Telling the truth can clarify any ambiguity.				.749
R4	Telling the truth is always my priority.				.644
R7	I am delighted with every true word that I say.				.636
R8	I will tell the truth although it is painful.				.633
T11	People see me as a responsible person.		.516		
T12	Others can rely on me to perform any duty that falls within my capability.		.651		
T13	I greatly believe in being trustworthy.		.570		
T14	I am happy to carry out my responsibility.		.814		
T15	I am satisfied with my ability to accomplish the tasks given to me.		.837		
T16	I feel regretful if I have not done my tasks well.		.633		
T18	I always ensure that every job that I do has the required quality.		.589		
S21	Helping others is one of my responsibilities.	.737			
S22	Helping others makes my life more meaningful.	.642			
S23	I believe that when I help others, I will be helped.	.559			
S25	I enjoy when I have contributed something to the society.	.578			
S26	I feel sad when I am not able to change the current situation.	.672			
S27	I will do my best to change something that is not right.	.650			
S28	I always provide guidance or advice to others.	.781			
S29	I provide assistance without others asking for it.	.763			
S30	I will volunteer when I know that someone needs help.	.835			
I32	Learning is a part of my life.			.699	
I34	I enjoy discussing with knowledgeable people.			.722	
I35	I enjoy doing activities that can enrich my knowledge.			.642	
I38	I seek advice from others when I am in doubt.			.781	
I39	I always take the opportunity to learn new things when it arises.			.688	
Variance Explained		20.714	15.655	13.366	12.314

Kaiser-Meyer-Olkin Measure Of Sampling Adequacy.			.847
MSA			.746-.904
Bartlett's Test Of Sphericity		Approx. Chi-Square	1307.009
	df		325
	Sig.		.000

A principle component factor analysis with varimax rotation was performed to examine the factor structure of the 40-item Islamic Personality measure. A clear four factor structure was produced explaining 62.05% of the total variance. The KMO value of .847 indicates that the correlation matrix is acceptable for factor analysis to be conducted. The results show that a total of 14 items were removed due to high cross loadings or the loadings fall under components different from the proposed concepts. The remaining 26 items formed four factors resembling the original conceptualization of the concepts; nine items came together standing for social obligation explaining 20.714% of the variance, seven items hold together corresponding to trustworthiness explaining 15.655% of the variance, five items band together characterizing intellect explaining 13.366% of the variance, and five items grouped together representing righteousness explaining 12.314% of the variance. The original names for the four variables remain.

Table 4: Factor Analysis of CCB

		Component		
	Items	**1**	**2**	**3**
F2	When I receive good service from the employee, I comment about it.	.679		
F3	When I experience a problem, I let the employee know about it.	.651		
A4	I said positive things about the company that I received the service and its employee to others.	.805		
A5	I recommended the company that I received the service and its employee to others.	.846		
A6	I encouraged friends and relatives to use the services from the company.	.724		
H9	I teach other customers to use the service correctly.			.927
H10	I give advice to other customers.			.833
TL11	If service is not delivered as expected, I would be willing to put up with it.		.744	
TL12	If the employee makes a mistake during service delivery, I would be willing to be patient.		.778	
TL13	If I have to wait longer than I normally expected to receive the service, I would be willing to adapt.		.743	
Variance Explained		28.979	19.777	18.200
Kaiser-Meyer-Olkin Measure Of Sampling Adequacy.				.719
MSA				.561-.809
Bartlett's Test Of Sphericity		Approx. Chi-Square		308.841
	df			45
	Sig.			.000

A principle component factor analysis with varimax rotation was conducted to investigate the factor structure of the 13-item measure of Customer Citizenship Behavior. The analysis produced three distinct factors explaining a total variance of 66.96%. The KMO value of .719 denotes the suitability of the correlation matrix to conduct the analysis. The first factor explains 28.98% of the variance comprising five items combining feedback and advocacy. This factor was named 'support' due to its relevancy with the acts of providing feedback and advocating others. The second factor, tolerance, explains 19.78% of the variance consisting of three items assessing tolerance. The original name was retained. The third factor, helping, explains 18.2% of the variance with only two

items measuring helping behavior. The original namesof the second and the third factor were retained.

Following the results of the factor structure, hypotheses H1 to H16 which involve‘feedback’ and ‘advocacy’ factors are appropriately reorganized. The outcome is 12 restated hypotheses, namely:

H1. Righteousness significantly influence customer by supporting the providers through feedbacks and referrals.
H2. Trustworthiness significantly influence customer by supporting the providers through feedbacks and referrals.
H3. Social Obligation significantly influence customer by supporting the providers through feedbacks and referrals.
H4. Intellect significantly influence customer by supporting the providers through feedbacks and referrals.
H5. Righteousness significantly influence customer to help other customers.
H6. Trustworthiness significantly influence customer to help other customers.
H7. Social Obligation significantly influence customer to help other customers.
H8. Intellect significantly influence customer to help other customers.
H9. Righteousness significantly influences customers to tolerate problems in service delivery.
H10. Trustworthiness significantly influences customers to tolerate problems in service delivery.
H11. Social Obligation significantly influences customers to tolerate problems in service delivery.
H12. Intellect significantly influences customers to tolerate problems in service delivery.

Table 5: Results of Reliability and Correlation Analysis

No	Variables	Mean	SD	1	2	3	4	5	6	7
1	Righteousness	4.11	.64	(.839)						
2	Trustworthiness	4.04	.53	.542**	(.866)					
3	Social Obligation	4.03	.59	.502**	.541**	(.910)				
4	Intellect	4.07	.60	.505**	.609**	.607**	(.875)			
5	Support	3.83	.57	.473**	.466**	.625**	.568**	(.827)		
6	Helping	3.91	.79	.312**	.407**	.526**	.528**	.389**	(.851)	
7	Tolerance	3.55	.59	.235*	.100	.372**	.267**	.373**	.413**	(.695)

Notes: **. Correlation is significant at the 0.01 level (1-tailed), *. Correlation is significant at the 0.05 level (1-tailed), N=80; Reliability coefficients along the diagonal in the parentheses

All items measuring the intended variables have moderate to high reliability coefficients indicating acceptable level of internal consistency with the coefficient values in the range of .695 to .910. The four variables of Islamic Personality are moderately and significantly correlated with each other with r values in the range of .502 to .609, denoting good convergent validity. Al the three variables of CCB are also significantly correlated with each other; from low (r=.373) to moderate correlation (r=.413), signifying acceptable convergent validity. All variables of Islamic Personality are significantly correlated with all variables of CCB (except for the correlation between trustworthiness and tolerance) with the values range from .235 to .625, indicating potential influence of the independent variables and the dependent variables.

Table 6: Results of Multiple Regression Analysis

Independent Variables	Dependent Variables		
	Support (β)	Helping (β)	Tolerance (β)
Righteousness	.136	-.044	.115

Trustworthiness	.032	.063	-.242
Social Obligation	.393**	.323*	.363*
Intellect	.242*	.315*	.136
R	.680	.590	.418
R^2	.462	.349	.174
Adjusted R^2	.433	.314	.130
F values	16.095	10.031	3.959
Sig F values	.000	.000	.006
Durbin Watson	1.784	1.488	1.934

A series of regression analysis were performed to examine the influence of the Islamic Personality factors on the CCB dimensions. The results indicate that Social Obligation is the main predictor of Support (β=.393, p<.01), Helping (β=.323, p<.05) and Tolerance (β=.363, p<.05) behavior while Intellect is the significant predictor of Support (β=.242, p<.05) and Helping (β=.315, p<.05) behavior.

Social responsibility is one of the many examples of good deeds promoted by Sharia principles that seek to benefit consumers and citizens (Dusuki, 2005). Socially obligated customer is also likely to tolerate to other customers in a service failure incident, such as a customer giving away his or her seat to another customer who is allocated the same seat (Nicholls, 2010). People with high Social Obligation are willing to change what seems to be incorrect or to improve the current situation. These people perceive that they have the responsibilities towards others and these responsibilities have to be performed so that they and others will have harmonious lives. Yoo, Arnold and Frankwick (2012) asserted that a customer's social interaction with other customers has positive effects on his or her role clarity when using the provided services. This is perhaps the reason why Social Obligation significantly predicts all the CCB dimensions namely Support (giving feedback and promoting the service and product of the company), Helping (assisting other customers) and Tolerance (willingness to accept the current state of the services received). Thus, hypothesis H3, H7 and H11 are well substantiated.

Intellect reflects the willingness of people to engage in learning activities, involve in knowledge enriching activities and seek advice when in doubt. This type of people is likely to help others as a way to give back what they have received from others. According to Tsai and Bagozzi (2014), a person's positive cognitive evaluation leads to higher desires to contribute and help others within the community (which can be in the form of consumer groups). Besides, customers who possess intellectual traits are considered as rational and factual when considering engaging in continuous and mutually beneficial relationships. Previous study by Curth (2014) showed that rationale-based commitment positively moderates the relationship between commitment to fellow customers and both organizational and customer-directed customer citizenship behavior. Such finding may explain the reason why people with intellectual capabilities are willing to act as advocators for the company from which they received the service, and also as helpers to other customers. Thus, the hypotheses H4 and H8 are well supported. However, intellect does not significantly influence tolerance as it is assumed that people with this trait may not want to consider the issue in service delivery as a major issue which may require time and effort that is hard to be well-compensated. This is perhaps due to the fact that cognitive processes used by customers in creating their zone of tolerance are complex in nature especially when evaluating the firm's service delivery process and performance outcomes (Wu & Lu, 2011). Hence, hypothesis H12 is not supported.

Meanwhile, the other two Islamic Personality factors; Righteousness and Trustworthiness, are found to be not significantly related to CCB. Righteousness is concerned on the moral aspect of integrity, which refers to "being truthful and not lying either by deliberately deceiving or deliberately omitting" (Pallanski & Yammarino, 2007, p.180). Although behavioral integrity has been found to positively affects citizenship behavior in the workplace settings (Dineen, Lewicki & Tomlinson, 2006), such relationships are still unclear at the buyer-seller interface. Since people who remain true to oneself in their behaviour are likely to be non-defensive when interacting with

others while keeping promises intact (Leroy, Palanski & Simons, 2012), it can be assumed that the customers are more keen in reserving their 'true' opinions towards the service provider, as compared to paying attention on assisting other customers. Thus, hypothesis H1, H5 and H9 are not supported.

Finally, trust fails in predicting customer citizenship behavior, which surprisingly contradicts with the findings of Balaji (2014) and Cheng, et al. (2015). This can perhaps be attributed to the mounting responsibility endured by the trustee in performing actions that are acceptable to the main party, who is the trustor. Becoming a trusted person is not without conveying risk to the trustor. Pallanski and Yammarino (2007) described the trustor of having exposed to vulnerabilities in terms of risks associated with word-action misalignment. Thus, it can be assumed that in buyer-seller circumstances, customers who value trustworthiness may tend to avoid transferring the burden of uncertainty risks to other customers whom they may think to have very high expectations in terms of providing assistance and recommendations. Henceforth, hypotheses that involve trust as a factor that contributes to CCB (H2, H6 & H10) are not supported based on the above discussions.

5.0 MANAGERIAL IMPLICATION

The present study tested the influence of Islamic Personality model on CCB. The findings denote the significant influence of two Islamic Personality factors; namely Social Obligation and Intellect on Support and Helping Behavior. These traits of Muslim shoppers can be used by retailers and marketers as a basis to segment their customers, in terms of tailoring loyalty and affinity programs to them. Such consumer who possess CCB may be beneficial to the marketer in the sense that their benevolent deeds can be observed and emulated by other consumers. Besides, their tolerating and cooperative behavior may reduce the risk of confrontation and conflict should any difficulties arises during and after the purchase transactions.

6.0 SUGGESTION FOR FUTURE RESEARCH

The newly developed Islamic Personality Model requires additional effort to further enhance its validity (concurrent and predictive validities) and reliability (across different samples). The nomological networks of the model are suggested to be established by looking at its relationship with other related constructs such as job performance, satisfaction and commitment.

7.0 CONCLUSION

Personality traits have long been recognized as the important indicators for future behaviors of people. However, some of the existing personality models and theories have been proven to be incompatible in assessing people across cultures and geographical boundaries (Othman, Hamzah & Hashim, 2014). The Islamic Personality model is proposed to address the existing theoretical gap and tested for its validity and reliability. Using 85 data collected from shoppers, the results of factor analysis indicate the existence of four factors as conceptualized, indicating construct validity of the Islamic Personality model. The model is further tested for convergent validity using correlation analysis and the findings provide concrete evidence towards this direction. A series of multiple regression analysis were further performed to examine the concurrent validity of the model. The results indicate that the two factors of Islamic Personality; Social Obligation and Intellect, serve as significant predictors for most of CCB dimensions.

This article also makes a number of contributions to the existing literature. In the context of Muslim countries, this study seeks to complement (rather substituting) previous Muslim-related personality studies such as Al-Ghazali's Concept of Personality (Ali, 1995), Indonesian NEO-Personality Inventory (Halim, Derksen & van der Staak, 2004), Muslim Religiosity-Personality

Inventory (Krauss, et al., 2005), Ummatic Personality Inventory (Othman, 2011), Moral Character of Muslim Personality (Al-Ammar, Ahmed & Nordin, 2012) and Qura'nic Personality (Abu-Raiya, 2012). The Big Five Factor Model has been a matter of debate among scholars; some who viewed it as unsuitable for non-Western cultures (John & Srivastava, 1999; Abu-Raiya, 2012). As an example, items from International Personality Item Pool (Goldberg, 1999) in which some Extraversion measuring items such as "I am the life of the party" and "Talk to a lot of different people at parties" are considered as unsuitable to Sharia-abiding Muslims. Thus, the Islamic Personality Model seeks to address this knowledge gap by enriching the existing literature stream with an all new construct and measurements.

The robustness of the Islamic Personality Model is reinforced based on the results of the validity tests that have been elaborated earlier. Therefore, the newly developed Islamic Personality model is considered as a valid and reliable model of personality and it can be used as an alternative model in assessing personality traits among Muslims.

ACKNOWLEDGEMENTS

This work is funded by the Fundamental Research Grant Scheme awarded by the Ministry of Education, Malaysia via the Institute of Innovation and Research Institute (IRMI), Universiti Teknologi Mara Malaysia.

REFERENCES

Abu-Raiya, H. (2012). Towards a systematic Qura'nic theory of personality. *Mental Health, Religion & Culture*, *15*(3), 217-233.

Ahmad, M. F. (2015). Antecedents of halal brand personality. *Journal of Islamic Marketing*, *6*(2), 209-223.

Al-Ammar, F. K., Ahmed, I. H. & Nordin, M. S. (2012). Moral character of Muslim personality: Scale validation. *Journal of Education and Practice*, *3*(16), 118-128.

Ali, A. H. (1995). The nature of human disposition: al-Ghazali's contribution to an Islamic concept of personality. *Intellectual Discourse*, *3*(1), 51-64.

Ali, A. J. (2009). Levels of existence and motivation in Islam. *Journal of Management History*, *15*(1), 50-65.

Al-Jasmani, A. A. (1996). *The Psychology of Quran*. Beirut: Arab Scientific Publishers.

Arneson, S., Millikin-Davies, M. & Hogan, J. (1993). Validation of personality and cognitive measures for insurance claims examiners. *Journal of Business and Psychology, 7*(4), 459-473.

Balaji, M. S. (2014). Managing customer citizenship behavior: a relationship perspective. *Journal of Strategic Marketing*, *22*(3), 222-239.

Barbuto, J. E. (2001).Understanding and applying an integrative taxonomy of motivation sources to professional and personal settings. *Journal of Management Education,* 25(6),713-725.

Becker, P. (1999). Beyond the big five. *Personality and Individual Differences*,*26*(3), 511-530.

Beekun, R. I. & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of business ethics*, *60*(2), 131-145.

Bettencourt, L. A. & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, *73*(1), 39–61.

Bitner, M. J. (1992). Servicescapes: the impact of physical surroundings on customers and employees. *The Journal of Marketing*, 57-71.

Borman, W. C. & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human performance*, *10*(2), 99-109.

Çetin, M. (2006, November). Voluntary altruistic action: Its symbolic challenge against sinecures of vested interests. In *Proceedings of the Second Annual Conference On Islam in the Contemporary World, University of Oklahoma*.

Cheng, J. C., Wu, C. S., Yen, C. H., & Chen, C. Y. (2015). Tour Leader Attachment and Customer Citizenship Behaviors in Group Package Tour: The Role of Customer Commitment. *Asia Pacific Journal of Tourism Research*, (ahead-of-print), 1-16.

Chiaburu, D. S., Oh, I. S., Berry, C. M., Li, N., & Gardner, R. G. (2011). The five-factor model of personality traits and organizational citizenship behaviors: a meta-analysis. *Journal of Applied Psychology*, *96*(6), 1140.

Curth, S., Uhrich, S., & Benkenstein, M. (2014). How commitment to fellow customers affects the customer-firm relationship and customer citizenship behavior. *Journal of Services Marketing*, *28*(2), 147-158.

Daneshfard, K. (2012). The relationship between managers' personality characteristics and organizational commitment, and its dimensions in Islamic Azad University employees. *Interdisciplinary Journal of Contemporary Research in Business, 4*(7), 742-751.

Deckop, J. R., Cirka, C. C., & Andersson, L. M. (2003). Doing unto others: The reciprocity of helping behavior in organizations. *Journal of Business Ethics*,*47*(2), 101-113.

Delgado-Ballester, E., & Luis Munuera-Alemán, J. (2001). Brand trust in the context of consumer loyalty. *European Journal of marketing*, *35*(11/12), 1238-1258.

Derbal, N. (2011). Philanthropy in Jeddah, Saudi Arabia Lifestyle and Liberty in the Name of Piety and Islam. In *The first annual conference on Arab philanthropy and civic engagement: Selected research. Cairo, Egypt: John D. Gerhart Center for Philanthropy and Civic Engagement*.

Dineen, B. R., Lewicki, R. J., & Tomlinson, E. C. (2006). Supervisory guidance and behavioral integrity: relationships with employee citizenship and deviant behavior. *Journal of Applied Psychology*, *91*(3), 622.

Donaldson, T., & Dunfee, T. W. (1994). Toward a unified conception of business ethics: Integrative social contracts theory. *Academy of management review*, *19*(2), 252-284.

Erdheim, J., Wang, M., & Zickar, M. J. (2006). Linking the Big Five personality constructs to organizational commitment. *Personality and Individual Differences*, *41*(5), 959-970.

Fowler, J. G. (2013). Customer citizenship behaviour: An expanded theoretical understanding. *Global Journal of Business and Social Science, 9*(1), 1-8.

Glaachi, M. (2000). *Studies in Islamic Economy*. Kuwait: Dar An-Nafaes: Kuwait.

Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several factor models. In I Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.

Groth, M. (2005). Customers as good soldiers: Examining citizenship behaviors in internet service deliveries. *Journal of management*, *31*(1), 7-27.

Halim, M. S., Derksen, J. J. L., & van der Staak, C. P. F (2004). Development of the revised NEO personality inventory for Indonesia: A preliminary study . In B. N. Setiadi, A. Supratiknya, W. J. Hofstede, G. & Hofstede, G.J. (2005). *Culture and Organizations: Software of the Mind*. New York: McGraw-Hill.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments*. Englewood Cliffs: Prentice-Hall.

Ilies, R., Fulmer, I. S., Spitzmuller, M., & Johnson, M. D. (2009). Personality and citizenship behavior: the mediating role of job satisfaction. *Journal of Applied Psychology*, *94*(4), 945.

John, O. P. & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp.102–138). New York: Guilford Press.

Johnson, J. A. (1997). Seven social performance scales for the California Psychological Inventory. *Human Performance, 10*(1), 1-30.

Karim, N. S. A, Zamzuri, N. H. A. & Nor, Y. M. (2009). Exploring the relationship between Internet ethics in university students and the big five model of personality. *Computers & Education, 53*(1), 86-93.

Krauss, S. E., Hamzah, A., Suandi, T., Noah, S. M., Mastor, K. A., Juhari, R., Kassan, H., Mahmoud, A. & Manap, J. (2005). The Muslim religiosity-personality measurement inventory (MRPI)'s religiosity measurement model: Towards filling the gap in religiosity research on Muslims. *PertanikaJournal of Social Science and Humanities*, *13*(2), 131-145.

Leroy, H., Palanski, M. E., & Simons, T. (2012). Authentic leadership and behavioral integrity as drivers of follower commitment and performance. *Journal of Business Ethics*, *107*(3), 255-264.

Mastor, K. A., Jin, P., & Cooper, M. (2000). Malay culture and personality: A big five perspective. *American Behavioral Scientist, 44*(1), 95–111.
Metwally, M. M. (1997). Economic consequences of applying Islamic principles in Muslim societies. *International Journal of Social Economics*, *24*(7/8/9), 941-957.
Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human performance*, *10*(2), 71-83.
Motowildo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human performance*, *10*(2), 71-83.
Mowen, J. C., Park, S., & Zablah, A. (2007). Toward a theory of motivation and personality with application to word-of-mouth communications. *Journal of Business Research*, *60*(6), 590-596.
Natlianis, F., & Raja, U. (2002). Influence of religion on citizenship behaviour and whistle-blowing. In M. A. Rahim, R. T. Golembiewski& K. D. MacKenzie (Eds.), *Current Topics in Management* (pp. 79-98)*. London: Transaction Publishers*.
Nicholls, R. (2010). New directions for customer-to-customer interaction research. *Journal of Services Marketing*, *24*(1), 87-97.
Organ, D. W. (1994). Personality and organizational citizenship behavior. *Journal of Management*, *20*(2), 465-478.
Othman, A. K., Hamzah, M. I., & Hashim, N. (2014). Conceptualizing the Islamic Personality Model. *Procedia-Social and Behavioral Sciences*, *130*, 114-119.
Othman, N. (2011). Exploring the Ummatic Personality Dimensions from the Psycho-spiritual Paradigm. *International Journal of Psychological Studies*, *3*(2), p37.
Palanski, M. E., & Yammarino, F. J. (2007). Integrity and Leadership: Clearing the Conceptual Confusion. *European Management Journal*, *25*(3), 171-184.
Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. *Sloan Management Review*, *32*(3), 39-48.
Patterson, P. G., Razzaque, M. A., & Terry, C. S. L. (2003). *Customer Citizenship Behaviour in Service Organisations: A Social Exchange Model*. Proceedings of the Australian and New Zealand Marketing Academy (*ANZMAC) 2003*, Adelaide, 1-3 December (pp. 2079-2089). Retrieved April 16, 2015, from http://www.anzmac.org/conference_archive/2003/papers/SER01_pattersonp.pdf
Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of Advertising Research*, *44*(4), 333-348.
Revilla-Camacho, M. Á., Vega-Vázquez, M., & Cossío-Silva, F. J. (2015). Customer participation and citizenship behavior effects on turnover intention. *Journal of Business Research (in-press)*.
Rolland, J. P. (2002). The cross-cultural generalizability of the Five-Factor Model of personality. In R. R. McCrae & I. Allik (Eds.), *The five-factor model of personality across cultures* (pp. 7-28). US: Springer.
Schmitt, D. P., Allik, J., McCrae, R. R., & Benet-Martínez, V. (2007). The geographic distribution of Big Five personality traits patterns and profiles of human self-description across 56 nations. *Journal of Cross-cultural Psychology*,*38*(2), 173-212.
Smither, R., & Khorsandi, A. (2009). The implicit personality theory of Islam. *Psychology of Religion and Spirituality*, *1*(2), 81.
Temporal, P. (2011). *Islamic branding and marketing: Creating a global Islamic business*. John Wiley & Sons: Singapore.
Triyuwono, I. (2004). Trust (Amanah), the divine symbol: Interpretations in the context of Islamic banking and accounting practices. In *Fourth Asia Pacific Interdisciplinary Research in Accounting Conference* (pp. 1-19). 4-6 July 2004, Singapore.
Tsai, H. T., & Bagozzi, R. P. (2014). Contribution behavior in virtual communities: Cognitive, emotional, and social influences. *MIS Quarterly*, *38*(1), 143-163.
Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing*, *41*(5/6), 487-511.
Wilson, J. A., & Liu, J. (2011). The challenges of Islamic branding: navigating emotions and halal. *Journal of Islamic Marketing*, *2*(1), 28-42.

Wu, L. W. (2011). Satisfaction, inertia, and customer loyalty in the varying levels of the zone of tolerance and alternative attractiveness. *Journal of Services Marketing*, *25*(5), 310-322.
Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. *Journal of Business Research*, *66*(9), 1279-1284.
Yoo, J. J., Arnold, T. J., & Frankwick, G. L. (2012). Effects of positive customer-to-customer service interaction. *Journal of Business Research*, *65*(9), 1313-1320.
Yousaf, S. (2014). Promotion mix management: A consumer focused Islamic perspective. *Journal of Marketing Communications*, (ahead-of-print), 1-17.

Emotional Distress and Work Presenteeism among Administrative Workers: A Mediator Role of Upper-Extremity Musculoskeletal Disorders

Mohd Zulkifli Abdullah[1], Abdul Kadir Othman[1], Maria Justine[2], Naliza Solat[3], Zuria Akmal Saad[3]

1 Faculty of Business and Management, Universiti Teknologi MARA Puncak Alam, 42300 Puncak Alam, Selangor, Malaysia
2 Faculty of Health Sciences, Universiti Teknologi MARA Puncak Alam, 42300 Puncak Alam, Selangor, Malaysia
3 Faculty of Business and Management, Universiti Teknologi MARA Jengka, 26400 Jengka, Pahang, Malaysia

ABSTRACT

In today's working environment, administrative workers are expected to perform at the highest performance level to meet the demand of the customers, whether internal or external customers. Due to the heightened demand, some of them failed to adapt to the situation, therefore, resulting in emotional distress. Previous studies indicate that emotional distress might cause musculoskeletal disorders and subsequently musculoskeletal disorders might affect presenteeism. The present study is intended to test these assumptions using 393 administrative workers working at higher educational institutions in Peninsular Malaysia. The results indicate that all four regions of upper-extremity musculoskeletal disorders (UEMDs); neck, shoulder, upper-back and elbow, are positively associated with presenteeism, signifying that workers who suffer from UEMDs tend to reduce their productivity when performing their job. Besides, all four regions of UEMDs are found to be partial mediators of the relationship between emotional distress and presenteeism. The implications of the study are discussed.

Key Words: Emotional distress, upper-extremity musculoskeletal disorders, presenteeism, administrative workers.

1. INTRODUCTION

Higher educational institution can be quite a stressful environment for administrative workers. The intense growth of students' enrollment and the expansion of courses in various fields may lead to a more demanding environment, which increases emotional distress among them. As an administrative staff at a higher educational institution, changes in the university environment such as transformation, mergers, new legislation governing higher education and new leadership may also affect the staff (Barkhuizen & Rothmann, 2008). Due to emotional distress, university administrators were reported to have poor coping abilities (Blix & Lee, 1991), low organizational commitment (Viljoen & Rothman, 2009) and the feeling of unhappiness in their job (Northern Arizona University, 2005). According to Michailidis and Asimenos (2002) and Viljoen and Rothmann (2009), work-related stress could affect employees' physical health and psychological well-being. Stress has also been shown to be related to an increased risk of WRMDs (Lundberg & Melin, 2002). Patients with musculoskeletal pain frequently reported having high levels of emotional distress (Joaquim, Soares & Grossi, 2000). In the model of the stress process developed by Cohen, Kessler and Underwood (1995), it is proposed that a

negative emotional response to the stressful situation is a necessary requirement for physiological stress responses, which, in turn, increase the risk of physical disease especially upper-extremity musculoskeletal disorders (UEMDs).

Apart from absenteeism, this could also lead to another problem which is work presenteeism. Presenteeism also leads to increase costs to the organization because the employees cannot produce the work assigned to them and will spread infection to other employees and clients (Demerouti, Blanc, Bakker, Schaufeli & Hox, 2008). WRMDs were reported to have a significant effect on workers' productivity (Lotters, Meerding & Burdorf, 2005; Hagberg, Tornqvist &Toomingas, 2002; Beaton & Kennedy, 2005; Pransky, Benjamin, Hill-Fotouhi, Fletcher, Himmelstein & Katz, 2002). According to O'Donnell (2000), workers' ability to work and their productivity seem to be dependent on their health conditions. In the recent years, the workers' ability or capacity to work while suffering from musculoskeletal disorders (MDs) has received major interest in the area of occupational study (Escorpizo, 2008). However, there is a lack of uniformity and consistency in how work productivity is being used and measured (O'Donnell, 2000). In the previous studies, the prevalence of sickness and presenteeism and the impact on workers' productivity were estimated. Brouwer, Koopmanschap and Rutten (1999) reported that, on an average day, 7% of the workers in a trade company experienced health problems while being at work, with an estimated productivity loss of 13% per worker with health problems. Among computer users, 8% reported reduced productivity due to WRMDs with a mean of productivity loss of 15% for women and 13% for men (Hagberg, Tornqvist &Toomingas, 2002). Therefore, this study aimed to investigate the mediating role of UEMDs on stress and work presenteeism among administrative workers. These subjects are susceptible to stress related disorder and it subsequently will affect their productivity due to heavy workload and routine tasks.

2. LITERATURE REVIEW

Workers emotional distress has become a great global concern. Research has defined emotional distress in many ways. Some defined it as the body's non-specific response to demands made upon it, or to disturbing events in the environment (Rosenham & Seligman; 1989). Others, such as Robbins (2001) defined stress as a dynamic condition, which directly and negatively confront the individual with a constraint and demand on effectiveness, personal health, and quality of work. In addition, stress occurs when someone feels pressure about anything and it does not only affect the quality of life and social problems but also work performance. One study revealed that, the stress experienced by workers will directly impact the organization in term of organizational commitment and work performance (Barkhuizen & Rothmann, 2008). It was also found to decrease attention, reduce concentration, and impinge on decision-making (Shapiro, 2000).

Work-related musculoskeletal disorders (WRMDs) are among common problems faced by administrative workers. WRMDs include disorders of the nerves, tendons, muscles, and supporting structures and tissues of the body that result from workplace conditions or exposures (Bernard, 2005; Cohen, 1997). Meanwhile, work-related UEMDs are associated with repeated used of the upper extremity over time.

According to Medibank (2011), WRMDs contribute 7% of the overall productivity loss. The most frequently reported musculoskeletal symptoms among computer users were neck and shoulder pain (Eltayeb, Staal, Kernes, Lamberts & DeBie, 2007; Johnston & Souvlis, 2008; Korhonen, Ketola, Toivonen, Luukkonen, Hakkanen & Viikari-Juntura, 2003). This normally happens to administrative workers, such as keyboard operators or call center personnel. A study conducted by Rocha, Glina, Marinho and Nakasto (2005) found that the prevalence of neck–shoulder symptoms and wrist-hand was 43% and 39%, respectively, in call center

operators in Brazil. Meanwhile, Norman (2005) confirmed that call center operators had a higher prevalence of neck–upper extremity disorders than other professional computer users. In addition, other studies conducted among administrative workers in Japan (Ye, Abe, Kusano, Takamura, Eida & Takemoto, 2007) and United States (Demure & Luippold, 2000) also reported a significant association between lack of breaks and back, neck and shoulder pain. It is reported that poorer workstation ergonomics increased the risk of developing neck, back and wrist disorders (Sen & Richardson, 2007).

Administrative staff can be categorized as front line service workers who not only perform the secretarial tasks for the academia, but also to the other support staff, stakeholders and customers. The changes and increase in workload have made this group to cope with the stress environment (Barkhuizen & Rothmann, 2008). Delivering service in the higher educational institution needs adequate help of manpower. However, many jobs still cannot be automated and need to be performed manually, which involved repetitive tasks (Punnett, 1998; van Tulder, Malmivaara & Koes, 2007).

Work presenteeism is among common problem in an office environment. Although it can be defined in various definitions, generally work presenteeism is going to work despite feeling unhealthy (Aronsson et al., 2000; Dew et al., 2005) due to health problems (Turpin, Ozminkowki, Sharda, Collins, Berger & Billotti, 2004). Presenteeism brings the definition where people who are entitled to get a rest at home due to sickness, but still present themselves in the workplace. This situation may not only harm the employees by causing serious illness because postponing sickness leave, but also being viewed as an ineffective worker by the employer (Collin & Cartwright, 2012; John, 2010; Aronsson & Gustafasson, 2005). Weak demand, which requires colleague to be replaced, organization attendance's policies, an issue for the future promotion and fear of dismissal are among several reasons of presenteeism that is exhibited by the workers (Grinyer & Singleton, 2000). However, the most interesting and the positive side of presenteeism is, it could stimulate other colleagues to work and can build a good relationship between client and colleague. The study also mentioned that, the cause of presenteeism may depend on the types of sickness the employees faced. Upper back/neck pain, feelings of fatigue and slight depression were the highest percentage of presenteeism among workers (Demerouti, Blanc, Bakker, Schaufeli & Hox, 2008). The presenteeism can be triggered by increasing levels of stress and also have an influence upon productivity in a company (Manshor, Fontaine & Siong, 2003). A study from Collin and Cartwright (2012) also identified the same factors that promote presenteeism such as organizational policies and work related demand. It was found that, professions such as care, welfare and education are among the occupations that may lead to high presenteeism. Among the personal factors that may lead to presenteeism is boundlessness (which is, fear to say no), conservative attitude towards absence and also financial matters. The employees who work in teams may come to work in a sick condition because of fear of letting the team down. They prefer to work, although they are sick rather than taking leave from work.

After going through the literature of the past studies, it can be concluded that research conducted on this issue is lacking, that is involving administrative workers in a higher educational institution. This emphasizes the need for further research, particularly in the Malaysian setting. Therefore, this research was conducted to fill up the gap and contribute to the body of knowledge. It is important to conduct this research in order to determine the mediating role of UEMDs on emotional distress and work presenteeism among administrative workers in a higher educational institutions.

3. METHODOLOGY

3.1. Research Design

The study is correlational in nature. The sampling frame is based on a list of office workers who hold the job position of administrative assistant-clerical and operation (N-17), senior administrative assistant-clerical and operation (N-22), administrative assistant-financial (W-17) and senior administrative assistant-financial (W-22) from Universiti Technologi MARA (UiTM) in Peninsular Malaysia. The sample size for this study is 393. The unit of analysis for this study is the office workers who were employed by UiTM in Peninsular Malaysia as an administrative assistant (N17, W17, N22 and W22 work position grades). The respondents were working full time in the office, spending over six hours per day at the workstation and working at the same position over the past 12 months.

3.2. Instrument

The questionnaire was adapted from the established questionnaire and the items were modified in order to get the required responses to the research questions. The questionnaire consists of several sections; namely, Section A, to request demographic information of respondents such as age, gender, marital status, work position and work experience. Section B includes items measuring the level of emotional distress among respondents. Stress was measured by Perceived Stress Scale (PSS-10) (Cohen, Kamarck & Mermelstein, 1983).

Section C focuses on measuring the prevalence of UEMDs among respondents. The survey is a shortened version of the Nordic Musculoskeletal Symptom Survey. Previous studies have shown the validity of Nordic Questionnaire in assessing WRMDs (Descatha et al., 2007; Palmer, Smith, Kellingray & Cooper, 1999). Besides, section D focuses on measuring productivity, i.e. presenteeism using the Quantity and Quality (QQ) instruments (Burdorf & Bruggeling, 1996; Meerding, Ijzelenberg, Koopmanschap, Severens & Burdorf, 2005).

The questionnaire utilized closed-ended questions with a fixed range of possible answers using a 5-point Likert scale with the following values; 1 = strongly disagree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree to measure stress level in section B. Besides, a 5-point Likert scale with the following values; 1 = never, 2 = almost never, 3 = sometimes, 4 = fairly often and 5 = very often is to measure presenteeism in section D while UEMDs symptom used “yes” or “no” type of response.

4. DATA ANALYSIS

The collected data were analyzed using the statistical software, i.e. SPSS Version 20. The study uses both descriptive and inferential statistics. The descriptive statistics include the mean and standard deviation. Besides, the hierarchical multiple regression (also known as sequential regression) analysis was used to test the mediating roles of UEMDs on the relationship between emotional distress and presenteeism.

5. RESULTS

5.1. Response Rate

For the purpose of data collection, a total of 393 sets of questionnaires were distributed. Data were personally collected by the researcher, from the respective respondents. After three months, 368 questionnaires were collected. This is equivalent to the response rate of 93.6%.

5.2. Profile of Respondents

The analysis of the data indicated that 68.8% of the respondents were female and 31.3% were male. Most of them, 25%, were from the age group of 25 – 30 years old, followed by 24.5% in the age group of 31 – 35 years old, 14.1% of them from the age group of 46 – 50, 12.8% of them were above 50 years of age, 11.1% in the age group of 36 – 40 years old and 8.2% from 41 – 45 years old. However, only 4.3% of the respondents were below 25 years old. For the current job position, 56.3% of the respondents worked as Administrative Assistant-Clerical and Operation (N17), 19% of them were Senior Administrative Assistant-Clerical and Operation (N22), 15.8% were Administrative Assistant-Finance (W17) and 9% of them were Senior Administrative Assistant-Finance (W22).

In the context of the respondents' experience in their current position at the workplace, it was found that 112 (30.4%) of them had been working between 6 and 10 years and 109 (29.6%) of them had working experience between 1 and 5 years. Besides, 82 respondents (22.3%) had working experience of more than 20 years while 39 (10.6%) of them had 11 to 15 years of experience and only a minority of them, that is, 14 respondents (3.8%) had been working between 16 and 20 years and 12 (3.3%) of them had less than 1 year working experience. With regard to marital status, majority of the respondents that were represented by 306 respondents (832%) were married, 52 of them (14.1%) were single and only 10 (2.7%) of them were divorced.

5.3. Prevalence of UEMDs

The result shows that the prevalence of UEMDs as reported by the administrative workers during the past 12 months includes neck disorders (67.1%), shoulder disorders (73.44%), upper-back disorders (70.1%) and elbow disorders (22.0%).

5.4. Relationship between Stress and UEMDs

Table 1 summarizes the results of logistic regression analyses between emotional distress and neck disorder. Direct logistic regression was performed to assess the impact of emotional distress level on the likelihood that respondents would report that they had neck pain. The model contained only one independent variable (level of emotional distress). The full model was statistically significant, χ^2 (1, N = 368) = 9.074, $p < .01$, indicating that the model is able to distinguish between respondents who reported and did not report neck disorder.

The model as a whole explained 2.4% (Cox and Snell R Square) and 3.4% (Nagelkerke R square) of the variance in neck disorders, and correctly classified 67.1% of cases. To support the model, the Hosmer-Lemeshow Goodness of Fit Test should show the significance value of greater than .05 (Pallant, 2010). The result of the present study shows that the significance value is .91, indicating the current result supports the model.

As shown in Table 1, independent variable that was represented by emotional distress made a unique and statistically significant contribution to the model. The result revealed that emotional distress, recorded an odds ratio of 1.7, indicating that respondents who experienced emotional distress such as “being upset because of something that happened unexpectedly”, “could not cope with all the things that had to do” and “unable to control the important things in life” were 1.7 times more likely to report having a neck disorder than those who did not experience emotional distress in the workplace.

Table 1: Summary of the Influence of Emotional Distress on Neck Disorder

Independent Variable	**B**	**S.E.**	**Wald**	**p**	**Odds Ratio**	**95% C.I. for Odds Ratio**	
						Lower	**Upper**
Stress	.558	.191	8.503	**.004**	1.748	1.201	2.543
Constant	-.782	.518	2.281	.131	.458		

Table 2 illustrates the results of logistic regression analyses between emotional distress and shoulders’ disorder. The full model was statistically significant, χ^2 (1, N = 368) = 18.869, p < .01, indicating that the model is able to distinguish between respondents who reported and did not report shoulder disorders. The model as a whole explained 5% (Cox and Snell R Square) and 7.3% (Nagelkerke R square) of the variance in shoulder disorders, and correctly classified 74.5% of cases. To support the model, the Hosmer-Lemeshow Goodness of Fit Test should show the significance value of greater than .05 (Pallant, 2010). The result of the present model revealed that the significance value is .85, indicating that the model is supported.

As can be seen from Table 2, emotional distress made a unique and statistically significant contribution to the model by recording an odds ratio of 2.5. This indicated that respondents who experienced emotional distress such as “being upset because of something that happened unexpectedly”, “could not cope with all the things that had to do” and “unable to control the important things in life” were 2.5 times more likely to report having a shoulder disorder than those who did not experience emotional distress in the workplace.

Table 2: Summary of the Influence of Emotional Distress on Shoulders Disorders

Independent Variable	**B**	**S.E.**	**Wald**	**p**	**Odds Ratio**	**95% C.I. for Odds Ratio**	
						Lower	**Upper**
Stress	.899	.221	16.540	**.000**	2.458	1.594	3.792
Constant	-1.359	.580	5.495	.019	.257		

Table 3 provides the results of logistic regression analyses between emotional distress and upper-back disorder. The full model was statistically significant, χ^2 (1, N = 368) = 6.032, p < .05, indicating that the model is able to distinguish between respondents who reported and did not report upper-back disorder. The model as a whole explained between 1.6% (Cox and Snell R Square) and 2.3% (Nagelkerke R square) of the variance in the upper-back disorder, and correctly classified 70.1% of cases. To support the model, the Hosmer-Lemeshow Goodness of Fit Test should show the significance value of greater than .05 (Pallant, 2010). The result of the present model shows that the significance value is .4, supporting the model.

As shown in Table 3, emotional distress serving as an independent variable made a unique and statistically significant contribution to the model by recording an odd ratio of 1.6. This demonstrated that respondents who experienced emotional distress such as “being upset because of something that happened unexpectedly”, “could not cope with all the things that had to do” and “unable to control the important things in life” were 1.6 times more likely to report having upper-back disorder than those who did not experience emotional distress in the workplace.

Table 3: Summary of the Influence of Emotional Distress on Upper-Back Disorder

Independent Variable	**B**	**S.E.**	**Wald**	**p**	**Odds Ratio**	**95% C.I. for Odds Ratio**	
						Lower	**Upper**
Stress	.464	.194	5.731	**.017**	1.590	1.088	2.324
Constant	-.390	.525	.553	.457	.677		

Table 4 presents the results of logistic regression analyses between emotional distress and elbow disorder. The full model was not statistically significant, χ^2 (1, N = 368) = 3.449, p > .05, indicating that the model is unable to distinguish between respondents who reported and did not report elbows’ tingling. The model as a whole explained 0.9% (Cox and Snell R Square) and 1.4% (Nagelkerke R square) of the variance in elbow disorder, and correctly classified 78% of cases. To support the model, the Hosmer-Lemeshow Goodness of Fit Test should show the significance value of greater than .05 (Pallant, 2010). The result of the present study shows that the significance value is .97, supporting the model.

As shown in Table 4, emotional distress was not statistically significant to make contribution to the model (p >.05). This indicates that respondents who experienced emotional distress were not exposed to the prevalence of elbow disorder.

Table 4: Summary of the Influence of Emotional Distress on Elbows Disorder

Independent Variable	**B**	**S.E.**	**Wald**	**p**	**Odds Ratio**	**95% C.I. for Odds Ratio**	
						Lower	**Upper**
Stress	.366	.196	3.482	.062	1.442	.982	2.117
Constant	-2.274	.562	16.339	.000	.103		

5.5. The Mediating Role of WRMDs on the Relationship between Emotional Distress and Presenteeism

Table 5 presents the summary of the mediating role of neck disorder on the relationship between emotional distress and presenteeism. The R^2 change of 0.040 indicates that neck disorder explains an additional 4% of the variance in presenteeism, after the effects of emotional distress has been controlled for. It means that the inclusion of neck disorder increases the explanation of variance in presenteeism by 4%. This addition to the effect size is, by no means, small (Cohen, 1992). However, this is a statistically significant contribution, as indicated by the significance F change (F (1, 368) = 17.866, p = 0.000). The result revealed that neck disorder significantly mediates the relationship between emotional distress and presenteeism (β = 0.343, $p < .01$). As can be seen, the beta value of emotional distress was reduced but still significant, therefore, it is concluded that neck disorder is a partial mediating factor in the relationship between emotional distress and presenteeism.

Table 5: Summary of the Mediating Role of Neck Disorder on the Relationship between Emotional Distress and Presenteeism

Emotional Distress and Neck Disorder	Presenteeism		
	Without Mediator	With Mediator	Conclusion
Emotional Distress	.375**	.343**	Partial Mediator
Neck		.203**	
R^2	.140	.180	
Adjusted R^2	.138	.176	
R Square Change	.140	.040	
F Change	59.733	17.866	
Sig. F Change	.000	.000	
Durbin -Watson		2.148	

Notes: ** significance at the .01 level; * significance at the .05 level

Table 6 presents the summary of the mediating role of shoulders disorder on the relationship between emotional distress and presenteeism. The R^2 change of 0.054 indicates that shoulder disorder explains an additional 5.4% of the variance in presenteeism, after the effects of emotional distress has been controlled for. It means that the inclusion of shoulder disorder increases the explanation of variance in presenteeism by 5.4%. This is a statistically significant contribution, as indicated by the significance, F change (F (1, 368) = 24.662, p = 0.000). The result revealed that shoulder disorders was established to significantly mediate the relationship between emotional distress and presenteeism (β = 0.323, $p < .01$). As can be seen, the beta value of emotional distress was reduced but still significant, therefore, it is concluded that shoulder disorder is a partial mediating factor in the relationship between emotional distress and presenteeism.

Table 6: Summary of the Mediating Role of Shoulders' Disorder on the Relationship between Emotional Distress and Presenteeism

Emotional Distress and Shoulders' Disorder	Presenteeism		
	Without Mediator	With Mediator	Conclusion
Emotional Distress	.375**	.323**	Partial Mediator
Shoulders		.239**	
R^2	.140	.195	
Adjusted R^2	.138	.190	
R Square Change	.140	.054	
F Change	59.733	24.662	
Sig. F Change	.000	.000	
Durbin -Watson		2.137	

Notes: ** significance at the .01 level; * significance at the .05 level

Table 7 presents the summary of the mediating role of upper-back disorder on the relationship between emotional distress and presenteeism. The R^2 change of 0.054 indicates that the upper-back disorders explains an additional 5.4% of the variance in presenteeism, after the effects of emotional distress has been controlled for. It means that the inclusion of upper-back disorder increases the explanation of variance in presenteeism by 5.4%.This is a statistically significant contribution, as indicated by the significance F change (F (1, 368) = 24.636, p = 0.000). The result revealed that upper-back disorder was established to significantly mediate the relationship between emotional distress and presenteeism (β = 0.345, $p < .01$). As can be seen, the beta value of emotional distress was reduced but still significant, therefore, it is concluded that the upper-back disorders is a partial mediating factor in the relationship between emotional distress and presenteeism.

Table 7: Summary of the Mediating Role of Upper-Back Disorder on the Relationship between Emotional Distress and Presenteeism

Emotional Distress and Upper-Back Disorder	Presenteeism		
	Without Mediator	With Mediator	Conclusion
Emotional Distress	.375**	.345**	Partial Mediator
Upper-Back		.235**	
R^2	.140	.195	
Adjusted R^2	.138	.190	
R Square Change	.140	.054	
F Change	59.733	24.636	
Sig. F Change	.000	.000	
Durbin -Watson		2.125	

Notes: **significance at the .01 level; * significance at the .05 level

Table 8 presents the summary of the mediating role of elbow disorder on the relationship between emotional distress and presenteeism. The R^2 change of 0.074 indicates that elbow disorder explains an additional 7.4% of the variance in presenteeism, after the effects of emotional distress has been controlled for. It means that the inclusion of elbow disorder increases the explanation of variance in presenteeism by 7.4%. This is a statistically significant contribution, as indicated by the significance F change (F (1, 368) = 34.616, p = 0.000). The result revealed that elbow disorder was established to significantly mediate the relationship between emotional distress and presenteeism (β = 0.348, $p < .01$). As can be seen, the beta value of emotional distress was reduced but still significant, therefore, it is concluded that elbow disorder is a partial mediating factor in the relationship between emotional distress and presenteeism.

Table 8: Summary of the Mediating Role of Elbows' Disorder on the Relationship between Emotional Distress and Presenteeism

Emotional Distress and Elbows' Disorder	Presenteeism		
	Without Mediator	With Mediator	Conclusion
Emotional Distress	.375**	.348**	Partial Mediator
Elbows		.274**	
R^2	.140	.215	
Adjusted R^2	.138	.210	
R Square Change	.140	.074	
F Change	59.733	34.616	
Sig. F Change	.000	.000	
Durbin -Watson		2.107	

Notes: ** significance at the .01 level; ** significance at the .05 level

6. DISCUSSION

The prevalence of WRMDs among administrative workers during the last 12 months, especially shoulders (73.4%), upper-back (70.1%) and neck (67.1%) was very high. This is consistent with findings from previous studies (Swanson & Sauter, 2006; Adam, Esser, Koshy & Randle, 2007).

Besides, it is noticeable from the results that three regions of WRMDs had significant association with emotional distress. There were significant positive correlations between emotional distress and the three regions; neck, shoulders, upper-back disorders. These findings of the current study are consistent with those of Johnston (2007) and Conway (1999) who demonstrated the association between emotional distress and WRMDs especially neck, shoulders and upper-back discomfort among administrative workers. The findings of the current study are also consistent with several studies, for an example, Leclerc, et al. (1999) found that those with higher levels of emotional distress were more likely to suffer from neck pain in one year. The findings are similar to those found by Conway (1999) and Haufler, Feuerstein and Huang (2000), highlighting a significant relationship between emotional distress and musculoskeletal disorders. However, contrary to our expectations, this study shows non-significant relationship between emotional distress and elbow disorder.

Furthermore, another important finding is that there were significant associations between four regions of WRMDs and presenteeism. The results of this study are similar to a great deal with the findings of the previous work in this field (Boles et al., 2004; Horsley, 2011). Most of the workers who suffered from WRMDs had problems concentrating on their work. Besides, they also found that decision-making is more difficult and they had to put off some of their work to others.

Interestingly, this study divulges a new discovery on the mediating role of UEMDs on the relationship between emotional distress and presenteeism. As far as our concern, there is no previous studies that investigate the role of UEMDs as a mediator of the relationship between emotional distress and presenteeism. This study seems to be the pioneer in this area. It is interesting to note that the results indicate that the four regions of UEMDs; namely, neck, shoulders, upper-back and elbows' disorders partially mediate the relationship between emotional distress and presenteeism.

7. CONCLUSION

As a conclusion, the prevalence of UEMDs among administrative workers during the last 12 months, especially shoulders (73.4%), upper-back (70.1%) and neck (67.1%) was very high. There were significant positive correlations between emotional distress and three regions of UEMDs chiefly neck, shoulders as well as upper-back disorders. It is noticeable that people who work under stressful situation contribute to UEMDs. However, this study did not find a significant relationship between stress and elbow disorder. Besides, this study revealed that all four regions of UEMDs were positively associated with presenteeism. It can be concluded that workers who suffer from UEMDs tend to reduce their productivity when performing their job. Lastly, the most interesting finding of the current study is that all four regions of UEMDs serve as partial mediators of the relationship between emotional distress and presenteeism.

7.1. Managerial Implications

The findings of the present study pose several implications for managers. First, they have to be constantly aware of the emotional distress level of their subordinates so that appropriate actions can be taken to avoid prolonged effects especially on their productivity i.e. presenteeism. Simple measures can help assess the emotional distress levels, such as physical reactions, facial expression, voice intonation, the level of happiness, bodily movement and others. Second, managers should continuously educate the workers on how to manage emotional distress through workshops, seminars, briefings, emails, flyers, brochures and others. Finally, managers should organize special programs to discharge emotional distress among the subordinates such as family day, retreat, team building or other programs that swift the workers' attention away from their work. All these measures can be utilized by managers to ensure that the workers' emotional distress is at the manageable levels and to prevent UEMDs.

7.2. Suggestion for Future Research

The current study provides the fundamental understanding of the mediating role of WRMDs on the link between emotional distress and presenteeism among administrative workers. Besides, this study was conducted among those holding a job position of administrative assistant (clerical/operation and financial) in UiTM in Peninsular Malaysia. Future studies should be extended using larger sample sizes and covering bigger population, so that the findings might be generalized to an extended population. Using different methodology is highly recommended to accurately capture the information regarding the emotional distress level, WRMDs and presenteeism rather than relying on the perception of the respondents. The use of experimental groups for a specified time period (longitudinal study) is highly recommended.

REFERENCES

Adam, C., Esser, J., Koshy, G. & Randle, W.H. (2007).Ergonomics in office-based surgery: a survey-guided observational study by the American society for dermatologic surgery. *Inc.-Published by Blackwell Publishing,* 33, 1304-1314.

Aronsson, G., & Gustafsson, K. (2005). Sickness presenteeism: Prevalence, attendance-pressure factors, and an outline of a model for research. *Journal of Occupational and Environmental Medicine, 47,* 958–966.

Barkhuizen, N., & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions. *South African Journal of Psychology*, *38*(2), 321-336.

Beaton, D.E. & Kennedy, C.A. (2005). The workplace upper extremity research group, beyond return to work: testing a measure of at-work disability in workers with musculoskeletal pain. *Journal of Quality of Life Research,* 14(8), 1869-1879.

Bernard. B. P. (2005). *Musculoskeletal Disorders (MSMD) and Workplace Factors: A Critical Review of Epidemiologic Evidence for Work Related Musculoskeletal Disorders of the Neck, Upper Extremity, and Low Back*. NIOSH Publication No. 97–141. Atlanta: Centers for Disease Control and Prevention. Available at http://www.cdc.gov/niosh/docs/97-141

Blix, A.G., & Lee, J.W. (1991). Occupational stress among university administrators. Research in Higher Education*. 32*(3), 289-302.

Boles, M., Pelletier, B. & Lynch, W.D. (2004).The relationship between health risks and work productivity. *Journal of Occupational and Environmental Medicine,* 46, 737-745.

Brouwer, W.B., Koopmanschap, M.A. & Rutten, F.F. (1999). Productivity losses without absence: measurement validation and empirical evidence. *Journal of Health Policy,* 48, 13-27.

Burdorf, A. & Bruggeling, T. (1996). Reliability of a questionnaire on sickness absence with specific attention to absence due to back pain and respiratory complaints. *Journal of Occupational Environ Med,* 53, 58-62.

Cohen, S., Kamarck, T. & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health & Social Behavior,* 24(4), 385-396.

Cohen, S., Tyrrell, D.A., & Smith, A.P. (1993). Negative life events, perceived stress, negative affect, and susceptibility to the common cold. *Journal of Personality and Social Psychology*, *64*(1), 131.

Cohen, A. L. (1997). *Elements of ergonomics programs: a primer based on workplace evaluations of musculoskeletal disorders* (No. 97-117). DIANE Publishing.

Cohen, S., Kessler, R.C. & Underwood, G.L. (1995). *Strategies for measuring stress in studies of psychiatric and physical disorder.* In: Cohen, S., Kessler, R.C. & Underwood, G.L. (Eds.), *Measuring stress. A guide for health and social scientists,* Oxford University Press, New York, 3-26.

Cohen, S., Kessler, R. C., & Gordon, L.U. (Eds.). (1997). *Measuring stress: A guide for health and social scientists*. Oxford University Press.

Collins, A., & Cartwright, S. (2012). Why come into work ill? Individual and organizational factors underlying presenteeism. *Journal of Employee Relations, 34*(4), 429-442.

Conway, F.T. (1999). Psychological mood state, psychosocial aspects of work and musculoskeletal discomfort in intensive video display terminal (VDT) work. *International Journal of Hum-Comput Interact,* 11, 95-107.

Demerouti, E., Le Blanc, P. M., Bakker, A. B., Schaufeli, W. B., & Hox, J. (2009). Present but sick: a three-wave study on job demands, presenteeism and burnout. *Career Development International*, *14*(1), 50-68.

Demure. B., Luippold, R.S., Bigelow, C., Ali, D., Mundt, K.A., & Liese, B. (2000). Video display terminal workstation improvement program: Baseline associations between musculoskeletal discomfort and ergonomic features of workstations. *J Occup Environ Med, 42,* 783-791.

Descatha, A., Roquelaure, Y., Chastaq, J.F., Evanoff, B., Melchior, M., Mariot, C., Ha, C., Imberno, E., Goldberq, M. & Laclerc, A. (2007).Validity of Nordic-style questionnaires in the surveillance of upper-limb work-related musculoskeletal disorder. *Scandinavian Journal of Work, Environment and Health,* 33, 58-65.

Dew, K., Keefe, V., & Small, K. (2005). 'Choosing' to work when sick: Workplace presenteeism. *Social Science & Medicine, 60,* 2273–2282.

Eltayeb, S., Staal, J. B., Kennes, J., Lamberts, P. H., & de Bie, R. A. (2007). Prevalence of complaints of arm, neck and shoulder among computer office workers and psychometric evaluation of a risk factor questionnaire. *BMC musculoskeletal disorders*, *8*(1), 68.

Escorpizo, R. (2008). Understanding work productivity and its application to work-related musculoskeletal disorders. *International Journal of Industrial Ergonomics,* 38, 291-297.

Grinyer, A., & Singleton, V. (2000). Sickness absence as risk-taking behaviour: a study of organisational and cultural factors in the public sector. *Health, Risk & Society*, *2*(1), 7-21.

Hagberg, M., Tornqvist, E.W. &Toomingas, A. (2002). Self-reported reduced productivity due to musculoskeletal symptoms: Associations with workplace and individual factors among white-collar computer users. *Journal of Occupational Rehabilitation,* 12, 151-162.

Haufler, A., Feuerstein, M. & Huang, G.D. (2000). Job stress, upper extremity pain and functional limitations in symptomatic computer users. *America Journal of Individual Medicine.,* 38, 507-15.

Horsley, R. (2011). Factors that affect the occurrence and chronicity of occupation-related musculoskeletal disorders. *Journal of Best Practice & Research Clinical Rheumatology,* 25, 103-115.

Joaquim, J.F., Soares, J.J.F. & Grossi, G. (2000). Gender differences in coping with musculoskeletal pain. *International Journal of Behavioral Medicine,* 7(4), 303-321.

Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, *31*(4), 519.

Johnston, V., Souvlis, T., Jimmieson, N. L., & Jull, G. (2008). Associations between individual and workplace risk factors for self-reported neck pain and disability among female office workers. *Applied ergonomics*, *39*(2), 171-182.

Johnston, V. (2007). Biological pathways between occupational stress and work-related musculoskeletal disorders of the neck and upper extremity. *Physical Therapy Reviews,* 12, 335-345.

Korhonen, T., Ketola, R., Toivonen, R., Luukkonen, R., Häkkänen, M., & Viikari-Juntura, E. (2003). Work related and individual predictors for incident neck pain among office employees working with video display units.*Occupational and environmental medicine*, *60*(7), 475-482.

Leclerc, A., Niedhammer, I., Landre, M. F., Ozguler, A., Etore, P. & Pietri-Taleb, F. (1999). One year predictive factors for various aspects of neck disorders. *Journal of Spine,* 24, 1455-1462.

Lotters, F., Meerding, W.J. & Burdorf, A. (2005). Reduced productivity after sickness absence due to musculoskeletal disorders and its relation to health outcomes. *Scandinavian Journal of Work, Environment and Health,* 31, 367-374.

Lundberg, U. & Melin, B. (2002). Stress in the development of musculoskeletal pain. In: Linton, s. (ed.), new avenues for the prevention of chronic musculoskeletal pain and disability. *Journal of Best Practice & Research Clinical Rheumatology,* 165-179.

Manshor, A., Fontaine, R., & Siong Choy, C. (2003). Occupational stress among managers: a Malaysian survey. *Journal of managerial psychology*, *18*(6), 622-628.

Meerding, W.J., Ijzelenberg, W., Koopmanschap, M.A., J.L. Severens, J.L. & Burdorf, A. (2005). Health problems lead to considerable productivity loss at work among workers with high physical load jobs. *Journal of Clinical Epidemiology,* 58, 517-523.

Medibank, (2011). Sick at work. Retrived on August 20, 2015 from www.medibank.com.au.

Michailidis, M., & Asimenos, A. (2001). Occupational stress as it relates to higher education, individuals and organizations. *Work (Reading, Mass.)*, *19*(2), 137-147.

Norman, K. (2005). Call centre work: characteristics, physical, and psychosocial exposure, and health related outcomes.

Northern Arizona University, (2005). Comparison of responses from the Higher Education Research Institute Faculty Survey: Northern Arizona University's Faculty and Academic Administrators. Retrieved on August 20, 2015 from http://www4.nau.edu/pair.

O'Donnell, M.P. (2000). Health and productivity management: the concept, impact, and opportunity: commentary to Goetzel and Ozminkowski (comment). *American Journal of Health Promotion,* 14(4), 215-217.

Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*. Open University Press.

Palmer, K., Smith, G., Kellingray, S. & Cooper, C. (1999). Repeatability and validity of an upper limb and neck discomfort questionnaire: the utility of the standardized Nordic questionnaire. *Occupational Medicine*, 49, 171-175.

Pransky, G., Benjamin, K., Hill-Fotouhi, C., Fletcher, K.E., Himmelstein, J. & Katz, J.N. (2002). Work-related outcomes in occupational low back pain: a multidimensional analysis. *Journal of Spine,* 27(8), 864-870.

Punnett, L., & Wegman, D.H. (2004). Work-related musculoskeletal disorders: the epidemiologic evidence and the debate*. Journal of Electromyography and Kinesiology, 14,* 13–23.

Robbins, S.P. (2001) Organizational Behavior. 9th edition. Englewood Cliffs, New Jersey: Prentice Hall.

Rocha, L. E., Glina, D. M. R., Marinho, M. D. F., & Nakasato, D. (2005). Risk factors for musculoskeletal symptoms among call center operators of a bank in Sao Paulo, Brazil. *Industrial Health*, *43*(4), 637-646.

Rosenhan, D. L., & Seligman, M. E. (1995). *Abnormal psychology* . WW Norton & Co.

Shapiro, S. L., Shapiro, D. E., & Schwartz, G. E. (2000). Stress management in medical education: a review of the literature. *Academic Medicine*, *75*(7), 748-759.

Sen, A., & Richardson, S. (2007). A study of computer-related upper limb discomfort and computer vision syndrome. *Journal of human ergology*, *36*(2), 45-50.

Swanson, N.G., & Sauter, S.L. (2006). A multivariate evaluation of an office ergonomic intervention using longitudinal data. *Theoretical Issues in Ergonomics Science,* 7(1), 3-17.

Turpin, R. S., Ozminkowski, R. J., Sharda, C. E., Collins, J. J., Berger, M. L., & Billotti, G. M. (2004). Reliability and validity of the Stanford presenteeism scale. *Journal of Occupational and Environmental Medicine, 46,* 1123–1133.

van Tulder, M., Malmivaara, A., & Koes, B. (2007). Repetitive strain injury. *The Lancet*, *369*(9575), 1815-1822.

Viljoen, J.P., & Rothmann, S. (2009). Occupational stress, ill health and organizational commitment of employees at a university of technology. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 35*(1), 1-11.

Ye, Z., Abe, Y., Kusano, Y., Takamura, N., Eida, K., & Takemoto, T., (2007). The influence of visual display terminal use on the physical and mental conditions of administrative staff in Japan*. J Physiol Anthropol, 26,* 69-73.

Emotional Intelligence, Ulul-Albab Leadership Styles and Employees' Commitment

Nurul Naimah Zakaria, [1]Abdul Kadir Othman and [2]Erne Suzila Kassim
Faculty of Business and Management
Universiti Teknologi MARA, Puncak Alam
Malaysia
[1]abdkadir@ puncakalam.uitm.edu.my
[2]ernekassim@puncakalam.uitm.edu.my

ABSTRACT

The relationship between leadership styles and employees' commitment is the important element for organizational success. Studies have found that one of the general problems of employees' commitment is poor manager-subordinate relationship. Therefore, the study was conducted to examine the roles of leaders in relations to employees' commitment. Therefore, using a quantitative survey approach, we seek to get responses from employees at different organizations towards their leader's emotional intelligence and ulul-albab traits. The data were analysed for their factor structure, internal consistency, correlations and regressions. The findings reveal for the associations between leader's emotional intelligence and ulul-albab traits and employee commitment. The most significant traits that predict normative and affective commitment are self-awareness, and brotherhood and humanity. As this study took the approach of measuring the roles of emotional intelligence and ulul-albab characters in a single study, it adds to the knowledge by imparting both traits as an effective leadership quality. Thus, it opens for more opportunities for future research to investigate a more comprehensive role of leaders as agents of organizational success.

Key Words: employee commitment, emotional intelligence, ulul-albab leadership style, leadership style.

1. INTRODUCTION

Managing employees in an organization is a challenging task and engaging their commitment is even more demanding. Today, organizational success depends on the quality and commitment of the employees as organizational goals are better achieved with a group of motivated and committed team (Norshidah, 2008; Erzan, Omar & Mahmoud, 2014). Many factors might influence commitment and one of them is leadership style. Leadership is the main function in determining the goals, motivating and influencing the team and coordinating the organizational path. It is a crucial element that boosts and brings together an organization (Rad & Yarmohammadian, 2006), and creates positive chains to organizational performance. Leaders who promote growth and development are usually emotionally intelligent leaders who are able to influence the manpower to achieve high commitment, job performance and productivity (Bae, Chuma, Kato, Kim & Ohadhi, 2011). In studying leadership style, positive relationships are consistently found between emotional intelligence and employee commitment. While there are various approaches of leading an organization, this study is meant to determine the role of ulul-albab leadership style, in addition to understanding the leader's emotional intelligence. Deriving from the teaching of Al-Quran and Hadith, ulul-albab signifies comprehensive mentoring, coaching, supervising and inspiring approach. Yet, the relationship approach is least examined. Therefore, it is important to understand if ulul-albab characteristics play a significant role in building human capacity, especially in the context of determining employee commitment. This is also in line with the mission and government aspiration to inculcate holistic approach in leading the many aspects of services.

2. REVIEW OF RELATED LITERATURE

2.1. Employee Commitment

Commitment is usually stronger among longer-term employees, those who have experienced personal successes in the organization, and those working with a committed employee group. Newstrom and Davis (1986) proposed employee commitment as a level where employees recognize their significant roles in the organization and desire to continue actively participating in it. Luthans (1995) elucidated employees' commitment as a strong decision to remain with their position in an organization, a feeling of willingness to utilize high levels of endeavour on behalf of the organization as well as a feeling of unambiguous in accepting the organizational values and goals.

Commitment is described as an attitude of employees to be loyal to their organization and the process is continual in a way that the employees expressed their concern for the organization and its on-going success (Mayer & Allen, 1996). Madigan, Norton and Testa (1999) added that committed employees have attitudes such as working diligently, conscientiously, providing value, promoting the organization's output and searching for continuous improvement as well. Since they can contribute something good to the organization for a long term, in return, they expect the organization to provide them with work environment that stimulates growth and empowerment, chances to own a balance life between personal and work, never fail to meet customers' needs as well as providing an adequate welfare for them; education and training. Employee commitment has been studied from various approaches, models and dimensions. Table 1 shows the most common constructs that have been applied in many researches, presented by Rocha, Cardoso and Tordera (2008). Among the three, the Three Comparison Model (TCM) is the most widely used (Greenberg & Baron, 2003).

Table 1: Different Approaches in Studying Employee Commitment

Three Comparison Model (Allen & Mayer, 1990)	Three Dimensional Model (O'Relly & Charman, 1986)	Four Dimensional Model (Quijano, 2000)
• Affective: Emotional attachment, identification, enjoy membership	• Internationalization: Congruence of value and objectives	• Value-Related: Congruence of values and objectives
• Continuance: Leaving costs and benefits	• Identification: Desire for affiliation	• Affective: Need for affiliation
• Normative: Feeling of obligation	• Compliance: gain specific rewards	• Exchange: Extrinsic rewards
		• Need: Keeping job

TCM consists of affective, continuance and normative commitment. Based on the model, employees who possess high level of affective commitment will either remain or decide to leave the organization than employees who come with high continuance commitment that is more likely to remain with the organization. On the other hand, employees who have strong normative commitment, depending on the situations, will remain if they think they should remain (Allen & Mayer, 1990). If they think they should not, they would simply go. This commitment can be defined as attachment and loyalty.

Employees who have affective commitment normally will retain in the same organization for a longer period because when they feel satisfied with their job performance and role as organizational members, they will automatically develop a sense of affective commitment. As the affective commitment consists of three elements; employee's emotional attachment to, identification with, and involvement in the organization - they will be clearly exposed to the organizational goals and feeling of responsibilities to achieve those goals, they will exhibit a sense of emotional attachment to an organization (Allen & Mayer, 1990).

Normative commitment is conceptualized as the employees' belief that they have a responsibility to their organization (Bagraim, 2003). According to Celik (2009), normative

commitment refers to a feeling of responsibilities towards organization. Meyer and Allen (1990) stated that normative commitment is closer to “a feeling of obligation” that directly will make the employee remain with the organization.

Samina and Komal (2011) argued continuance commitment as the commitment that the employees have to stay with the organization because it is costly for them to leave the organization. In addition, Celik (2009) added that it also involves the cost of investment made by the employees to the organization. On the other hand, it can also be described as the employees’ intention to retain with the organization because they might already have personal investments in the form of non-transferable investment (close relationship with mates, retirement and career investment, acquire job skills that might be unique that only match with a particular organization, years of working, participation in organization activities, geographical issue) or other benefits that they think is really expensive for them to leave and find the new one at a new place (Jha, 2011). Continuance commitment will cause the employees to refuse to leave the organization (Yiing & Ahmad, 2009).

2.2. Leader’s Emotional Intelligence

Leadership has a strong connection to the concept of emotional intelligence (EI) (Feather, 2009). Emotional intelligence is about how people manage their emotions and it requires emotional competence, which is the ability to influence people’s attitude which will affect the employees’ motivation at their workplace (Leiter, Oore, Day & Laschinger, 2011). Leaders who are emotionally intelligence are able to notice employees’ emotional stress and positive-negative emotions (Zampetakis & Moustakis, 2011). With emotional maturity, leaders can recognize employee’s feeling such as depression or stress (Bass, 2002).

Generally, a positive correlation is found between emotional intelligence and employee commitment. Nikolaou and Tsaousis (2002) found there is a strong relationship between some constructs of emotional intelligence and employee commitment. Carmeli (2003) also found affective commitment is related to emotional intelligence and leaders with high emotional intelligence are likely to attach themselves to the organization as well. However, there is no significant relationship between EI and continuance commitment.

Hu et al., (2011) asserted that employees remain in the organization if there is an effective leadership. With the existence of emotionally intelligent leaders, employees are motivated to perform in their jobs and increase productivity (Bae et al., 2011). Goleman (1998) suggested that the five components of EI, which are self-awareness, self-regulation, motivation, empathy, and social skills can be used to achieve successful job performance. Table 2 summarizes the five competencies of EI (Orsntein & Nelson, 2006).

Table 2: Five Dimensions of Emotional Intelligence

EI Dimensions	Behavioral Description
Self-Awareness	• Ability to accurately recognize one’s emotions and their causes. • Ability to be realistic and appropriately identify one’s strengths and weaknesses
Self-Regulation	• Belief that one is capable (mentally and physically) of accomplishing one’s goals. • Ability to keep emotions and behaviors in check. • Ability to say what you mean and mean what you say [emphasis added]. • Concern for, and actions directed, and follow through. • Ability to shift behavior and thought from preferred to other modes.
Motivation	• Inspiration to achieve high accomplishment. • Persistence in the face of obstacles/difficulties/failures. • Taking control of a situation because you choose to. • Ability to think positively about the future.
Empathy	• Ability to recognize other’s emotions through non-verbal cues. • Helping others to grow and accomplish their goals. • Desire to help others.

	• Ability to recognize the realities of power and politics.
Social Skills	• Ability to communicate a message so that people will change their behaviors and thoughts. • Ability to coordinate with and respond to others. • Ability to form effective working relationships with others. • Ability to face conflict and find a solution that brings opposing parties positive outcomes.

2.3. Ulul-Albab Leadership Style

Ulul-albab is an Islamic term derived from the Almighty Holy Book, al-Quranul Karim. The term then has been widely used by Islamic and western scholars from all over the world and increasingly recognized in Malaysia since the remark made by the former Prime Minister Malaysia's fifth Tun Abdullah Haji Ahmad Badawi in his keynote speech at the Putra World Trade Centre (PWTC) in 2006 (Sabri, 2009). Countries' leaders then spread the term to their nations but the acceptance was mixed (Wan Mariana & Mohd Shafiee, 2012). From the al-Quran, ulul-albab can be defined as "people who can understand" and "people who has the mind".

Ulul-albab is a group of individuals who has been awarded by Allah (SWT) with special ability who are given wisdom, intelligence and knowledge as well as empirically derived knowledge in any matter (Wan Mariana & Mohd Shafiee, 2012). They also have sharp mind as well as a very good knowledge of foundation in Islam; "Fardu Ain" and "Fardu Kifayah" (Abdullah, 2006). Besides, ulul-albab is a trusted group of encyclopaedic scholars who are believed by Muslims that their responsibility are important to blow up the spirit of religion and play roles to build the Islamic civilization based on their ability to master a variety of knowledge (Abdullah, 2006). Sabri (2009) in his book entitled *"Generasi Ulul-Albab Segunung Harapan Seteguh Gagasan"* shares a few more definitions and writings from a few scholars. Among them are the writings of former mufti of Perlis, Dr. Mohd Asri Zainul Abidin, who defined ulul-albab as a group of individuals who have matured minds and high comprehension that they are able to make proper assessments.

The group will have a strong belief in Allah (SWT) where they always put Allah (SWT) as a priority and feel amazed with Allah's (SWT) creations. They believe that every creation has its own untold secret (Mohd Kamal, 2006). The next generation is expected to uphold the ulul-albab traits, which the leadership is based on al-Quran as guidance and source of knowledge. They should be able to bring peace to the world as it is their responsibility as the Caliphs of Allah.

Four dimensions were suggested in explaining ulul-albab leadership styles, which are love approach, leadership by example, appreciation and brotherhood and humanity (Jamal, 2012). Maslow (1954) believed that love is a human desire. Integrating love in organization will strengthen employees' emotions, thus develop their moral values. Leaders in organizations should understand that employees who perform well do not solely depend on their commitment or other related factors. But, it is the social relationship with the leaders that emphasizes on humanistic values, that promotes the healthy working environment (Slameto, 1995). As role models, leaders should have eminent personalities to earn respect from their employees (Rohaty, 2003). Leaders should possess charismatic leadership traits and spiritual qualities such as sincerity, honesty, patience, love and uphold moral values. Furthermore, a good leader will always acknowledge and appreciate employees as a sign of gratitude for their contributions (Yulk, 2002). By recognizing them, employees will be more motivated (Suraiya, 2011) and studies have found significant relationship between appreciation and employee commitment. Finally, in the context of Islam, the relationship between employer and employee is based on hablunmin al-nas that is to defend both sides of the parties (Mustafa, 1994). Hope given by a brother (a person) to another brother is like hope given by an employee to an employer (Hakim, 1989). Similarly, the relationship is known as ukhuwwah, a situation in which a brother is willing to take care of one another in delivering services in order to avoid unpleasant consequences (Wan Ali, 2002).

2.4. Relationships between Leadership Styles and Employee Commitment

The environment of the internal organization that comprises leadership style, organizational atmospheric condition and co-workers' relationships normally will affect the employee commitment as well as the quality of the employee-leader relationship (Chen, 2005). Yulk (2002) found that how employees are connected to leaders is based on how the leaders treat them. It was supported by Wang and Howell (2010) who believed that it will be a nightmare to employees if they need to work with leaders who are hostile and unsupportive. Employees prefer to work with leaders who support them and provide them with adequate guidance and instructions instead of working with leaders who only like to criticize them (Yulk, 2002). Furthermore, leadership plays a big role in making employees remain with the organization and can become a determinant of success or failure of an organization (Bass & Avolio, 1997).

According to Stum (1999), commitment depends on how leadership is practiced. Leaders need to posses good leadership skills because they will affect the development of organizational commitment. Previous research proves that there is a positive relationship between leadership behavior and organizational commitment (Billingsley & Cross, 1992). Using EI and ulul-albab leadership styles as the determinants of commitment, the following hypotheses are suggested.

H_1: There is a positive relationship between leaders' self awareness and employees' commitment
H_2: There is a positive relationship between leaders' motivation and employees' commitment
H_3: There is a positive relationship between leaders' empathy and employees' commitment
H_4: There is a significant relationship between leaders' social skill and employees' commitment
H_5: There is a positive relationship between leaders' self regulation and employees' commitment
H_6: There is a positive relationship between leaders' love approach and employees' commitment
H_7: There is a positive relationship between leaders' leadership by example and employees' commitment
H_8: There is a positive relationship between leaders' appreciation and employees' commitment
H_9: There is a positive relationship between leaders' brotherhood and humanity and employees' commitment

3. RESEARCH METHODOLOGY

3.1. RESEARCH DESIGN

A quantitative survey method was deployed as the research design. Items were adopted from past studies and validated by experts in the field. The population was government officers in selected public service agencies who need to assess their commitment level and the immediate supervisor's leading styles. The internal consistency test of the pilot study shows that the results of the items were greater than .70, thus reliability can be assumed. Using stratified proportionate sampling techniques, 269 responses were collected. Performing a normality test for the data produced the score of Kurtosis and Skewness values at the range of +/-3, indicating that the data were normally distributed. Table 3 presents the demographic profiles of the respondents.

Table 3: Demographic Profiles

Profile		N	%	Profile		N	%
Gender	Male	85	31.6	Length of Service	<5 years	73	26.4
	Female	184	68.4		6 - 10 years	116	41.9
Age	< 30	69	24.9		11 - 15 years	46	16.6
	31 – 35	26	9.4		16 - 20 years	35	12.6
	36 - 40	69	24.9		>20 years	7	2.5
	41 - 45	63	22.7	Position	Top Level	32	11.6
	46 - 50	22	7.9		Middle Level	74	26.7
	> 50	28	10.1		Lower Level	171	61.7
Marital Status	Single	73	26.4	Immediate Supervisor	Director	32	11.6
	Married	204	73.6		Head of Dept	22	7.9
Education	Master	4	1.4		Head of Unit	132	47.7
	Bachelor	41	14.8		Chief of Clerk	91	32.9
	Diploma	132	47.7				
	High School	100	36.1				

3.2. Factor Analysis

Factor analysis was performed as a technique for data reduction. The exploratory factor analysis was conducted to measure the validity of the leader's emotional intelligence scale: self-awareness, motivation, empathy, social skill and self-regulation. Table 4 shows the rotated factor loading. The 25 items of leader's emotional intelligence were subjected to the principle component factor analysis. The results show that there were only three components of leader's emotional intelligence. Ten items were removed due to high cross-loadings and only 15 items were retained. The principle component analysis revealed the presence of three components with 69.94% of the explained variance. Thus, the cumulative percentage of leader's emotional intelligence was appropriate as the percentage is above 60 % (Heir et al., 2010). The KMO result for the factor analysis for the leader's emotional intelligence is .843 and the Barlett's Test of Sphericity is highly significant with a value of p<.05 (Approx. Chi-Square = 3304.034, p<.001) indicating the significant correlation matrix and the appropriateness of factor analysis.

Table 4: Factor Analysis of Independent Variable: Leader's Emotional Intelligence

Factors	**Components**		
	1	**2**	**3**
Social Skill_24	**.862**		
Social Skill_25	**.873**		
Social Skill_26	**.845**		
Social Skill_27	**.860**		
Social Skill_28	**.613**		
Self-Awareness_9		**.856**	
Self-Awareness_10		**.766**	
Self-Awareness_11		**.762**	
Self-Awareness_12		**.854**	
Self-Awareness_13		**.859**	
Empathy_19			**.701**
Empathy_20			**.837**
Empathy_21			**.796**
Empathy_22			**.818**
Empathy_23			**.770**

The principal component factor analysis was performed in order to measure the validity of the *Ulul-Albab* leadership style scale. Four dimensions were used; love approach, leadership by example, appreciation, and brotherhood and humanity. Table 5 shows the rotated factor loadings. Initially, there were 28 items but the results suggested four factors with 18 items to be retained with 70.345 % of the explained variance. The KMO measure of sampling adequacy is .871, indicating the items were interrelated. The Barlett's Test of Sphericity shows a significant result with a value of (Approx. Chi-Square = 3164.065, p<.001), indicating the significant correlation matrix and the appropriateness of factor analysis.

Table 5: Factor Analysis of Independent Variable: Leader's Ulul-Albab Approach

Factors	Components			
	1	2	3	4
Appreciation 49	**.793**			
Appreciation 50	**.859**			
Appreciation 51	**.786**			
Appreciation 52	**.839**			
Appreciation 53	**.789**			
Love 34		**.743**		
Love 35		**.769**		
Love 36		**.743**		
Love 37		**.774**		
Love 38		**.653**		

Brotherhood and Humanity 55	**.741**	
Brotherhood and Humanity 56	**.710**	
Brotherhood and Humanity 57	**.754**	
Brotherhood and Humanity 58	**.756**	
Leadership by Example 44		**.816**
Leadership by Example 45		**.751**
Leadership by Example 46		**.647**
Leadership by Example 47		**.602**

Employee commitment was measured as affective, continuance and normative commitment. Table 6 shows the rotated factor loadings, suggesting only eight items to be valid. The principle component analysis shows the presence of two dimensions with 69.140 % of the explained variance. The KMO measure of sampling adequacy is .853, indicating that the items were interrelated. The Barlett's Test of Sphericity shows a significant with a value (Approx. Chi-Square = 1345.964, p<.001), indicating the significant correlation matrix and the appropriateness of factor analysis.

Table 6: Factor Analysis of Independent Variable: Employee Commitment

Factors	**Components**	
	1	**2**
Normative Commitment_72	**.806**	
Normative Commitment_73	**.779**	
Normative Commitment_74	**.797**	
Normative Commitment_75	**.698**	
Normative Commitment_76	**.836**	
Affective Commitment_62		**.845**
Affective Commitment_63		**.871**
Affective Commitment_65		**.810**

Due to the results of factor analyses, the hypotheses were revisited, dropping the hypotheses related to social regulations and motivations.

4. FINDINGS AND DISCUSSION

4.1. Correlation Test

Prior to the hypotheses testing, a set of correlation test was conducted. A reliability test was performed to measure the stability and consistency of the instrument in measuring a concept and helps to assess the goodness of a measure. The results are presented in Table 7. The results indicate a good consistency of the items in measuring the variables and the existence of significant associations among all variables. The strongest association is between self awareness and affective commitment (r=.634, p < 0.01), followed by self awareness and normative commitment (r = .596, p < 0.01) and social skills and affective commitment (r = .394, p < 0.01).

Table 7: Cronbach's Alpha and Correlation Test

No.	Variables	1	2	3	4	5	6	7	8	9
1	Self-awareness	(.899)								
2	Empathy	.399**	(.890)							
3	Social Skills	.369**	.534**	(.911)						
4	Love	.328**	.479**	.566**	(.865)					
5	Leadership by Example	.320**	.440**	.343**	.428**	(.787)				
6	Appreciation	.300**	.565**	.562**	.533**	.542**	(.922)			
7	Brotherhood	.361**	.542**	.494**	.507**	.520**	.456**	(.822)		
8	Affective	.634**	.223**	.394**	.289**	.253**	.238**	.335**	(.828)	
9	Normative	.596**	.321**	.225**	.238**	.268**	.323**	.340**	.398**	(.869)

4.2. Findings and Discussion

The results of the hypotheses testing are displayed in Table 8.

Table 8: Results of Hypotheses Testing

Variables	AC	NC	Variables	AC	NC
	Beta	Beta		Beta	Beta
Self-awareness	.601**	.565**	Love	.133**	.000
Empathy	-.151**	.121**	Leadership by examples	.065	.044
Social skills	.253**	-.048	Appreciation	.032	.195**
			Brotherhood	.220**	.228**
R^2	.447	.364	R^2	.136	.152
F Value	73.499	52.171	F Value	10.689	12.217
Sig F Value	.000	.000	Sig F Value	.000	.000
Durbin-Watson	1.903	1.511	Durbin-Watson	1.886	1.512

Self-awareness plays a significant role in influencing employees' commitment, both the affective ($\beta = .601$, $p < .001$) and normative commitment ($\beta = .565$, $p < .001$). In fact, comparing the results of all predictors, self-awareness shows a consistent result. While empathy is significant in predicting normative commitment ($\beta = .121$, $p < .001$), it is negatively related to affective commitment ($\beta = -.151$, $p < .001$). Likewise, social skill is significant in influencing affective commitment ($\beta = .253$, $p < .001$), but unlikely for normative commitment ($\beta = -.048$, $p > .05$). Looking at the variance explained, 44.7% of the variance in affective commitment is explained by emotional intelligence factors, while 36.4% of the variance in normative commitment is explained by emotional intelligence factors of leaders.

Looking at the ulul-albab leadership style, love, leadership by example, appreciation, brotherhood and humanity approaches explain 15.2% of the variance in normative commitment, but they only explain 13.6% of the variance in affective commitment. The only predictor that plays significant roles in both types of commitment is brotherhood and humanity ($\beta = .220$, $p < .001$, for affective commitment and $\beta = .228$, $p < .001$, for normative commitment). On the other hand, leadership by example is not significantly related to both affective commitment ($\beta = .065$ $p > .05$) and normative commitment ($\beta = .044$, $p > .05$).

These results are consistent with Meyer et al. (2002) which affirmed that employees' behavior is stronger on affective and normative commitment instead of continuance commitment, which was perceived to be not related to the work behaviour. A leader must be competent by which he or she is able to be an influencer to every employee so that he or she is able to practice several types of leadership when handling isolated events in the organization, created by internal or external parties (Woods, 2010). Similarly, Nikolaou and Tsaousis (2002) found strong relationship between emotional intelligence and employee commitment. Studies confirmed that a leader's emotional intelligence was directly related to employee commitment (Lin, Chen & Chuang, 2011). Meanwhile, Hu et al., (2011) stated that employees will remain in the organization if there is effective leadership with a very good attribute. Besides, Bae et al. (2011) believed that the existence of emotionally intelligent leaders will motivate employees in improving their job performance and productivity. This shows that employees tend to be committed and willing to serve for the best interest of their work when leaders support and guide them to ensure that their expectations are satisfied and achieved.

In this context, leaders in organizations should understand the importance of managing their emotions and instil ulul-albab traits. The leaders must enhance their self-awareness and empathy when dealing with employees. Similarly, it is important for leaders to build relationships with their employees in promoting effective and efficient teamwork. According to Meyer and Allen (1997), employees who have good relationship with their immediate work group also have higher levels of commitment.

5. CONCLUSION

The study was conducted to examine the roles of leadership styles in influencing employees' commitment. There are significant associations between leader's emotional intelligence and normative and affective commitment and between ulul-albab leadership styles and normative and affective commitment, with different intensity. Leaders must exhibit good self-awareness, empathy, social skills, love, leadership by example, appreciation and brotherhood and humanity in connecting with the employees. As this study took the approach of examining the roles of emotional intelligence and ulul-albab in a single study, it adds to the existing knowledge regarding the effective leadership approach. Thus, it opens up more opportunities for future research to investigate a more comprehensive role of leaders in affecting employees' commitment.

REFERENCES

Abdullah, M. Z., (2006). Ulul-albab: Pendekatan Islam Hadhari ke Arah Melahirkan Modal Insan terbilang. *Seminar Ulul-albab,* Kuala Terengganu.

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), 1-18.

Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of vocational behavior*, *49*(3), 252-276.

Bae, K. S., Chuma, H., Kato, T., Kim, D. B., & Ohashi, I. (2011). High performance work practices and employee voice: A comparison of Japanese and Korean workers. *Industrial Relations: A Journal of Economy and Society*, *50*(1), 1-29.

Bagraim, J. J. (2003). The nature and measurement of multiple commitment foci amongst South African knowledge workers. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, *12*(2), 13.

Bass, B. M. (2002). Cognitive, social, and emotional intelligence of transformational leaders. In *Kravis-de Roulet Leadership Conference, 9th, April, 1999, Claremont McKenna Coll, Claremont, CA, US*. Lawrence Erlbaum Associates Publishers.

Billingsley, B. S., & Cross, L. H. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education*, *25*(4), 453-471.

Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes: An examination among senior managers. *Journal of managerial Psychology*, *18*(8), 788-813.

Çelik, C. (2008). Relationship of organizational commitment and job satisfaction: A field study of tax office employees. *Mersin University*, 138-155.

Chen, L. T. (2005). Exploring the relationship among transformational and transactional leadership behavior, job satisfaction, organizational commitment, and turnover on the IT Department of Research and Development in Shanghai, China. *Nova Southeastern University*.

deSequeira Rocha, F., Cardoso, L., & Tordera, N. (2008). The importance of organizational commitment to knowledge management.

Goleman, D. (1998). *Working with emotional intelligence*. Bantam Books.

Greenberg, J., & Baron, R. A. (2003).Behavior in Organizations, eighth (international) edition.

Hakim, M. S. (1989). The employer and the employee Islamic concept. Trans, Kuala Lumpur.

Hu, Q., Xu, Z., Dinev, T., & Ling, H. (2011). Does deterrence work in reducing information security policy abuse by employees?.*Communications of the ACM*, *54*(6), 54-60.

Ishak, S. (2011). Model kepemimpinan etika berlandas sirah Nabi Muhammad SAW. *Jurnal Hadhari*, *3*(2), 23-44.

Jamal, N. Y. (2012). Analisis Pengembangan Konsep Dasar Kepemimpinan Rektor Universitas Islam Negeri (UIN) Malang Periode Tahun 1998 sd 2008. *Jurnal Aplikasi Manajemen*, *7*(1), 173.

Jha, S. (2011). Influence of psychological empowerment on affective, normative and continuance commitment: A study in the Indian IT industry. *Journal of Indian Business Research*, *3*(4), 263-282.
Leiter, M. P., Laschinger, H. K. S., Day, A., & Oore, D. G. (2011). The impact of civility interventions on employee social behavior, distress, and attitudes. *Journal of Applied Psychology*, *96*(6), 1258.
Lin, Y. T., Chen, S. C., & Chuang, H. T. (2011). The effect of organizational commitment on employee reactions to educational training: An evaluation using the Kirkpatrick four-level model. *International Journal of Management*, *28*(3), 926.
Luthans, F. (1995). *Organizational behavior*.
Madigan, M., Norton, J., & Testa, I. (1999). The quest for work - life balance. [online]. Rogers Media.
Mahdi, O. R., Mohd, E. S. B. G., & Almsafir, M. K. (2014). Empirical study on the impact of leadership behavior on organizational commitment in plantation companies in Malaysia. *Procedia-Social and Behavioral Sciences*, *109*, 1076-1087.
Maslow, A. H. (1954). Motivation and Personality, New York: Harper & Row Publishers.
Mohd Kamal, H. (2006). Konsep ilmu and pembentukan generasi ulul-albab dalam konteks dunia global. *Seminar Ulul-Albab*, Kuala Terengganu.
Nawab, S., & Bhatti, K. K. (2011). Influence of employee compensation on organizational commitment and job satisfaction: A case study of educational sector of Pakistan. *International Journal of Business and Social Science*, *2*(8), 25-32.
Newstrom, J. W., & Davis, K. (1986). *Human behavior at work*. New York. McGraw-Hill.
Norshidah, M. N. (2008). *Relationship between emotional intelligence, leadership behavior and organizational commitment with organizational readiness for change in Malaysia institute of higher learning*. PhD Thesis, Universiti Putra Malaysia.
O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, *71*(3), 492.
Ornstein, S., & Nelson, T. (2006). Incorporating emotional intelligence competency building into the preparation and delivery of international travel courses. *Innovations in Education and Teaching International*, *43*(1), 41-55.
Rad, A. M. M, & Yarmohammadian, M. H. (2006). A study of relationship between managers' leadership style and employees' job satisfaction. *Leadership in Health Services*, *19*(2), 11-28.
Sabri, M. S. (2009). *Generasi ulul-albab segunung harapan seteguh gagasan*. (The ulul-albab generation: A *mountain of hope, an unfaltering concept*). Shah Alam: Karisma Publications Sdn. Bhd.
Stum, D. L. (2001). Maslow revisited: Building the employee commitment pyramid. *Strategy & Leadership*, *29*(4), 4-9.
Verleysen, B., & van Acker, F. (2012). *The impact of appreciative inquiry on employee work engagement explained through basic psychological needs and motivation*. Open University Netherland.
Wan Ali, W. J. (2002). Hubungan majikan dan pekerja dari perspektif Islam. *Jurnal Teknikal dan Kajian Sosial*, 157-165.
Wan Mariana, W. M., & Mohd.Shafiee, H. (2009). Penerapan konsep ulul-albab dalam pendidikan.
Wang, X. H. F., & Howell, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. *Journal of Applied Psychology*, *95*(6), 1134.
Woods, B. R. (2010). *The relationship between a manager's emotional intelligence and perceived leadership style* (Doctoral dissertation, Capella University).
Yiing, L. H., & Ahmad, K. Z. B. (2009).The moderating effects of organizational culture on the relationships between leadership behavior and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership and Organization Development Journal*, *30*(1), 53-86.
Yukl, G. A. (2002). Leadership in organizations.
Zampetakis, L. A., & Moustakis, V. (2011). Managers' trait emotional intelligence and group outcomes: The case of group job satisfaction. *Small Group Research*, *42*(1), 77-102.

Incorporation of Mobile Learning Approaches in Staff Training

Ros A. Yahaya[1], Nor H. Mohamed[2] and Mohd Khalid Abas[3]
1 UiTM Kampus Sek 17, Shah Alam, dr.rosyahaya@gmail.com
2 UiTM Kampus Sek 17, Shah Alam, serimadah@gmail.com
3 UiTM Puncak Alam, mkhalid@palam.uitm.edu.my

ABSTRACT

Mobile devices in training offers a new horizon to help participants to get started with mobile learning in the venture to experience the learning process. Various research emphasized the opportunities and benefits of using mobile learning, and simultaneously highlight the obstacles organizations faced when designing and implementing training using mobile learning. The aim of this paper is to highlight the practical in the difficulty in getting more participation and full engagement from the generation Y staff. outlooks in executing the mobile learning usage in staff training at an organization. Outcome of the case study reveals that the existing instructional technology and design of the training modules results The traditional approach neglects to consider the different learning approaches of the Gen Y's type of learners, their generational attributes and their values at the workplace. Future study should incorporate the use of other platforms such as Whatsapp™ or Instagram ™ among Gen Y.

Key Words: mobile learning; in-house training; team building; ADDIE model

1. INTRODUCTION

The world trend in integration of technology in teaching and learning is changing from correspondence paper based in 1960s to e-learning to mobile based. In line with the world trend, the mobile learning move in Malaysia is also growing. Mobile learning is the sophisticated system in a process of learning and can cooperate with various tools of communication. Mobile learning promotes learning at any place, anytime and anywhere (Ally, 2009; Martin et al., 2013). The learning process is continuous and allows collaboration with others to enhance understanding. Besides that, the use of web-based learning is easier and instructions can be delivered through wireless network. The fast development of mobile devices such as smartphones and tablets promote the usage of mobile technology in education and training. Today, mobile phones and tablets are very much connected to us. To some people, their mobile gadgets are considered as a life companion. Many studies related to mobile learning and teaching are beginning to take grounds in public and private universities in Malaysia (Hussin, 2013). The Ministry of Education has established the eLearning Council of Malaysian Universities which includes mobile learning (Embi & Nordin, 2013; Mariam & Muniandy, 2014). Mobl21 (2015) acknowledged the significant opportunities in mobile learning as follows: 1) Stimulate Learning at anytime and anywhere, 2) Promote equal access to learning, 3) Boost social communication, 4) Suitable for multiple learning environments, 5) Provide customised and individualised learning experience.

Many researchers and scholars argue that mobile learning provides the best learning approach without looking at the challenges of the application associated with the mobile learning. Common pitfalls should be identified, best practices and standards should be made available for sharing purposes (Ally, 2009) without sacrificing the learning effectiveness. Jacob and Issac (2008) argues that adaptive learning, limited text constraint, and instant communication are the barriers to consider. In another study conducted by DeWaard et al., (2011), students in mountainous or rural areas may face geographical obstacle. They were also concerned about the taboo issues and gender disparities that affect the effectiveness of the mobile learning. Finally, these arguments are supported by a study by Mohamad et al., (2012) that highlighted misusage possibility, education

policy that prevent the students to bring the mobile phone and tablets to schools, the cost incurs to deploy, manage and maintain the system, and finally possibility of personal space assault.

Despite the challenges, mobile learning is making a strong impact in the training industry. More and more trainers see mobile approaches as necessary to be incorporated into their training modules. Ally and Prieto-Blázquez (2014) proposed the following principles when designing the learning materials associated with mobile learning:

1) Presentation approaches that enable learners to understand and learn the material effectively.
2) Breakdown and structure the information into smaller portion to facilitate processing.
3) Allocate time for the learners to digest and master the new content
4) Allow the interactive learning with proper navigational procedure.
5) Create the learning materials that are handy and retrievable electronically.

Generation Y (Gen Y) is the wired generation, where they grew up in the world of interconnectivity. Gen Y came after Generation X who were born the 1980's and 2000 These young people are enthralled by the unlimited information availabe online, having special skills in utilizing the social media and know how to mobilise their networks. This is a generation that has, up until now, shown to be skeptical about political parties and more likely than any other age group to support dissimilar views. They insist that change is unavoidable and inevitable, to remain relevant within the modern world.

Many organizations face difficulties in dealing with generation gap especially the Generation Y. A study by Haeberle et al. (2009) had shown that generational disparities influenced many angles of the workplace related to people, process, systems, and technologies. Kapoor and Solomon (2011) recommended the management to understand and manage workplace with different generations. Therefore, the management should examine attributes of the Gen Y including their view of work, perspective on life and other related issues. Conflicts that exists between generations must be addressed immediately and utilization of the method to manage the gap in the most efficient way.

The Gen Y's general attributes and values were considered thoroughly. Referring to the Generational Differences Chart (WWMC, 2015), one of the factors that give great impact on Gen Y was the global digital media boom. Some of their attributes and values are as follows.

> "Very attached to the gadget and parents, focus on change using technology, think out of the box, self absorber, techno savvy and value training as important, new skill will ease stressful situation, motivated by learning" *(Generational Difference Chart, WWMC, 2015).*

Learning is unique to an individual. Every learner develops different learning style as they grow up. There are three main types of learning styles; Visual learners, Auditory and Kinesthetic. Visual Learners prefers learning through visual methods such as through pictures, graphics, illustrations and the like. Auditory learners prefers listening to sound before they can understand about things. One of the most common method is to read aloud or listening to background music while studying. Kinesthetic learners, on the other hand, learn best by touching, and hands-on experience. One way is to take notes, doing similar activitity involving touching. Several theories of learning apply to mobile learning (Figure 1), as cited by Embi and Nordin (2013) in Naismitsh et al. (2006).

Theme	Key Theorists	Activities
Behaviourist learning	Skinner, Pavlov	• drill and feedback • classroom response systems
Constructivist learning	Piaget, Bruner, Papert	• participatory simulations
Situated learning	Lave, Brown	• problem and case-based learning • context awareness
Collaborative learning	Vygotsky	• mobile computer-supported collaborative learning (MCSCL)
Informal and lifelong learning	Eraut	• supporting intentional and accidental learning episodes
Learning and teaching support	n/a	• personal organisation • support for administrative duties (eg attendance)

Figure 1: Key Learning Theories and suitable activities. Source: Embi & Nordin, 2013)

In-house staff training helps organizations to advance their companies. One of the trainings include team building among all staff members. The power of a strong team is many times effective than individuals working separately. Teamwork skills are taught and encouraged during team building sessions. It is critical to ensure a high performing team and eventually the company's success. Ability to work in a team creates a more effective staff who will drive the company to greater heights and increase productivity. The other important element is the diversity of skills and personalities where different personality types balance and complement each other.

This paper explores a case study of staff training programme for a private organization in Selangor. The mobile learning approach was proposed in order to incorporate mobile usage and learning in one of the team building programs. The main reason for the incorporation of mobile learning was due to most of the target participants were Generation Yers, who are the digital natives. This approach was seem appropriate and appeals to the new staff at the organization.

2.0 THE CASE STUDY

The aim of this case study is to highlight the practical outlook in executing mobile learning approach in team building at a private organization. The design of the current training module does not appeal to the Gen Y staff. It is difficult to get more participation and full engagement from them. The existing design neglects to consider an integrated approach between the types of learning style, the generational attributes and their values at the workplace. The purpose of the new design in team building approach was to reduce the generation gap. The team building program used mobile devices and mobile learning approach that opened a new horizon and offered opportunities to the training participants especially the Gen Y to incorporate mobile learning in enhancing the learning experiences.

Every year, the training department conducts team building programs for staff of the company using the traditional training module. This paper focuses on the latest approach which incorporates mobile learning in the module. This is due to most of the target participants were Gen Y staff. The following are the main purpose of the team building program:

a) Strengthen bonding the relationships among the workers
b) Boost teamwork and enhance communication in the organization
c) Improve quality, productivity, creativity, synergy in the organization
d) Inculcate the organization culture and value among the workers

2.1 Program Design and Procedure

The module for the team building program was designed based on the ADDIE instructional system design model. There are five phases of the ADDIE model as shown in Figure 2.

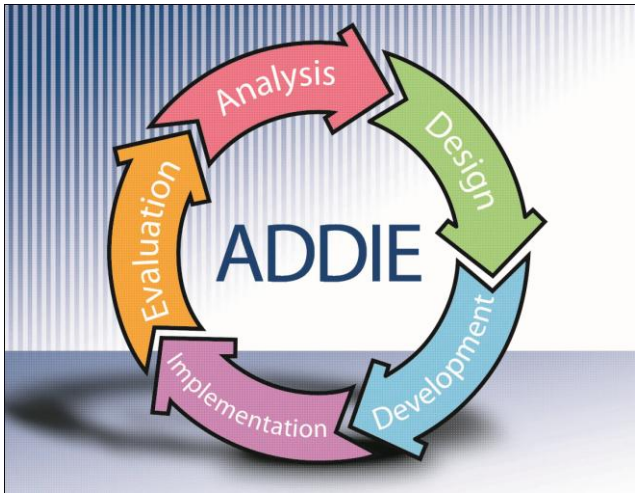


Figure 2: The ADDIE Model

In the first stage, the analysis stage required the program designing team to consider the needs of instruction, circumstances and barriers and also the participants' needs.

The Design stage focused on the learning objectives, methodologies, strategies and lesson planning. This stage considers all types of learning style when designing the program. In this phase, the incorporation of mobile learning took place.

The Development stage involved creation of colourful presentation slides and other materials for visual learners, prepared list of videos and musics to be used when performing the activities for auditory learners, challenging outdoor activities for kinaesthetic learners and problem solving based activities for indoor games to help the auditory learners to learn effectively.

The Implementation phase executed the usage of mobile as a learning tool together with facilitator's user manual.

The Evaluation phase were done based on the Kirkpatrick's Model of training evaluation (Smidt et al., 2009) as shown in Figure 3 below:

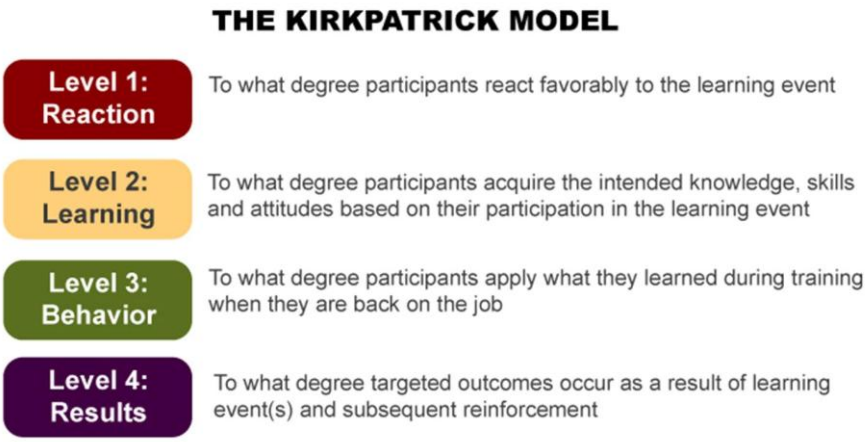


Figure 3: The Kirkpatrick Evaluation Model (Smidt et al., 2009)

The overall objective of the special team building program was to create a holistic approach in getting the participants to gel together and the focus was to get more participation and full engagement from Gen Y participants. As illustrated Figure 4, the case study design was proposed to provide the holistic view of the relationship between the instructional technology and design, the type of learners and the generational attributes and values of Gen Y participants.

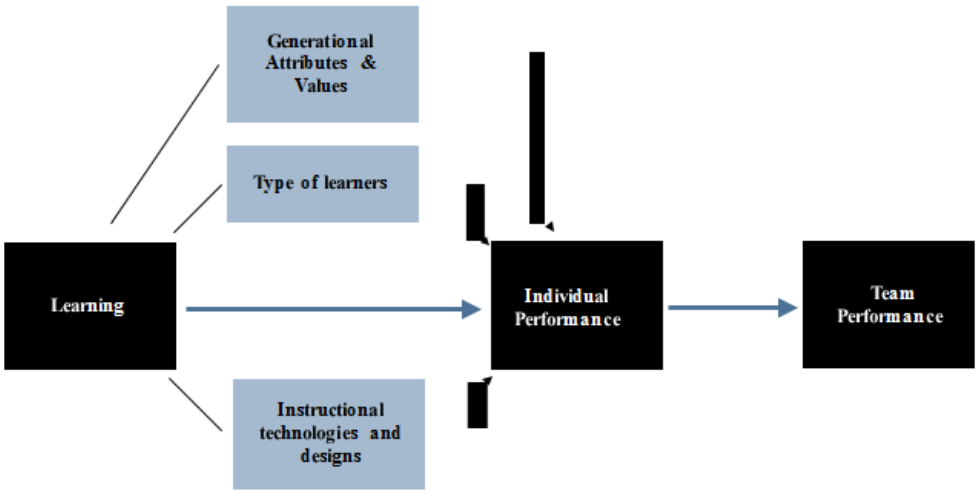


Figure 4: Case study design for Experiential Learning Transfer

The team building program was executed at one of the famous beach resorts in Malaysia. With good wi-fi and network coverage. There were 33 participants, who are executive level management from one of the departments in the organization. The program was conducted for two days and one night including the journey from the office to the resort. The itinerary as shown in the figure below:

Team Building Itinerary & Action Plan

Day	No	Activity	Venue	Start Time	End Time	Duration	Equipments Requirements	Methodology	Objectives
Day 1	1	Depart from HQ	TBA	7.30am	10.00am	150mins	Personal Luggage, Indemnity Form	Group Travel by Bus.	
	2	Arrival of participants & Registration, Welcoming Drinks	Lobby, Function Room	10.00am	10.30am	30mins	Name tag and registration sheet.	Team will register at the dedicated function room.	
	3	Introduction and ice-breaking	Function Room	10.30am	10.45am	15mins	Picture of animals,PA System,music	Participant will find their group by making sound of animals	Break the ice, to get familiar with one another.
	4	Briefing and Opening	Function Room	10.45am	11.00am	15mins	P.A system		
	5	Team formation	Function Room	11.00am	11.15am	30mins	White cloth 2"X1.5", mop stick, crayons, tapes	Draw their team flag, dress up mascot, slogan/tag line & war cry	Creating Brands and group identity.
	6	Orienteering briefing	Function Room	11.15am	11.30am	15mins			Safety,parameters,challenges
	7	**Activity 1: "Stick Placement"**	Function Room	11.30am	12.30pm	60mins	Measurement tape,pencils,masking tape	Participants will try to place the pencil as far as they can without any parts of the body touching the ground	Leadership, communication and also teamwork.
	8	Lunch, Check-in, Prayer	Room	12.30pm	2.00pm	1hr 30mins	Nil		
	9	**Activity 2: 'Treasure Hunt'**	Resort	2.00pm	6.00pm	4hrs	ribbons,list of countries,puzzle,envelopes,first aid	Participant will find items according to the bearings given and ended with rope course challenge	Strategic planning,leadership,communication and challenges
	10	Group photo		6.00pm	6.10pm	10mins	Nil		
	11	Free & Easy	Café/Hall	6.10pm	8.30pm	2hrs 30mins	Nil		
	12	**Dinner + Group show**	Lawn	8.30pm	10.30pm	2hrs	Musical instruments,props	They will plan to do a show according to the song list given	Communication,teamwork,creativity
	13	Supper		10.30pm	11.00pm	30mins	Nil	Nil	Nil
Program Break - Rest Time			Individual Room			11.00pm	All Participants		

Figure 5: The team building itinerary and action plan (Source: Survey Data)

Unlike normal team building programs, all participants must bring their mobile phones or tablets along the session. This pre-condition enabled the participants to use their personal mobiles as a tool in the program. Participants have to treat the tools as their that they have to take care in their own custody without missing or misplace the tools. The tools become symbolic meaning to their work burden that they have to carry on daily basis at their workplace.

Other than that, there were some of the task lists or requirements that they need to do as a part of the instructional design of the team building program that associated with mobile usage and mobile learning:

1) No torchlight was provided, participants need to use the mobile phone or tablet's torch light application for the solo drop game (night activity).
2) Additional to normal team's formation activities, all groups were required to create a group in social networking media using Web 2.0 tools (i.e., Twitter) for communication and sharing purposes.
3) No hardcopies of the instruction materials were given, the group leader need to take pictures for all the instructions materials before starting the Treasure Hunt activity. They were required to understand the hints given using the 'google search'.
4) No facilitator stationed at the checkpoints except for the first and the last check points whereby the participants need to take the group picture and send to the lead facilitator that they have already reached to every checkpoint and completed the task.

3. OUTCOME

During the focus group sessions, positive feedback were received on the new modules. Most of the participants were excited with the different than usual approach. They were very engaged in all the activities and fully committed to the program. Some of them wished the program could be extended to a longer duration and requested for a phase II program. The program was given 4.5/5 points for overall evaluations. Participants also reported that they can easily refresh newly learnt SKA (skill, knowledge and attitude) online, whenever needed. This concept is matched with the organization's Pull System where company should "produce or supply whatever needed, when it is needed in the exact amount needed" (Company Production System). Additionally, this approach also supports transfer of learning to the workplace.

Based on the observation, many participants discuss and share ideas with their peers to complete their tasks. They shared videos for the best practices from internal and external sources, with each other via their smartphones. Staff members are already using mobile communications where most of the participants have experienced Whatsapp™ groups with their colleagues and trainers for certain modules. Most communication, discussion and consultations on the subject matter took place via the instant messaging.

Overall the case study reveals that the mobile learning approach was successful and it is has the potential to boost motivation among all staff members to give full commitment to the team and the organization.

4. CONCLUSION AND FUTURE RECOMMENDATIONS

The case study reveals that it is time to start implementing technological innovations in the training industry. Organizations should revolutionize the traditional training and integrate the training with the latest technology. However, there is no urgent need to totally change the traditional modules with classroom training approach since this approach has proven to be one of the best approaches for formal learning at the workplace. Also, there is no 'one size fits all' system, it should be developed with options to build skill, knowledge and attitude (SKA) of the staff members. No doubt this effort requires full support from all levels of the organization, but with knowledge and skills from the training and development team, success is in hand. Future study should focus on a more comprehensive approach in staff training in line with the rapid advancement of technology. There is a potential to develop a blended learning with mobile learning approach for product training in the near future.

REFERENCES

Ally, Mohamed (Ed.) (2009). Mobile Learning: Transforming the delivery of education and training. Edmonton, Canada: Athabasca University Press.

Ally, M. (2009). Mobile learning: Transforming the delivery of education and training.Athabasca University Press

Ally, M., & Prieto-Blázquez, J. (2014). What is the future of mobile learning in education?. RUSC. Universities and Knowledge Society Journal, 11(1), 142-151.

De Waard, I., Abajian, S., Gallagher, M., Hogue, R., Özdamar Keskin, N., Koutropoulos, A., & Rodriguez, O. (2011). Using m-learning and MOOCs to understand chaos, emergence, and complexity in education. The International Review of Research in Open and Distance Learning, 12(7), 94–115

Embi, M. A., & Nordin, N. M. (2013). Mobile learning: Malaysian initiatives and research findings.

Gagne, R. M., Wager, W. W., Golas, K. C. & Keller, J. M. (2005). Principles of Instructional Design(6th Edition). Belmont CA: Wadsworth/Thomson Learning.

Haeberle, K., Herzberg, J. & Hobbs, T. (2009). Leading the Multigenerational Work Force.

Healthcare Executive, pp. 62-7.Kapoor, C. & Solomon, N. (2011). Understanding and Managing Generational Differences in the Workplace. Worldwide Hospitality and Tourism Themes Vol. 3(4), 308-318.For more information, please visit: http://www.apastyle.org/index.aspx

Hussin, S. (2013) Mobile Applications in Teaching and Learning. CIAST Shah Alam. Retrieved April 6, 2015 from https://mymlearning.wordpress.com/2013/09/19/mobile- applications-in-teaching-and-learning-ciast-shah-alam-19-sept/.

Jacob, S.M. & B. Issac (2008). The Mobile Devices and its Mobile Learning Usage Analysis.Proceedings of the International Multi Conference of Engineers and Computer Scientists, IMECS 2008, Hong Kong, 1, 19-21.

Malaysia: Centre for Academic Advancement, Universiti Kebangsaan Malaysia, 1-131.

Mariam Mohamed & Muniandy, B. (2014). Mobile-assisted language learning in Malaysia: Where are we now?. Proceeding of the Global Conference On Language Practice & Information Technology (GLIT 2014) (e-ISBN 978-967-11768-6-3). 9-10 June 2014, Kota Kinabalu, Sabah, MALAYSIA.

Martin, F., & Ertzberger, J. (2013). Here and now mobile learning: An experimental study on the use of mobile technology. Computers & Education, 68(1), 76-85.

Mob21 (2015). Mobile Learning Made Easy: Mobl21 Resource - Reading Material on Mobile Learning, Retrieved April 21, 2015, from http:www.mobl21.com/resources/

MoLeNET (2007). The Mobile Learning Network. United Kingdom. Retrieved April 5, 2015 from http://www.molenet.org.uk.

Mohamad, M., Maringe, F., & Woollard, J. (2012). Mobile Learning in Malaysian Schools: Opportunities and Challenges of introducing teaching through mobile phones. International Journal for e-Learning Security, 2(1), 133-137.

Portio Research (2015). Mobile Industry Report. Retrieved April 20, 2015, from http://www.portioresearch.com/en/mobile-industry-reports.aspx.

Smidt, A., Balandin, S. Sigafoos, J. & Reed, V. A (2009). The Kirkpatrick model: A useful tool for evaluating training outcomes. Journal of Intellectual and Development Disability, 34(3), 266-274.

Song, H.S.Y., Murphy, A. & Farley, H. (2013). Mobile devices for learning in Malaysia: Then and now. In H. Carter, M. Gosper and J. Hedberg (Eds.), Electric Dreams. Proceedings ascilite 2013 Sydney, 830-834. Retrieved April 6, 2015 from http:/www.ascilite.org/conferences/sydney13/program/papers/Song.pdf

Team Building and Staff Motivation Training, (2009). Online Management Training Series © 2009 Early are and Education Training and Consulting. Retrieved from http://www.tymthetrainer.com/images/Team_Building_and_Motivating_Staff.pdf

WMFC (2015). Generational Differences Chart. Retrieved May 20, 2015 from http://www.wmfc.org/uploads/GenerationalDifferencesChart.pdf.

Knowledge Sharing Intention among Tertiary Students in Malaysia: Individualism versus Collectivism

Norashikin Hussein[1], Ainie Hairianie Aluwi[2], and Nor Azian Abd Rahman[3]
UiTM Puncak Alam, Faculty of Business and Management, Centre for Management and Administrative Studies, Bandar Puncak Alam, 43200 Selangor Malaysia
[1]shikin6320@salam.uitm.edu.my
[2]ainie402@salam.uitm.edu.my
[3]norazian9829@salam.uitm.edu.my

ABSTRACT

This study investigates the effects of personal cultural orientation on student's knowledge sharing intention. The initial emphasis of knowledge sharing intention in the discourse of knowledge management strayed from cultural perspectives. Thus, the need for identifying the relationship between culture and student's intention to share knowledge was established. Data were collected from 300 final year students from various business degree programs in a public university in Malaysia. Results indicate that the level of knowledge sharing among tertiary students as moderate. Specifically, students with higher collectivism value have high tendency to share knowledge compared to those who are more individualism oriented. The findings of this study are expected to contribute to Malaysia's education system and future employers whereby cultural values need to be taken into consideration in enhancing the culture of knowledge sharing among tertiary students.

Key Words: Individualism, Collectivism, Knowledge Sharing.

1. INTRODUCTION

Knowledge is one of many key ingredients that give organizations the fighting edge to remain competitive and relevant. Organizations need to develop their employees to continuously compete and innovate to create the opportunities that organizations need to survive. These employees include entry level positions that consist of individuals who just graduated from tertiary education. Therefore, establishes the need for organizations to understand knowledge sharing intention of students at tertiary level for they will provide the workforce in organizations worldwide.

According to Yu (2014) various studies from different scholarly disciplines have examined knowledge sharing at the individual level. Although many domains were discussed, the effects of culture on knowledge sharing intentions lack discourse within the literature. Yet culture, specifically individualism and collectivism instil different motivation for people to share knowledge. For example, some students tend to accomplish more either interpersonally or academically in a cooperative environment compared to an individualistic environment. Goh and Sandhu (2013) highlighted there is still limited study in the context of knowledge sharing in the context of institutions of higher learning, particularly in developing countries. In fact, the level of knowledge sharing intention among tertiary students is hardly explored. Additionally, the link between both variables needs to be further explored as well. Thus, research on tertiary students is required to understand the development or evolution of knowledge sharing among students in Malaysian. Specifically, the objectives of the study are:

(1) To examine the level of knowledge sharing intention among students.
(2) To determine the relationship between personal cultural orientation (collectivism and individualism) and knowledge sharing intention.

2. LITERATURE REVIEW

The following review discusses the relationship between knowledge sharing intention (KSI) and personal cultural orientation from a knowledge-based view of a firm's perspective.

2.1. Knowledge Sharing

Knowledge is an abstract concept that requires an understanding of acquisition, dissemination, and application of prior knowledge to form new knowledge (Nanoka & Takeuchi, 1995). Knowledge acquired by employees is not easily distributed and converted into organizational knowledge. Knowledge is not easily shared either, even when knowledge is embedded into the organizational system. Employees in organization still find it hard to share what they know with others for different reasons. Often, the owner of the created knowledge could only share knowledge when they choose to inform other of what they know (Ma, Qi, & Wang, 2008).

What does it take to for people to share knowledge? Knowledge sharing needs more then just disseminating information to others. It also requires for the individual to help the person acquiring the knowledge to understand the contents and turn it into his or her own body of understanding that could be distributed to others later. Thus, make the knowledge they acquire become their very own newfound capabilities.

Firms obtain, disseminate, and apply knowledge exclusively within the organization are often link with having "strong" values embedded in their culture. An organization that embeds knowledge sharing into their organizational culture tends to enhance performance and competitive advantage of the organization. Evidence of this claim is found in research of cultures towards achievement of knowledge sharing in China (Lai & Lee, 2007).

Witherspoon, Bergner, Cockrell and Stone (2013) defined knowledge sharing as "contributions to, and among, individuals" which "exchanges relevant information, suggestions, and expertise with one another", and the shared knowledge can be explicit as well as tacit. Other than that, Ho and Kuo (2013) pointed out that knowledge sharing is a process of contributions and acquisitions. Ho and Kuo (2013) further distinguished knowledge sharing from knowledge construction and knowledge creation, and suggested that knowledge sharing as a transmission of information between people.

2.2. Personal Cultural Orientation

Previous researches have indicated organizational culture that supports knowledge sharing is tied to KSI. Lai and Lee (2007) defined organizational culture from a knowledge based view as the way individual develop a shared interpretations and understanding of organizational events within a given period of time. Culture is referred to as embedded in values, beliefs, and assumptions of organizational members that exist deep within the structure of organizations. Shared cultural assumptions create a preconscious, powerful, and group phenomenon that is difficult to disolve. Furthermore, Markus and Kitayama (1991) and Triandis (1995) suggest that individualism and collectivism should differentially moderate the attitude-intention and subjective norm-intention relations.

Kanzler, Niedergassel, and Leker (2012) reported several studies that found personal and cultural factors to have an effect on the intention to share knowledge and showed their cost and benefits in long-term/short-term perspective. Another study reveal that personal cultural orientation (also called personal cultural values or personal cultural dimensions) has an impact on behaviors and attitudes within the context of international business and marketing (Kumar, Fairhurst, & Kim, 2013). Kanzler, Niedergassel, and Leker (2012) continue to discuss that individualism and collectivism have strongly influence on the way how members of a culture interpret and share knowledge. For instance, individualists are more concerned about rationality, while collectivists focus on harmony and feelings during knowledge sharing processes.

2.3. Collectivism and KSI

The renowned study on national culture was conducted by Hofstede between 1970s to 1980s. Later, Hofstede (1998) established the accepted definition of collectivism by many scholars in terms of culture (Schulte & Kim, 2007) “as the extent to which people in a society from birth onwards are integrated into strong, cohesive in-groups, which, throughout the people's lifetimes, continue to protect them in exchange for unquestioning loyalty.” Hence, research in national culture continues to show that people in Asian or “eastern” countries have low individualism and strong collectivism traits. In addition, United States and other “western” countries showed strong individualism traits. Collectivism emphasized seeing the self as an extension of one’s in-group and choosing in-group goals over the individuals personal goals (Yu, 2014).

More studies were conducted to examine how far collectivism nations differ from individualism nations. One study of Chinese and US firms found that Chinese employees who were more into group and superiors’ expectations had more positive attitudes toward knowledge sharing, and that the Chinese respondents who were more latent to react to punishment with higher intent to share knowledge compared to US respondents. In contrast, individualism interpreted the self as distinct from one’s in-group and focused on personally satisfying goals over in-group goals (Yu, 2014).

The interdependence theory had stated that, the stronger the cultural context supporting friendship and polite behaviour, the more likely it is that members of the group to willingly share resources (Mohammed Fathi, Cyril, & Guan, 2011). In a study that compares between collectivist and individualivist cultures, researchers found that people might be more willing to share failures because it is good for the group; it also demonstrates affiliation with the group and support to accomplish the group’s goals (Noordin & Jusoff, 2010). Therefore, it is hypothesized that:

H1: There is a positive relationship between collectivism and knowledge sharing intention.

2.4. Individualism and KSI

Hui and Triandis (1986) defined individualism as brought together in four psychological qualities: a sense of personal identity, self-actualization, internal locus of control and post-conventional principled moral reasoning. The guiding principle of individualism is the interest of the individual. The study continues to explain differences in people from collective and individualism societies. Hui and Triandis explained that collective societies are more concerned with effects of their actions on others, sharing benefits and loss of face. That is, Magnini, et. al., (2013) reported that previous study build the theory on the concept that individualism is a mindset in which “personal interests are assigned more importance than the interests of the group.” In contrast, individualism context suggest there may be individual gains to feigning willingness to, but failing to actually share knowledge.

Besides that, there are many reasons why employees tend to choose to withhold or ‘‘hoard’’ knowledge. This element is identified as ‘‘selfish gene’’ model from evolutionary biology, employees act mainly from self-interest with a primary goal of propagating their genetic code (Witherspoon, et. al, 2013). Individualistic individuals will share only knowledge they have something to gain financially and economically. Therefore, it is hypothesized that:

H2: There is a positive relationship between individualism orientation and knowledge sharing intention.

2.5 The Conceptual Framework

Figure 1 presents the conceptual framework discussed in the study. The model investigates the relationships between collectivism and individualism on knowledge sharing behavior.

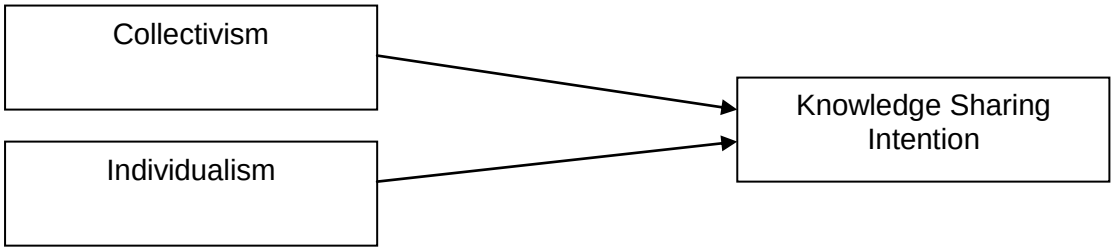


Figure 1: Conceptual Framework

3. RESEARCH METHODOLOGY

The present study utilized a cross sectional study where all data were collected at the same point of time. Final year students of various business degree programs were chosen as key respondents as they are expected to be more experience and well-exposed to knowledge compared to other students in the faculty. Hence, they tend to have higher intention in sharing knowledge. Data were collected through personally administered questionnaires as it gives the respondents personal space in answering the questions and almost 100 percent response rate ensured. Students were assured on the anonymity and the findings are used for academic purpose only. To measure cultural orientation, the study adopted Hooft and Jong's (2009) seven items for individualism and seven items for collectivism. Five items from Bock (2005) were used to represent knowledge sharing intention as the dependent variable. All items in the questionnaire were presented using five-point Likert Scale, ranging from 1 = "Strongly disagree" to 5 = "Strongly agree".

Data was statistically analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to establish frequency distribution for demographic profiles and providing descriptive statistics on the variables tested. Correlation analysis was used to understand the inter-correlation exist among the variables. Finally, multiple regression analysis was employed to test the hypotheses of the study

4. RESULTS AND DISCUSSION

Data were obtained from 300 final year students of various business degree programs of a public university in Malaysia. The respondents of this study were consisted of 24.3 percent male students and 75.7 percent of female students.

4.1 Result Analysis

To test the internal consistency of the variables, reliability test using cronbach alpha was utilized in the study. Based on Table 1, all variables were found to be acceptable based on their reliability values which ranged between 0.7 to 0.8. This is in line with many suggestions in the literature where reliability of 0.7 is considered adequate for a survey instrument. Among the independent variables, collectivism shows the highest mean of 3.72. This is followed by knowledge sharing intention with a mean of 3.65 and individualism with a mean of 3.59. The standard deviation for all variables ranges from 0.54 (individualism) to 0.56 (collectivism and knowledge sharing intention).

Table 1: Reliabilities and Descriptive Analysis

Variable	Cronbach Alpha	Mean	Standard Deviation
Knowledge Sharing Intention	0.77	3.65	0.56
Individualism	0.70	3.59	0.54
Collectivism	0.80	3.72	0.56

Note: All items used a 5-point Likert scale with (1=Strongly disagree, 2=Disagree, 3=Agree neither disagree, 4=Agree and 5=Strongly agree)

Pearson Correlation analysis is conducted to determine the direction, strength and significance of relationships between variables in the study. The correlation analysis was done in order to see the association between dependent variable and independent variables. Based on Table 2, all variables used in the study are interrelated to each other. Collectivism was found to be the highest to be correlated to knowledge sharing intention (r=.45, p<0.01).

Table 2: Pearson Correlation Analysis.

	Knowledge Sharing Intention	Individualism	Collectivism
Knowledge Sharing Intention	1.00		
Collectivism	0.45**	0.20*	1.00
Individualism	0.18**	1.00	0.20*

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

In investigating the relationship between independent variables (individualism and collectivism) and dependent variable (knowledge sharing intention), multiple regression was used in the analysis. The result of multiple regression analysis is shown in Table 3 below. The R^2 for the model above is 0.21. Therefore, the variance of the model which consisted of individualism and collectivism explained knowledge sharing intention at 21 percent. Using multiple regression procedure, only regression between collectivism and knowledge sharing intention were found to be significant (R^2= 0.43, p<0.01). Thus, the model explained collectivism as having 43 percent of the variance in knowledge sharing intention. Thus, H1 is supported. Based on the result, there is no significant contribution of individualism. Thus, H2 is not supported.

Table 3: Multiple Regression Analysis

Independent variables	Dependent variable
Individualism	0.10
Collectivism	0.43**
F value	39.06**
R^2	0.21
Adjusted R^2	0.20

** p < 0.01

4.2 Discussion

This study investigates the relationship between personal cultural orientation (collectivism and individualism and) and knowledge sharing intention. Firstly, it was found that the knowledge sharing intention among tertiary students of the public university is at a moderate level. This further explains that students perceived that it is acceptable to share knowledge which later leads to positive knowledge sharing behaviour.

Secondly, the findings indicate that collectivism predicted the intention of knowledge sharing among students. In another words, students who perceived themselves as collectivism have higher intention in sharing knowledge compared to those who were categorized as individualism. This is aligned with Yu's (2014) view that collectivist individuals are concerned with relationships. Thus, they are willing to share their knowledge to others for achieving collective goals. As this group of people appreciate 'in-group' goals over their own personal goals, they feel happier and more satisfied when knowledge is extended over and to be shared with others. Indeed, sharing is a way to express support to their group in achieving the collective missions (Chow et. al., 1999). Additionally, the results support findings by Shin (2011) and Du et al. (2011).

The results also revealed that there is no support for individualism and knowledge sharing intention. As individualistic individuals are characterized by keeping distance from one's 'in-group' and put emphasis on personal satisfaction (Yu, 2014), sharing knowledge will only happen if there's something worth in return (Bennet & Bennet, 2012). Indeed, Du et al. (2011) highlighted that knowledge processes would be more effective if it involves low individualism oriented and focuses on relations and cooperation.

5. IMPLICATIONS, LIMITATIONS AND CONCLUSION

The contributions of this study are of importance, firstly, it adds theoretically on knowledge sharing intention from a personal cultural orientation perspective. Hence, this study integrates two different fields of culture and knowledge management from an empirical perspective. With collectivism as a useful predictor to knowledge sharing intention, it is known that cultural factors is one the motivation sources for students to share knowledge. Secondly, based on a meta-analysis study conducted by Witherspoon et al. (2013), most studies found related to knowledge sharing were dominated by employees as a sample. Therefore, this study provides a new view of knowledge sharing from the perspective of tertiary students, which is imperative to fill the gap in the topic especially in the context of Malaysia.

From a practical point of view, this study provides a few implications. Firstly, it provides new insights to the education sector on collectivism as cultural value that motivates the students to share knowledge. This is crucial in creating learning environment that is conducive and effective for the students. As the institutions of higher education are centres for knowledge-based activity, it is important to put focus on exploiting knowledge-based resources, i.e., students. Secondly, future employers would benefit to consider personal culture orientation in designing work system and database that would enhance the knowledge sharing behavior among employees. This is imperative especially when organization has high workforce diversity, where each individual has different needs and requirement with regards to knowledge sharing. Indeed, each professional has different roles and importance in creating, storing and disseminating knowledge that exist in the organization (Elliott & Jacobson, 2002).

This study has a few limitations that need to be addressed for future research. Firstly, is the fact that the sample obtained in this study is purely based on one faculty of a public university in Malaysia. Hence, the result might not be generalized to other universities in Malaysia. Future study should consider involving various public and private universities in Malaysia. Secondly, as suggested in the literature, studies on knowledge sharing should utilize longitudinal study design as perceptions on knowledge can be captured across time. Since this study is conducted cross-sectionally, future study should consider using longitudinal type of study. Finally, this study is limited to direct relationship between independent and dependent variables. Ideally, moderating and mediating variables should be included to further understand the relationships between personal cultural orientation and knowledge sharing.

Overall, the results indicate that tertiary students have a positive attitude towards knowledge sharing. Specifically, collectivism oriented students were found to have higher willingness in sharing knowledge compared to those who are individualism in nature.

REFERENCES

Goh, S. K., & Sandhu, M. S. (2013). Knowledge Sharing Among Malaysian Academics: Influence Of Affective Commitment And Trust. *The Electronic Journal Of Knowledge Management*, *1(1),* 38-48.

Bennet, A. & Bennet, D. (2003). *The partnership between organizational learning and knowledge management*, in Hosapple, C.W. (Ed.), Handbook on Knowledge Management, Springer, New York, 439-55.

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS quarterly*, 87-111.

Du, R., Ai, S., Abbott, P. & Zheng, Y. (2011). Contextual factors, knowledge processes and performance in global sourcing of IT services: an investigation in China. *Journal of Global Information Management* (*JGIM*), 19 (2), 1-26.

Goh, S. K., & Sandhu, M. S. (2013). Knowledge sharing among Malaysian academics: Influence of affective commitment and trust. *The Electronic Journal of Knowledge Management*, *11*(1), 38-48.

Heiman, B. A., & Nickerson, J. A. (2004). Empirical evidence regarding the tension between knowledge sharing and knowledge expropriation in collaborations. *Managerial and Decision Economics*, *25*(67), 401-420.

Ho, L. A., & Kuo, T. H. (2013). How system quality and incentive affect knowledge sharing. *Industrial Management & Data Systems*, *113*(7), 1048-1063.

Hofstede, G. (1998). Identifying organizational subcultures: An empirical approach. *Journal of Management Studies*, 35(1), 1-12.

Hooft, E. A., & Jong, M. (2009). Predictin g job seeking for temporary employment using the theory of planned behaviour: The moderating role of individualism and collectivism. *Journal of Occupational and Organizational Psychology*, *82*(2), 295-316.

Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism a study of cross-cultural researchers. *Journal of cross-cultural psychology*, *17*(2), 225-248.

Kanzler, S., Niedergassel, B., & Leker, J. (2012). Knowledge sharing in academic R&D collaborations: does culture matter?. *Journal of Chinese Entrepreneurship*, 4(1), 6-19.

Kumar, A., Fairhurst, A., & Kim, Y. K. (2013). The role of personal cultural orientation in consumer ethnocentrism among Indian consumers. *Journal of Indian Business Research*, *5*(4), 235-250.

Lai, M. F., & Lee, G. G. (2007). Risk-avoiding cultures toward achievement of knowledge sharing. *Business Process Management Journal*, *13*(4), 522-537.

Lin, C. P. (2007). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *Journal of business ethics*, *70*(4), 411-428.

Ma, Z., Qi, L., & Wang, K. (2008). Knowledge sharing in Chinese construction project teams and its affecting factors: an empirical study. *Chinese Management Studies*, *2*(2), 97-108.

Magnini, V. P., Hyun, S., Kim, B., & Uysal, M. (2013). The influences of collectivism in hospitality work settings. *International Journal of Contemporary Hospitality Management*, *25*(6), 844-864.

May, R. C., & Stewart Jr, W. H. (2013). Building theory with BRICs: Russia's contribution to knowledge sharing theory. *Critical perspectives on international business*, *9*(1/2), 147-172.

Mohammed Fathi, N., Cyril Eze, U., & Guan Gan Goh, G. (2011). Key determinants of knowledge sharing in an electronics manufacturing firm in Malaysia. *Library Review*, 60(1), 53-67.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review,* 98(2), 224-253.

Noordin, F., & Jusoff, K. (2010). Individualism-collectivism and job satisfaction between Malaysia and Australia. *International Journal of Educational Management*, *24*(2), 159-174.

Schulte, W. D., & Kim, Y. K. (2007). Collectivism and expected benefits of knowledge management: A comparison of Taiwanese and US perceptions. *Competitiveness Review: An International Business Journal*, *17*(1/2), 109-117.

Shin, S. K. (2011). Determinants of knowledge sharing. *Key determinants of knowledge sharing in an electronics manufacturing firm in Malaysia*, 53-67.

Triandis, H. C. (1995). *Individualism and collectivism.* Boulder, CO: Westview Press.

Witherspoon, C. L., Bergner, J., Cockrell, C., & Stone, D. N. (2013). Antecedents of organizational knowledge sharing: a meta-analysis and critique. *Journal of Knowledge Management*, *17*(2), 250-277.

Yu, M. (2014). Examining the effect of individualism and collectivism on knowledge sharing intention: an examination of tacit knowledge as moderator. *Chinese Management Studies*, *8*(1), 149-166.

Leadership Style and its Influence on the Quality of Life among School Teachers

Mohd Khalid Abas[1], Ros A. Yahaya[2], Narehan Hassan[3], Ervinna Manggas[4]
1 UiTM Shah Alam, khalid210@salam.uitm.edu.my
2 UiTM Shah Alam, dr.rosyahaya@gmail.com
3 UiTM Shah Alam, drnarehan@puncakalam.uitm.edu.my
4 UiTM Shah Alam, e.mgas@gmail.com

ABSTRACT

Leadership is a process where one person can influence others or followers in terms of attitudes, behaviours and thoughts. At the same time, it can inspire their followers. Teachers are the backbone of their schools, therefore good leadership is very important among teachers for the attainment of social status which is in teachers' quality of life (QOL) and organizational goals where it related to the schools. This paper explores the different leadership styles amont government teachers in Malaysia using the quantitative approach. Participants of this study are teachers of government schools in East Malaysia. Results of the Pearson correlation analysis indicates that there is a positive relationship between overall leadership styles and quality of life. The findings also agreed that both transformational and transactional leadership have positive relationship among followers. It is recommended that future research focuses on teachers from private schools in other areas.

Key Words: leadership styles, school teachers, quality of life

1. INTRODUCTION

The term leadership has raised the attention from social scientists and researchers due to the fact that it involves human relations and organizational behavior. Nicholls (1989) describes leadership also means the traditional activities through planning, organizing, monitoring and controlling. Leadership functions include motivating people, guiding and coaching. It involves the process of communication either verbal or non-verbal (Mills, 2005). Studies reveal that leadership styles is an indicator for organizational success as it influenced the followers, especially through the creation of creative and innovative followers (Foster & Young, 2004). Leaders can be described as "individuals who possess the ability to lead people to guide themselves to what they were always capable of doing," (Leithwood, Jantzi, & Steinbach, 2002).

School teachers in Malaysia are tasked with administrative work in the schools. Teachers are facing health issues such as feeling depressed, stressed and these lead to their absenteeism from school due to the workload and the various attitudes of the students that they have to face everyday. Furthermore, most principals pay less attention to their teachers needs makes them feels low of motivation, feeling emotional, showed symptoms of anxiety and low self-esteem to perform their work. These attitudes can give an impact towards school and students achievement. Teachers who were planning to leave the profession expressed less job satisfaction and more negative attitudes toward teaching as a career and toward the school administration due to the inefficient leadership styles among headmasters and principals. In Malaysia, a study stated that pressure among teachers would be increased, if the headmasters and principals stress on procedures and formal agreements rather than a relationship of support and recognition (Sakinah, et al., 2011). Many teachers consider support as an important aspect of their relationship not only with their students, but also with their leaders.

This paper explores the relationship between leadership styles and quality of life among teachers in government schools in East Malaysia and how it affects their work and daily lives.

2. BACKGROUND

Leadership has been defined as mobilizing the workforce towards attaining organizational goals where the process involves a person who can influence others to achieve an objectives and lead the organization in a way that make it more cohesive and coherent (Aldrin & Gayatri, 2014). Leadership is the initiation of acts that result in a consistent pattern of group interaction directed towards the solution of mutual problems. In the workplace, Leadership is one of the most dynamic effects during individual and organizational interaction. The excellent leader not only inspires subordinate's potential to enhance efficiency of the employees. The role of leadership is mostly influenced by the culture of the organization. It has been argued that organization's beliefs, values and assumptions are of critical importance to the overall style of leadership that they adopt (Awan & Mahmood, 2010). Clarke (1997) reported that there are few characters that should be applied by the leaders which are beliefs, values, ethics, character, knowledge and skills. Even in giving the task, the leader's role is very important. According to Winston and Patterson, leader is the one or more people who selects, equips, trains, and influences their followers who have diverse gifts, abilities and skills.

Types of leadership also plays an important role. C. N. Lester (2000) believed that leadership style is significant and plays an important role as decision makers to handle the difficulty of the tasks. However, Pierre Casse and Paul Claudel (2011) argued that the choices of leadership was depending on the nature of task, the power available to the leader, the employee experience, the culture of organization itself and how well the leaders handle the timing for task completion. The way of leaders handling their subordinates can affected their emotional, and probably can improve the subordinates personalities from unmotivated to motivate and then in term of social inclusion, which is the subordinates can build a relationship with others by doing community activities and volunteer activities. Adeyemi and Bolarinwa (2013), studied leadership styles in schools in Nigeria where there is a lot of inadequacies especially of physical facilities in schools. They also reveal that there were over-crowded classrooms especially in urban schools and the absence of laboratory facilities in many schools thereby inhibiting effective teaching and learning processes. This situation tends to have adverse effect on teachers performance in schools. This study also shows that the leaders didn't care about the school facilities to make the teachers feeling comfortable, enjoyable and loves their jobs during teaching.

The transformational-transactional leadership is viewed as the continuum which allows the individuals to employ transformational-transactional qualities at the same time (Bass, 1985, Bryman, 1992). In addition, transformational leadership is usually held to be superior form of leadership, built on transactional leadership but not vice-versa (Bass, 1985). Nevertheless, Bass and Avolio (1991) have been establishing four dimensions behaviors that constitute the transformational and three dimensions behaviors of transactional leadership as shown in Figure 1.

This study focuses on the transformational-transactional leadership styles using Bass and Avolio model meanwhile quality of life (QOL) using Schalock and Verdugo model. Transformational is regarded as superior to other leadership styles and can produce desirable leadership outcome. Besides that, transformational leadership is regularly contrasted with much traditional transactional leadership that is viewed primarily as a cost benefit exchange procedures (Laguerre, J. C., 2010). Transactional leaders, on the other hand, use conventional reward and punishment to gain compliance from their subordinates says Covey (2007). However, a study conducted by(Howell & Avolio, 1993) confirms that contingent rewards have a negative impact on the followers' performance. Contingent reward is viewed as an active and positive exchange between leaders and followers whereby followers are awarded for accomplishing agreed upon objective.

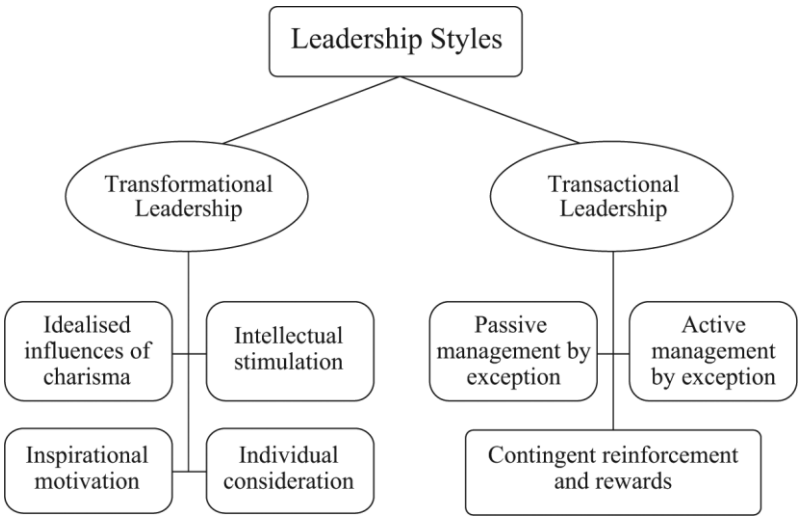


Figure 1: Leadership Styles (source Bass, 2006)

2.1. The Quality of Life

The Quality of Life (QOL) dimensions was the famous model to indicate the employee's life across the world. Quality of Life (QOL) was introduced by Keith and Schalock (1999). Schalock and Verdugo (2002) stated that their quality of life model composed of eight-first-order correlated factors such as emotional wellbeing, self-determination, personal development, rights, material wellbeing, interpersonal relations, physical wellbeing and social inclusion. The term QOL was not widely used and the term socioeconomic status, level-of-living, and social status was used to composite measures of families' living conditions. According to Gilgeous (1998), QOL could be defined as an individual's satisfaction with his or her life dimensions comparing with his or her ideal life where evaluation of the quality of life depends on individual's value system and on the cultural environment where they lives.

In the Malaysian context, Omar (2009) mentioned that QOL encompasses the fulfilment of human needs such as a satisfactory material life, health, education, security, living in a clean environment and also the enjoyment of the aesthetic and spiritual needs. Based on studies conducted by Azahan et al. (2009) on the quality of life in Malaysia's intermediate city from urban dwellers perspective where the researchers examined by their income and distribution, education, health status and family living. This study is utilizing Scalock and Verdugo (202) quality of life model but measured only four elements which are emotional well-being, interpersonal relations, personal development and social inclusion.

2.2. Workload of Teachers in Malaysia

Teachers' workload is a universal issue. Workload refers to all activities that involved teacher time either directly or indirectly with professional duties, responsibilities and interests (Galton & MacBeath, 2010). Other duties such as teaching time in and out of class, official duties as a teacher within school compound and outside. Shukri (1998) suggests that workload refers to responsibilities assigned to teachers. Other responsibilities expected to be performed by teachers include teaching and learning, co curricular activities, file management, meetings and anything related (Azita, 2012).

Achievements and success of a school depended very much on the teachers.

2. RESEARCH DESIGN

The objective of this study was to find out if there is a relationship between leadership styles and quality of life among teachers in government schools in East Sarawak. The relationship

between two variables which were leadership styles and quality of life were examined using Pearson Product-Moment Correlation Coefficient. The findings were used to determine whether the hypotheses are accepted or rejected.Cohen's (1988) guidelines was used to provide the explanation of the strength of the relationship in terms of value of Pearson Correlation (r) and the direction of the relationship for the variables used in the study in order to understand the relationship between leadership styles and quality of life.

The instrument designed for this research study was constructed from the combination of three (3) studies. The Demographic Background instrument was created by the researcher. The IV instruments were adapted from Bass and Avolio (2008). The leadership styles instrument measured the element of transformational leadership which is (1) Idealized Influence (2) Intellectual Stimulation (3) Inspirational Motivation and (4) Individual Consideration meanwhile transactional leadership measured the element based on the following areas: (1) Contingency Rewards (2) Passive Avoidant and (3) Management by Exception. Items of DV were adapted from Schalock and Verdugo (2002). It includes: (1) Emotional Well-being (2) Interpersonal Relations (3) Personal Development and (4) Social Inclusion.

Nonprobability sampling which is convenience sampling was used for this research. Convenience sampling refers to a captive, or easily sampled population and no random (Salkind, 2012). This sampling was being chosen becauseit is fast, inexpensive, easy and the subjects were readily available. For the purpose of this study, the researcher decided to distribute more questionnaires from what is

3. FINDINGS

The objective of this study is to investigate the influence of leadership styles towards quality of life among teachers in government schools in East Malaysia. In this study, multiple regressions were used to explore which variables in leadership styles namely inspirational motivation, idealized influence, individual consideration, passive avoidant, contingent rewards and management-by-exception is the best predictor of quality of life among teachers in government schools. Based on the findings, it is shown that there is a small correlation, positive and significant relationship between leadership styles and quality of life (QOL) (r=.297, p<0.05) as in Table 1 below:

Table 1 : Correlation between leadership styles and quality of life (n=205)

No.	1	2	3	4	5	6	7	8	9	10	11	12
1 Idealized Influence												
2 Inspirational Motivation	.770**											
3 Passive Avoidant	-.261**	-.221**										
4 Contingent Rewards	.604**	.723**	-.128									
5 Management-by-exception	.157*	.225**	.320**	.275**								
6 Individual Consideration	-.081	-.120	.642**	-.115	.268**							
7 Personal Development	.470**	.490**	-.178*	.409**	.112	-.032						
8 Emotional Well-being	.340**	.370**	-.112	.324**	.026	.035	.590**					
9 Social Inclusions	.386**	.406**	-.150*	.443**	.067	.010	.623**	.488**				
10 Interpersonal Relations	.346**	.427**	-.173*	.363**	.160*	-.089	.611**	.473**	.535**			
11 Leadership Styles	.475**	.517**	.571**	.533**	.638**	.640**	.275**	.226**	.261**	.210**		
12 Quality of Life	.469**	.515**	-.185**	.468**	.107	.019	.854**	.811**	.803**	.791**	.297**	

**Corrrelation is significant at the table 0.01 level (2-tailed)

Table 2 shows the result of multiple regression analysis between elements of leadership styles and quality of life. Based on the table below, leadership styles explains 31.2% of the variance (R-Square) in quality of life as indicated by the F-value of 14.993 ($p<.05$). The Durbin Watson value stated about 1.696 showed there is a correlation between the leadership styles and quality of life. This indicates that elements of leadership styles influence quality of life.

In order to identify which element in leadership styles model is the most influential on quality of life, Beta value under Standardized Coefficients were observed and compared based on the contribution of each element in the independent variable. Based on Table 2, it was observed that inspirational motivation has the highest significant influence on quality of life with $\beta=.261$, $p<0.05$.

In addition, contingent rewards, individual consideration, and idealized influence have a significant influence of quality of life with$\beta=.214$, $p<0.05$, $\beta=.158$, $p<0.05$, $\beta=.111$, $p<0.05$ respectively. However, two dimensions which were passive avoidant and management-by-exception did not influence quality of life due to the score $\beta=.-.166$, $p<0.05$ and $\beta=.-.017$, $p<0.05$. As a conclusion, both transformational and transactional leadership influence the teacher's quality of life (QOL).

The result based on the correlational data analysis support the research objectives where there was positive and significant relationship between leadership styles and quality of life (QOL) among teachers in government school. All the elements of leadership styles under transformational leadership namely idealized influence, inspirational motivation, individualized consideration significantly correlate with quality of life.

Table 2: Multiple regression between elements of leadership styles and quality of life (QOL) (n=205)

Model	**Standardized Coefficient (Beta)**	**T**	**Sig.**
Mean Idealized Influence	.111	1.162	.246
Mean Inspirational Motivation	.261	2.416	.017
Mean Passive Avoidant	-.166	-2.002	.047
Mean Contingent Rewards	.214	2.444	.015
Mean Management-by-exception	-.017	-.259	.796
Mean Individual Consideration	.158	2.007	.046
R^2	.312		
Adjusted R^2	.292		
R^2 Change	.312		
F Change	14.993		
Significance F Change	.000		
Durbin-Watson	1.696		

The elements of leadership styles that associated with idealized influence, inspirational motivation, individualized consideration, passive avoidant, contingent rewards and management-by-exception significantly influenced the quality of life. The most influential factor under transformational leadership was inspirational motivation followed by individual consideration, and then idealized influence.

4. CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

The leaders in government schools in East Malaysia challenge subordinates with high standards, communicate optimism about future goals, and provide meaning for the task at hand. It was concluded that teachers in government schools will feel motivated, satisfied and enjoyed their tasks if their leaders which is headmasters and principals giving rewards to them after completing certain tasks. There is a moral justification for the transformational leader's efforts to achieved value-congruence between the leader and the led. When it is achieved, both were more satisfied emotionally(Meglino, Ravlin, & Adkins, 1992). Much of this congruence results in leaders being seen by followers as more considerate, competent, and successful (Weiss, 1978) and subordinates are more satisfied with their jobs.

The elements of leadership styles that are associated with idealized influence, inspirational motivation, individualized consideration, passive avoidant, contingent rewards and management-by-exception significantly influenced the quality of life QOL). The most influential factor under transformational leadership was inspirational motivation followed by individual consideration, and then idealized influence. Besides that, transactional leadership also influenced the quality of life (QOL). The most influential factor under transactional leadership was contingent rewards then followed by passive avoidant and management-by-exception. Transactional leadership seeks to motivate followers by appealing to their own self-interest.

It is recommended for future research to focus on quality of life among teachers from both government and private schools. This allows for a wider and better perspectives on the influence of leadership style on quality of life.

REFERENCES

Abbas, W., &Asghar, I. (2010). The Role of Leadership InOrganizatinal Change: Relating the successful Organizational Change with Visionary and Innovative Leadership.

Azita, A. R. (2012). Secondary School Teachers' Workload in Batu Pahat, Johor Darul Takzim. Master's Thesis, Universiti Teknologi Malaysia, Skudai Johor.

Babayemi, A. (2006). Principalship. I, J.B. Babalola, A.O. Ayeni, S.O. Adedeji, A.A. SulemanandM.O. ArikeWuyo (Eds) Educational Management; Thoughts and Practice. Ibadan; CodatPublications.

Bogler, R. (2001). The Influence of Leadership Style on Teacher Job Satisfaction. *Educational Administration Quarterly Vol. 37, No. 5* , 662-683.

Casse, P., & Claudel , P. (2011). Leadership styles: a powerful model. *Training Journal*, 47-51.

Charles, R. E., & Katherine, J. B. (2007). The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *", Journal of Organizational Culture, Communications and Conflict. 2(10)*, 123-128.

Foster, R., & Young, J. (2004). Leadership: Current themes from the educational literature. *The CAP Journal(12)3,*, 29-30.

Galton, M., & MacBeath, J. (2010). Balancing the workload equation in English primary schools: a continuing story? Asia-Pacific Journal of Teacher Education, 38(4),

Muhammad Shukri, S. (1998). Primary School Teachers' Workload. Master's Thesis, Universiti Utara Malaysia, Sintok Kedah.

Lee, V., Bryk, A., & Smith, J. B. (1993). The organization of effective high schools. In L.Darling-Hammond (Ed.), *Review of research in education, 19* (pp. 171-267). Washington, DC: American Educational Research Association.

Leithwood, K. A., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration,38(2),* 112-129.

Yukl, G. (1989). Managerial Leadership: A Review of Theory and Research. Journal of Management, vol. 15, no. 2, 252-289.

Yukl, G. (1998). Leadership in organizations. *Upper Saddle River, NJ: Prentice-Hall.*, 1-139.

Zaleznik , A. (1977). Managers and leaders: are they different. *Harvard Education Review Vol. 54*, 67-78.

Zin, S. M., Nik Jaafar, N. H., Ngah, N. E., Ismail, R., Ibrahim, N., Jusoff, K., et al. (2011). Ingratiation and the Use of Power in Malaysian Secondary Schools . *World Applied Sciences Journal 12* , 10-14.

Motivation in the Workplace: A Study on the Support Group Employees of Public University.

Rohana Ngah[1], Saiful Azwan Mustapha[2] and Amily Fikry Aziz[3]
1 Malaysian Academy of Entrepreneurship and SME Development
Faculty of Business Management, Universiti Teknologi MARA, Senior Lecturer
rohanangah@salam.uitm.edu.my
2 Islamic International University, Assistant Registrar
msaifulazwan@iium.edu.my
3 Faculty of Business Management, Universiti Teknologi MARA, Senior Lecturer
amily@salam.uitm.edu.my

ABSTRACT

The purpose of this study is to explore the effect of work motivation on intention to stay of support group employees of Malaysian public university. As numbers of support group staff resigning annually is increasing, it affected the work motivation of the remaining staff. Theories of motivation could be implemented in the workplace as it relates to work motivation. Quantitative method of survey was utilized. A total of 222 usable questionnaires were collected. The findings show that work motivation has positive significant impact on intention to stay. Job satisfaction was proven to moderate the relationship between work motivations on intention to stay. However, out of seven elements of work motivation, only recognition, and responsibility were positively significant to intention to stay. This study provides an insight into the elements of work motivation of support staff of university in Malaysia. Recommendations are also provided.

Key Words: *Work* Motivation, Job Satisfaction, Intention to Stay, Support Group.

1. INTRODUCTION

Employees as the organization's human capital is invaluable and all organizations striving to keep their good people in helping the organization to achieve its objectives (Balakrishnan, 1997). One of the main focuses in keeping and motivating employees towards higher productivity is work motivation which have been studied in previous literature in both academic and none academic organizations and as well private and public organizations (Davies, 1989; Balakrishnan, 1997; Pitman, 2000; Hader, 2007; Feza, 2007; Madlock, 2008). Many studies pertaining to factors that influence motivation of employees have been identified, such as gender, age group, position/ work type, workplace and length of employment and many more, stress management (Munirah, 1995; Rohani, Ilias & Fauziah, 2004). Retaining and motivating employees to stay in the organization is a challenge for organization in sustaining their performance. There are few factors that influence employee satisfaction and job performance such as recognition and personal growth (Drake, Wong and Salter, 2007); efficient management and supervisors' communication (Nagarajah, Kuldip and Ibrahim, 2004) and participation in decision-making process (Balakrishnan, 1997). In addition, job satisfaction also plays an important role in motivating employees towards higher productivity and loyalty towards organization. Companies that motivate and make available satisfactory working environment to workers would gain benefits from qualified and knowledgeable workers that would provide as tools to achieve its vision and missions (Rumpel & Medcof, 2006; Bushardt, Lambert & Duhon, 2007). Thus, this study attempts to investigate factors that influence motivation of IIUM's support group employees in discharging their responsibilities.

2. LITERATURE REVIEW

2.1 Review of Work Motivation

According to Rozalli, Arshad and Saladin (2003), motivation is a person's way of thinking shaped by interaction of personal, social and workplace issues that have influence on job satisfaction. Once motivation is associated to work, it can be defined as a process by which performance is strengthened, focussed, and maintained in workplace surroundings (Rozalli et al., 2003). Individuals are intrinsically motivated when they fulfil their enjoyment, interest, curiosity and personal challenges in their work (Kim, 2000) while extrinsic motivation is derived from goals of the work or meet a constraints that imposed by an extrinsic source (Amabile et al. (1994).

2.2 Work Motivation Theory

Pinder (1998) suggests that the theories of motivation could be implemented in the workplace. Thus these theories need to be verified and applied accordingly. Motivation comes from the requirements of internal (the influence that comes from within) while external influences cannot be controlled or governed (the influence out of human control). There are several theories relating to work motivation such as motivator-hygiene theory, Maslow's Hierarchy of Needs Theory, Intrinsic/Extrinsic Theory, Human Needs Theories, Alderfer's Existence-Related- Growth (ERG) Theory, McClelland's Learned Needs Theory and Vroom's Expectancy Theory. Based on the literature review and the background of this study, motivator-hygiene theory or Two-factor theory deemed to be the most suitable theory for this study.

2.3 Motivator-Hygiene Theory (Two-Factor Theory)

This theory has two types of factors that have an effect on the motivation of workers namely motivator needs and hygiene needs. Motivator needs is a needs that describe levels of employee satisfaction, while hygiene needs explain the level of employees' dissatisfaction. Abdullah and Ainon (2008) stated that, the Two-Factor theory proposed by Herzberg is easier to use in the workplace compared to Maslow's. Motivator factors include recognition, responsibility, growth, achievement, advancement and interesting work while 'hygiene' factors are extrinsic elements that sometimes can lead to unhappy experiences, such as company policy, salary, relationship with colleagues and supervisory style. As supervisors they should reduce the dissatisfaction of workers with regards to payment of wages, working conditions, guidelines of the companies as these determine the levels of workers' motivation. The leader must strive to ensure that workers are motivated to work by all chances as suggested by the theories of motivation. According to Robertson et al. (1992) Herzberg's two-factor theory is well-known efforts linking job characteristics with human motivation, satisfaction and performance. Steers et al. (1996) indicated that intrinsic factors within the work itself have made workers feel good experience. These factors known as 'motivator' includes variables such as achievement, recognition for performance, responsibility, advancement, the work itself and personal growth. Conversely, according to Ahmad (2007), company policies, salary, fellow worker relations, working condition and supervisory style can be dissatisfying experiences and identified as 'hygiene' factors resulting from the extrinsic factors that has nothing to do with work-related matters.

2.4 Job satisfaction

Lofquist and Dawis (1969) defined satisfaction as "an individual's positive affective evaluation of the target environment; pleasant affective state; the individual's appraisal of the extent to which his or her requirements are fulfilled by the environment" (p. 27). Liu (2005) further stated that job satisfaction is the feeling of individuals towards their work and diverse characteristic of their work. Velnampy (2008) conducted a study on job attitude and employees' performance found that job satisfaction influence performance of the workers and at the same time improves job

involvement. According to Claudio et al., 2010, although individual behaviors of the workers can be one of the factors that influence their work satisfaction; the environment of the company and work condition also can have effects on job satisfaction. The environment of the company that influence job satisfaction, are such as uncertainty responsibility, workload, communication with managers and fellow workers, appreciation, and taking care of each other (Claudio et al., 2010). John Rains (2011) proposed that high level of workers satisfaction exist once they are given some authority to make decision. Employees' satisfaction in the workplace resulted from better salary, benefits, and other incentives (Rains, 2011).

2.5 Intention to Stay

Intention to stay can be explained as the willingness of a worker to remain with the company (Seonghee et al., 2009) because of motivated advices given by their supervisors. Laine, van der Heijden, Beatrice, Wickstrom, Hasselhorn and Tackenberg (2009) stated that, the choice to leave the career is probably the result of coincident reasons, which they are known as pushing and pulling factors. When the workers have intention to stay in the company, it shows that the workers have the sense of responsibility towards the company and as a result will remain serving the company (Noraani et al., 2010, Yingyan, 2010). Whether the idea of 'intention to stay' or 'propensity to leave', it was the main predictor of employee turnover (Noraani et al., 2010). The cost of losing an experienced staff is costly as money and time have to be spent for the purpose of recruiting and training the new worker. In addition, when the workers leave the company, they actually interrupt the efficiency of the company (Nitardy, 2008). When the worker leaves the company, the price the company is losing is approximately more than the worker's one year salary (Nitardy, 2008).

2.6 The Development of Hypotheses

2.6.1 Work Motivation and Intention to Stay.

According to Jamal (1985) indirect relationship between job stress and motivation exist at work but positive relation was found between stress and intention to leave the job. Work motivation has positive relationship to intention to stay (Sayyid, Ishfaq & Muhammad, 2011). In addition, workers' commitment is a significant characteristic for any company, because through this it can foresee the level of productivity, job satisfaction, motivation, and low turnover intention (Schalkwy, Toit, Danie, Bothma & Rothmann, 2010). When the management of the company recognized and valued the workers who contributed their hardships, performance and capabilities, the workers tend to demonstrate better loyalty and be likely to remain with the company (Chew & Wong, 2008).

H1: Work motivation has positive relationship to intention to stay.

2.6.2 Work Motivation and Job Satisfaction.

The relationship between motivation and job satisfaction of the subordinates in educational institutions shows an encouraging relationship between working surroundings, compensation and recognition with motivation (Ishfaq & Talat, 2011, Rizwan et al. (2010). When subordinates feel pleasant and exciting in doing their work, it is the proof that they are satisfied with incentives and appreciation, management and work itself, and as a result develop an intrinsic strength to perform a given job (Muhammad, Musawwir-Ur-Rehman, Gulnaz, Huma & Adnan, 2012).

H2: Work motivation has positive relationship to job satisfaction.

2.6.3 Job Satisfaction and Intention to Stay.

The study on the relationship between job satisfaction and turnover intention had been conducted by many researchers (Franca & Obinna, 2009). According to a study conducted by Arnold and Feldman, (1982); Cotton and Tuttle, (1986); Hom and Kinicki, (2001), there is no

relationship between job satisfaction and turnover. Conversely, in a study conducted by Khatri, Fern and Budhwar (2001), the outcome revealed that, job satisfaction has a weak relationship with turnover intention. Consequently, the study on the surface of job satisfaction with outcome variables for instance performance and turnover intention may not be clear to explain the level of company's potencies and weaknesses (Chew & Chan, 2008). Measuring job satisfaction is an ideal investigation to identify whether subordinate will maintain or leave the job soon, since recent satisfaction at work has relationship with intention to stay (Yingyan, 2010). When the employees experienced fairness in receiving rewards it will increase the job satisfaction of the employees (DeConinck & Bachmann, 2007).

H3: Job satisfaction has positive relationship intention to stay.

2.6.4 Work Motivation, Job Satisfaction and Intention to Stay.

Earlier studies have proved that there is a relationship between perceived supervisor-support (PSS) and intention to stay (Chen, 2001). Perceived supervisor support (PSS) was described as workers' feeling relating to their involvement or assistance towards the company is appreciated by the manager and whether the managers are aware about the workers' wellbeing (Eisenberger, Stringlhamber, Vandenberghe, Sucharski & Rhoades, 2002; Kottke & Sharafinski, 1988). It is suggested that, to enhance perceived organizational support (POS), companies should invest in workers and have to be grateful for the participation and sacrifice given by workers because perceived organizational support (POS) will mediate the correlation between HR practices and organizational commitment and job satisfaction (Griffeth, Hom & Gaertner, 2000; Wayne, Shore & Liden, 1997). Since employee engagement is able to foresee effectiveness, job satisfaction, motivation, commitment, and low turnover intention, it is a significant idea for companies (Schalkwy et al., 2010). If the worker's commitment is high, it would strengthen his relationship with the company and, as a result, this would influence the worker's intention to stay with the company (Schalkwy et al., 2010).

H4: Job satisfaction moderates the relationship of work motivation and intention to stay.

3. RESEARCH METHODOLOGY

To ensure validity, the instruments for the study have been adopted from various authors. Work motivation is adopted from Louise W. Losos (2000), job satisfaction from Quinn (2011) and Aryee, Fileds and Luk (1999). Intention to stay is adopted from Lyons (1981) and Seonghee et al. (2009). Likert-scale from 1 (strongly disagree) to 5 (strongly agree) was used for this study.

3.1 Results

For data collection purposes, 500 questionnaires were distributed to the Human Resource department to be distributed to support group staff working in *kulliyahs/* faculties and divisions/ departments in the International Islamic University Malaysia. Out of 500, only 222 questionnaires were returned and usable which indicated response rate of 44%.

3.2 Demographic Profile of Respondents

The result from demographic profile shows male (41 %) and female (59 %) took part in this survey. Majority of the participants was in the age group of 30 – 39 years old (45.9 %). In terms of marital status, majority (78.4 %) of the participants are married and 21.6 % are single. About 46.4 % have education level of SPM, 45.9% of STPM/Diploma while only 7.2% has degree. Majority of the respondents (57.7 %) involved in administrative work, 23.9 % worked in library work and the rest (18.5 %) were in technical area. A majority (56.8 %) of the participants worked in divisions/ departments and 43.2 % worked in *kulliyahs*/ faculties. In terms of length of employment, majority (29.7%) have been working for between 6- 10 years, 23.4 % for 16 – 20 years, 21.2 % for 11 – 15 years, and 20.7 % have been working for 1 – 5 years.

3.3 Reliability Test

The reliability test was carried out to study the internal consistency of the constructs, subsequent to the exploratory factor analysis. According to Nunnally (1978), alpha values above 0.5 can be considered as adequate. The entire Cronbach's Alpha values were above the critical point of 0.7 and therefore show that the survey's reliability is accepted. Table 1 shows the reliability results.

Table 1: Cronbach's Coefficient Alpha for the Study Constructs

Variable	Items	Cronbach's Alpha
Recognition	10	0.907
Personal Growth	10	0.919
Benefits	10	0.808
Supervisory Style	11	0.913
Job Description	11	0.902
Personal Relationship	9	0.934
Responsibility	12	0.945
Job Satisfaction	6	0.829
Intention to stay	4	0.883

3.4 Validity

3.4.1 Convergent Validity of Work Motivation.

Convergent validity was established between the work motivation scale (recognition, personal growth, benefits, supervisory skills, job description, personal relationship and responsibility) by using Pearson's r correlation coefficients. Table 2 shows the correlations among work motivation elements.

Table 2: Pearson r intercorrelations to establish convergent validity between work motivation

	1	2	3	4	5	6	7
RG	1						
PG	0.604**	1					
BFT	0.583**	0.603**	1				
SS	0.669**	0.628**	0.591**	1			
JD	0.587**	0.656**	0.525**	0.586**	1		
PR	0.698**	0.650**	0.615**	0.721**	0.722**	1	
RSP	0.696**	0.601**	0.562**	0.673**	0.708**	0.803**	1

** Correlation is significant at the 0.01 level (2-tailed).

The range of significant correlations was between 0.525 ($p \leq 0.01$) to 0.803 ($p \leq 0.01$). The strongest significant relationship was between personal relationship and responsibility. The weakest significant relationship was between job description and recognition. Therefore, the convergent validity was established for the work motivation.

3.4.2 Convergent validity for the work motivation, job satisfaction and intention to stay.

One-way ANOVA's were performed to measure the differences of work motivation, job satisfaction and intention to stay. Table 3 shows the results of the one-way ANOVA.

Table 3: ANOVA Test

	F	Sig
Recognition	4.094	0.000 (0.541)
Personal Growth	5.120	0.000 (0.488)
Benefits	7.202	0.000 (0.385)
Supervisory Style	8.595	0.00 (0.414)
Job Description	1.267	0.262
Personal Relationship	5.620	0.432
Responsibility	6.758	0.010
Job Satisfaction	3.978	0.047
Intention to stay	9.986	0.000

The results show a significant F value for Job satisfaction (F = 3.978, p = 0.047) and intention to stay (F=9.986, p = 0.00). This indicates that job satisfaction and intention to stay are statistically different than the work motivation. Therefore, the convergent validity is established among the variables.

3.5 Correlations and Linearity

In this study a correlation analysis was carried out for all nine variables with the purpose of identifying the relationship between each of the variables. The results of the correlation analysis disclose that correlation between both dependent variable and the moderating variable is significant and positive. Intention to stay correlates with job satisfaction at r = 0.716 (p<0.01). The overall correlation coefficient values of the variables are between the low and moderate level, in the range of between 0.534 – 0.813. All correlation coefficient values are significant at the 0.01 levels. This test indicated that multicollinearity does not exist since the correlation coefficient (r) is less than 0.90 (Pallant, 2005), for that reason, the variables are ready for the subsequent regression analyses. It can be concluded from the analysis that, personal relationship has the strongest and significantly positive correlation with intention to stay. Job satisfaction also has a strong positive correlation with job description and responsibility.

3.6 Analysis and Testing Hypotheses

Regression analysis was utilized to test the impact of the work motivation (motivation and hygiene) on intention to stay (IS). For this study, Work Motivation (WM) which comprises two main variables, namely, motivator and hygiene are treated as the independent variable. The dependent variable is represented by intention to stay (IS) while intention to stay as a moderator. Table 4 shows the result of regression between Work Motivation (WM) and Intention to Stay (IS).

Table 4: Summarized Multiple Regression for Work Motivation (WM) and Intention to Stay (IS)

Variable	B	SE	β	t	P
(Constant)	0.157	0.133			
Motivator	0.842	0.070	0.771	12.082	0.00
Hygiene	0.126	0.063	0.127	1.985	0.048

Dependent variable: Intention to Stay (IS)

The independent variable in this regression model clarify 77.8% of variation (R^2 = 0.778) in intention to stay. In general the model fits for simple regression equation and it is found to be significant with the F value at 354.920 (p= 0.01). The Durbin Watson value of 1.627 falls within the suitable range of 1.50 to 2.50, which shows the absence of significant autocorrelation in the model. Thus, H1 is supported.

Next, the work motivation (WM) was regressed against job satisfaction (JS) to establish the relationship between the work motivation and job satisfaction. Table 5 shows the result of this regression analysis.

Table 5: Relationship between work motivation and job satisfaction

Variable	B	SE	β	t	P
(Constant)	0.181	0.184			
Motivator	1.275	0.097	0.970	13.178	0.00
Hygiene	0.190	0.088	0.158	2.150	0.033

The result of the analysis shows that WM (β = 0.970 and 0.158/, p < 0.00) is positively and significantly related to job satisfaction. Evidently, the independent variable in this regression model shows approximately 70% of variation (R^2 = 0.704) in job satisfaction. The overall model fits for simple regression equation and it is found to be significant with the F value at 241.379 (p= 0.00). The Durbin Watson value of 1.882 falls within the acceptable range of 1.50 to 2.50, which indicates the absence of significant autocorrelation in the model.

Regression analysis was carried out to investigate the impact of job satisfaction on intention to stay. The results are shown in Table 6.

Table 6: Relationship between Job satisfaction and intention to stay

Variable	B	SE	β	t	p
(Constant)	0.827	0.201			
Job satisfaction	0.778	0.043	0.768	18.162	0.00

R^2 = 0.589, Adjusted R^2 = 0.587, Durbin-Watson = 1.726, F value = 214.746, p = 0.000

The results shows that of the analysis indicating that Job satisfaction (β = 0.768, p < 0.01), is positively and significantly related to intention to stay. Job satisfaction, in this regression model, clarifies about 58.9% of variation (R^2 = 0.589) in intention to stay. Taken as a whole, the model fits for the simple regression equation and it appears to be significant with the F value at 214.746 (p= 0.01). The Durbin Watson value of 1.726 falls within the acceptable range of 1.50 to 2.50, which shows the absence of significant autocorrelation in the model. Therefore, it can be concluded that Job satisfaction when regressed against intention to stay has a positive and significant relationship with intention to stay. Therefore, H3 is supported.

3.7 Moderation Effect

In testing the moderation effect of job satisfaction on the relationship between work motivation and intention to stay, interaction effects have to be first developed by multiplying the values of all independent variables by the value of the moderator In the hierarchical regression development a dependent variable is first regressed with all independent variables, followed by the moderator, and finally all the interaction terms (the interaction between each independent variable and the moderator). The results in Table 7 show the hierarchical regressions which were applied to test the relationship among work motivation and intention to stay, with the inclusion of job satisfaction as the moderator.

Table 7: Moderating Effect of Job Satisfaction on Relationship of Work Motivation and Intention to Stay**.**

Variable	B	SE	β	T	p
(Constant)	3.370	0.177			
Work Motivation	0.216	0.025	0.828	1.598	0.00
Job satisfaction	0.818	0.102	0.929	7.981	0.00

Variable	Standardized Coefficient Beta (β) Step 1	Standardized Coefficient Beta (β) Step 2
Work Motivation	0.487**	1.598**
Moderating variable Job satisfaction		0.468***
R^2	0.695	0.768
Adjusted R^2	0.692	0.765
Sig. F Change	0.000	0.000
F Value	231.661**	223.364**

In step 2, job satisfaction was entered into the equation in order to gauge its impact as a moderator. The R^2 increased from 69.5% to 76.8% indicating a change of 7.3%, which was significant at $p< 0.05$. The R^2 change value is 0.073, demonstrating that work motivation and job satisfaction explained an additional 0.73% of variance in intention to stay when job satisfaction was included. This is a statistically significant contribution, as indicated by the Sig. F change value for this line (0.00). The ANOVA table indicates that the model as a whole is significant ($F = 223.364$, $p < 0.005$).

In step 3, the interaction of Work Motivation and Job satisfaction was entered into the equation as moderator to the model. The result show the effect of moderating effect of job satisfaction which represents a significant incremental portion of variance ($R^2 = 0.787$, $p < 0.10$). From this finding, it shows that Job satisfaction improves the relationship of the work motivation and intention to stay therefore H4 is supported.

4. DISCUSSION

Work Motivation has positive impact on intention to stay which is in line with previous studies by Aydin (2012), Kudo et al. (2006) and Tzeng (2002). In addition, motivator factor (recognition and responsibility) was found to be significant in influencing the intention to stay. This finding is supported by Tan and Hong and Waheed (2011). A study by Tzeng (2002) also found that work motivation has positive relation to intention to stay of nurses in Taiwan. It was found that the motivator elements have more influence on intention to stay. Work Motivation was also found to be positively related to job satisfaction. This is supported by Tan and Waheed (2011). However, this finding contrasts to Herzeberg (1966) as cited in Tan and Waheed (2011) finding that hygiene factor played an important role in job satisfaction. They further identified that hygiene factors dominate work motivation in terms of job satisfaction among sales personnel in Malaysia. The finding shows that job satisfaction is positively related to intention to stay which is supported by Tzeng (2002) that found that job satisfaction elements such as salary, working environment and promotion were significant predicators of nurses' intention to stay. Job satisfaction moderates the relationship between work motivation and intention to stay which is supported by Bertz (1971) that emphasized that job satisfaction should be taken into account in deriving prediction at work place.

5. CONCLUSION

The study shows the impact of work motivation (WM) on job satisfaction and intention to stay (IS). The analysis also shows the impact of work motivation elements; recognition, personal growth, benefits, supervisory skills, job description, personal relationship and responsibility, individually on job satisfaction and intention to stay (IS). Organizations usually depend seriously on supervisors' leadership style in motivating their workers towards better job satisfaction and intention to stay longer. For that reason, it was complicated to improve the motivation level of the workers if the supervisors' leadership style is not reliable, especially in Malaysia. The supervisors need to give serious attention on motivation, job satisfaction and intention to stay as these elements have a positive impact for organization. Since supervisors are busy with many responsibilities, they might not give enough attention to their workers. Although minimal attention is given to workers, it will actually give a positive impact to the organizations. However, if supervisors ignore these elements, sooner or later the company might suffer severely in future.

This study has some limitations for this study. Survey using structured questionnaires limits the flow of information. It is recommended that interviews be conducted to gain more information concerning motivation, job satisfaction and intention to stay in the public as well as private universities. In addition, this study is only focus in one university. Extending to other universities would produce more comprehensive findings thus it would help researchers in understanding how organizations develop a motivational environment that will result in employees' job satisfaction and intention to stay longer with the company. Therefore, an inclusive model will be able to build up, especially for the benefit of the public and private universities in Malaysia. In addition to that, this study possibly will assist researchers and academicians in developing measurements of motivation, job satisfaction and intention to stay in the workplace for specific organizations in the future.

This study merely focuses on motivation, job satisfaction and intention to stay with the organization in a public university. For future research, it is recommended that a study on private universities and colleges to be included in looking closely at the environment, culture and internal structure of the private universities and colleges.

REFERENCES

Abdullah Hassan; Ainon Muhammad (2008). *Panduan menggunakan teori motivasi di tempat kerja* (4th Edn.). Kuala Lumpur: PTS Professional.

Ahmad, K. (2007). Management from the Islamic perspective: Principles and practices. (2nd Edn.). Kuala Lumpur: Research Centre, IIUM.

Amabile, T. A. (1997). Entrepreneurial creativity through motivational synergy. *Journal of Creative Behavior, 31* (1*),* 18 – 27.

Amabile, T.A.; Hill, K.G.; Hennessey, B.A.; & Tighe, E. M. (1994). The work preference inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology, 66* (5), *950* -967.

Arnold, H.J., Feldman, D.C. (1982). A Multivariate Analysis of the Determinants of Job Turnover. *Journal of Applied Psychology*, *67* (3), 350

Aydin, Oya Tamtekin (2012). The impact of motivation and hygiene factors on research performance: An empirical study from a Turkish University. *International Review of Management and Marketing*, *2*(2), 106-111.

Balakrishnan, V. (1997). Participation in decision-making in the public service department. (Master Dissertation, International Islamic University Malaysia, 1997).

Bushardt, S. C., Lambert, J., & Duhon, D. L. (2007). Selecting a better carrot: Organizational learning, formal rewards and culture – A behavioural perspective. *Journal oOf Organizational Culture, Communications & Conflict*, *11*(2), 67-79.

Chen, Z. (2001). Further investigation of the outcomes of loyalty to supervisor: job satisfaction and intention to stay. *Journal of Managerial Psychology 16 (7/8),* 650–660.

Chew, Yin Teng & Wong, Sai Kong (2008). Effects of career mentoring experience and perceived organizational support on employment commitment and intentions to leave: A study among

hotel workers in Malaysia, *International Journal of Management, 25*(3), 692-700.
Claudio, Cortese G.; Colombo, Lara & Ghislieri, Chiara (2010). Determinants of nurses job satisfaction: The role of work–family conflict, job demand, emotional charge and social support. *Journal of Nursing Management, 18,* 35–43.
Cotton, J.L., & Tuttle, F.M. (1986). Employee Turnover: A Meta-Analysis and Review with Implications for Research. *Academy of Management Review*, *11*(1), 55-70.
Davies, Christopher J. (1989). Administrative Staff Control Systems in the British Civil Service. *International Journal of Public Sector Management, 2*(2).
DeConinck, James & Bachmann, Duane (2007). The impact of equity sensitivity and pay fairness on marketing manager's job satisfaction, organizational commitment and turnover intentions. *The Marketing Management Journal , 17*(2), 134 –141.
Drake, Andrea R.; Wong, Jeffrey; Salter, Stephen B. (2007). Empowerment, Motivation, and Performance: Examining the Impact of Feedback and Incentives on Nonmanagement Employees. *Behavioral Research in Accounting, 19*, 71-89.
Eisenberger, R.; Stringlhamber, F.; Vandenberghe, C.; Sucharski, I. & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology 87,* 565–573.
Feza Tabassum Azmi (2007). Job Descriptions to Job Fluidity: Treading the Dejobbing Path. *EBS Review, 23*, 86-98.
Franca Ovadje & Obinna S. Muogboh (2009). Exploring the motivation to stay and to perform among managers in Nigeria. *International Journal of Business Research, 9(*3), 27-38.
Griffeth, R.W., Hom, P.W., Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests, and research implications for the next millennium. *Journal of Management 26,* 463–488.
Hader, Richard (2007). Personal relationship in the workplace: Yay or Nay? *Nursing Management; 38*(7), 6-6.
Herzberg, F; Mausner, B.; Snyderman, B. B. (1993). *The motivation to work: With a new introduction by Frederick Herzberg.* New Jersey: Transaction Publishers.
Ho Hom, P.W., & Kinicki, A.J. (2001). Toward A Greater Understanding of how Dissatisfaction Drives Employee Turnover. *Academy of Management Journal*, *44* (5), 975-987.
Ishfaq Ahmed & Talat Islam (2011, Aug). Relationship between Motivation and Job Satisfaction: A Study of Higher Educational Institutions. *Journal of Economics and Behavioral Studies, 3*(2), 94-100
Jamal, Muhammad (Jun, 2010). Burnout among Canadian, Chinese, Malaysian and Pakistani Employees: An Empirical Examination. *International Management Review*, *6*(1), 31-41.
Jamal, M. (1985). Relationship of job stress to job performance: a study of managers and blue collar workers. *Human Relations, 38(5),* 409-424.
John Rains, Jr. (2011, January). Job satisfaction among U.S. department of the army civilians: An analysis based on the Minnesota satisfaction questionnaire. (Doctorial Dissertation, Capella University, January 2001). *ProQuest Dissertations and Theses.*
Kamarul Zaman Ahmad; Raida Abu Bakar (Sep, 2003). The association between training and organizational commitment among white-collar workers in Malaysia. *Journal of Training & Development, 7*(3), 166-185.
Khatri, N., Fern, C. T., and Budhwar, P. (2001). Explaining Turnover in an Asian Context. *Human Resource Management Journal*, *11* (1), 54-74.
Kim, Jounggun (2000). A study of relationships among work motivation, problem-solving style, leadership style, and team climate on creative behaviour in the South Korean workplace. (Doctorial Dissertation University of Missouri-Columbia, 2000). *ProQuest Dissertation and Theses.*
Kottke, J.L., Sharafinski, C.E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement 48,* 1075–1079.
Kudo, Yasushi, Satoh, T., Hosi,K., Miki,T., Watanebe, M., Kido, S., and Aizawa, Y. (2006). Association between intention to stay on the job and job satisfaction among Japanese Nurses in Small and Medium-siexed Private Hospitals, *Journal Occupational Health, 46,*504-513.

Laine, Marjukka; van der Heijden, Beatrice I. J. M.; Wickstrom, Gustav; Hasselhorn, Hans-Martin; Tackenberg, Peter (2009, Feb). Job insecurity and intent to leave the nursing profession in Europe. *International Journal of Human Resource Management*. *20*(2), 420-438.

Lofquist, L. & Dawis, R (1969). *Adjustment to work*. New York: Meredith Cooperation.

Losos, L. W. (2000). *Comparing the motivation levels of public, private and parochial high school teachers*. (Doctoral dissertation, Saint Louis University, 2000). UMI Microform 9973372

Lyons, T.F. (1981). Propensity to leave scale of 1971. In Cook, J.D., Hepworth, S.J., Wall, T.D., & Warr, P.B. (Eds). *Experience of Work: A Compendium and Review of 249, Measures and Their Use*. New York: Academic Press.

Madlock, Paul E. (Jan 2008). The link between leadership style, communicator competence, and employee satisfaction. *Journal of Business Communication, 45*(1), 61-78.

May Chiun Lo; Ramayah, T.; Kueh Swee Hui, Jerome (Jan, 2006). An investigation of leader member exchange effects on organizational citizenship behavior in Malaysia. *Journal of Business & Management, 12*(1), 5-23.

Muhammad Jamal Shah, Musawwir-Ur-Rehman, Gulnaz Akhtar, Huma Zafar, Adnan Riaz (2012, April). Job Satisfaction and Motivation of Teachers of Public Educational Institutions. *International Journal of Business and Social Science, 3(*8), 271-281.

Munirah, R. (1995). An empirical study of secretaries' work, training and career development with implications for the secretarial curriculum. (Final Research Report, Universiti Teknologi MARA, 1995)

Nagarajah, L.; Kuldip, S.; Ibrahim, S. (2004). Statistical modelling on the relationship between job performance and employee morale in an organization. (Final Research Report, Universiti Teknologi MARA, 2004).

Nitardy, Charlotte M (2008). The Relationship between Career Development and Intent to Stay in a High Turnover Industry, Early Childhood Education and Care. (Doctorial Dissertation, University of Minnesota, 2008). *ProQuest Dissertations and Theses.*

Noraani Mustapha, Aminah Ahmad, Jegak Uli & Khairuddin Idris (2010, December). Job Characteristics as Antecedents of Intention to Stay and Mediating Effects of Work Family Facilitation and Family Satisfaction among Single Mothers in Malaysia. *International Journal of Business and Social Science, 1*(3).

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Pallant, Julie (2005). *SPSS survival manual: a step by step guide to data analysis using SPSS for windows (Version 12)* (2nd ed.) New South Well: Allen & Unwin 2005.

Pinder C. C. (1998). *Work motivation in organization behavior.* New Jersey: Prentice-Hall.

Pitman, Tim (2000). Perceptions of Academics and Students as Customers: a survey of administrative staff in higher education. *Journal of Higher Education Policy & Management; 22*(2), 165-175.

Quinn, Floyd Francis,. (2011). The Effects Of Employment Development And Other Factors On Intention To Stay Among Employees Of Four-Year, Public Institutions Of Higher Education In Texas, https://Digital.Library.Txstate.Edu/Handle/10877/2506

Rizwan Saleem, Azeem Mahmood, Asif Mahmood (2010, November). Effect of Work Motivation on Job Satisfaction in Mobile Telecommunication Service Organizations of Pakistan. *International Journal of Business and Management, 5(*11).

Robert, Wignall A. (2004). An investigation of job satisfaction of Florida state prison industry workers: An examination of Herzberg two-factor theory. (Doctorial Dissertation, Capella University, 2004). *ProQuest Dissertations and Theses.*

Robertson, I. T., Smith, M. & Cooper, D. (1992). *Motivation: Strategies, theory and practice* (2nd Edn.). London: Institute of Personnel Management

Rohani A. Ghani; Ilias Mamat; Fauziah Noordin (2004). Organizational commitment and job satisfaction: A comparative study of full-time and part-time academic staff of Universiti Teknologi MARA. (Final Research Report, Universiti Teknologi MARA, 2004).

Rozalli Hashim; Arshad Hashim; Saladin Mohd Rasool (2003). *The Relationship Between Motivation and Job Satisfaction and Organizational Commitment among the Non-Commissioned Officers of the Police Force: A Preliminary Study in Melaka.* Universiti Teknologi MARA Cawangan Melaka Kampus Alor Gajah.

Rumpel, S., & Medcof, J. W. (2006). Total rewards: Good fit for tech workers. *Research Technology Management*, *49*(5), 27-35.

Sayyid Salman Rizavi, Ishfaq Ahmed, Muhammad Ramzan (2011, March). Studying stress and its job related costs; an empirical evidence from banking sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business, 3(*2), 94 – 100.

Schalkwy, Sonet van; Toit, Danie H. Du; Bothma, Adriaan S.; & Rothmann, Sebastiaan (2010). Job insecurity, leadership empowerment behaviour, employee engagement and intention to leave in a petrochemical laboratory. *Open Journals Publishing. 8(*1), 1-7.

Seema Munaf (Oct-Dec, 2009). Motivation, performance and satisfaction among university teachers: Comparing public and private sectors in Pakistan and Malaysia, *South Asian Journal of Management, 16*(4), 7-28.

Seonghee Cho; Johanson, Misty M.; & Priyanko Guchait (2009). Employees intent to leave: A comparison of determinants of intent to leave versus intent to stay. *International Journal of Hospitality Management, 28,* 374–381.

Steers, M., Porter, W. & Bigley, A. (1996). *Motivation and leadership at work*. (6th Edn.). Boston: McGraw-Hill.

Tan Teck-Hong and Amna Waheed (2011). Herzberg's Motivation-Hygiene theory and Job satisfaction in the Malaysian Retail Sector: The mediating effects of love of money. *Asian Academy of Management Journal, 16* (1), 73-91

Tzeng, H.M. (2002). The influence of nurses' working motivation and job satisfaction on intention to quit: an empirical investigation in Taiwan, *39*, 867-875.

Velnampy T. (2008). Job Attitude and Employees Performance of Public Sector Organizations in Jaffna District, Sri Lanka. *GITAM Journal of Management, 6(*2), 66-73.

Wagner, Anne E. (2004, May). The relationship between job satisfaction and turnover intent of human service support employees in a community-based organization. (Doctorial Dissertation, Capella University, May 2004). *ProQuest Dissertations and Theses.*

Hong, T. T., & Waheed, A. 2011. Herzberg's Motivation- Hygiene Theory And Job Satisfaction In The Malaysian Retail Sector: The Mediating Effect Of Love Of Money. *Asian Academy of Management Journal*, *16*(1), 73-94.

Wayne, S.J.; Shore, L.M. & Liden, R.C. (1997). Perceived organizational support and leader-member exchange: a social exchange perspective. *Academy of Management Journal 40* (1), 82–111.

Yingyan Wang (2010, September). Intention to stay in Chinese foreign-invested companies: previous experiences, initial expectations and current satisfactions. *The International Journal of Human Resource Management, 21*(11), 1996–2012.

Organizational Climate, Job Satisfaction and Intention-to-Leave among Academic and Administrative Staff in Malaysia

Fauziah Noordin[1], Hasliza Haji Hadadak[2], Suraya Hani Samsuddin[3]

1 Faculty of Business and Management, Universiti Teknologi MARA,
fauziah716@salam.uitm.edu.my
2 Faculty of Business and Management, Universiti Teknologi MARA
liza.hadadak@gmail.com
3 Faculty of Business and Management, Universiti Teknologi MARA
surayahani.samsuddin@yahoo.com

Abstract

The purpose of this study is to determine the level of organizational climate, job satisfaction and intention-to-leave among the academic and administrative staff of a public university in Malaysia. A quantitative research method, using questionnaire, was used in the study. The respondents comprised both the academic and administrative staff of the university. Descriptive statistics and Pearson product-moment correlation coefficient were utilized to and fulfill the research objectives. The results of the study indicate that for the academic staff, the total mean values for each of the component of organizational climate, job satisfaction, and intention-to-leave appeared to be at moderate levels. The results for the administrative staff produced different mean values compared to academic staff with organizational design, communication, culture, and job satisfaction at high levels while the other organizational components were at moderate levels. The results also show that for the academic staff there were significant positive relationships between all the components of organizational climate and job satisfaction, and significant negative relationships between all the components of organizational climate and intention-to-leave whereas for the administrative staff, the results indicate significant positive relationship between all the components of organizational climate and job satisfaction but there is no significant relationship between any of the components of organizational climate on intention-to-leave. The findings of this study are considered to be important as they revealed different category of the university staff have different perceptions on the same variables studied.

Key words: Organizational climate, job satisfaction, intention-to-leave

1. INTRODUCTION

Organizational climate is a concept that enables the industrial/organizational psychologist to identify how the organization is a psychologically meaningful environment for individual organization members (Payne and Pugh, 1976). Organizational climate can be viewed as that which is represented by the employees' perceptions of the objective characteristics of an organization (Landy, 1989). The ability of any organization to take off and achieve its goals is a function of its ability to attract, retain and maintain competent and satisfied staff into its employment and this applies to universities as well. A university is an institution of higher learning that provides manpower needed to advance national development in both the public and private sector. University lecturers are currently facing many challenges in education and

society, which may well affect their levels of job satisfaction (Kniveton, 1991). This raises concern regarding the attitudes of educators towards their work and their levels of job satisfaction or dissatisfaction (Steyn and Van Wyk, 1999). Volkwein and Zhou (2003) state that higher education research has shown that several work-related variables exert positive and significant influences on administrative satisfaction, namely, a supportive organizational culture, teamwork, relationships with colleagues and superiors, worker autonomy, and self-fulfillment. As such relationship between organizational climate-related variables with academic and administrative staff's satisfaction provide strong evidence of the importance and influence of such factors in the workplace and is said to be a predictor of staffs' retention which has a difference with the level of intentional to leave or stay with the organization.

Nguyen, Taylor and Bradley (2003) suggest that employers benefit from satisfied employees as they are more likely to profit from lower staff turnover and higher productivity if their employees experience a high level of job satisfaction. They further suggest that employees should also be happy in their work, given the amount of time they have to devote to it throughout their working lives. As such, climate surveys serve as an essential means for determining the nature of organization. Climate surveys give employees a voice to assist in making desired transitions as smooth as possible. Climate surveys enable organization to identify potential areas that may need to be addressed in order to create a positive environment for academic and administrative staff from diverse backgrounds. It is useful for development and quality improvements efforts towards organization's goal. In an organization like a university, the climate as perceived by those who work in it determines to a large extent their level of contribution and the degree of attainment of its set goals and objectives. Thus, organizational climate survey enables a successful organization to operate more efficiently through the use of workers' input and satisfaction ratings. Therefore, the purpose of this study is to determine the perception of both the academics and the administrative staff of a public university on its organizational climate, job satisfaction, and intention to leave.

2. Brief Literature Review

2.1.Organizational Climate

Organizational climate is defined as people's perception and attitude about the organization, whether it is good or bad place to work, friendly or unfriendly, hardworking or easy-going, and so forth (Wendell and Bell, 2004). As such, organizational climate can be defined as the human environment within which organizations employees do their work. It may refer to the environment within a department a major company unit or an entire organization. Ashforth (1994) stressed that organizational climate is a joint property of both the organization and the individual. In other words, organizational climate is an outcome of the interaction between the organizational attributes and the behavior of the individuals. Therefore, the organizational climate in universities is a relatively enduring quality of university climate that is experienced by participants, affects their behavior, and is based on the collective perception of behaviors of all the people involved in the organization. A healthy organizational climate influences the staff in the way they perceive the organization (Hoy and Tarter, 1992). Hence organizational climate is a critical link between the members of an organization, their organizational behavior, and the organization itself (Welsch & Lavan, 2003). For this study, seven components of organizational climate were specifically identified and measured. The components are organizational design, communication, leadership, teamwork, decision making, culture, and motivation.

According to Gailbraith (2002), organizational design is foremost about strategy, the basic direction of the company and which activities are most necessary. It is also about structure,

processes, rewards and people. Many designs fail because they focus exclusively on formal structures and processes while ignoring the political, social, and cultural dynamics of the organization. In some cases, seemingly elegant designs ignore the way work actually gets done within the organization. So, as top management personnel make design decisions, they must constantly balance the two aspects of the organization. The effectiveness of the design in terms of performance required fulfilling the strategic objectives and the design's impact on individuals, group relationships, and the political dynamics of the organization. As such organization design is an equally powerful determinant of climate is organizational arrangements; the formal and the informal ways in which work is accomplished

According to Sin, Tse, Yau, Chow, Lee, and Lau (2005), communication is defined as the formal as well as informal exchanging and sharing meaningful and timely information between one person and another. Communication is important to create mutual understanding between one person and another and it is crucial to create cooperation and trust especially between academic and administrative staff in a university. Drenth, Thierry, and de Wolff (1998), define communication as the sending and receiving of messages by means of symbols and see organizational communication as a key element of organizational climate. Acceptable behaviors are reflected in direct, constructive and timely feedback; open communication; mutual respect; and use of conflict (differences) as an asset whereas lack of acceptable behaviors such as blaming others; focusing on problems rather than solutions; allowing rumors, gossip and criticisms to prevail corrupt the organization climate (Taylor and Marya, 2006).

Armstrong (2004) defines leadership as influence, power and the legitimate authority acquired by a leader to be able to effectively transform the organization through the direction of the human resources that are the most important organizational asset, leading to the achievement of desired purpose. This can be done through the articulation of the vision and mission of the organization at every moment, and influence the staff to define their power to share this vision. Leadership at work in education institutions is thus a dynamic process where an individual is not only responsible for the group's tasks, but also actively seeks the collaboration and commitment of all the group members in achieving group goals in a particular context (Cole, 2002). Different leadership styles on the organizational climate and performance directs the organization in a way that makes it more cohesive and coherent. Certain leadership styles also produce a positive and stable organizational climate that makes an impact on motivation and performance. According to Litwin and Stringer (1968), leadership style is a critical factor of the quality of any organizational climate, because leadership is about inspiring people to perform (Cole, 2002). Even if an institution has all the financial resources to excel, it may fail dismally if the leadership does not motivate others to accomplish their tasks effectively. Fostering teamwork is creating work culture that values collaboration. Teamwork could make thinking, planning, decision and actions are better when done cooperatively. Teamwork spirit among the academic and administrative staff in a university can create a harmony working environment. The barriers or wall between faculties should be demised in order to increase teamwork. By encouraging teamwork at every level, organizations can ensure that they accelerate productivity.

Another component of organizational climate is the subordinate level of participation in the organization's decision making process. Decision making is the conscious process of making choices from among several alternatives with the intention of moving towards some desired course of action (Mintzberg, 1979; Shull, Sndre, Delbecq, and Cummings, 1970). Decision making is also a process, which reflects how a decision is made. Hannah's (1967) study clearly stated that the role of a worker in decision making in an organization depends on the size of such organization and the management system adopted. If the top management can create or

give an opportunity to their employees to voice out their opinion in making a decision, its can foster the positive working environment and healthy climate. According to Schwarber (2005), when faced with a decision, the leader needs to let his or her team members know, at the outset, that they are going to play a vital role in coming up with the best possible solution.

Culture has been commonly understood to be made up of a collection of fundamental values and belief which give meaning to organizations (Pettigrew, 1979; Schein, 1990). Each organization has its own distinctive culture. Organization culture reflects to how "we do thing" (Zaheer and Westney, 2003) whereas, according to Cartwright, Daniels, and D'Andrea (2005) organizational culture encompasses the beliefs, values and practices that the employee uses to define the organization. Culture is important as it is more than its distinct visible features, it extends to the inner self of a person, to members within a society, further to the whole community. It can form invisible bonds between members thus bring people together in the community. In an organization, culture directly impacts what happens or will not happen in organizations. In other words, organizations can ultimately get only as so much as their organizational cultures take them. That is why the culture that the academic and administrative staff of the university portray are important as it will reflect the university as a whole.

Motivation is referred to as an internal state or condition that activates behavior and gives direction and it develops desire or want that energizes and directs goal-oriented behavior (Mintzberg, 1979). Woolfolk (2001) defined motivation as an internal state that arouses, directs and maintains behaviour. Ochitwa (2002) collaborating this opinion pointed out that organizational climate can arouse employee's natural motivations. He further states that some climates could lead to frustration of staff, while others can energize the work environment. Those organizations with conductive work environment usually have a warm and friendlier climate than organizations with unconducive environment. Therefore, the key to understanding the process of motivation lies in the meaning of, and relationship among, needs, drives, and incentives. That is, it is the process of stimulating people to action and to achieve a desired task. As such it is important that the top management motivate their employees in order to maintain and encourage the employees to perform better in their work and in return they will feel appreciate by the organization.

2.2.Job satisfaction

Among the most accepted definition of job satisfaction is by Locke (1969) who defines job satisfaction as a positive emotional feeling, a result of one's evaluation towards his job or his job experience by comparing between what he expects from his job and what he actually gets from it. Job satisfaction is the extent to which an employee feels about his or her job (Odon, Boxx, and Dunn, 1990). Demir (2002) refers job satisfaction to employees' feel of contentment and discontentment for a job. Cranny, Smith, and Stone (1992) concluded that job satisfaction is a contribution of cognitive and affective reactions to the differential perceptions of what an employee wants to receive compared with what he or she actually receives. It is suggested that job satisfaction is a state of pleasure gained from applying one's value to a job (Locke, 1969). Spector (1997) believes that job satisfaction can be considered as a global feeling about the job or as a related constellation of attitudes recognized as a critical link between members of an organization. Job satisfaction has long been an important concept in the organizational study of the responses employees have to their jobs. Job satisfaction is the result of the interaction of the employees' values and his perception towards his job and environment (Locke, 1976). Nevertheless, job satisfaction reflects the extent an individual enjoys their job. Therefore, it is an emotional response towards various aspects. Cranny et al (1992) found that job dissatisfaction could result in psychological frustration and low productivity. Thus, job satisfaction plays a very critical role in attracting and retaining of employees' ability in an organization (Brookfield, 1998).

Nasurdin and Ramayah (2003) indicated that both task and organizational rewards contribute to job satisfaction. Task rewards are intrinsic rewards directly associated with the job such as interesting and challenging work, variety and opportunities to use one's skills. Job satisfaction is not a unitary concept; rather, a person can be relatively satisfied with one aspect of his or her job and dissatisfied with other aspects. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs (Spector, 1997). As such, satisfaction and dissatisfaction with one's job depends upon the positive or negative evaluation of one's own success or failure in the realization of personal goals and perceived contribution of the job to it. Studies have consistently reported that job satisfaction is one of the factors or reasons for employee intentions to leave the organization (Price, 2001). This makes job satisfaction an issue of substantial importance for both employers and employees.

2.3.Intention to leave

Intentions are, according to researchers such as Ajzen and Fishbein (1980) and Igbaria and Greenhaus (1992), the most immediate determinants of actual behavior. While it is reasonable to argue that intentions are an accurate indicator of subsequent behavior, it is still not known what determines such intentions (Firth, Mellor, Moore & Loquet, 2004). In fact, there has been a great deal of involvement in this study to assess the employees' intention to leave or to stay in the organization but a lot of confusion exists about what is really the cause (Zaffane, 1994). Intent to leave is a psychological process and it is hard for researchers to comprehend it but, intent to leave has been described as an aware and thoughtful grit to leave the organization (Tett and Meyer, 1993). Many factors have been investigated and linked with employee's intentions to leave. The term 'intention to leave' can be refers to the situation in which an individual is consciously making a decision whether to leave an organization (Weisberg, 1994) and look forward to find another job in the near future (Purani & Sahadev, 2008). This is in line with attitude behavior theory (Fishbein and Ajzen, 1975) that one's intention to perform a specific behavior is the close predictor of that behavior. Employee's intent to leave is his inclination (Martin, 1979) to quit the job and this is the last step before leaving the organization (Porter and Steer, 1973). Intention to leave the workplace was normally due to lack of human resource orientation within the organization, i.e. the extent to which personnel are rewarded for a job well done, feel well taken care of and where management is interested in their health and well-being. It is very difficult to measure the reasons for employee turnover because those who have left the organization are difficult to access and collect the data and their response remains low. Therefore, it is wise to measure the employee's intent to leave before they quit which is comparatively less complicated (Johnsrud, Heck, and Rosser, 2000).

Relationship between Organizational Climate, Job Satisfaction and Intention-to leave

There are numerous studies investigating the relationship between organizational climate and job satisfaction, with many researchers finding evidence to support the relationship between the two constructs (Field & Abelson, 1982; Friedlander & Margulies, 1969; Schneider & Snyder, 1975). In a review of studies investigating organizational climate and job satisfaction, Peek (2003) found that organizational climates that exhibit characteristics such as having a high degree of autonomy, providing opportunities for employees, nurturing relationships among employees, showing interest in and concern for their employees, recognizing employees' accomplishments and holding employees in high regard result in more satisfied workers. Similarly, Brief (1998) found that salary, benefits and advancement opportunities were components of organizational climate that had a direct influence on job satisfaction. Mosser and Walls (2002) also reported a positive relationship in organizational climate and job satisfaction in their work. Literature indicates climates of an organization and job satisfactions of their employees vary together. That climate had the greatest impact on satisfaction with interpersonal relationships on a job, a moderate impact upon satisfaction with recognizable advancement in

the organization and relatively less impact upon self-realization from task involvement (Friedlander and Margulies, 1999; Pritchard and Karasick, 1993; Salkind, 2000). Baron, (1996), Carrell, Elbert, Hatfield, Grobler, Max, and Van der Schyft (1998) and Denizer, (2008), in their studies identified organizational structure; rules, regulation and policies; supervision and leadership, work group; work environment, etc as factors that cause satisfaction in the work environment (Fajana, 2001). For example, Sagie,(2002) and Udogo,(2008), admitted that communication, problem solving, decision making, learning and motivation all can be affected by the organizational climate.

Porter and Steer (1973) suggested that individuals and organizational level factors should be included which determine the employee's behavior and attitude that manipulate his/her decision whether to leave or stay in the organization. Manger and Eikeland (1990) also examined factors that impact on academics' intentions to leave the organization, and found that relations with colleagues were the largest predictor of intention to leave. This indicates that the "climate" of the environment in which academics work has a large influence on their feelings of satisfaction with the job as a whole, and their commitment to stay in the job rather than seeking to fulfill intrinsic needs elsewhere. Regardless of the reason, intention to leave is costly to the organization, as the stayers may divert their resources for their personal gain (Seigall & McDonald, 2004). Hence, it is important that the organization provides a good working environment or positive working climate in order to increase employees' satisfaction in working place, thus decrease employees intent to leave. It is hoped that the findings of this study will provide data to the administrators of the university that can be used for informed decision making, to begin the on-going process of self-assessment and critical evaluation in order to continue to improve the university climate, job satisfaction, and reduce the intention-to-leave among the staff of the university.

3. METHODOLOGY

A quantitative research methodology was utilized to assess the level of each component of the organizational climate, the level of job satisfaction, and intention-to-leave of both academic and administrative staff of a public university in Malaysia. A total of 220 surveys were distributed to the staff of the university where 110 were distributed to academic staff and 110 were distributed to administrative staff. After a screening process, only 154 completed questionnaires (academic staff – 46.36%; administrative staff – 93.63%) were usable. The respondents for the current study are made up of 51.3% male and 48.7% female. Majority (45.5%) of the respondents are in the below than 31 years of age category, followed by those who ranked between 31 - 44 years of age category (37.7%), and 16.9% are from more than 44 years of age category.

3.1.Reliability Test

The Cronbach's Alpha for organization design is 0.730; communication is 0.773; leadership is 0.883; teamwork is 0.812; decision making is 0.789; culture is 0.895; job satisfaction is 0.780; and motivation is 0.786. These also apply to intention to leave measures which the reliability of the scales is above .5 that is 0.805. According to Nunnally (1978), Cronbach's Alpha >0.5 is acceptable for an exploratory study. Hence, the instruments used to measure the variables above are considered reliable.

3.2.Descriptive Statistics

The response format for the components of organizational climate is a 5 point Likert Scale ranging from strongly disagree (1), disagree (2), not sure (3), agree (4) and strongly agree (5). For the purpose of the study, the scale indicators for the components of organization climate are as follows:

1.00 – 2.99 is Low level
3.00 – 3.99 is Moderate level
4.00 – 5.00 is High level

Table 1 shows the results of a total means scores for each of the component of organizational climate, job satisfaction, and intention to leave.

Table 1: Total Means for Variables: Academic and Administrative Staff

Components Of Organizational Climate	Mean (Academic staff)	Std. Dev	Mean (Administrative staff)	Std Dev
Organization Design	3.86	.480	4.07	.473
Communication	3.50	.784	4.09	.485
Leadership	3.56	.877	3.96	.636
Teamwork	3.67	.780	3.90	.414
Decision making	3.33	.679	3.92	.524
Culture	3.10	.874	4.05	.552
Motivation	3.34	.698	3.87	.592
Job Satisfaction	3.46	.851	4.08	.592
Intention to leave	3.38	1.090	3.08	1.019

As shown in Table 1, the results of the study indicated that for the academic staff, the total mean values for each of the component of organizational climate, job satisfaction, and intention-to-leave appeared to be at moderate levels. The results for the administrative staff produced different mean values compared to academic staff with organizational design, communication, culture, and job satisfaction at high levels while the other organizational components were at moderate levels. In order to identify which statement(s) led to mean values as indicated in Table 1, the mean value for each statement of the variables was analysed as shown in Table 2.

Table 2: Mean values on Individual Items: Academic and Administrative Staff

Statements	Academics	Admin
Organization Design		
1. The university vision and mission are clear to me.	3.90	3.98
2. The university's policies and procedures are clear to me.	3.55	**4.03**
3. Employees have to share understanding of what the organization is supposed to do.	3.98	**4.11**
4. Roles and responsibilities within the department are understood.	3.75	**4.24**
5. Employees perform a number of different tasks beyond their job description.	**4.14**	**4.01**
Communication		

6. I receive the information I need to perform my job well.	3.45	**4.07**
7. When I need help, I can ask others in my work group for suggestions or ideas.	3.69	**4.09**
8. Our face-to-face meetings are productive.	3.37	**4.12**
Leadership		
9. I am inspired by my superior.	3.41	3.86
10. I clearly understand what my superior expects from me.	3.69	**4.05**
11. My superior's actions are consistent with the university values.	3.61	**4.00**
12. My head of department encourage people to speak up when they disagree with the decisions.	3.57	3.95
Teamwork		
13. I feel my input is valued by my peers.	3.65	3.71
14. Employees consult each other when they need support.	3.80	3.89
15. Knowledge and information sharing is a group norm across the different faculties/departments/units of university.	3.57	**4.01**
16. I have confidence and trust in my colleague.	3.67	3.99
Decision Making		
17. I feel free to tell top management people what I really think.	2.88	3.69
18. We seek multiple sources of information before making important decisions.	3.78	3.93
19. I have authority to do my job to the best of my abilities.	3.67	**4.04**
20. I feel that this university is making good progress in providing equal opportunity for all employees to make decision.	2.98	3.96
21. I have chance to use my new ideas in my task.	3.37	3.99
Culture		
22. This university has a good working environment.	2.92	**4.01**
23. I enjoy being a part of this university.	3.53	**4.30**
24. I feel valued as an employee.	2.98	3.99
25. Morale is high across the university.	3.14	3.94
26. Employees have a good balance between work and personal life.	2.96	**4.01**
Job Satisfaction		
27. In general, I like working here.	3.55	**4.23**
28. The amount of work that I expected to do is reasonable.	3.29	**4.10**
29. I find my job is interesting and motivating.	3.55	3.92

Motivation		
30. I am energetic and enthusiastic about my work.	3.75	**4.06**
31. This university challenges me to strive for ambitious goals.	3.47	**4.01**
32. I receive a great deal of encouragement and recognition.	3.12	3.74
33. I was appropriately rewarded for my performance.	3.06	3.68
Intention To Leave		
34. In general, I would leave the university if offered better pay and compensation benefits.	3.82	3.19
35. In general, I would leave the organization if offered good working environment.	3.84	3.03
36. In general, I would leave the university if offered sophisticated office/classroom equipment	3.47	3.25
37. For some time, I have been considering changing employer.	3.27	3.11
38. I feel fed up with my current job.	3.51	2.85

It appears that for the academic staff the only high mean value is for the statement "Employees perform a number of different tasks beyond their job description" whereas for the administrative staff, several high mean values were found for all the variables except intention to leave as indicated in Table 2.

3.3.Correlation

Table 3 indicates the relationship among of organization design, communication, leadership, teamwork, decision making, culture, and motivation, with intention to leave and job satisfaction for academic staff. The results show, there is significant negative relationship between organizational climate and intention to leave. It indicates the higher the level of organizational climate the lower to intention to leave.

Table 3: Correlations: Academic staff

Variables	Intention-to-leave	Job satisfaction
Communication	-.355*	.535**
Leadership	-.419**	.438**
Teamwork	-.285*	.462**
Decision Making	-.441**	.563**
Culture	-.494**	.753**
Motivation	-.592**	.693**

Note: Correlation is significant at the 0.01 level (2-tailed); Correlation is significant at the 0.05 level (2-tailed)

Table 4 indicates the relationships among of organization design, communication, leadership, teamwork, decision making, culture, and motivation with intention to leave and job satisfaction for the administrative staff. The results indicate that there are significant relationships between the components of organizational climate and intention to leave and job satisfaction. The result shows that there is no significant relationship between the components

of organizational climate and intention-to-leave. As for the relationship between the organizational climate and job satisfaction, there are positive significant relationships. This means if the administrative staff perceive good or favorable organizational climate, their job satisfaction will increase.

Table 4: Correlation: Administrative staff

Components of Organizational climate	Intention-to-leave	Job satisfaction
Communication	.017	.339**
Leadership	.015	.367**
Teamwork	.175	.385**
Decision Making	.184	.429**
Culture	.067	.424**
Motivation	.176	.429**

Note: Correlation is significant at the 0.01 level (2-tailed); Correlation is significant at the 0.05 level (2-tailed)

4. CONCLUSION AND RECOMMENDATIONS

The results of the study showed that the academic staff's perception on components of organizational climate, intention-to-leave, and job satisfaction to be at moderate levels whereas the results for the administrative staff produced different mean values with organizational design, communication, culture, and job satisfaction at high levels while the other organizational components were at moderate levels. The results also indicate that for the academic staff there were significant positive relationships between all the components of organizational climate and job satisfaction, and significant negative relationships between all the components of organizational climate and intention-to-leave whereas for the administrative staff, the results indicated significant positive relationship between all the components of organizational climate and job satisfaction but there was no significant relationship between any of the components of organizational climate on intention-to-leave. These findings are rather intriguing due to the fact that even though the respondents are employees of the same university yet their perceptions on organizational climate, intention-to-leave, and job satisfaction are somewhat different.

The present findings should be of interest not only to the university in particular, but also to those institutions of higher learning in general. Knowledge of one's organization is always important as decisions and plans are developed and implemented based on one's knowledge of one's organization. The perceptions of the employees of one's organization are of utmost importance in the plans that involve human resources. It is hoped that the findings of this study will provide data to the management of the university that can be used for informed decision making, to begin the on-going process of self-assessment and critical evaluation in order to continue to improve the organizational (university) climate, staff job satisfaction, and reduce intention-to-leave, and to establish a baseline from which future organizational (university climate), satisfaction, and intention-to-leave assessments can be compared to.

It is recommended that future studies should further investigate the relationships between organizational climate, job satisfaction, and intention-to-leave in both public and private institutions of higher learning in Malaysia. The findings of these future studies would aid the management of these institutions of higher learning to better understand their employees and further enhance the employer-employee relations in these organizations.

REFERENCES

Ajzen I, Fishbein M (1980). Understanding attitudes and predicting social behavior, New Jersey: Prentice-Hall.

Armstrong, M. (2004). Human resource management theory and practice. London: Bath Press Ltd.

Ashforth, B.E. (1994). *Review of Organizational career development: Benchmarks for building a world-class workforce* (T.G. Gutteridge, Z.B. Leibowitz, & J.E. Shore), San Francisco: Jossey-Bass, 1993. Canadian Journal of Administrative Sciences, 11, 272-273.

Baron, R (1996). Behaviour in Organizations. Newton: Allyn and Bacon.

Brief, A.P. (1998). Attitudes in and around organizations. California: Sage.

Brookfield, H.B. (1998). The impact of flexible benefits plans on job satisfaction, organizational commitment and turnover intention. Benefits Quarterly, 10, 84-90

Carrell, M. R.; Elbert, N. F., Hatfield, R. D.; Grobler, P. A.; Max, M. & Van der Schyft. (1998). Human Resource Management in South Africa. Cape Town: Prentice-Hall.

Cartwright, B.Y., Daniels, J., & D'Andrea, M. (2005). An exploratory study of self report versus demonstrated multicultural counseling competence. Paper presented at the National Council on Rehabilitation Education 5th Annual National Conference, Tucson, AZ.

Cole, G.A. (2002). The administrative theory and workers' motivation, Zante institute of administration Press LtD, ABU Zaria, Nigeria

Cranny, C.J., Smith, R.C. & Stone, E.F. (1992). Job satisfaction: How people feel about their jobs and how it affects their performance. New York: Lexington

Demir, M.C. (2002). Job satisfaction of nurses, working at Turkish Military Forces Hospitals. Military Medicine, 167, 402-404.

Denizer, D. (2008). Accidents at Work and Work Related Health Problems by Sex, Status, Age and Severity. *Journal of Health Management*. 26(2), 721-760.

Drenth, P.J.D., H. Thierry, and C.J. de Wolff (1998). *Handbook of Work and Organizational Psychology* (2nd Edition). East Sussex: Psychology Press Ltd.

Fajana, Sola (2002). Human Resource Management: An Introduction. Lagos: Labofin and Company

Field, R.H.G., & Abelson, M.A. (1982). Climate: A reconceptualization and proposed model. Human Relations, 35(3), 181−201.

Firth, L., Mellor, J., Moore, A., & Loquet, C. (2004). How can managers reduce employee intention to quit?. Journal of Managerial Psychology, 19 (2), 170-187.

Fishbein, M. and Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Reading, MA: Addison Wesley.

Friedlander, F and Margulies, N. (1999). Multiple Impacts of Organizational Climate and Industrial Value Systems Upon Job Satisfaction. *Personnel Psychology*. 22, 171-183.

Hannah, H. (1967). The legal Base for Universities in Developing Countries. NewYork: Maxlin Press.

Hoppock, R. (1935). Job Satisfaction. New York: Harper and Brothers.

Hoy, W. and C. Tarter, (1992). Measuring the health of the school climate: a conceptual framework. *NASSP Bulletin*, 76(5): 74-79.

Igbaria, M. and Greenhaus, J.H. (1992), "Determinants of MIS employees' turnoverintentions: a structural equation model", *Communications of the ACM*, Vol. 35 No. 2, pp. 35-49.

Johnsrud LK, Heck RH, Rosser VJ (2000). Morale Matter: Middle level administrators and their intent to leave. J. Higher. Educ. 71(1): 34-59.

Keegan, J.K. & Schlegelmilch, B.B. (2003). *Culture and global marketing management – A European Perspective*. Ashford Colour Press Ltd., Gosport.

Kniveton, B. (1991). An Investigation of Factors Contributing to Teachers Job Satisfaction. *School Psychology International*, 12, 361 – 370.

Landy, F.J. (1989). Psychology of work behavior (4th ed.). Belmont: Wadsworth.

Litwin, G.H., & Stringer, R.A. Jr. (1968). Motivation and organizational climate. Boston: Harvard University Press.
Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (ed.), Handbook of industrial and organizational psychology (pp. 1297-1349). Chicago: Rand McNall.
Luthans, F. (1998).*Organisational Behaviour*. 8th ed. Boston: Irwin McGraw-Hill.
Manger, T. and Eikeland, O. (1990). 'Factors predicting staff's intentions to leave the university', *Higher Education*, Vol. 19 pp. 281-91.
Martin TN Jr. (1979). A contextual model of employee turnover intention. Acad. Manage. J. 22(2): 313-324.
Mintzberg, H. (1979), The structuring of organizations, Prentice-Hall, Englewood Cliffs.
Moorman, R.H., Niehoff, B.P. & Organ, D.W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment and procedural justice. Employees Responsibilities and Rights Journal, 6, 209-225
Mosser, N. R. and Walls, R. T. (2002). Leadership frames of nursing chairpersons and the organizational climate in baccalaureate nursing programs. *Southern Online Journal of Nursing Research*, 3.
Nasurdin, A.M. and Ramayah, T. (2003). The Link Between Satisfaction and Commitment: Is It Different For Old And Young Workers? The National Human Resource Development Conference Proceedings, 15th -16th December 2003, Kuching, Malaysia.
Newstrom, J. & Davis, K. (1993). Organization Behavior: Human Behavior at Work. New York: McGraw-Hill.
Nguyen, A.N., Taylor, J. and Bradley, S. (2003a), Relative pay and job satisfaction: Some new evidence, Working Paper 045, Department of Economics, Lancaster University Management School, 2003a, available at: http://www.lums.lancs.ac.uk/publications/viewpdf/000187/
Nunnally, J. C. (1978). Psychometric theory (2nd edition.). New York: McGraw-Hill.
Ochitwa O. (2002) "A study of the organizational climate of high and low adopter elementary schools in Saskatchewan" Group and Organizational Management, 24(4): 96-100.
Odon, R.Y., Boxx, W.R. & Dunn, M.G. (1990). Organizational cultures, commitment, satisfaction and cohesion. Public & Management Review, 14, 157-168.
Payne, R., & Pugh, D.S. (1976). Organizational structure and climate. In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology,* (pp. 1125- 1174). Chicago: Rand McNally.
Peek, R.C. (2003). The relationship between organizational climate and job satisfaction as reported by institutional research staff at Florida community colleges. Unpublished PhD dissertation, University of Florida.
Pettigrew, A.M. (1979), "On studying organizational cultures", Administrative Science Quarterly, Vol.24 pp.570-581.
Porter LW, Steers RM (1973). Organization work and personal factors in employee turnover and absenteeism. Psych. Bull., 80: 151-176.
Price, J.l. (2001). Reflections on the determinants of voluntary turnover. International Journal of Manpower, 22(7), 660-624.
Pritchard, R.D. and Karasick, B (1993). "The Effects of Organizational Climate on Managerial Job Performance and Job Satisfaction". Organizational Behaviour and Human Performance. Vol 9.
Purani, K and Sahadev, S. (2008), The Moderating Role of Industrial Experience in the Job Satisfaction, Intention to Leave Relationship: an Empirical Study Among Salesmen in India. The Journal of Business & Industrial Marketing. 23(7): pg. 475.
Rambur, B., Val Palumbo, M., McIntosh, B., & Mongeon, J. (2003). A Statewide Analysis of RNs' Intention to Leave Their Position. Nursing Outlook, 51, 181-188
Sagie,A. (2002). Employee Absenteeism, Organisational Commitment and Job Satisfaction: Another Look. Journal of Vocational Behaviour. 52(2), 156-171.

Salkind, N. J. (2000). “Exploring Research”. New Jersey: Prentice Hall. 4th Edition.
Schein, E. (1990) ‘Organizational culture’, American Psychologist, 45(2), pp. 109-19.
Schneider, B., & Snyder, R.A. (1975). Some relationships between job satisfaction and organizational climate. Journal of Applied Psychology, 60(3), 318−328.
Schwarber, P.D. (2005), “Leaders and the decision-making process”, Management Decision, Vol. 43 Nos 7/8, pp. 1086-92.
Shull, Fremont A., Jr., Sndre L. Delbecq, and L. L. Cummings (1970). Organizational Decision Making. McGraw-Hill Inc.
Siegall, M. and McDonald, T. (2004) Person-organization Value Congruence, Burnout and Diversion of Resources, Personnel Review, 33(3), 291–301.
Sin, L. Y.M and Tse, A.C.B and Yau, O.H.M Chow, R.P.M., Lee J.S.Y and Lau,
L.B.Y (2005). Relationship Marketing Orientation: Scale Development and Cross Culture Validation. *Journal of Business Research*, pp.1-10
Spector, P.E. (1997), Job satisfaction: Application, assessment, causes, and consequences, Sage, London, 1997.
Steyn, G. M. & Van Wyk, J. N. (1999).” Job Satisfaction. Perceptions of the Principals and Teachers in Urban Black Schools in South Africa”. South African Journal of Education. 19(1), 37 – 43.
Taylor and Marya (2006). Crisis Communication Effectiveness in the Context of the Relational Perspective of Public Relations and Image Repair Strategies. Human Communication Research, 29: 153–181.
Tett, R.P. and Meyer, J.P. (1993), "Job Satisfaction, Organizational Commitment, Turnover Intention, and Turnover: Path Analyses Based on Meta-analytic Findings", Personnel Psychology, 46: 259-293.
Udogo, (2008).Understanding Employee Commitment in the Public Organisation: A Study of the Juvenile Detention Center. International Journal of Public Administration. 18(8), 1269-1295.
Volkwein, J. F. and Zhou, Y. (2003). Testing a model of administrative job satisfaction. *Research in Higher Education, 44,* 149-171.
Weisberg, J. and Kirschenbaum, A. (1993), “Gender and turnover: a wereexamination of the impact of sex on intent and actual job changes”, Human Relations, Vol. 46 No. 8, pp. 987-1007.
Welsch, H.P, & La Van, H (2003), Inter-relationship between organizational commitment and characteristics, job satisfaction, professional behaviour and organizational climate Human Relations, 34, 1079-1089.
Wendell L. French and Cecil H. Bell (2004), Organization Development: Behavioral Science Interventions for Organization Improvement.
Woolfolk, A. (2001). Educational psychology 8th ed. Boston, MA: Allyn and Bacon
Zaffane R.M (1994). Understanding employee turnover. Int. J. Manpower. 15(9): 22- 33.
Zaheer, S. Westney, D.E. (2003), The Multinational Enterprise as an Organization [in:] Rugman, A.M., Brewer, T.L. (eds.), The Oxford Handbook of International Business, Oxford University Press, New York.

Relationship between Prosocial Motivation and Subordinate Self-Rating of Leader-Member Exchange Relationship at Public Universities

Shereen Noranee[1], Noormala Amir Ishak[2], Raja Munirah Raja Mustapha[3], Mohd Amli Baharum[4] and Rozilah Abdul Aziz[5]

1 UiTM Puncak Alam , Selangor, shereen@puncakalam.uitm.edu.my
2 UiTM Shah Alam, Selangor, noormala317@salam.uitm.edu.my
3 UiTM Puncak Alam, Selangor, munirah@salam.uitm.edu.my
4 UiTM Kampus Jengka, Pahang, amli_baharum@pahang.uitm.edu.my
5 UiTM Puncak Alam, Selangor, rozilah@puncakalam.uitm.edu.my

ABSTRACT

Employees who have high exchange relationships with their supervisors feel that the relationship would lead to positive treatment by their supervisors. This would induce an obligation on the part of the followers to reciprocate positive treatment from leaders with extra-role behaviors. These employees are motivated to help their leaders and, equally, the organizations achieve their goals. However, true prosocial motivated employees consider appreciation from help beneficiaries is not really significant. These employees are willing to help others even though that help is not part of any formal job description or work policy. Employees who take voluntary efforts in helping other workers would lead to organizational effectiveness. Therefore, the objective of this study is to examine the relationship between prosocial motivation and subordinate self-rating of leader-member exchange quality. Rasch model was used to validate the measurement and SPSS was administered for further analysis on 210 administrative officers at local public universities. The findings reveal that employee prosocial motivation has a positive indirect effect on subordinate self-rating of leader-member exchange relationship. Thus, proven the importance of leader-member exchange relationship quality in the working environment. A discussion on recommendation and future research are also presented.

Key Words: Prosocial motivation, subordinate self-rating of leader-member exchange ralationship, Rasch model, public universities.

1. INTRODUCTION

Interpersonal relationship that employees secure in organizations have important implications on individual well-being, morale, effectiveness and competence, as well as organizational success and productivity (e.g., Shao, Resick, & Hargis, 2011; LePine, Erez, & Johnson, 2002; Podsakoff, Whiting, Podsakoff, & Blume, 2009). The relationship allows employees to have more opportunity to perform citizenship behavior for those people who are close to them, regardless of race, gender, or age (Bowler & Brass, 2006). Interpersonal exchange relationships with supervisors, also known as leader-member exchange relationship (LMX), are important that it ultimately determines how employees define and play their roles within the organizational context (Dienesch & Liden, 1986). At the same time, subordinates are not passive, but rather proactive participants who would try their best to change their work environment. As high quality exchange relationships develop, mutual internal goals and attitude similarities between managers and employees are linked positively to job-related outcomes (Lo & Ramayah, 2006). Employees who have high exchange relationships with their supervisors, feel that this would lead to positive treatment by their supervisors. This would induce an obligation on the part of the followers to reciprocate positive treatment from leaders with extra-role behaviors. Hence, these employees are

motivated to help their leaders and, equally, the organizations achieve their goals (Chan & Mak, 2012; Bowler, Halbesleben, & Paul, 2010).

Employees who have high prosocial motivation is also to have high motivation to help others. The motivation to help offers positive consequences such as creating a sustainable, high-quality, effective relationship between individuals, positive self-development and other employees' productivity at work (Spitzmuller & Van Dyne, 2013).

2. LITERATURE REVIEW

This section discusses on employee prosocial motivation (PSM) as an antecedent, and subordinate self-rating of leader-member exchange (LMX) quality as an outcome.

2.1 Leader-Member Exchange Relationship

Leader-member exchange (LMX) occurs when a supervisor demonstrates managerial actions which positively regard by an employee, and due to that the employee is willingly to reciprocate through behaviors that are likely valued by the supervisor (Settoon, Bennett, & Liden, 1996). This is congruent with social exchange theory, where individuals who are engaged in high-quality relationships will behave in such a way that their exchange partner will also get the benefits (Liden, Wayne, & Sparrowe, 2000).

LMX gives impact on employee work behavior. According to Lamertz (2002), a person's personal attributes do not solely drive an employee behavior. Instead, the characteristics of relationship, such as LMX, that promote in determining the employee behavior. Therefore, effective and efficient employee work behavior may be the result of "opportunity structures" which is created by organizational social and workflow systems.

The emphasis on dyadic relationships is an important and unique feature of LMX theory. Nevertheless, in supervisor-subordinate relationships, it has proven that supervisors do not behave consistently toward all subordinates (Graen, 1976). Instead, supervisors engage different quality relationships with their subordinates. Specifically, a study found that employees with high prosocial motivation have indirect negative relationship with supervisor-rating of LMX (Shereen, Noormala, Raja Munirah, & Mohamad Shahril, 2016).

In supervisor-subordinate relationships, high-quality of LMX dyads exhibits a high level of exchange between the supervisor and subordinate. This characterizes by mutual liking, trust, respect, and reciprocal influence (Dienesch & Liden, 1986). As a result, subordinates are often given more information by the supervisor and reported better latitude of job. On the other hand, lower-quality of LMX relationships known as traditional "supervisor" relationships are based on hierarchical differentiation and exercise more formal rules of employment contract (Graen & Scandura, 1987).

High exchange relationship is created on a long-term orientation, where the exchanges between managers and employees are ongoing, are based on feelings of diffuse obligation, and are less in need of an immediate "pay-off" (Walumbwa, Cropanzano, & Goldman, 2011; Shore, Tetrick, Lynch, & Barksdale, 2006). The emphasis is on the socio-emotional aspects of exchanges, such as give-and-take and being taken care of, and the exchange partners trust that the other partner will reciprocate. Under such conditions, employees' prosocial motivation will probably be considered as in-role behavior rather than extra role behavior. This, in turn, should make the employees work behavior more genuine and trusting and thereby increase the level of exchange relationship with supervisors (Dysvik, Buch, & Kuvaas, 2015).

2.2 Prosocial Motivation

Motivation comes from a set of energetic power that is created from within and outside individuals to initiate and sustain behaviors equipped with the direction, the intensity and duration towards a goal (Pinder, 2014). One element of motivation that has been an interest to researchers is prosocial motivation (eg, Dysvik, Buch, & Kuvaas, 2015; Grant, 2008). Prosocial motivation is the psychological state in which people focus on the goals for the benefit of others, based on concern for the welfare of others (Benedetti, 2012). It is not like altruism, which refers to concern

for others at the expense of self-interest (De Dreu, 2006), prosocial motivation put their self-interest aside to care for others. Grant and Berg (2010) suggested that prosocial motivation is similar to the intrinsic motivation rather than extrinsic motivation. Research on prosocial motivation in organizational literature shows that when employees are motivated prosocially, they are more likely to be sensitive to the needs and perspectives of others, including those of co-workers, supervisors, suppliers and customers (De Dreu, Weingart, & Kwon, 2000; Grant & Berry 2011), resulting in higher levels of performance and productivity (Grant, 2008).

Employees who are highly motivated in their prosocial values show high levels of performance, endurance, productivity, creativity, task significance, social worth, perceived positive impact on others, affective commitment to the other employees, and self-efficacy (Benedetti, 2012; Grant & Berry 2011). According to Grant (2007), prosocial motivation is categorized into four dimensions namely, relational job design, collective rewards, transformational leadership, and individual differences. Relational job design links employees to other organizational individuals which produce good outcomes (eg., customers, clients, and patients). Those who experience higher levels of prosocial motivation demand them to invest more time and energy in their assigned tasks and assisting the beneficiaries (Grant, 2007). Generally in any organizations, norms influence employee motivation in defining shared standards and expectations of appropriate behavior, such as showing more concern on individuals' outcome and exchanging more information (De Dreu, Weingart, & Kwon, 2000).

Prosocial motivation is a desire of an individual to build a good relationship (Banki, 2010). Naturally, prosocial motivation is an important theoretical and practical phenomenon because it has a great influence on employee behavior and work performance (Grant & Berg, 2010). Employees who have a positive attitude coupled with their position in the organization may feel inclined to go beyond accepting the signs of appreciation. Some individuals may also work extra hours, adding more responsibilities for the organization. They are willing to take action to ensure the survival of the organization as their behaviors are driven by the values of prosocial (Finkelstein, 2006).

2.3 Prosocial Motivation and LMX

Grant and Sumanth (2009) studied the perception of a supervisor trust among employees will strengthen the relationship between prosocial motivation and performance of employees. Another study conducted by Grant, Parker, and Collins (2009) suggests that a proactive employee behavior accompanied with strong prosocial motivation can contribute to the evaluation of higher supervisor performance.

Cheng, Lu, Chang, and Johnstone (2013) analysed the moderating effect of supervisor-attributed motives on the relationship between voice behavior (eg., making innovative proposals) and LMX. In particular, the behavior will be stronger in effect when the supervisor recognizes the behavior as more prosocial rather than self-interest.

It is essential that supervisors have a positive perception in their subordinates to strengthen the relationship between employee motivation and employee performance (Grant & Sumanth, 2009). It is proven that supervisors will assess their subordinate better, if subordinates possess strong prosocial motivation (Grant, Parker, & Collins, 2009).

3. METHODS

This study is cross-sectioned correlational research where 210 samples were analyzed by using the Rasch Model Measurement (WINSTEPS 3.72.3) and Statistical Package in Social Sciences Software (SPSS) version 20.

The population for this study is the total number of public university Administrative Officers (AOs; e.g., N41, N44, and N48), Professional and Management group, from various departments and units at 20 public universities in Malaysia. The 20 public universities are listed in the Ministry of Education Malaysia (MOE) official portal at http://www.moe.gov.my/en/home. The critical component of the model is LMX; hence, it is important that the sample includes employees who have opportunities to help their supervisors on a regular basis. The sampling strategy focused on the entire AOs in which, it is assumed that employees and their supervisors have a tendency to

interact with one another. This ensures that participants have opportunities to interact with supervisors at work, thereby providing opportunities for variance in LMX.

3.1 Measures

Leader-Member Exchange. Leader-member exchange measure was adopted from a 7-item (LMX7) construct of Scandura and Graen (1984), with Cronbach's alpha of above .84. Graen and Uhl-Bien (1995) recommended the LMX7 scale and had analyzed the Cronbach's alpha single measure range of .80 to .90. Coefficient alpha for LMX7 analyzed by Berneth, Armenaksi, Feild, Giles, and Walker (2007) was .90. The additional 12 items were adopted from Bernerth et al. (2007) which exceeded .90 of coefficient alpha. Leader-member social exchange (LMSX) scale was developed based on uncertainty involved in social exchanges. LMX7 and LMSX scales were combined as both were related to antecedent variables of PSM and precedent of LMX. The scale was accordingly modified to reflect supervisor perception of LMX. This instrument was able to assess the different and the same components of the supervisor-subordinate relationship which is consistent with the notion of social exchange.

Prosocial Motivation. PSM also was assessed with a 5-item scale adapted from the measure of PSM using an established 12-item measure developed by Grant (2008a), Grant and Sumanth (2009), and Grant (2008b). All items were adopted and the item reliability is above than .90.

3.2 Testing the Goodness of Fit Using Rasch Measurement Model

Quality control and good of fit was analysed using Rasch Model. Several iterations were done by collapsing the data and deleting the items identified as misfits. A better fit instrument was finally constructed, showing marked improvement across various fit statistics including MNSQ, Z-Std, reliability, SE and variance measured.

Table 1: Summary of Cleaned Values

	Item	**Person**
Reliability:	**0.97** (*0.98*)	**0.94** (*0.93*)
Infit MNSQ:	**0.98** (*0.33*)	**1.02** (*1.05*)
Separation:	**5.56** (*7.84*)	**3.8** (*3.64*)
Scale Range:	**5.13** (4.49)	**8.97** (7.47)
PCA Variance Measure:	**50.5%** (*42.0%*)	
Unexplained 1st Contrast:	**4.7%** (*4.7%*)	

The results in Table 1 are the cleaned values (in bold) followed by the original instrument values which are shown in italics. The cleaned instrument shows a little decrease to 0.97 of item reliability but still indicating sufficiency of item range and the person mean which allows for further analysis of the instrument. Wright and Masters (1982) claimed that the value is positive because it is near to 1.0, indicating that the replicability of the items could occur if these items are to be given to another sample of the same size. Item infit MNSQ is at 0.98 indicating a normal response which meets the expected value of MNSQ. Excellent item model fit MNSQ range extreme is at 0.77-1.3 (Fisher, 2007). The instrument yields an item separation index at 5.56, indicates excellent sufficiency of item range (Fisher, 2007). In short, the survey has sufficient items for determining the influence of employee motivation on employees' ICB, identifying the influence of employee motivation on LMX relationship among the administrative officers at public universities.

Person reliability was conducted to determine how well the items measure the respondents. In this study, the person reliability is slightly increased to 0.94. The acceptable person reliability

index ranges from 0.80 to 1.00, indicating positive feedback. In addition, the person reliability index of ≥ 0.8 is acceptable (Bond & Fox, 2013). It is above the logit scale for different sets of item agreement which measures the same construct. Person infit MNSQ decreased to 1.02 indicating a normal response which meets the expected value of MNSQ. Excellent item model fit MNSQ range extreme is at 0.77-1.3 (Fisher, 2007). The summary statistics displays a person separation of 3.80 compared to the previous that was at 3.64. Therefore, this denotes that the respondents' reliability is beyond that of the items, at 3.80 endorsement level. In addition, the separation index of ≥ 2.0 is also acceptable (Bond & Fox, 2013).

The item scale range is wider at 5.13 logits against the person scale range of 8.97 logits as compared to the original instrument of 4.49 logits and 7.47 logits, consecutively. The item scale range increased by 0.44 logits, which is equivalent to 32.5%. The PCA of variance measure also improved from 42% to 50.5%, determining a strong measurement dimension (Conrad, Riley, Conrad, Chan, & Dennis, 2010). which is considered as satisfactory given the sample and the instrument. The unexplained variance in 1st contrast shows 4.7%, and thus conforms to the acceptable value at <15%.

D. RESULTS

Bootstrap analysis which is known as INDIRECT, implemented by Preacher and Hayes (2008) was used to assess the relationship between prosocial motivation and subordinate self-rating of LMX.

Table 2: Summary of Mediation Result (5,000 Bootstrap Samples, N = 210)

Independent Variable (IV)	Mediating Variable (M)	Dependent Variable (DV)	Effect of IV on M (*a*)	Effect of M on DV (*b*)	Direct Effect (*c'*)	Indirect Effect (*a**b*)	95% CI for *a**b*	Total Effect (*c*)
Prosocial Motivation	Subordinate Self-rating of LMX	Interpersonal Citizenship Behavior	.23**	.002	.013	.0005	-.0005,.002	-.037

Note: IV, independent variable; DV, dependent variable; M, mediator. In both analyses, the effects of the other independent variables were controlled for **p<.001, *p<.05. Several other variables (e.g., impression management motivation, interpersonal citizenship behavior) were included in this survey, however, for the purpose of this paper, results of LMX and subordinate self-rating of PSM were extracted from the analysis.

Table 2 shows that the respondents who indicated a high level of prosocial motivation, were more likely to have subordinate self-rating of LMX (a = 0.23). Hence, prosocial motivation has indirect effect on subordinate self-rating of LMX.

5. DISCUSSION

The current study found that employee prosocial motivation has a positive indirect effect on subordinate self-rating of LMX. It means that employees who were socially-motivated rated themselves as possessing high LMX quality. Subordinates have perception of having high interpersonal relation with their supervisors. This finding is supported by a statement stating that prosocial motivation is a desire of an individual to build a good relationship (Banki, 2010). In addition, they are more likely to be sensitive to the needs and perspectives of others, including those of co-workers, supervisors, suppliers and customers (De Dreu et al 2000; Grant & Berry 2011). Subordinates with strong prosocial motivation may have strong relational identities. This is

because according to Cheng, Lu, Chang, and Johnstone (2013), supervisors with strong relational identities are motivated to establish high LMX. However, if subordinates lack the ability to meet the added roles and duties that are expected of high LMX members and also lack the motivation or ability to maintain high LMX, relationships between both parties will be diminished.

Sources of motivation at the relational level include serving the welfare of others (i.e., prosocial motivation). In the perspective of employees, those with high levels of prosocial motivation also have high levels of LMX relationship with their supervisors. According to Spitzmuller and Van Dyne (2013) employees who have high prosocial motivation is also to have high high-quality and effective relationship with supervisors at work.

6. CONCLUSION AND FUTURE RESEACH

Measures of prosocial motivation and LMX were integrated and respective subscales were disregarded; the effects of each dimension of each mentioned measures were thus overlooked. Studying the facets of prosocial motivation and LMX would be worthwhile in future research in order to understand the complex mechanisms and work behavior of employees more deeply. More research is needed on how employees become prosocially-motivated to help particular beneficiaries and serve particular causes, and how these differences in prosocial motivation influence work behaviors and experiences (Grant, 2009). This question is significant in theory because it will extend the understanding of the nature, content, and forms of prosocial motivation. It is significant in practice because it will provide prosocial motivation with tools for motivating employees to contribute effort towards important causes.

Under what conditions do self-interested motivations undermine prosocial motivation? In contrast to current findings, evidence exists that self-interested motivations can undermine prosocial motivations. Some researchers have argued that employees are often motivated by feelings of compassion and empathy to help others, but that social norms discourage the expression of this prosocial motivation unless it can be justified as self-interested motivation (Ferraro, Pfeffer, & Sutton, 2005; Miller, 1999). Others have found that monetary rewards and financial incentives, especially when linked to time or performance, can distract employees' attention away from concern for others (DeVoe & Pfeffer, 2007). Research is needed to inform the conditions that moderate whether self-interested motivations undermine or support prosocial motivation (Grant, 2009).

7. REFERENCES

Banki, S. (2010). Is a good deed constructive regardless of intent? Organization citizenship behaviour, motive, and group outcomes. *Small Group Research*, 41(3), 354-375.

Benedetti, A. A. (2012). *Event-level intrinsic, extrinsic, and prosocial motivation: Effects on well-being*, (Doctoral dissertation, The University of Akron).

Berg, J. M., Grant, A. M., & Johnson, V. (2010). When callings are calling: Crafting work and leisure in pursuit of unanswered occupational callings.*Organization Science*, *21*(5), 973-994.

Bernerth, J., Armenakis, A., Feild, H., Giles, W., & Walker, H. (2007). Leader-member social exchange (LMSX): Development and validation of a scale. *Journal of Organizational Behaviour*, 28(8), 979-1003.

Bond, T. G., & Fox, C. M. (2013). *Applying the Rasch model: Fundamental measurement in the human sciences*. Psychology Press.

Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of applied Psychology*, *91*(1), 70.

Bowler, W. M., Halbesleben, J. R., & Paul, J. R. (2010). If you're close with the leader, you must be a brownnose: The role of leader–member relationships in follower, leader, and coworker attributions of organizational citizenship behavior motives. *Human Resource Management Review*, *20*(4), 309-316.

Buch, R., Kuvaas, B., Dysvik, A., & Schyns, B. (2014). If and when social and economic leader-member exchange relationships predict follower work effort: The moderating role of work motivation. *Leadership & Organization Development Journal*, *35*(8), 725-739.

Chan, S. C., & Mak, W. M. (2012). Benevolent leadership and follower performance: The mediating role of leader–member exchange (LMX). *Asia Pacific Journal of Management*, *29*(2), 285-301.

Cheng, J. W., Lu, K. M., Chang, Y. Y., & Johnstone, S. (2013). Voice behaviour and work engagement: the moderating role of supervisor-attributed motives. *Asia Pacific Journal of Human Resources*, 51(1), 81-102.

Conrad, K. J., Riley, B. B., Conrad, K. M., Chan, Y. F., & Dennis, M. L. (2010). Validation of the Crime and Violence Scale (CVS) against the Rasch measurement model including differences by gender, race, and age. *Evaluation Review*, *34*(2), 83-115.

De Dreu, C. K. W. (2006). Rational self-interest and other orientation in organizational behavior: A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology*, 91, 1245-1252.

De Dreu, C. K., Weingart, L. R., & Kwon, S. (2000). Influence of social motives on integrative negotiation: a meta-analytic review and test of two theories. *Journal of Personality And Social Psychology*, *78*(5), 889.

DeVoe, S. E., & Pfeffer, J. (2007). Hourly payment and volunteering: The effect of organizational practices on decisions about time use. *Academy of Management Journal*, 50(4), 783-798.

Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review*, *11*(3), 618-634.

Dysvik, A., Buch, R., & Kuvaas, B. (2015). Knowledge donating and knowledge collecting: The moderating roles of social and economic LMX. *Leadership & Organization Development Journal*, *36*(1), 35-53.

Ferraro, F., Pfeffer, J., & Sutton, R. (2005). Economics language and assumptions: How theories can become self-fulfilling. *Academy of Management Review*, 30(1), 8-24.

Fisher, W. P. J. (2007). Rating scale instrument quality criteria. *Rasch Measurement Transactions*, 21(1), 1095.

Graen, G. (1976). Role-making processes within complex organizations. *Handbook of Industrial and Organizational Psychology*, 1201, 1245.

Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393.

Grant, A. M. (2008a). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48-58.

Grant, A. M. (2008b). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology*, 93(1), 108-124.

Grant, A. M. (2009). Putting self-interest out of business? Contributions and unanswered questions from use-inspired research on prosocial motivation. *Industrial and Organizational Psychology*, 2(01), 94-98.

Grant, A. M., & Berg, J. M. (2010). Prosocial motivation at work: When, why, and how making a difference makes a difference. *Handbook of Positive Organizational Scholarship*. Oxford University Press.

Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, *54*(1), 73-96

Grant, A. M., & Sumanth, J. J. (2009). Mission possible? The performance of prosocially motivated employees depends on manager trustworthiness. *Journal of Applied Psychology*, 94(4), 927.

Grant, A. M., Parker, S., & Collins, C. (2009). Getting credit for proactive behaviour: Supervisor reactions depend on what you value and how you feel. *Personnel Psychology*, 62(1), 31-55.

Lamertz, K. (2002). The social construction of fairness: Social influence and sense making in organizations. *Journal of Organizational Behavior*, *23*(1), 19-37.

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of applied psychology*, *87*(1), 52.

Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85(3), 407.

Lo, M. C., & Ramayah, T. (2009). Dimensionality of organizational citizenship behavior (OCB) in a multicultural society: The case of Malaysia. *International Business Research*, *2*(1), p 48.

Pinder, C. C. (2014). *Work Motivation in Organizational Behavior*. Psychology Press.

Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual-and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *94*(1), 122.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behaviour Research Methods*, 40(3), 879-891.

Scandura, T., & Graen, G. B. (1984). Mediating Effects of Initial Leader-Member Exchange Status on the Effects of a Leadership Intervention. *Journal of Applied Psychology*, 69(3), 428-36.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader–member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81(3), 219.

Shao, P., Resick, C. J., & Hargis, M. B. (2011). Helping and harming others in the workplace: The roles of personal values and abusive supervision. *Human Relations*.

Shereen Noranee, Noormala Amir Ishak, Raja Munirah Raja Mustapha, & Mohamad Shahril Mohamad Besir, (2016). Employee prosocial motivation and interpersonal citizenship behavior: The supervisor rating of leader-member exchange quality as a mediator. In *Proceedings of the 1st AAGBS International Conference on Business Management 2014 (AiCoBM 2014)* (pp. 221-233). Springer Singapore.

Shore, L. M., Tetrick, L. E., Lynch, P., & Barksdale, K. (2006). Social and economic exchange: Construct development and validation. *Journal of Applied Social Psychology*, *36*(4), 837-867.

Spitzmuller, M., & Van Dyne, L. (2013). Proactive and reactive helping: Contrasting the positive consequences of different forms of helping. *Journal of Organizational Behavior*, *34*(4), 560-580.

Walumbwa, F. O., Cropanzano, R. and Goldman, B. M. (2011). How leader-member exchange influences effective work behaviors: Social exchange and internal-external efficacy perspectives, *Personnel Psychology*, Vol. 64, No. 3, pp. 739-770.

Wright, B. D., & Masters, G. N. (1982). *Rating scale analysis. Rasch measurement*. MESA Press, 5835 S. Kimbark Avenue, Chicago, IL 60637.

The Impact of Reward Structures on Job Satisfaction among Academic Staff in Universiti Kuala Lumpur

Mohd Hafizul Ismail[1] and Siti Nur Dina Hj Mohd Ali[2]
[1)]*Universiti Kuala Lumpur, Malaysia, mhafizul@unikl.edu.my*
[2] *Universiti Teknologi MARA,Cawangan Negeri Sembilan, Malaysia, dina8394@ns.uitm.edu.my*

ABSTRACT

Job satisfaction has a profound impact towards any institutions. This study seeks to investigate the levels of job satisfaction towards reward structures among academic staff in Universiti Kuala Lumpur. The significant relationship between reward structures on job satisfaction is examined as the main objective of this study. Therefore, a quantitative method is applied by employing a survey research design for data collection. A research instrument in the form of questionnaire consisted of 17-item Likert scale on job satisfaction is adapted for 103 male and female academic staff in Universiti Kuala Lumpur. The instrument comprises one independent variable which is reward structure and one dependant variable which is job satisfaction. For analysis, the Statistical Package for Social Science (SPSS) version 20.0 is used to analyse the statistical data. In order to determine the reliability of the data, the Cronbach's Alpha analysis is utilized which indicating an average 0.7 and above for all variables. The data obtained is later analysed by using descriptive analysis and linear regression to identify the significant relationship between both independent and dependent variables. The finding reveals that the academic staff in Universiti Kuala Lumpur are satisfied with their reward structures scheme and the overall job satisfaction. Additionally, it is also revealed that there is a significant relationship between the reward structures and their job satisfaction.

Key Words: Job Satisfaction, Reward Structures, Universiti Kuala Lumpur, Academic Staff

1. INTRODUCTION

Job satisfaction has a profound impact towards any institutions. Thus, workplace, a venue that occupies most of the employees' time performing their job, undoubtedly plays a big role in most employees' life. In fact, it can take up more time than any other activities as it is the main source of the economic basis for our living. Due to this, job satisfaction is regarded as an important key area for numerous researches and is mostly studied in the recent years. Ivancevich et.al and Pool (1997) claimed that job satisfaction is the degree to which individuals feel a positive attitude about their overall job. The satisfaction is the indicator on the assigned task demanded at the workplace. Job satisfaction can also be referred to an emotional response of the workers towards the task as well as the social and physical conditions of the workplace. Rice et al. (1991) and Akpofure (2006) defined job satisfaction as a total feeling about one's job or in term of specific factors of the job and it can be related to specific output such as productivity and job performance.

Based on related theories on job satisfaction, it is learned that job satisfaction can be identified as the degree to which the expectations in someone's psychological contract are satisfied (Ivancevich,1997 and Akpofure, 2006). Attitude at the workplace can be also associated to the employee satisfaction towards the designated job. Therefore, job satisfaction can also be displayed as a result of various attitudes possessed by an employee towards his or her job. These attitudes related to job factors among the employees including job environment, job security, salary, nature of work, opportunity for promotion, opportunities for participation in decision making and other enjoyment of fringe benefits entitled by the employees.

Although there are several job satisfaction researches previously, it is found that not many studies focused on the job satisfaction of the university employees (i.e. academic staff)(A.Solucis and Syed Shah Alam,2005). The academic staffs build the foundation of the university key performance. University is the centre in conveying knowledge at tertiary levels which is a crucial developmental keystone for any country and the academic staffs are the backbones. To a large extent, a university is expected to seek and cultivate new knowledge, provide the right model of leadership and strive together in promoting equality and social justice. In addition, universities are also considered as the premier source of knowledge awareness production institutions as they produce the specialist manpower at different point of life (Salman et. al., 2011). A better nation is dependent on the source of the retrieved knowledge in order to be on par with other developed nation worldwide. Thus, it is obviously noted that education contributes towards the betterment and development of the nation in the country. Therefore, the education system must be strategically planned in order to produce the best result in this particular area to convey such vision. This brings upon the importance role of the academic staff (e.g. lecturers, facilitators, tutors or teachers) as the main personnel in the education sector to disseminate the knowledge. Regardless of the designated position or the affiliated institutions they are working with, the academicians have heavy responsibilities in educating the students with the knowledge stored. Thus, the high quality of the academic staff is the reference of outstanding education system as the healthy and positive university will later increase the academicians' job satisfaction levels. To add further, this supportive atmosphere will not only increase the academicians' job satisfaction but, concurrently, will improve the productivity and learning environment of the university onwards.

The responsibilities of the lecturers are wide-ranging and varied. Nowadays, the lecturers are not only responsible in shaping the quality of the students through a formal in-class learning activities, but they also need to perform additional task such as administration, research and co-curricular activities. In order to handle all tasks efficiently, the lecturers need to give their full commitments as the educators of the affiliated institutions. Additionally, commitment depends on several contributing factors such as work environment, reward structures and personal characteristics. According to Allan and Meyer (1990), commitment is regarded as the attitude of the employees towards their organizations. The ways the employees perceive the given tasks are associated with the commitment they personally possess at the workplace itself.

This provides the fact that a satisfied employee is influenced by the environment he or she experienced at the workplace. Another essential component of job satisfaction takes into consideration the expected rewards. This plays a rather significant role as it can be the indicator of the levels of job satisfaction that the employees have towards the organizations. Drawing from Herzberg, Mausner, and Snyderman (1959), rewards are categorized as extrinsic if they are received mainly to complete the job assigned (e.g. pay, promotion, praise from supervisor) and intrinsic if they are associated with the job itself and have some personal attachment towards the job (e.g. chance to develop new skills or accomplish something worthwhile).

According to Maslow's Theory of Needs, the most basic need in work environment for an employee is that the reward structures consist of pay or salary (Luthans, 2005). Salary is an ultimate factor of job satisfaction for almost every type of employee in every organization. Although it is a very important factor towards job satisfaction but few researches come out to be unclear regarding the influences of salary on job satisfaction. According to Bassett (1994), there is a lack of empirical evidence exists in literature to indicate that salary alone can improve the employees' satisfaction or decrease their dissatisfaction. However, a study conducted by Oshagbemi (2000) among the United Kingdom academicians, found out that there is a statistically significant relationship between salary, rank of employees and their levels of job satisfaction. In fact, another study by Grace and Khalsa (2003) at Massachusetts higher education institutions reported that professional development and the salary packages offered are the most important job satisfaction factors.

According to Spector (1996), salary satisfaction is determined by the equity in which it is distributed, rather than the actual amount of salary. In other words, people who earn lower may be more satisfied with their salary than those higher earning individuals. This is a rather interesting insight as a study conducted by De Vaney and Chen (2003) concluded that salary was an important determinant of job satisfaction. It is noted that they measured salary as relative to other employees and to the job itself. Thus, the notion that pay is the main indicator of satisfied employees is based upon the value the employees placed upon the salary. To add further, the value for pay was not measured by the amount that the employees was actually paid rather the personal attainment that the employees have.

Another essential element of reward structures is the promotional opportunity. Many researchers shared the same opinions on the fact that job satisfaction is strongly related to the individual opportunities for promotion (Peterson et.al, 2003). This viewpoint is supported in a study conducted by Ellickson and Logsdon (2002) where satisfaction with promotional opportunities was found out to be positively and significantly related to the job satisfaction of the employees. Additionally, a research carried out by David and Wesson (2001) suggested that limited opportunities for promotion were common in public sector organizations by discouraging the qualified employees to remain in their respective jobs..

The academicians are merely humans who are also subjected to problems of dissatisfaction at the workplace. By the time these academicians experience low job satisfaction, they are not well-motivated to perform their best in the classes and inculcate creativity among the students. If they are not satisfied with their working environment, they have the tendency to leave the profession or frequently change the institutions instead. These academicians who are planning to leave their jobs are reported to have low satisfaction and more negative attitudes towards teaching as a career (Smith, 2007). As a result, this act would tarnish the university image which leaves a negative impression to the university as a whole. Therefore, there is an urgent need to study such related factors that contribute towards job satisfaction among academicians so that proper actions can be taken by the management to improve the current situation so that it is in line with university expectations.

There are several researches conducted to investigate the area of reward structures and job satisfaction among academic staff in Malaysia context. In 2009, Fauziah and Kamaruzaman discovered that the academic staff of the Malaysia's universities have a moderate level of general satisfaction. The demographic variables which are current position, age, marital status, and salary appear to represent antecedent conditions of the general satisfaction. In contrast with Fauziah and Kamaruzaman (2009), Anantha et. al. (2013) demonstrated specifically a research in private institutions instead. An article written by Anantha et. al. (2013) entitled 'The Effects of Reward and Motivation Satisfaction: Evidence from Education Industry in Malaysia' performed a study about the relationship between compensation, motivation and promotion with job satisfaction among the academic staff in three private colleges in Malaysia. The finding of this study showed that there is a positive significant association exists between pay, promotion and fringe benefits on job satisfaction.

There are a limited number of researches carried out on rewards structures and job satisfaction particularly in private institutions and Malaysia context. To be specific, there are no research done in Universiti Kuala Lumpur (henceforth UniKL) to find out more the association of reward structures and job satisfaction among academic staff in this university. Job satisfaction among the academic staff is crucial as it acts as a picture of a successful yet healthy environment to both the academic staff and the students in teaching and learning session. This provides a platform for students to shape their future in entrepreneurship and install critical thinking. In line with the main vision of UniKL to become the leading entrepreneurial technical university in the future, the levels of job satisfaction among its academic staff are very important because it will affect the quality of teaching, creativity and productivity of the learning session, in particular. Thus,

this would not only have an impact on the academic performance of the current students, but it can also affect the impression of the new incoming students towards the integrity of university for the long term implication. To add further, at the end, the stakeholders of the university are answerable in terms of the standardized procedure implemented in the university.

Hence, this study highlights the area of job satisfaction among UniKL academic staffs in City Campus, Kuala Lumpur. Despite a lot of research and studies had been done on job satisfaction but there has never been any published researched paper on job satisfaction in UniKL. To be specific, the impact of reward structure on job satisfaction among academic staff in UniKL still remains unclear and there is a need to investigate further about this area. Due to this fact, this paper aims to contribute to the body of knowledge of the concerned area of reward structures and job satisfaction. The research question as a gridline for this study is 'What are the levels of satisfaction among the academic staff towards reward structures and their relationship with job satisfaction?'. Therefore, the hypothesis is formulated for the research question as follows*; is there a positive relationship between reward structures factor and job satisfaction*. This study aimed in examining the levels of job satisfaction in term of reward structures and the relationship between reward structures and job satisfaction among the academic staff in UniKL.

Therefore, this research focuses on the impact of reward structure on job satisfaction levels among the academic staff in UniKL. As the biggest private university in the Malaysia, UniKL contributes significantly toward the national building by yielding thousands of graduates in various fields every year. Without alleviating the contribution of non-academic staff, the academic staff portray significant roles in shaping a nation. Thus, to ensure that the academic staff are able and willing to carry out their task successfully, it is necessary to point out that the management department of the university need to know and understand the contributing factors which can affect the academic staff satisfaction levels in general. This is absolutely a helpful effort for the management of the university in planning out possible reach out programs to cater such needs. By presenting related facts and figures of the findings, this can assist the university to overcome common problems of dissatisfaction among the academic staff such as low quality of teaching, absenteeism and turnover and eventually elevate the satisfaction levels among the academic staff for better quality in teaching and learning.

2. RESEARCH METHODOLOGY

This study used a quantitative approach to measure the relationship between personal characteristics and rewards structures toward a job satisfaction. Thus, the study employs a survey research as a basic research design for this study. Therefore, a quantitative method was selected with the use of questionnaire in collecting the data for a systematic documentation. This is supported further by Neuman (2011, p. 200) on the basis that 'in the form of numbers and numerical data, this method represents a uniform, standardized and compact way to empirically represent abstract ideas'. The data obtained from the findings were presented by the representation of facts and figures in tables. This is much preferable in terms of the data presentation and interpretation as it provides input about the finding itself. Therefore, a hypothesis was formulated based on Spector (1996) and Peterson et.al (2003) study of reward structures. The hypothesis, 'There is positive and significance relationship between the reward structures factors and job satisfaction', is the preliminary statement as a guideline for this research.

The target population for the present study is the academic staff at UniKL. UniKL itself consists of 14 different institutions ranging from Kedah, Perak, Selangor, Wilayah Persekutuan Kuala Lumpur, Melaka and Johor. The population or empirical target population (i.e. the sampling frame) selected is the UniKL staff in Kuala Lumpur and Selangor. Based on the sampling framework, the actual sample selected for the purpose of this paper is the academic staff who works at UniKL Malaysia Institute of Information Technology (MIIT), City Campus, Kuala Lumpur.

The sample comprises 103 academic staff of Universiti Kuala Lumpur. They were purposively selected from 5 categories based on their designated posts, namely, Professor, Associate Professor, Senior Lecturers, Lecturers and Tutors. The average number of academic staff for each category is between 20 to 30 respondents. For the purpose of this study, the analysis of the data was not emphasised on their respective category but rather on the number of participants selected for the sample of the study. Of the 103 respondents, 44 were male and 59 were females.

According to previous literature, the three widely used and most popular job satisfaction scales are The Minnesota Satisfaction Questionnaire (MSQ), The Job Descriptive Index and The Job Satisfaction Survey (Arnold and Feldman, 1986; Smith, 1992; Spector, 1996; Mitchell, 2004; Gray, 2005). The questionnaire used consists of 26 items ranging from very satisfied (5), satisfied (4), uncertain (3), somehow satisfied (2) and not satisfied (1) based on the five Likert-scales item. The instrument of the study is categorized into two sections; Part A and Part B. The first part, Part A, collects respondents' demographic data which consists of gender, age, academic qualification and length of service. The second part, Part B of the questionnaire is 12 items consisting questions regarding reward structures which caters the main purpose of this study: to determine the levels of job satisfaction among the academic staff at UniKL. The subscales of the instrument have been arranged accordingly in the questionnaire. The independent variables consists 12 questions and the dependent variables (i.e. job satisfaction) consists of 5 questions as to be answered by the respondents upon administering the survey.

For the purpose of this study, the results from the survey were analysed by using the SPSS Version 20.0. The specific measurement techniques utilized from the software are the descriptive analysis, ANOVA and linear regression. The results of the questionnaire survey were computed by utilizing the descriptive statistics to examine the level of job satisfaction experienced by the academic staff of this particular university. The researcher used the descriptive analysis to measure the percentage of job satisfaction on both independent variables and dependent variable. The descriptive statistics were computed to examine the individual impact of independent variables on job satisfaction as well as to answer the research question. The significance between independent variables and dependent variable is tested by using linear regressions. Linear regression is used to investigate the effects of independent variable on single interval skill dependant variable.

3. RESULT AND DISCUSSION

Table 1: Sample demographics**.**

		Count	%
Gender	male	44	42.9
	female	59	57.1
	Total	103	100.0

Age	below 30	13	12.9
	31-40	53	51.4
	41-50	37	35.7
	Total	103	100.0

Qualification	bachelor	10	10.0
	master	69	67.1
	phd	24	22.9
	Total	103	100.0

Length of Service	up to 2 years	6	5.7
	3-5 years	29	28.6
	5-8 years	22	21.4
	above 9 years	46	44.3
	Total	103	100.0

Table 1 shows the descriptive analysis of demographic data based on gender, age, academic qualification and the length of service. The analysis of the demographic variables indicated that there are more female (57.1 %) respondents than male respondents (42.9 %) participated in the research. The majority of the respondents are the 31 to 40 years age group (51.4 %). Sixty-seven percent (67%) of the respondents hold Master Degree as their highest education qualification and followed by PhD holders (22.9 %) and Bachelor Degree holders (10%). The length of service based on the demographic table shows that the forty-four percent (44%) of the respondents have worked for the university for more than nine years.

Table 2: Reliability test (Cronbach's Alpha) for each factor.

Factors	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
1. Reward	.754	.742	12
2. Job Satisfaction	.776	.774	5

Table 2 shows the Cronbach alpha for reward structures and job satisfaction. The Cronbach's coefficients alpha value is 0.754 for the independent variable (i.e. rewards structures) and 0.766 for dependent variable (i.e. job satisfaction). The Cronbach's Alpha indicated good inter-item consistency for each factor analyzed. Sekaran (1992) explained that the reliability of a measure is established by testing the consistency and the stability of data collected. The consistency of the data shows the degree an item is independently measured of a concept. Reliability analysis was used to measure the goodness of data. This is to ensure that all items used in each variable are free from error and thus, providing consistent results. The Cronbach's alpha was the measurement used for this purpose. According to the rules of thumb about Cronbach's Alpha coefficient size, the higher the Cronbach's Alpha means the higher the reliability coefficient. According to Sekaran (2000), the alpha value over 0.80 is considered good, whereas a range of 0.70 is considered acceptable. Therefore, it can be concluded that the factors accepted for the internal consistency reliability and the measurement scales of the constructs were stable and consistent.

Table 3 : Reward Satisfaction

Factor / Degree		Percent (%)
Reward	Not Satisfied	2.9
	Somewhat Satisfied	27.1
	Uncertain	10.0
	Satisfied	44.3
	Very Satisfied	15.7
	Total	100.0

The result for research question is shown in Table 3 which contains the results of the reward structures and job satisfaction. By considering the related factors of the reward structures which are pay, promotion and benefit altogether, the result shows that 2.9% of the respondents were not satisfied, 27.1% of the respondents were somewhat satisfied, 10% of the respondents were uncertain, 44.3% of the respondents were satisfied and 15.7% of the respondents were very satisfied with their reward structures. About 60% of the respondents select “The pay I get from the amount of work I do,” “The pay in comparison with other universities,” “The promotion policy compare with other universities,” and “Opportunity to career development”. This descriptive analysis takes a small step toward developing a perspective of factors influencing job satisfaction but it cannot identify the relative contribution of these factors to the variation in job satisfaction. For that, the researcher turns to regression analysis. A linear regression allows researcher to assess the relationship between dependent variable (i.e. job satisfaction) with independent variable (i.e. reward structures).

Table 4: Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.637[a]	.406	.388	.37906

a. Predictors: (Constant), Reward structures

b. Dependent Variable: Job satisfaction

Based on Table 4, the independent variable which is the reward structures has fair correlation with the dependent variable (i.e. job satisfaction). This is because the correlation (R) for this research is 0.637 whereas the coefficient of determination (R^2) is 0.406 for the examined regression model. From the analysis, this reveals that the regression line could have a significant account for 40.6% of the variation of job satisfaction. In contrast, it shows that there is 59.4% of the variation of job satisfaction could not be presented by the equation. Therefore, there is a possibility that other additional variables which are important in explaining factors affecting job satisfaction

which are not covered in this study. Hence, the results show that 40.6% of the variance in the job satisfaction has been significantly fair as explained by the two independent variables.

Table 5: ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.739	3	3.246	22.593	.000[b]
	Residual	14.225	99	.144		
	Total	23.964	102			

a. Dependent Variable: Job satisfaction

b. Predictors: (Constant), Reward structures

Table 6: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.380	.232		5.960	.000
	reward	.249	.087	.279	2.854	.005

Based on Table 5, it shows that F value of 22.593 is significant at the 0.000 level. This is because the p-value is 0.00 is less than 0.005 ($p<0.005$). Overall, the regression model with independent variable of the reward structures was suitable in explaining the variation of job satisfaction. In addition, Table 6 shows t the reward structure has a significant relationship with job satisfaction. This is because the p-value of reward structures variable is 0.005. The Coefficients with the p-values less than alpha are statistically significant. Thus, the coefficients having a p-value of 0.05 or less would be statistically significant. The results show that reward structures was a significant determinant of job satisfaction.

The results showed a significant relationship between reward structures with job satisfaction with significant value of 0.005 levels. Therefore, the hypothesis previously stated is accepted and it is concluded that there is a positive relationship between reward structures with job satisfaction. This is also supported by a descriptive analysis on reward structures indicating 60% of the academic staffs were satisfied and very satisfied with reward structures in UniKL (Refer Table 3). Hence, it can be concluded that the respondents are mostly satisfied with the reward structures scheme. According to Beer and Walton (1990), satisfaction with the reward is related to what the employees expect and what they received regarding their job. Thus, this result advocated that the respondents' expectations in terms of rewards have been met.

Based on previous literature reviews, most researchers expected these results affect positively on the overall job satisfaction. According to Luthans (2005), as in Maslow's Hierarchy of Needs Theory, the most basic need of job satisfaction that required to be fulfilled is salary and pay. This finding is also supported by a study conducted by Oshagbemi (2000) among the UK academicians as the study found out a significant relationship between salary, rank of employees and their levels of job satisfaction. In Malaysia, Solucis and Syed Shah (2006) found that there is

indeed a significant association between pay, promotion and benefits to job satisfaction among academic staff in private universities.

4. CONCLUSION

The impact of reward structure on job satisfaction showed that the academic staff at UniKL mostly satisfied with their jobs. This is in line with the primary objective of this study in which to examine the levels of job satisfaction among the academic staff at this university. The findings of this study revealed that the academic staff in UniKL were satisfied with their job and the reward structure legalized. In addition, the hypothesis is accepted based on the findings from the linear regression demonstrating that there is a positive relationship between reward structures on job satisfactions.

There is several limitations worth to identify in this study. The questionnaire designed for the present study is to determine how satisfied the academic staff in terms of the reward structure and job satisfaction. However, it does not identify an in depth information on job satisfaction as this kind of information is limited for the present research purposes only. Therefore, it is recommended that a qualitative study which can be combined with the statistical analysis to provide a triangulation approach to be conducted. Due to limited sample and data collected through the primary survey, the data need

The questionnaire used for this study emphasizes on job satisfaction among the academic staff at UniKL only and it should not be generalized to other institutions. However, the instrument used for this study can be adapted and utilized in other relevant sectors in Malaysia dealing with job satisfaction. For future reference, it is recommended that this study to be expanded in larger context of tertiary levels. This study can be replicated to other institutes or universities within Malaysia especially in Klang Valley where there are high number of higher learning institutions established. As job satisfaction plays such an important role in contributing to the productivity levels of employees in the companies, it may be feasible to extend this study to other industries in Malaysia. The present study offers interesting insight in assessing the limited number of researches in the body of knowledge on job satisfaction among the academic staff in UniKL.

5. References

Arnold, H.J. and Feldman, D.C. (1986). *Organizational Behavior*. New York*: McGraw-Hill*.

A. Solucis and Syed Shah Alam.(2005) .Job satisfaction among academic staff in Private Universities in Malaysia . *Journal of Social Science*.72-75

Bedeian, A.G., Ferris, G.R. and Kacmar, K.M. (1992). Age, Tenure, and Job Satisfaction: A Tale of Two Perspectives. *Journal of Vocational Behaviour*. 33-48.

Burke, R. J. (1999). Workholism among women managers: Work and life satisfactions and psychological well-being. *Equal Opportunities International*, 18(7), 25-35.

Bohloko, G. M. (1999). Job Satisfaction Among Academic Staff At Colleges of Education in the Free State. *Master of Education thesis, University of the Orange Free State, Bloemfontein*

Bryman, A. (1995). Research Methods and Organization Studies. *London: Routledge*

Clegg, C.W. (1983). Psychology of Employee Lateness, Absenteeism, and Turnover: A Methodological Critique and an Empirical Study". *Journal of Applied Psychology*. February: 88-101 as cited in Luthans, F. (2005). Organizational Behaviour, p. 216. *10th ed. Boston: McGraw-Hill*

Fauziah N., Kamaruzaman J. (2009). Level of job satisfaction among Malaysia academic staff. *Asian Social Science*, 122-126

Gay, L.R. and Diehl, P.L. (1992). Research Methods for Business and Management. New York: *Macmillan*

Gray, K.C. (2005). Job Satisfaction. [online]. Illinois: College of DuPage. Available from http://www.cod.edu/grayke/210Ch8.html

Green, J.(2000). Job Satisfaction of Community College Chairpersons. [online]. *Doctor of Philosophy Dissertation, Virginia Polytechnic Institute and State University,Virginia*. Available from: http://scholar.lib.vt.edu/theses/available/etd-12072000-130914/.

Greenberg, J. (1993). Stealing in the Name of Justice: Informational and Interpersonal Moderators of Theft Reactions to Underpayment Inequity. *Organizational Behavior and Human Decision Process, February*: 81-103 as cited in Kreitner, R., Kinicki, A. and Buelens, M. (1999). Organizational Behaviour, p.214. London*: McGraw-Hill*

Harrison, G. L. (1995). Satisfaction, tension and interpersonal relations: A cross-cultural comparison of managers in Singapore and Australia. *Journal of Managerial Psychology, 10*, 13-19.

Kamaruzaman J., Zaliha H., Ju S.Y, Salleh D. (2009). The life satisfaction of academic and non-academic in a Malaysia Higher Education Institution. *International Education Studies*, 144-150

Kinicki, A.J. Schriesheim, C.A. McKee, F.M. and Carson, K.P. (1997). The Construct Validity of the Job Descriptive Index (JDI): Review, Critique, and Analysis as cited in Kreitner, R., Kinicki, A. and Buelens, M. (1999). Organizational Behaviour, p. 199. London: *McGraw-Hill*

Koch, J. and Steers, R. (1978). Job attachment, satisfaction, and turnover among public employees. *Journal of Vocational Behaviour*, 12, 119-128.

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (ed.)*, Handbook of industrial and organizational psychology (pp. 1297-1349). Chicago: Rand McNall*

Luthans, F. *(2005).* Organizational Behaviour*. 10th ed. Boston: McGraw-Hill.*

Newstrom, J.W. and Davis, K. (1993). Organizational Behaviour – Human Behaviour at Work*. 9th ed. New York: McGraw-Hill*

Oshagbemi. (1999). Academic and their managers. *A comparative study in job satisfaction*, 108-120.

Robbins, S.P. (2001). Organizational Behaviour. *9th ed. New Jersey: Prentice- Hall.*

Smith, P.C., Kendall, L.M. and Hulin, C.L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally as cited in Arnold, H.J. and Feldman, D.C. (1986). Organizational Behavior, p.99. *New York: McGraw-Hill*.

Spector, P. E. (1982). Behaviour in organisations as a function of employee's locus of control. *Psychological Bulletin*,91, 482-497.

Testa, M. R. (2001). Organizational commitment, job satisfaction, and effort in the service environment. *The journal of Psychology*, 135, 256-266.

Torrington, D. and Hall, L. (1991). Personnel Management: A New Approach*. 2nd ed. New Jersey: Prentice-Hall*

University of Minnesota. (MSQ) Minnesota Satisfaction Questionnaire. [online*]. Available from* *http://www.psych.umn.edu/psylabs/vpr/msqinf.html*

Vecchio, R.P. (2000). Organizational Behaviour*. 4th ed. Orlondo: Harcourt.*

Welsh, H. P. and La Van, H. (1981). Interrelationships between organizational commitment and job characteristics, job satisfaction, professional behavior, and organizational climate*. Human Relations Journal, 34, 1079-1089.*

The Impact of Transformational Leadership Styles towards Employees Job Performance: The Moderating Effect of Trust

Noorlaila Yunus[1] and Mohd Akmal Mohd Aduros[2]
1 Faculty of Business Management, Universiti Teknologi MARA, Shah Alam, Selangor
nlaila814@salam.uitm.edu.my; lailanoor13@yahoo.com
2 Faculty of Business Management, Universiti Teknologi MARA, Shah Alam, Selangor
mohdakmal11@gmail.com

ABSTRACT

Transformational leadership styles of leaders or managers have been widely practiced and linked to positive individual and organizational consequences Transformational leadership inspires followers and help to get better personal values and higher performance. Therefore, this study empirically explains the impact of transformational leadership style which consists of four dimensions (4I's), namely, Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individual Consideration (IC) toward the job performance among employees. It also determines the moderating effect of trust of employees to their leaders or managers with the relationship between two constructs, as well as trust in transformational leadership style and employees job performance. A set of 220 questionnaires were distributed to employees at several food manufacturing companies in Shah Alam which are Silver Bird Group Berhad (High 5) and Gardenia Bakeries Sdn. Bhd. There are other types of leadership styles however for this study Transformational Leadership styles was used. The findings were analyzed using descriptive and statistical statistics. The result of the study indicated that there was a positive and significant relationship between transformational leadership styles and employee's job performance. In addition, this study also provides several recommendations that could be beneficial for industries and suggestions for future research which could be strengthen the result of study.

1. INTRODUCTION

Background of the Study

The leaders who practice the Transformational leadership style insist that, it is only their leadership style has the ability to inspire and motivate employees to successfully achieve their work performance and best outcome. In addition, from the perspective of these transformational leaderships, they are also able to inspire and motivate the followers and make them as an asset to the organization. In making the standard operations more systematic and functioning to the organization while concentrating on the followers' values, it helps the followers to align their values with the organizational values, thus leading to the successfulness of the organization, as stated by Givens (2008). According to Parry (2001) and Bass (1998) successful leaders are typically described as inspirational and motivational, or in the appropriate jargon "*transformational*". The type of leadership style that being practice by the leaders plays an important role to motivate employees to do their work well and to make them happy to work with them (leaders). There are many types of leadership styles used by leaders nowadays, including the traditional and contemporary approaches to leadership. However, in this study the type of leadership style that will be discussed is the transformational leadership. According to Bass (1985), a transformational leadership has four components which are idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. In addition, Bass and Avolio (1994) stated that transformational style of leadership focuses on a positive vision of what can be achieved, is

characterized by enthusiasm and optimism, also encourages innovation, creativity, and the questioning of old assumptions. The leader adopting this style orients to each individual's specific needs, listens electively, and uses a personalized approach. In achieving the employee's job performance in the organization, there are two components which need to be addressed in the study. The first component is the commitment of the employees toward their job and the second component is their motivation towards their job. In addition, both components which are commitment and motivation toward job performance are usually affected from the employee's trust toward their leaders. According to Creed and Miles (1996), trust in leaders is particularly important for effective functioning teams and organizations where tasks are complex and unstructured, and where it requires high levels of interdependence, cooperation, and information sharing. Because of that, this study used trust (where we know plays an important role) as moderating variable toward the job performance.

2. STATEMENT OF THE PROBLEM

According to Quinn, (1996) and Bass (2000), survival these days requires strong leaders who can transform all the old assumptions and stimulate new perspectives and explore new businesses in the business environment. Yukl (1989) and Covey (1990) have both suggested that it is the trust that is engendered by transformational leaders that creates the heightened levels of commitment and performance associated with transformational leadership. Since the past few years, transformations have been made in many manufacturing companies in Malaysia. There have been leaders who could enhance morale, motivation and performance of the followers with a variety of mechanisms by this transformational leadership, but how far would the impact of transformational leadership style change the followers towards their commitment and motivation in job performances remains unclear. In the wake of these recent changes, pertinent questions about the implementation of transformational leadership need to be addressed. Firstly, how far the transformational leadership could influenced the workers commitment and motivation in job performance for better outcomes. In the preliminary interviews conducted by the researcher in several manufacturing companies in Shah Alam, including Silver Bird Group Berhad and Fraser & Neave Holdings Berhad, most of the leaders of the companies were of the opinion that a dynamic leadership is important to achieve the objectives of the organization and the efficiency of their workers. In the context of this research, the approach to leadership should be to foster strong ties between the leadership with the behaviours of the subordinates including the trust, commitment and motivation towards the employee job performance.

One of the main problems that occur in the manufacturing companies these days is de-motivated employees who feel that they are not treated well by their leaders. To overcome this problem, it is important to measure how well the components of transformational leadership are able to predict the job performance in the manufacturing companies in Malaysia. During a preliminary interview researcher stated the employees in her organization are concerned about the leadership style that the leaders apply in their everyday works. According to her, if the leaders play an effective leadership style it will lead to an effective work by the employees and the company. In addition, it is imperative also to investigate which components of transformational leadership is the best predictor of the job performance in manufacturing company in Malaysia. In a research by Hatter and Bass (1988), they claimed that transformational leadership has increased the organization performances. While Barling, Moutinho and Kelloway (1998) said that leaders also have their own approach to attract the followers.

The objectives of this study were as follows:

1. To identify the strongest dimension of transformational leadership (Idealized influence, Inspirational motivation, Intellectual stimulation and Individual consideration) that gives impacts on the commitment and motivation in job performance.

2. To examine the relationship between the transformational leadership style (Idealized influence, Inspirational motivation, Intellectual stimulation and Individual consideration) towards the commitment and motivation in job performance.
3. To examine if trust moderates the relationship between transformational leadership (Idealized influence, Inspirational motivation, Intellectual stimulation and Individual consideration) and job performance (commitment and motivation).

3. LITERATURE REVIEW

3.1 Transformational Leadership

According to Bass and Avolio (1994), transformational leadership may be described in such an example where the person or individual could motivate and inspire employees by raising their awareness of the value of the tasks they perform and the importance of organizational goals, and by drawing on employees' intrinsic needs. Transformational leadership can be a motivator to guide their followers in doing the job thus helping them with the appropriate motivation to lead them in doing the work well. This statement is supported by Bass (1998) who indicated that transformational leadership is based on the connections between leaders and other employees as an effective transformational leader understands the needs and motivations of others and tries to help them reach their full potential. In addition, from the perspective of Malaysian leaders, the transformational leadership style is the most common practice compared to the other leadership styles. There is an evidence to confirm that, in general, Malaysian organizations are more active and perform better compared to those in other countries such as Hong Kong and Singapore (Tay, 2010). Transformational leaders can influence their followers to perform well in their jobs and bring along the respect and trust to their followers. This statement is supported by Mackenzie and Rich (2001) in their study which stated that trust is positively related to the core transformational leader behaviour, individualized support and high performance of the expectation. From the respect and trust, the followers will be motivated to give full commitments towards their jobs in the organization. This statement is supported by Flaherty and Pappas (2000) who said that, employee trust in their manager has been linked to the individual outcomes such as higher job satisfaction, productivity, and higher commitment to the organization. Furthermore, according to a study by Schneider and George (2011), the researchers found that in the transformational leadership practiced by the leaders, there is a positive relationship which affects the quality of commitment, job performance and intentions to stay longer in the organization. This idea is supported by Dowling (2007) who mentioned that, the transformational leaders tend to treat their followers with fairness, give a clear direction on what they want the followers to do and increase their confidence and interest by challenging the followers to look beyond their self-interest and expectation. In the transformational leadership, there are four dimensions known as 4 I's.: Idealized influence, Inspirational Motivation, Intellectual Simulation and Individual Consideration.

Ritz (2009) stated that transformation oriented leadership as well as the interactions of transformation oriented leadership and public service oriented motivation have positive relations to the achievement of job performance. This is supported by Dowling (2007) who stated that leaders who posses transformational leadership style influence individuals, namely the followers or the employees. This happens because these leaders emphasize a common sense of purpose and develop the strengths of the followers. Nevertheless it shows that both transformational leadership style and job performance have a significant and positive relationship.

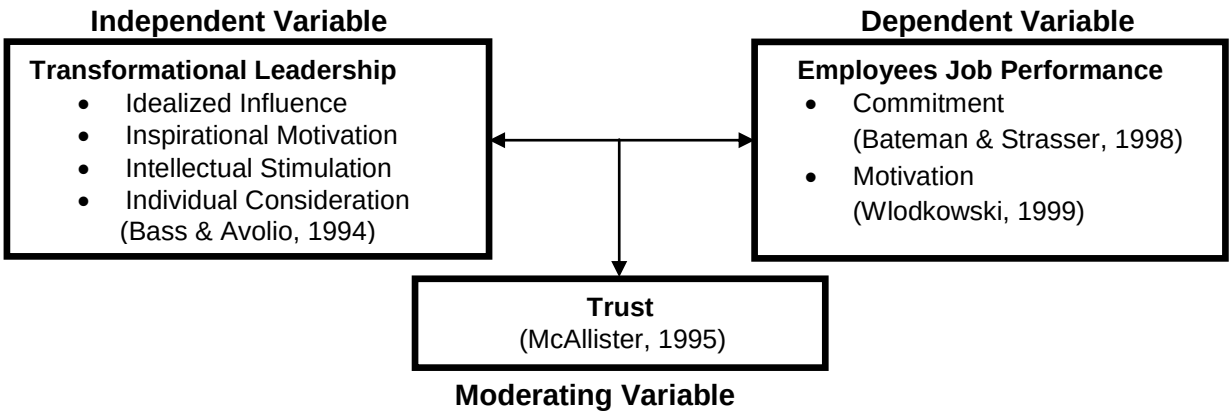
Stum (1999) stated that employee commitment reflects the quality of an organization's leadership. Furthermore, it is logical to assume that the leadership behaviour would have a significant relationship with the development of the organization commitment. A relationship between commitment and transformational leadership style has been reported on the organization and management literature. In three separate studies done by Popper, Mayseless and Castelnovo (2000), evidence was found to support the hypothesis that a

positive correlation exists between transformational leadership and attachment by Podsakoff, MacKenzie and Bommer (1996) who found that leadership behaviours explained 48% of the variance in organizational commitment and 55% of trust. Other than that, Chiok Foong (2001) studied the effect of leadership behaviours on employee outcomes in Singapore. A positive significant correlation was shown among organizational commitment and leadership behaviour.

Trust has been identified as an important part of numerous leadership theories. In transformational leadership style, according to Podsakoff, Mackensie, Moorman and Fetter (1990) it was stated that transformational and charismatic leaders built trust in their followers. Mayer and Davis (1999) stated that a model of trust is based on the perspective that transformational leadership behaviours such as individual consideration, intellectual stimulation and individual motivation have an influence on the development of trust. In addition, Arnold, Barling and Kelloway (2001) also showed that transformational leadership increases trust and organizational commitment. According to Dirks and Ferrin (2002), individuals observe leader's actions and draw inferences about the nature of their relationship with the leader and/or the character of the leader. Furthermore, Dirks and Ferrin (2000) have shown that trust in leadership has a significant relationship with individual outcomes including job performance and organizational commitment. They found that trust in supervisor was more strongly related to the job level variables whereas trust in senior leadership was more strongly related to organizational level of variables.

3.2 Conceptual Framework

In relations to the above discussion about the research topic, a conceptual framework was developed in a proper way and presented in a diagram. According to Sekaran, (2006) conceptual framework is the conceptual model of how the theories relate to the logical sense of the relationship among the several factors identified as important to the problems. The conceptual framework shows the variables used in the study based on the literature review discussed. This research recognized that independent variables and dependent variables are both related to each other and for the moderating variable, it being used as the factor that involves in the relationship between independent variable and dependent variable. There are three types of variables in the framework. The first variable identified is the transformational leadership. Under the transformational leadership there are four dimensions which are idealized influence, inspirational motivation, intellectual stimulation and individual consideration which appear as independent variables. The second variable in this framework is identified as job performance under the dependent variable measured by commitment and motivation. Besides, there is also a moderating variable which is trust. This study was conducted to determine the relationship between transformational leadership and job performance and to determine the impact of transformational leadership toward the job performance among employees.



Hypotheses

H1: There is a positive significant impact (Transformational Leadership) between idealized influence and employee's job performance.

H2: There is a positive significant impact (Transformational Leadership) between inspirational motivation and employee's job performance.

H3: There is a positive significant impact (Transformational Leadership) between intellectual stimulation and employee's job performance.

H4: There is a positive significant (Transformational Leadership) impact between individual consideration and employee's job performance.

H5: There is a positive significant impact (Transformational Leadership) between idealized influence and commitment.

H6: There is a positive significant impact (Transformational Leadership) between inspirational motivation and commitment.

H7: There is a positive significant impact (Transformational Leadership) between intellectual stimulation and commitment.

H8: There is a positive significant impact (Transformational Leadership) between individual consideration and commitment.

H9: There is a positive significant impact (Transformational Leadership) between idealized influence and motivation.

H10: There is a positive significant impact (Transformational Leadership) between inspirational motivation and motivation.

H11: There is a positive significant impact (Transformational Leadership) between intellectual stimulation and motivation.

H12: There is a positive significant impact (Transformational Leadership) between individual consideration and motivation.

H13: Does trust moderate the relationship between (Transformational Leadership) idealized influence and commitment.

H14: Does trust moderate the relationship between (Transformational Leadership) inspirational motivation and commitment.

H15: Does trust moderate the relationship between (Transformational Leadership) intellectual stimulation and commitment.

H16: Does trust moderate the relationship between (Transformational Leadership) individual consideration and commitment.

H17: Does trust moderate the relationship between (Transformational Leadership) idealized influence and motivation.

H18: Does trust moderate the relationship between (Transformational Leadership) inspirational motivation and motivation.

H19: Does trust moderate the relationship between (Transformational Leadership) intellectual stimulation and motivation.

H20: Does trust moderate the relationship between (Transformational Leadership) individual consideration and motivation.

4.0 METHODOLOGY

The sample size for this study was using the Roscoe's (1975) as rules of thumb where the sample should be more than 30 or less than 500 in order to make generalizability to research finding. The instrument that was used in this research was a questionnaire. The questionnaire was adapted from previous researcher by Bass and Avolio (1998) with amendments and modifications made to suit the context of the study. The data collections in this study were analysed using the Statistical Package for Social Sciences (SPSS) version 20. Table 4.1 shows the total number of respondents.

Table 4.1 Number of Respondents Involved (n=220)

No. of Questionnaire Distributed	No. of Questionnaire Returned	Percentage Returned (%)	Number of Valid Questionnaire	Percentage Valid (%)
240	220	92	220	92

Table 4.2Reliability
Statistics

Variables	No. of Items	Original Cronbach's Aplha (n=220)	No. Of Items	Cronbach's Alpha (After Factor Analysis)
Idealized Influence (II)	4	.836	4	.836
Inspirational Motivation (IM)	4	.884	3	.866
Intellectual Stimulation (IS)	4	.909	4	.909
Individual Consideration (IC)	4	.868	3	.841
Commitment	7	.875	7	.875
Motivation	10	.919	5	.894
Trust (as moderating variable)	11	.939	11	.939

Findings:

Research Question 1

What is the strongest dimension of transformational leadership style that gives impacts on the job performance?

The hypotheses were tested by testing the influence of Independent Variables (Transformational Leadership) includes the Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individual Consideration (IC) on the Dependent Variables (Job Performance). Table 4.16 below indicated that the result of regression analysis for the Independent Variables and Dependent Variables.

Table 4.16

Multiple Regression Analysis between Transformational Leadership and Job Performance

Independent Variables	**Dependent Variables (Standardized Coefficient Beta)**
Idealized Influence (II)	.083
Inspirational Motivation (IM)	.138
Intellectual Stimulation (IS)	.145
Individual Consideration (IC)	**.217****
R	.516
R^2	.267
F	19.542

Significant F value	.000
Durbin Watson	1.580

Notes: *significant at the 0.05 level
** significant at the 0.01 level

Finding

The table 4.16 above shows the summary of the result of multiple regression analysis of factor that impact of the Transformational Leadership Styles (Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individual Consideration (IC) toward Job Performance of the employees. The Independent Variables explained .267 of the variance (R Square) in Job Performance which was significant, as indicated by the F-value of 19.542 ($p<.01$). This indicated that the element of factors that impact of the Job Performance. From the elements of Dependent Variables, the most significant element that gave an impact toward Job Performance was Individual Consideration (IC) as the coefficient value was ($\beta=.217, p<.01$). Besides that, the researcher found the other three elements in Transformational Leadership Styles which were Idealized Influence (II) ($\beta=.08<p.05$), Inspirational Motivation (IM) ($\beta=.138$, $p<.05$), and Intellectual Stimulation (IS) ($\beta=.145$, $p<.05$). According to the regression analysis test, the strongest dimension of Transformational Leadership Styles that gave impacts on the job performance was Individual Consideration (IC) dimension whereby the value was .217 (sig.=.014, $p<.01$). Therefore, hypothesis H_4 is accepted but H_1, H_2 and H_3 are rejected.2.

Research Question 2

Is there any significant relationship between the transformational leadership styles and the job performance?

This section is looking into the relationship between Transformational Leadership Styles and Job Performance. In this study, the relationship between dimensions of the Transformational Leadership Style and Employee's Job Performance was investigated using Standard Multiple Regression Analysis.

First, the researcher tested the relationship between Transformational Leadership Styles, Idealized Influence (II) Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individual Consideration (IC) with Commitment. Transformational Leadership Styles (Independent Variables) consist of 4 elements which are Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individual Consideration (IC). Job Performance of employees (Dependent Variables) was constructed into 2 elements which are Commitment and Motivation. In order to elaborate the relationship between these two variables, the researcher decided to use a table for elaboration the correlation based on **r** values from Cohen (1988). The table below indicates the scores.

Table 4.17

*Cohen's (1988) Guidelines for Interpreting Correlation based on **r** values*

Degree of Correlation	**r Values**
Very Strong	±0.8 and 1.0
Strong	±0.6 and 0.8
Moderate	±0.4 and 0.6
Weak	±0.2 and 0.4
Very Weak	±0 and 0.2

Table 4.18

Correlation Analysis for Variables

No.	*1*	*2*	*3*	*4*	*5*

1	*II*					
2	*IM*	*.756***				
3	*IS*	*.688***	*.787***			
4	*IC*	*.659***	*.658***	*.705***		
5	*Commitment*	***.402****	***.471****	***.483****	***.469****	
6	*Motivation*	***.373****	***.354****	***.353****	***.369****	*.626***

***. Correlation is significant at the 0.01 level (2-tailed).*

Finding

Based on Table 4.18, it indicated that all Transformational Leadership Styles dimensions were correlated to Job Performance of employees. It showed that there was a significant relationship between Transformational Leadership Styles (Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individual Consideration (IC)) and Employees Job Performance (Commitment and Motivation). It specified that there was a positive and moderate relationship between Idealized Influence (II) and Commitment (r=.402, p<.01). Motivation had a positive and week relationship to Idealized Influence (II) (r=.373, p<.01). From the table above also, it shows that Commitment had moderate and positive relationship with Inspirational Motivation (IM) (r=.471, p<.01). Meanwhile, Motivation had a weak and positive relationship with Inspirational Motivation (IM) (r=.354, p<.01). Apart from that, Intellectual Stimulation (IS) show that it had a moderate and significant relationship between Commitment whereby **r** value indicated a positive relationship (r=.483, p<.01). Motivation had a weak and positive relationship with Intellectual Stimulation (IS) whereby (r=.353, p<.01). In addition, the table also indicates that Commitment had a positive and moderate relationship between Individual Consideration (IC) (r=.469, p<.01). Lastly, Motivation show that it had a significant relationship between Individual Consideration (IC) whereby **r** value indicated a positive relationship (r=.369, p<.01).

Research Question 3

Does trust moderate the relationship between transformational leadership style and job performance?

These sections answered the research question 3 and in order to get to know these questions, hierarchical regression analysis were used to analyze the data. Based on the research question 3, there were 8 hypotheses tested as follows. Independent Variables (Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individual Consideration) were tested in each of Dependent Variables (Commitment and Motivation). The researcher used a series of three step hierarchical regression analysis. Furthermore, the Independent Variables namely (Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individual Consideration) were tested on Commitment, followed by Motivation. For the first 4 hypotheses, the step that researcher used as below:

Table 4.19

Hierarchical Regression Analysis of Trust of Employees to Leaders Moderates on the Relationship between Transformational Leadership Styles dimensions and Commitment

Variables	Model 1	Model 2	Model 3
IV			
Idealized Influence (II)	-.017	-.075	.584
Inspirational Motivation (IM)	.188	.167	-1.043
Intellectual Stimulation (IS)	.190	.133	-.221
Individual Consideration (IC)	.223**	.161	-.358
Moderator			
Trust		.296**	-.853**
Interaction			

Idealized Influence*Trust			-1.268
Inspirational Motivation*Trust			1.957
Intellectual Stimulation*Trust			.643
Individual Consideration*Trust			1.521
R^2	.278	.335	.437
R^2 Change	.278	.057	.102
F Change	20.675	18.376	9.489
Sig. of F Change	.000	.000	.000
F Value	20.675	21.552	18.091
Sig. of F Value	.000	.000	.000
Durbin-Watson			1.916

Notes: *significant at the 0.05 level **
significant at the 0.01 level

Finding

The regression model from Table 4.19 explained the percentage of variance in the Dependent Variables of Commitment. Model 1 indicated 27.8% of the variance in the Dependent Variable (Commitment) explained in the Independent Variables (Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Individual Consideration). Model 2 showed 33.5%, additional 5.7% higher than the variance in Model 1. Model 3 explains 43.7% of the variance where there was a 10.2% increment in the variance. Moreover, the researcher found out that there was no significant interaction between trust to moderate the relationship between four dimensions in Transformational Leadership Styles, Idealized Influence (II) (β=-1.268, p>.05), Inspirational Motivation (IM) (β=1.957, p>.05), Intellectual Stimulation (IS) (β=.643, p>.05), Individual Consideration (IC) (β=1.521, p>.05). Therefore, four hypotheses (H_{13} to H_{16}) are rejected. However, the Durbin-Watson value of 1.916 was still within the acceptable range.

RECOMMENDATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Based on the literature review and findings of this study, the researcher has made several recommendations that can be applied for future research study. The leaders in the manufacturing companies should play an important role to use their Transformational Leadership Styles to stimulate the Employee's Job Performance. It is because from the results, the researcher found that there were dimensions of Transformational Leadership Styles related to Employee's Job Performance such as Individual Consideration (IC) with Employee's Job Performance. Besides that, Inspirational Motivation (IM) and Intellectual Stimulation also do influence the Motivation of Employee's Job Performance. So, for the better outcome in the organization, the leaders or managers may use these findings as strategies to apply multiple styles of leadership based on their intelligence in managing employees in the organization. Below are several recommendations that made to increase the value of future research. First of all, future research should not be limited to only manufacturing companies. The research can be conducted on combinations of private and government manufacturing companies. When large samples are taken for this kind of study, the generalization may no longer be limited since a bigger population is represented. Apart from that, it would be more interesting if a future research could see the comparison of employee's job performance and transformational leadership styles at the private and government manufacturing companies using similar measurements. It is also suggested that the future research used other leadership styles introduced by Bass and Avolio (1994), such as transactional leadership styles and laissez faire leadership styles in order to find the other relationships with the employee's job performance. Last but not least, for the future

researcher this study also can be extended by using other statistical analysis such as Structural Equation Modeling (SEM). This method uses for testing and estimating the causal relations using a combination of statistical data and qualitative causal which not only to find relationship but the effect as well. Lastly, the researcher suggested that future study could use mixed methods of instruments, such as using combination of survey for qualitative and quantitative research and using observation and interview from informant for better quality output in the future.

REFERENCES

Aarons, G. A. (2006). Transformational and transactional leadership: Association with attitudes toward evidence-based practice. *Psychiatric Services, 57*(8), 1162-1169.

Anderson, C. M., & Martin, M. M. (1995). The effects of communication motives, interaction involvement, and loneliness on satisfaction: A model of small groups. *Small Group Research, 26,* 118-137.

Arnold K.A., Barling K., Kelloway E.K. (2001). Transformational leadership or the iron cage: Which predicts trust, commitment and team efficacy? Leadership. Organ. Dev. J. 22: 315-320.

Barling, J., Moutinho, S., & Kelloway, E. K. (1998). *Transformational leadership and group performance: The mediating role of affective commitment.* Manuscript submitted for publication Kingston, Ontario: Queen's University.

Bass, B. M. (1985). *Leadership and performance beyond expectations.* New York: The Free Press.

Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact.* Mahwah, NJ: Lawrence Erlbaum Associates.

Bass and Avolio. (1995). *The Multifactor Leadership Questionnaire (5x).* Palo Alto, CA: Mind Garden.

Bass, B. M., & Avolio, B. J. (1994). Improving *organizational effectiveness through transformational leadership.* Thousand Oaks, CA: Sage.

Bateman, T., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. Academy *of Management Journal, 21,* 95-112.

Baugh, S. G., and Roberts, R. M. (1994). Professional and organizational commitment among engineers: Conflicting or complementing? IEEE Transactions on Engineering Management, 41, 108-114.

Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993) A theory of performance. In N. Schmitt & W. C. Borman (Eds.) *Personnel selection in organizations* (pp. 35-70). San Francisco, CA: Jossey-Bass.

Chiok Foon Loke, J. (2001). Leadership behaviours: Effects on job satisfaction, productivity and organizational commitment. *Journal of Nursing Management,* 9, 191-204.

Coakes, S.J., Steed, L. & Ong, C. (2010). *Spss: analysis without anguish*. John Wiley and Sons. Australia Ltd.

Covey, S. (1990). Principle-Centered Uadership. New York: Simon and Schuster.

Creed, W.E. & Miles, R.E. (1996). Trust in organisations: A conceptual framework linking organisational forms, managerial philosophies, and the opportunity costs of controls. In R.M.Kramer & Tyler, T.R. *Trust in organisations: Frontiers of theory and research*. London: Sage.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, (87), 611-628.

Dowling M. C. (2007). A measurement of instructional and transformational leadership of the assistant principal: its relationship to closing the achievement gap. *Unpublished Dissertation*.

Flaherty, K. E., & Pappas, J. M. (2000). The role of trust in salesperson – sales manager relationships. *Journal of Personal Selling & Sales Management, 20,* 271-278.

Givens, J. R. (2008). Transformational Leadership: The Impact on Organization and Personal Outcome. *Emerging Leadership Journeys,* Vol 1 Iss. , pp. 4-24.

Mackenzie, S. B., & Rich, P. M. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science Vol. 5* No. 8, 115-

134.
Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. Journal of Applied Psychology, 84, 123-136.
McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal, 38*(1), 24-59.

Meyer, J. P., and Allen, N. J. (1997). *Commitment in the Workplace: Theory, Research, and Application.* Thousand Oaks, CA: Sage.
Oakland, J. S, & Tanner, S. (2007). Successful Change Management. *Total Quality Management, 18*(1/2), 1-19.
Parry, Ken (2001), *Leadership in the Antipodes: Findings, Implications and a Leader Profile.* Wellington: Institute of Policy Studies Centre for the Study of Leadership, 166–191.
Podsakoff, P. M., Mackenzie, S. B. And Bommer, W. H. R. 1996. "Transformational leadership behaviours as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviours", Journal of Management, 22:259-298.
Popper, M., Mayseless, O., & Castelnovo, O. (2000). Transformational leadership and attachment. *The Leadership Quarterly*, 11 (2), 267-289.
Podsakoff, P., MacKenzie, S., Moorman, R., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly, 1*, 107-142.
Quinn, Bass, B. M., Kathleen, K. R. (2004). Executive Leadership Attributes Relating to Transformed Organizational Human Resource Services: *A Study of Transformational Leadership.* Florida, USA.
Ritz, A. (2009). Public service motivation and organizational performance in Swiss federal government. *International Review of Administrative Sciences,* Vol. 75. No. 1, pp, 53-78.
Roscoe T. J. (1975). *Fundamental Research Statistics for the Behavioral Sciences*. New York: Holt, Rinehart and Winston Inc.
Salkind, N.J.(2009). *Exploring Research*. New Jersey: Pearson Education International.
Sarros, J. C. and Santora, J. C. (2001). "The transformational-transactional leadership model in practice." Leadership and Organisation Development, 22(7/8), pp.383-394.
Schneider K. S. & George M. Winnette (2011). Servant leadership versus transformational leadership in voluntary service organizations. *Journal of Leadership & Organization Development. Vol 32*. No. 1 pp. 60-77.
Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skill building approach (5th ed.)*. Chichester: John Willey & Sons Ltd.
Stum, D.L. (1999). Maslow revisited: Building the employee commitment pyramid. *Strategy and Leadership,* 29(4), 4-9.
Tay, J. (2010). The Malaysian Insider: Najib receives Asean Transformational Leader Award.
Wlodkowski, R. J. (1999). Enhancing *Adult Motivation to Learn: A Comprehensive Guide for Teaching All Adults*. (Rev. ed.) San Francisco: Jossey-Bass.
Yin, R. K. (1994), *Case Study Research*, *Design and Methods*, 3rd ed. Applied Social Research Methods Series, Sage, UK.
Yulk, G. (2002). *Leadership in organizations* (5 ed.). Englewood Cliffs, NJ: Prentice-Hall.
Yukl, G. A. (1989). *Leadership in Organizations*. 3d ed. Englewood Cliffs, NJ: Prentice Hall.

The Influence of Health Administration Graduates' Competencies on Employability

[1]Ahmad Suffian Mohd Zahari, [2]Abdul Kadir Othman, [3]Mohamad Shahril Mohamad Besir, [4]Saadiah Juliana Saadon

[1]Faculty of Business and Management, Universiti Teknologi MARA Terengganu, 23000 Dungun, Terengganu, Malaysia
ahmadsuf@tganu.uitm.edu.my

[2]Faculty of Business and Management, Universiti Teknologi MARA Shah Alam, Selangor, Malaysia
abdkadir@salam.uitm.edu.my

[3]Faculty of Business and Management, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia
shahrilbesir@puncakalam.uitm.edu.my

[4]Faculty of Business and Management, Universiti Teknologi MARA Kampus Puncak Alam, Selangor, Malaysia
saadiah2861@puncakalam.uitm.edu.my

ABSTRACT

Employability is a major concern in the country as the number of graduates who are unemployed after a few months of leaving the universities keeps on increasing over time. The similar trend is experienced by the graduates from the Health Administration Program which is offered by Faculty of Business and Management, UiTM. Therefore, the objective of this study is to investigate the factors that contribute to graduates' employability so that appropriate actions can be taken to improve the situation. Based on 102 responses obtained by online survey, the results of regression analysis indicate that only knowledge competency significantly contributes to employability. Surprisingly, social responsibility is negatively related to employability. Other factors comprising leadership, communication, problem solving, lifelong learning, entrepreneurship, and ethics & professionalism are not significant predictors of graduates' employability. The implication of the study is discussed.

Key Words: Graduates' employability, health administration, competencies

1. INTRODUCTION

According to Hodges and Burchell (2003), competency is a combination of cognitive skills (technical knowledge, expertise & abilities), and personal or behavioral characteristics (principles, attitudes, values & motives), which are a function of an individual's personality. Meanwhile, Spencer and Spencer (1993) viewed competency as a characteristic of an individual, which is causally related to job performance. Thus, identifying and developing the important competencies is critical in order to increase employability for public and private universities' graduates. Various authors have proposed a number of competencies required or expected of graduates. For instance, Maes, Weldy and Icenogle (1997) considered oral communication, problem-solving skills and self-motivation to be the three most important competencies required of graduates. However, Stasz (1997) argued that problem-solving, teamwork, communication skills, and personal qualities, as the most important competencies.

Having a knowledgeable human capital and high skills are the most important factors for Malaysia to transform its economy towards achieving the status of a developed country by the year 2020. In recognizing this need, Higher Education Ministry have continued to

increase the number of students enrolled in public higher education institutions in all fields and levels of study. According to Director General of Higher Education, Ministry of Education, Prof. Datuk Dr. Asma Ismail, the ministry has announced the addition of a total of 5,328 students to universities for the 2014/2015 session, while increasing the intake of students to the university by 42.79%. However, the number of graduates alone is not sufficient without equipping them with the skills required by the current industries and employers.

The issue on employability of graduates has become a major concern nowadays. In relation to this, feedback from the perspective employers is essential to enable the public and private universities understand the current needs of the industry. The graduates' competency nowadays is very important because it provides many benefits not only to the institutions of higher learning in Malaysia but also to the graduates themselves. According to Hazrul (2012), the critical factors that can affect the chance to get a job include the quality of education, the willingness of employers to take local graduates, the growth and development of the Malaysian economy and the quality of its graduates.

Nowadays, thousands of graduates failed to secure suitable jobs upon graduation. Various factors are said to contribute to this phenomenon such as low English proficiency, poor attitudes or personality, asking for unrealistic salary, mismatch of skills, being choosy, unable to demonstrate problem solving skills and lack of job knowledge. The identification of the factors is based on the perception of the employers. Studies are lacking in investigating factors that contribute to graduates' employability based on the students' perceptions as they are the right persons to convey their experience in securing the job after graduation.

The issue of employability is also the concern among graduates from Health Administration Program offered by Faculty of Business and Management, Universiti Teknologi MARA (UiTM). Currently, there are more than a thousand graduates from the program. Some of them are working in the health related public sector, a few in the non-health related public sector, quite a considerable number in the health related private sector, some in the non-health private sector and others are self-employed. Unless the graduates are working in a sector related to their qualification, they are considered as unemployed. Based on the feedback from the graduates, some of them are unable to secure the right match between the job and their academic qualification. This situation arises from the fact that students are lacking in employable competencies.

Therefore, this study was conducted to investigate the factors that contribute to graduates' employability among Health administration graduates from Faculty of Business and Management, UiTM. By identifying the factors of employability, specific measures can be initiated to improve the existing curriculum structure, subject content and teaching and learning process, if necessary. In addition, this study will serve as an exploratory research for graduate competencies in meeting the local industry needs.

2. LITERATURE REVIEW

In the current changing work environment, employers continue to face increasing competition from a globalised economy. In businesses, the current economic climate presents a very challenging environment where employers are increasingly relying on knowledgeable, skilful and enterprising workforce. Employers, therefore demand skilful people when recruiting new employees. A study by Archer and Davison (2008) pertaining to the perspectives of employers on graduate employability, provides a clear distinction between what some universities are promoting and what is required by industry. They emphasized that that employers were in agreement about what are considered to be the most important skills that they look for. Harvey (2001) in his study found that graduates (graduate employability) can be defined from various angles, but largely in relation to the maintenance of a level of skills and specific properties of the graduates, and the ability to use them for job retention. Graduates should be willing to work in teams, competent in solving problems and making decisions, eloquent in communications, innovative and efficient in managing change (Harvey, 2001). However, employers' research over the

decade has uncovered negative feedback that there are shortages in skills, where the skills demanded are not entirely met by graduates (CBI & Pearson, 2012).

The Ministry of Higher Education is always seeking ways to solve graduate employment issues through public institutions of higher learning. Graduates are now not only required to have academic knowledge (graduate skills) but must have soft skills as well as business skills to improve their competencies. All of these skills represent the overall marketability of graduates. Thus, human capital is the most important investment for a country's development that can lead to the creation of high income economy (Tenth Malaysia Plan, 2011-2015). Hence, the development and investment in human capital, particularly in tertiary level is often a priority of the government. To enhance the employability of graduates, local universities have attempted to improve its academic programs. Among the programs that have been and are being implemented include the introduction of soft skills module beginning in the academic session in 2007/2008. This program aims to improve students' communication skills and proficiency level especially in English. Besides, the entrepreneurship module is proposed to equip students with entrepreneurial skills relevant to the current market requirement (Hazrul, 2012).

> "There has been a persistent undercurrent of opinion amongst employers and politicians to the effect that graduates lacked a number of the skills that businesses need"
>
> (Yorke, 2004)

In order to enhance graduate employability, Ministry of Higher Education has emphasized on several measures such as the more structured industrial training, apprenticeship, and entrepreneurship training. These programs are intended to equip graduates with the additional values to be more marketable and employable in the local and international markets, thus reducing the problem of unemployment among university graduates. In addition, the ministry is also taking steps to enhance the employability of graduates by entering the marketability element in the curriculum, for examples, inviting practitioners to teach at higher education Institutions, improving the employability of graduates through the co-curricular activities; and involving employers in the curriculum review.

The issue of unemployment among graduates often deals with the education system and it can be regarded as a failure of the country's tertiary education system in producing graduates needed by the industry. Although many improvements have been implemented to strengthen the graduates' competency levels at the university, there are still complaints put forward by the employers about the quality of the graduates. Among the complaints submitted by employers is the weakness of the graduates in soft skills such as communication skills and low proficiency in English.

Chan and Norehan (2007) argued that unemployment among graduates remains a major problem in Malaysia. According to the National Economic Action Council (NEAC) report 2011-2015, there are five factors that contribute to this phenomena such as the lack of skills and work experience among graduates, the mismatch between the needs of industry and the field of study of graduates, the lack of ability to communicate well, especially in English, the negative attitudes of some graduates in getting the jobs and the lack of awareness on the availability of various jobs. Besides, report by The World Bank entitled 'Malaysia and the knowledge economy: Building a World-Class Higher Education System in 2007' has identified three main factors contributing to unemployment among graduates, they are the demand and supply of graduates, the process of job search and skills mismatch.

2.1. Knowledge

A common phrase today is that we are in a knowledge-driven economy. This indicates that the demand for knowledge is higher than before, and knowledge is what makes people employable. Therefore, graduates with high knowledge are greatly needed

and it is important for the national economy. This matter is crucial for the economy and for the respective employees, as high levels of employment contribute to the economic growth. Knight and Yorke (2003) and Rahmah, Ab Razak and Zaini (2001) found that employers want graduates with knowledge, ability to cope with uncertainty, ability to work under pressure, action-planning skills, communication skills, IT skills, proficiency in networking and ability to work in a team. Additionally, Berhem, Younies, and Smith (2011) found that knowledge of worldwide networks and contacts, knowledge of home culture, computer skills, communication skills, and the ability to understand cultural dynamics are the most important skills among UAE graduates.

Employers expect graduates to be knowledgeable therefore are focusing on examining knowledge capabilities the graduates have during the recruitment and selection processes. Graduates therefore, need to demonstrate the possession of high level of knowledge to ensure that they succeed in the selection process. For example, the findings obtained by Morshidi, Abdul Majid, Rosni, Abdul Aziz and Mohd Haflah (2004) indicate the factors for failure to get employed is lack of knowledge, poor command in English, and problem in communication. Overall, knowledge is perceived by employers as a standard requirement, which should have been developed through the degree program undertaken by the graduates at the university. To examine the relationship between knowledge and employability, this study highlights the following hypothesis:

Hypothesis 1: The knowledge capabilities of graduates have a significant positive influence on employability.

2.2. Social responsibility

As highlighted previously, knowledge is a standard requirement in considering for a graduate to be employed. To build on this pre-required skill, a graduate must also demonstrate soft skills, behaviours and personal characteristics. Corporate Social Responsibility plays a relevant role in different dimensions (social, economic and environmental). According to Cade (2008), corporate social responsibility (CSR) is recognised by Business in the Community and the European Union as having four main elements:

1) Marketplace – employee volunteering that allows employees to learn about the marketplace,
2) Workplace – work-life balance that provides for a happier workforce,
3) Community – good relations and dialogue with neighbours and affected communities that improve public image and employee pride,
4) Environment – sound environmental management that reduces costs, avoids litigation and penalties, and improves image.

A study by Hanum, Razli and Azuddin (2008) found that students can acquire soft skills through Bakti Siswa Perdana. This finding is very similar to the findings of Haslinda, Muhammad Nubli and Zarina's (2005) study. They claimed that integrated programs that have been implemented by the university to produce engineering students are able to develop students' skills in various aspects. The finding from their research proves that the program known as Program Bakti Prima involving students can improve their soft skills. However, there is also evidence suggesting that there is a gap between graduate competencies and employer requirements for graduate competencies in relation to an employer's social and environmental responsibilities.

Cade (2008) in his research found that many students and employers did not fully understand the terms sustainable development and corporate social responsibility. This is supported by Farhana (2013), who emphasized that the factor of laziness among students leads to unemployment among graduates. She argued that, the attitude of the graduates who live in the era of rapid development leads to the situation where graduates take an

approach of wait-and-see. She emphasized that, they (graduated students) only act when the situation is urgent or it is too late. Indeed, they thought that the country's economic growth will continue to prosper without any problem. Graduates also rely on government aids such as scholarships and assume that the government will provide them with a job after graduation. To examine the relationship between the two variables, the study puts forward the following hypothesis:

Hypothesis 2: The social responsibilities of graduates have a significant positive relationship with employability.

2.3. Leadership and Team

Leadership is the ability to influence others toward the achievement of a goal. Leaders either have, or are perceived to have, strong self-confidence. Leaders are team players, allowing them to work in a group to achieve the best results for their employer. Leaders show social skills by respecting the thoughts, opinions and ideas of others. According to Harvey (2000), most employers are looking for graduates who are proactive, can use higher level skills including 'analysis, critique, synthesis and multi layered communication to facilitate innovative teamwork in catalyzing the transformation of their organization'. Mitchell, Skinner and White (2010) conducted a study to determine Alabama business educators' perceptions on the importance of soft skills for success in the twenty first century workforce. They found that the Alabama business educators consider soft skills such as leadership, teamwork, communication, problem solving, and diversity to be important components of the business/marketing education curriculum.

Kelley and Gaedeke (1990) argued that oral communication, written communication, problem solving, analytical skills, computer applications, and leadership/teamwork skills are the important skills required by employers. Similarly, Clarke (1997) conducted a study on 40 trust member companies and found that employers are actually looking for graduates who possess attributes of lifelong learning, flexibility and adaptability to changes as well as some generic skills of communication, teamwork, initiative, problem solving and decision making. To assess the relationship, the following hypothesis is derived:

Hypothesis 3: The leadership and team have a significant positive influence on employability.

2.4. Communication

Graduates need to understand both the personal attributes valued by employers and effective communication skills. This is because employers are looking for graduates who are able to communicate well, both verbally and in writing. If graduates are applying for a job or looking for a promotion with the current employer, they need to demonstrate good communication skills in a team so that the flow of information exists. Besides, effective communication relies on verbal and written communication between teams. Research by Done (2011) and Bovinet (2007) identified communication skills, critical thinking ability, cross functional competency, global and cultural awareness, self-discipline, and technological competency as important competencies in a student's skill-set. Similarly Ratna and Fazal (2008) highlighted the needs for basic skills related to communication, language, working in groups and personal attributes in order to face the challenges of the job market after graduation. In addition, employers expect their employees to have good communication skills and skills in solving problems (Azizah, 2004). A study by Archer and Davison (2008) found that regardless of the size of the company, 'soft skills' (e.g. communication skills and team-working) are perceived to have more weight than technical or 'hard skills'. To assess the relationship, the following hypothesis is developed:

Hypothesis 4: Communication has a significant positive relationship with employability.

2.5. Problem Solving

Employers today are concerned about finding good workers who do not only have basic academic skills like reading, writing, science, mathematics, oral communication and listening, but also higher order thinking skills like problem solving. Problem solving is the ability to solve challenges by identifying and systematically analyzing relevant information and factors to infer a logical and effective solution. Problem solving requires the ability to think both creatively and logically to improve performance, to troubleshoot problematic procedures or equipment, and to complete research tasks. In order to succeed in the workplace, graduates need to be able to evaluate information, and various ways of approaching and resolving problems; thus be able to decide on the most appropriate solution. Ambigapathy and Aniswal (2005) stressed on the importance of creativity and thinking skills in problem solving work that must be possessed by a graduate. Moreover, Ali (2012) argued that some students are still lacking in soft skills, such as problem solving and communication.

An empirical study was conducted through a survey on 1105 employers by Galloup group in Norway, Iceland, Croatia and Turkey. The result found that problem-solving skills are considered least important among graduates. In total, only 58% and 62% of respondents ranked these skills as “very important” or “rather important”. To clarify the relationship between problem solving and employability, this study identifies the following hypothesis:

Hypothesis 5: Problem solving has a significant positive influence on employability.

2.6. Lifelong learning

Lifelong learning is the engagement in various learning activities that can occur throughout one’s life, with the aim of improving knowledge and individual skills thus contributing to the society and the working world. Based on a research done by Tiza and Abdullah (2013), the tendency of students to continue their studies after high school is high. This is in line with Rosli, Mohamad Bokhairi, Aziz, Muhd Akmal, Syed Najmuddin and Asiah (2011) who asserted that the acquisition of skills for lifelong learning is higher among university students. To clarify the relationship technically, this study identifies the following hypothesis:

Hypothesis 6: Lifelong learning has a significant positive influence on employability.

2.7. Entrepreneurship

Entrepreneurship is very significant to improve the employability of university graduates, thus meeting the government's desire to create a society that is progressive and obtaining high income (Abdul Said, 2012).The problem of unemployment at present can be overcome by making entrepreneurship as a career. The approach that can be used to achieve the goal of developing a Malaysian society is through education and entrepreneurial culture in higher education aimed to provide awareness, knowledge and entrepreneurial skills (Ministry of Education 2001; Ministry of Entrepreneur and Cooperative Development, 2005). It will be able to foster a culture of entrepreneurship among graduates and changing the mentality of the students towards self-employment.

According to Moreland (2006), the typical outcome of an entrepreneurial emphasis in higher education is to make graduates attractive to companies that want to utilize the talented and creative graduates. Moreland (2006) described the characteristics of entrepreneurs as energetic, responsible, self-confident, risk-taking, visionary, committed to work, creative and innovative, and having an internal locus of control. Yorke (2004) defined entrepreneurial skills as a set of achievement, understanding and personal attributes that make individuals more likely to gain employment and be successful in their chosen

occupations. According to Hytti and O'Gorman (2004), the country's competitive advantage is dependent on the skills base of the workforce, and more specifically, on the ability of both firms and individuals to engage in innovative activities in the new economy. This has created an imperative focus on entrepreneurship skills, as they are related to innovation. Therefore, based on empirical evidence from previous studies, it clearly shows that entrepreneurship is an important element for employability. To evaluate the relationship, this study identifies the following hypothesis:

Hypothesis 7: Entrepreneurship has a significant positive influence on employability.

2.8. Ethics and professionalism

One of the factors that can contribute to employability is the attitude of the graduates. They tend to be choosy. They are likely to turn down a job offer that does not commensurate with their qualifications. They prefer to stay at home without doing any work or choose to be unemployed rather than working as a clerk or having low job positions. Thinking "better to be idle when you do not find suitable work" should be removed from the mind of each graduate. Apart from the attitude of graduates who choose jobs, lack of ethics and moral values also cause unemployment in Malaysia (Nair, Patil & Mertova, 2009). This finding contradicts with Marliana's (2013) study which found that the level of students' awareness on the importance of ethical and moral values is high. A study by Rodiah, Siti Rahayah and Noriah (2009) also found that ethics and professionalism is not the key indicator in increasing unemployment among graduates. To examine the relationship, this study identifies the following hypothesis:

Hypothesis 8: Ethics and professionalism has a significant positive influence on employability.

3. RESEARCH METHODOLOGY

The present study is correlational in nature as it is meant to examine the relationship between the variables involved. Originally there were ten independent variables in the study, however, it was reduced to eight based on the results of factor analysis. The variables are knowledge, social responsibility, leadership, communication, problem solving, lifelong learning, entrepreneurship and ethics & professionalism. The dependent variable is graduates' employability.

The identification of the variables was made by referring to previous works in the similar field. After the variables were identified, a pool of questionnaire items for each variable was established. The opinion of experts in the questionnaire development and the education field was sought in selecting the relevant items to be used to measure the intended variables. Some items were modified and some were created to ensure the right representation of items for each variable. A pilot test was conducted by distributing the questionnaire to 30 respondents to ensure that they understand the items and answer them consistently.

This study is specifically concentrated on the graduates from Health Administration program of Faculty of Business Management, UiTM. Currently, there are more than 1000 graduates from the program. This pool of graduates serves as the population of the study. Since the number of graduates is small, all of them are treated as samples for the study. They were contacted and invited to participate in the online survey. After the lapse of three months, 105 respondents participated in the survey. However, three sets were incomplete and had to be excluded.

4. RESEARCH FINDINGS

4.1. Profile of the Respondents

Table 1: The Profiles of Respondents

		Frequencies	Percentages
Gender	Male	19	18.6
	Female	83	81.4
Tenure	<6 months	43	42.6
	6-12 months	19	18.8
	13-18 months	18	17.8
	>18 months	21	20.8
Employment	Public Health Related	33	33.3
	Public Non Health Related	17	17.2
	Private Health Related	37	37.4
	Private Non Health Related	12	12.1

Table 1 shows that the respondents involved in the study consisted of 19 (18.6%) males and 83 (81.4%) females. This is the true representation of the graduates from the program. With regard to work tenure, 43 (42.6%) of the respondents had been working for less than six months, 19 (18.8%) of them had between six to 12 months of working experience, 18 (17.8%) of them had worked for 13 to 18 months in various organizations and 21 (20.8%) of them had more than 18 months of work experience. Interestingly, 33 (33.3%) and 37 (37.4%) of the respondents had been working in health related organizations either public or private. Only 17 (17.2%) and 12 (12.1%) of them had been in the non-health related organizations either public or private.

4.2. Factor Analysis

Factor analysis was conducted in order to summarize the patterns of correlations among the dimensions and variables and to reduce a large number of variables to a smaller, yet manageable, number of variables. Principal Component Factor Analyses with varimax rotation were utilized to identify the underlying structure or dimensions in the independent, and the dependent variables in this study. Factor analysis can recognize whether a common factor or more than a single factor is present in the responses to the items. In essence, factor analysis was used to understand the underlying structure in the data matrix, to identify the most parsimonious set of variables, and to establish the goodness of measures for testing the hypotheses (Hair, Black, Babin & Anderson, 2010).

Conducting factor analysis, several statistical values are observed to establish whether the items are suitable to be factor analyzed. This is accomplished by examining the values of Measure of Sampling Adequacy (MSA), Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of Sphericity. The MSA value for the individual items was set to be above .50 and the KMO (overall items) value to be above .60. The Bartlett's test of Sphericity is observed to detect the presence of significant correlations among variables. It is appropriate to proceed with the factor analysis if the value of the test is large and significant ($p<.05$) (Hair et al., 2010).

Overall, two (2) factor analyses were performed independently for each scale concerning Graduates' Competencies and Graduates' Employability. Two criteria were used to determine the number of factors to be extracted: (1) the absolute magnitude of the eigenvalues of factors (eigenvalue greater than one criterion), and (2) the relative magnitude of the eigenvalues (scree test plot) (Hair et al., 2010). The eigenvalue of a factor represents the amount of total variance accounted by the factor. The total amount of variance explained by the factor(s) was set at 60.0 % and above (Hair et al., 2010). In addition, the scree test

plot was also inspected to find a point at which the shape of the curve changed direction and became horizontal. All factors above the elbow, or a break in the plot, were retained as these factors contributed the most to the variance in the data set.

In interpreting the factors, only items with a loading of .40 or greater on one factor were considered. In the case of cross-loadings (an item that loads at .32 or higher on two or more factors) (Tabachnick & Fidell, 2001) or the difference between and among factors is less than .10 (Youndt, Snell, Dean, & Lepak, 1996), the items were considered for deletion. The clean factors were then interpreted or named by examining the largest values linking the factors to the items in the rotated factor matrix. Reliability tests were subsequently carried out after factor analyses.

Table 2: Factor Analysis of Dependent Variable

Items	**Component**	
	1	
EMP2	.762	
EMP3	.858	
EMP4	.763	
EMP5	.890	
EMP7	.836	
EMP9	.819	
% Variance Explained	67.665	
Kaiser-Meyer-Olkin Measure Of Sampling Adequacy	.863	
MSA	.823-.900	
Approx. Chi-Square	359.378	359.378
Df	15	15
Sig.	.000	.000

Assessing the validity of the Graduates' Employability, Principle Component Factor Analysis was conducted. There were initially 10 items for the scale. Factor analysis with varimax rotation was used to determine factors' dimensionality. The results of the analysis revealed that the six items formed a unidimensional structure, explaining 67.665% of the total variance in the model. A total of four items were excluded due to their low communality values, high cross loadings and loading on factors different from the original conceptualization.

The KMO measure of sampling adequacy for the MI scale is .863 indicating that the items were interrelated. Bartlett's Test of Sphericity shows a significant value (Approx. Chi-Square = 359.378, $p<.001$) indicating the significance of the correlation matrix and appropriateness for factor analysis. Moreover, the individual MSA values range from .823-.900, indicating that the data matrix was suitable to be factor analyzed.

Table 3: Factor Analysis for Independent Variables

Items	Component							
	1	2	3	4	5	6	7	8
L2	.808							
L1	.807							
L4	.807							
L3	.743							
T3	.709							
T1	.681							
T5	.665							
L5	.616							
T2	.582							
K4		.851						
K5		.834						
P1		.801						
K1		.792						
K3		.791						
P3		.757						
P5		.733						
K2		.682						
E4			.801					
E1			.789					
E3			.774					
E2			.761					
E5			.687					
S2				.771				
S3				.743				
S5				.708				
S4				.686				
S1				.641				
C4					.739			
C2					.690			
C1					.639			
C3					.613			
C5					.601			
PS3						.708		
PS4						.705		
PS5						.668		
PS2						.583		
EP2							.821	
EP1							.782	
EP4							.534	
EP3							.513	
LL1								.864
LL2								.751
% variance Explained	16.039	14.192	10.223	8.118	7.976	6.320	6.092	4.388
Kaiser-Meyer-Olkin Measure Of Sampling Adequacy					.875			
MSA					.725-.969			
Bartlett's Test of Sphericity	Approx. Chi-Square				3297.481			
	Df				861			
	Sig.				.000			

Examining the validity of the Graduates' Competencies, Principle Component Factor Analysis was conducted. There were initially 50 items for the scale, assessing ten different graduates' competencies; five items were allocated in measuring each competency. Factor analysis with varimax rotation was used to determine factors' dimensionality. The results of the analysis revealed that the 50 items formed eight factor structures, explaining 73.348% of the total variance in the model. Some items were excluded due to their low communality values, high cross loadings and loading on factors different from the original conceptualization.

The KMO measure of sampling adequacy for the scale is .875 indicating that the items were interrelated. Bartlett's Test of Sphericity shows a significant value (Approx. Chi-Square = 3297.481, p<.001) indicating the significance of the correlation matrix and appropriateness for factor analysis. Moreover, the individual MSA values range from .725-.969, indicating that the data matrix was suitable to be factor analyzed.

The first factor comprised nine items measuring both leadership and team competencies. Only one item was removed because of high cross loadings. The factor loadings were in the range between 0.582 and .808. Based on the relevancy of the combination, the factor was retained and named leadership and team competency due to its dominant loadings. The second factor consisted of eight items assessing knowledge and practical knowledge competencies. Two items were removed due to high cross loadings. The factor loadings were in the range between .0682 and 0.851. It was named knowledge competency to reflect its dominant loadings. The third factor comprising five items clearly measured entrepreneurship competency with loadings in the range between 0.687 and 0.801. The original name of entrepreneurship competency was retained. The fourth factor that was represented by five items assessed social responsibility competency. The loadings were in the range between 0.641 and 0.771. The name of social responsibility competency remains. The fifth factor having five items reflected communication competency with factor loadings ranging between 0.601 and 0.739. The name of communication competency was used to identify the factor. The sixth factor was represented by four items measuring problem solving competency. The factor loadings were in the range between 0.683 and 0.708. One item was deleted due to high cross loadings. The name problem solving competency was used to identify the factor. The seventh factor comprised four items assessing ethics and professionalism with factor loadings ranging between 0.513 and 0.821. One item was removed due to high cross loadings. The name ethics and professionalism was used to reflect the factor. The last factor consisted of only two items measuring lifelong learning competency. The factor loadings were 0.751 and 0.864. Three items were deleted due to high cross loadings.

Table 4: Reliability, means, standard deviation, correlation analysis and reliability analysis

No	Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1	Knowledge	3.47	.84	(.931)								
2	Social Responsibility	4.23	.60	.394**	(.869)							
3	Leadership & Team	3.73	.65	.477**	.532**	(.939)						
4	Communication	3.93	.57	.313**	.448**	.644**	(.861)					
5	Problem Solving	3.62	.75	.435**	.455**	.723**	.627**	(.915)				
6	Lifelong Learning	4.39	.60	.278**	.364**	.281**	.387**	.297**	(.720)			
7	Entrepreneurship	3.63	.69	.351**	.569**	.572**	.522**	.616**	.379**	(.920)		
8	Ethics & Professionalism	4.28	.55	.403**	.549**	.522**	.500**	.462**	.377**	.472**	(.807)	
9	Employability	3.19	.98	.596**	.140	.350**	.245**	.293**	.076	.187*	.280**	(.903)

Notes: **. Correlation is significant at the 0.01 level (1-tailed); *. Correlation is significant at the 0.05 level (1-tailed); N=102

Table 4 shows the descriptive statistics to describe the mean, standard deviation (SD) and the relationship among variables. The independent variables are knowledge, social responsibility, leadership & team, communication, problem solving, lifelong learning, entrepreneurship and ethics & professionalism and the dependent variable is employability.

The reliability analysis was used to determine the consistency of items measuring the intended variables. The Cronbach's alpha values were used to assess the reliability of items. The values were in the range between .720 and 0.939 signify that the items reliably measured the intended variables as they are supposed to measure. The values are shown in the parentheses along the diagonal.

The correlation coefficients were used to diagnose the interrelationships among the variables in the study. The correlation coefficients between the independent variables range from low to high, indicating convergent validity. The correlation coefficients that are in the range of low and high relationship between the independent variables and the dependent variable indicate the potential influence of the independent variables on the dependent variable. Except for the relationship between social responsibility competency and employability and the relationship between lifelong learning and employability, all relationships between the independent variables and the dependent variables are significant.

Table 5: Multiple regression analysis

	Standardized Coefficients Beta
Knowledge	.595**
Social Responsibility	-.224*
Leadership & Team	.213
Communication	.055
Problem Solving	.074
Lifelong Learning	-.055
Entrepreneurship	-.143
Ethics & Professionalism	.123
R	.693
R^2	.480
F value	10.379
Sig F value	.000
Durbin Watson	2.043

The regression analysis was used to investigate the influence of graduates' competencies on their employability. The R^2 of .480 indicates that 48% of the variance in the regression model was explained by the independent variables. The significance F value ($F(8, 90) = 10.379$, $p = 0.000$) indicates model fit and the Durbin Watson value of 2.043 denotes acceptable dependency of variables in the regression model.

Looking at the individual contribution of the independent variables (graduates' competencies) in explaining the dependent variable (graduates' employability), only knowledge ($\beta = .595$, $p<.01$) and social responsibility competencies ($\beta = -.224$, $p<.05$) are found to be significant predictors. However, the relationship between social responsibility and employability is negative, indicating inverse relationship. Other competencies are not significant to influence graduates' employability.

5. DISCUSSION

Based on the results of the regression analysis, it was found that knowledge is the significant predictor of graduates' employability. The results are consistent with the findings of studies conducted by Knight and Yorke (2003), Rahmah et al. (2001), Berhem et al. (2011); and Morshidi et al. (2004). These researchers clearly demonstrate that knowledge possessed by

graduates' are vital in determining graduates' employability. Graduates are required to have the required fundamental and practical knowledge to become employable. This is the major requirement by the industry so that they do not have to be extensively trained before they are assigned with the intended tasks. Organizations could save a great amount of money when graduates are equipped with the required knowledge.

Another important predictor of employability is graduates' social responsibility. However, this factor has inverse relationship with employability. It indicates that having high social responsibility competency might make the graduates less employable. This finding contradicts with what is explained by Hanum et al. (2008), and Haslinda et al. (2005). They argued that having good social responsibility can build the soft skills that can enhance graduates' social responsibility.The most plausible reason for this occurrence is that graduates in health administration field are supposed to concentrate their effort towards managing the day-to-day operations of the organizations. They are required to ensure that the organizations are able to provide the best services to the customers including patients. Having high social responsibility might affect the effectiveness of the operations.

Lifelong learning and entrepreneurship also have negative relationship with employability. These findings are inconsistent with the results of studies conducted by Tiza and Abdullah (2013), and Rosli et al. (2011) pertaining to lifelong learning. The most likely reason is that most graduates are working in administrative field. Therefore, they are expected to contribute towards the effective running of the organizations. Having these competencies might divert their attention from performing effectively on their required tasks. Implementing lifelong learning and entrepreneurship competencies might render graduates to spend time on other activities.

Other factors; namely, leadership and team, communication, problem solving and ethics and professionalism do not significantly influence employability because most of them are working at the lower management level, performing administrative tasks. This position does not require the graduates to use these competencies at a great extent. They are expected to do the execution job rather than planning. Looking at the strength of association between leadership & team competency and employability and between ethics & professionalism competency and employability, although not significant they are quite considerable denoting that these competencies should not be taken lightly. Graduates are required to have these competencies as value added factors to ensure employability.

6. CONCLUSION

Due to the alarming number of unemployed graduates, the present study was undertaken to investigate factors that influence graduates' employability especially those who graduated from the health administration field. The results of correlation analysis indicate that almost all graduates' competencies (except social responsibility and lifelong learning) are significantly related to employability. The results of regression analysis confirm the significant influence of knowledge competency on graduates' employability. Although not significant, factors like leadership and team, and ethics and professionalism competencies should not be ignored in securing a job.

6.1. Managerial Implication

Since the findings of the present study confirm the importance of knowledge on graduates' employability, higher educational institutions especially those offering health administration programs should ensure that their graduates are properly equipped with the fundamental (technical) and practical knowledge on the health administration field. This competency is considered a niche and is able to differentiate the graduates from the crowd. Therefore, ensuring the most relevant content of the program as requested by the industry is a must thus obtaining frequent feedback from the industry is highly required.

Factors like leadership and teamwork, and ethics and professionalism competencies should also be emphasized as most jobs do not allow job incumbents to work in isolation. In

most organizations, the ability to work as a team is highly valued. Similarly, those with high ethics and professionalism competency will be greatly sought after as they will contribute significantly towards the well being of the organizations. The higher educational institutions should ensure these elements are embedded in the program syllabi and appropriately emphasized.

6.2 Research Implication

The present study was conducted by means of obtaining feedback from the graduates of the Health Administration program. They were asked to respond to the online survey within a certain period of time. Those who participated in the survey might be the ones who are characterized by certain traits and might present some degree of bias. Besides, the feedback that they gave might be different from that of employers. They might have different opinions on graduates' employability. Therefore, future studies should use a variety of methods that would reduce the element of bias associated with respondents. Feedback from employers might enrich the data that can also be used to validate the findings.

REFERENCES

Abdul Said Ahmad. (2012). Pendidikan Keusahawanan dalam kalangan pelajar: Perspektif dan Cabaran. *Utusan Borneo.* http://eprints.ums.edu.my/4584/1/nc0000001801.pdf.

Ambigapathy, P., & Aniswal, A. G. (2005). University curriculum: An evaluation on preparing graduates for employment. *Institut Penyelidikan Tinggi Negara*, Universiti Sains Malaysia.

Ali @ Alik, A. (2012). *Keberkesanan Penerapan Kemahiran Generik Dalam Kalangan Pelajar Institut Kemahiran Mara Di Sabah dan Sarawak.* Unpublished Masters degree dissertation, Universiti Tun Hussein Onn Malaysia.

Archer, W. & Davison, J. (2008). Graduate employability: What do employers think and want? London, the Council for Industry and Higher Education (CIHE). *http://aces.shu.ac.uk/employability/resources/0802Grademployability.pdf*

Azizah Tahir. (2004). Facing the realities of the world of work. *Proceedings a workshop on Enhancing Graduate Employability in a Globalised Economy*, Economic Planning Unit, Malaysia.

Berhem, B., Salih, A. H., & Yousef, D. A. (2008). The business curriculum and the future employment market: UAE Business leaders' views. Education, *Business and Society: Contemporary Middle Eastern Issues*, 1(2), 124-137.

Bovinet, J. W. (2007). Different skill-set views: A four-year study of marketing students, practitioner and educators. *Journal of Business and Public Affairs,* 1(1).

Cade, A. (2008). Student force for sustainability: Employable graduates for responsible employers research on the links between sustainability and employability in the graduate job market in relation to higher education teaching and learning Report to the Higher Education Academy. https://www.heacademy.ac.uk/sites/default/files/esd-employable-graduates-responsible-employers.pdf

CBI & Pearson. (2012). Learning to Grow: *what employers need from education and skills. Education and Skills survey*. Pearson International. http://www.cbi.org.uk/media/1514978/cbi_education_and_skills_survey_2012.pdf

Chan, L. Y. & Norehan Abdullah. (2007). Productivity in higher education system in Malaysia. *Kajian Malaysia*, Jilid. XXV, No. 2.

Clarke, A. (1997). Survey on employability. *Industrial and Commercial Training,* 29(6), 177-183.

Done, A. (2011). *Supply chain knowledge management: A conceptual framework.* (Working paper WP-900). IESE Business School, University of Navarra. http://www.iese.edu/research/

Farhana Mohd Rosli. (2013). Kecenderungan menceburi bidang keusahawanan dalam kalangan bakal graduan di UTHM. Unpublished Masters degree dissertation, Universiti Tun Hussein Onn Malaysia.

Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. (5th ed.). New York, Prentice-Hall International.

Hanum Hassan, Razli Ahmad, & Azuddin Bahari. (2008). *Kemahiran Insaniah Dan Kepentingan Penerapannya Dalam Program Baktisiswa Perdana Unimap.* Pusat Kemahiran Komunikasi Unimap. http://dspace.unimap.edu.my/dspace/bitstream/123456789/5842/1./pdf/

Harvey, L. (2001). Defining and Measuring Employability. *Quality in Higher education,* Vol 7(2) 97-109.

Harvey, L. (2000). New realities: the relationship between higher education and employment. *Tertiary Education and Management,* 6, 3–17.

Haslinda @ Robita Hashim, Muhammad Nubli Abdul Wahab & Zarina Mohd Ali. (2005). Pembangunan Sahsiah Mahasiswa Bersepadu: Konsep Dan Pelaksanaannya Di Kolej Universiti Kejuruteraan. *Proceedings in Seminar Kebangsaan Kursus Sokongan Kejuruteraan,* Langkawi, 17-18 Disember 2005.

Hodges, D. & Burchell, N. (2003). Business Graduate Competencies: Employers' Views on Importance and Performance. *Asia-Pacific Journal of Cooperative Education,* 4(2), 16-22.

Hytti, U. & O'Gorman, C. (2004). What is enterprise education? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education and Training* 46(1), 11-23.

Kelley, C. A., & Gaedeke, R. M. (1990). Student and employer evaluation of hiring criteria for entry-level marketing positions. *Journal of Marketing Education,* 12(3), 64-76.

Khatijah Omar & Siti Nazilah Mat Ali. (2006). Kemahiran Generik ke Arah Pengukuhan Modal Insan Kelas Global. 1-5. http://eprints.utm.my/222/2/KhatijahOmar2006_Kemahirangenerikkearahpengukuhan.pdf

Knight, P. & Yorke, M. (2003) Employability and Good Learning in Higher Education. *Teaching in Higher education*. Vol 8(1), 3-16.

Maes, J. D., Weldy, T. G., & Icenogle, M. L. (1997). A Managerial Perspective: Oral Communication Competency is most important for business students in the workplace. *Journal of Business Communication,* 34(1), 67-80.

Malaysia and the knowledge economy: Building a World-Class Higher Education System in 2007. http://siteresources.worldbank.org/INTMALAYSIA/Resources/Malaysia-Knowledge-Economy2007.pdf

Marliana Musa & Ahmad Esa (2009). Tahap Penguasaan Kemahiran Generik Dalam Kalangan Pelajar Tahun Akhir Diploma Kejuruteraan Elektrik Serta Pendidikan, *Journal of Techno Social*, UTHM.

Mitchell, G. W, Skinner, L. B. & White, B. J (2010). Essential soft skills for success in thet-first century workforce as perceived by business educators. *The Delta Pi Epislon Journal*, 52(1), 43-53.

Moreland, N. (2008). Entrepreneurship and higher education: An employability perspective Learning and Employability – Series One. The Higher Education Academy.

Morshidi Sirat, Abdul Majid Mohd, Rosni Bakar, Abdul Aziz Buang, & Mohd Haflah Piei. (2004). *Studies on academic achievement and graduates force usability in higher learning institute*. Penang: Institut Penyelidikan Tinggi Negara, Universiti Sains Malaysia.

Muhammad Hazrul Ismail. (2012). Study on Employability of Graduates in Malaysia: A Survey of Employer Perspectives. *Persidangan Kebangsaan Ekonomi Malaysia ke VII (PERKEM VII) Transformasi Ekonomi dan Sosial Ke Arah Negara Maju.* Ipoh, Perak, 4–6 Jun 2012.

Nair, C. S., Patil, A. & Mertova, P. (2009).Re-engineering graduate skills – A case study. *European Journal of Engineering Education*, 34(2), 131–139.

Nordin Mohd Salleh, Abd Hamid & Jabor. (2005). Tahap keyakinan kemahiran generik di kalangan pelajar kolej komuniti. *Seminar Pendidikan 2005*, (1-12).Skudai: UTM.

Rahmah Ismail, Ab Razak Dan & Zaini Mahbar. (2001). Persepsi dan keperluan mjikan sektor awam terhadap graduan ekonomi. *Prosiding Seminar Kebangsaan pendidikan Ekonomi di persimpangan Jalan*, September

Ratna Roshida Abdul Razak & Fazal Mohamed Mohamed Sultan. **(**2009). Kurikulum universiti dan keperluan pemerolehan pekerja *Monograf* 13, 7(12). Pulau Pinang: Institut Penyelidikan Pendidikan Tinggi Negara (IPPTN).

Rodiah Idris, Siti Rahayah Ariffin, & Noriah Mohd Ishak (2009). Pengaruh Kemahiran Generik dalam Kemahiran Pemikiran Kritikal, Penyelesaian Masalah dan Komunikasi Pelajar Universiti Kebangsaan Malaysia (UKM). www.mjli.uum.edu.my

Rosli Saadan, Mohamad Bokhairi, Aziz Yahya, Muhd Akmal Noor Rajikon, Syed Najmuddin Syed Hassan, & Asiah Mohd Pilus. (2011). Keberkesanan Kursus Kokurikulum Berkredit Dalam Memperkasakan Kemahiran Insaniah dalam Kalangan Pelajar Institusi Pengajian Tinggi Awam. *Journal of Human Capital Development*, Vol 4.

Spencer, L., & Spencer, M. (1993). Competence at work: Models for superior performance, N.Y: John Wiley & Sons. http://www.tandfonline.com/doi/abs/10.1080/135943298398673?journalCode=pewo20#.Vd8fZvmqqko

Stasz, C. (1997). Do employers need the skills they want? evidence from technical work. *Journal of Education and Work,* 10(3), 205-223.

Tabachnick, B. G., & Fidell, L. S. (2001). Using Multivariate Statistics. Boston: Allyn and Bacon.

Tenth Malaysia Plan, 2011-2015). http://www.epu.gov.my/en/tenth-malaysia-plan-10th-mp-

The Gallup Organization. (2010). *Employers' perception of graduate employability* Analytical report.

Tiza Lytha Rimaya, Musly Thahar & Abdullah Mat Rashid. (2013). Kemahiran insaniah dalam kalangan pelajar aliran teknikal sekolah menengah vokasional di gombak . *Seminar pasca siswazah dalam pendidikan.* (greduc 2013), pp 16-25

Youndt, M. A., Snell, S. A., Dean, J. W., Jr., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal,* 39: 836–866.

Yorke, M. (2004) Employability in the Undergraduate Curriculum: some student perspectives. *European Journal of Education*, 39 (4), 409-427.

The Influence of HRM Practices in Determining the PHEIs Non-Academic Staff Intention to Stay: A Conceptual Model

Shariff Harun[1], Siti Asiah Md Shahid[2] and Abdul Kadir Othman[3]
1 Faculty of Pharmacy & Health Sciences, Universiti Kuala Lumpur
2 Institute of Business Excellence, Faculty of Business & Mgmt., Universiti Teknologi MARA, Shah Alam
3 Faculty of Business & Mgmt., Universiti Teknologi MARA, Shah Alam

ABSTRACT

Previous studies suggested that there are many contributing factors that influence workers' job satisfaction level in an organization, however, what influences their decision to remain in an organization has always been a complex and inconclusive research topic. Therefore, the need to analyze the factors affecting the employees' intention to stay especially within the context of the non-academic staff at Private Higher Education Institutions (PHEIs) is pertinent because the findings would be able to assist the institutions to have better insights on what they should do in order to retain their competent workforce. It is an undeniable fact that the contribution of the non-academic staff towards the upbringing and success of the Institution is equally crucial and important as compared to the academic staff. Therefore, by identifying the HRM practices attributes as well as their influences on the non-academic staff intention to stay will definitely assist the PHEIs in performing better.

Key Words: PHEIs, Non-Academic staff, Intention to stay, HRM practices.

1. INTRODUCTION

Today's business world is very competitive and the uncertainties in the current economic scenario have always made business owners to be more cautious in making their business decisions. These current economic scenarios have caused companies to face severe competitive pressures and rapidly changing market demands. Most of these changes involve new trends or technologies and these are among the factors that make business organizations seek ways to become more flexible, adaptive, and competitive. The way how companies design, organize, and manage their work to face these current changes will not be the same as they will need to take into account the size of the companies or the kind of culture in which the organizations are operating. It is however, in the midst of all these innovations, organizations are discovering or rediscovering in some instances that people are really their most important asset.

A competent workforce is the back bone to the success of any organization, without them, the organization will not be able to perform its functions to the fullest. Happy and motivated employees can create wonders to the organization, while dissatisfied employees can create disharmony and chaos in the organization which can lead to staff retention issue. Recruiting suitable and highly motivated staff, as well as being able to retain them is the key to business success (Kotler, 2003). When an employee quits an organization, the setbacks that might be faced by the organization would be, losing of client or business venture (Ghosh, Satyawadi, Prasad & Shadman, 2013; Walker, 2001; McCallum, 1988), the high cost involved in the lengthy and tedious recruitment process (Pfeffer, 1998), the increase in cost of training and loss of time due to the transition process (Davies, 2001). Therefore, the ability of the organization to retain its staff will assist the organization to stay focused towards achieving their goals (Hong, Hao,

Kumar, Ramendran & Kadiresan, 2012). If the activities are designed effectively, the production of each individual worker will contribute to the attainment of organizational goals (Samuel & Trevis, 2006).

To ensure that the activities are designed effectively and the right employees are employed, we need to acquire human resource management (HRM) skills and knowledge. This is because human resource management is the strategic and coherent approach to the management of an organization's most valued assets - the people, who are working individually and collectively to contribute to the achievement of the business objectives (Armstrong, 2006). When an organization truly wants to create a positive work environment that is based on high trust, exceptional customer service, collaborative teamwork, operational excellence, and creative problem solving, then the management team must understand and be responsive to their employees' needs. Management needs to understand that for certain employees pay is only part of the answer to good employees' management. They will need to understand that companies are human and social organization, not just economic machines (Kotler, 2003).

2. MALAYSIAN PRIVATE HIGHER EDUCATION INSTITUTIONS

Since its introductory in 1980s, the Malaysian private education sector has been growing rapidly and the industry has been recognized by the international community as one of the most innovative and progressive sectors in the region (Performance Management and Delivery Unit [PEMANDU], 2010). Starting with only a few in its early days, Malaysia now has 55 private universities, 7 foreign university branch campuses and 22 private university colleges (Jabatan Pengajian Tinggi Malaysia, 2012). Through this collaboration and the support from the PHEIs, the government is planning to accelerate the inflow of international students to 150,000 by 2015 and 200,000 by 2020 (Kementerian Pengajian Tinggi Malaysia, 2011). Therefore, PHEIs should value the government aspiration as an opportunity not to be missed as it can also generate better revenue for their institutions.

According to the Private Higher Education Institutions Act 555, PHEIs are defined as any Higher Education Institutions (inclusive of University or College University or its branch campuses) which their establishment is approved and registered under Act 555 (Akta Institusi Pendidikan Tinggi Swasta, 1996). These PHEIs are operated by non-governmental agencies and the sources of funds are coming from their own coffers. The offering of their programs is however, subject to the approval of Ministry of Education Malaysia and the running of their programs is directly under the close supervision of Malaysian Qualification Agency (MQA). To ensure the quality provided by the PHEIs is according to the world standard, the Malaysian government, through Ministry of Higher Education has introduced the local rating system known as SETARA. Through the SETARA rating system, the PHEIs performance is rated and categorized according to 6 different categories or Tier. The highest Tier rating is 6 and universities under this category are considered as Outstanding Universities and this is followed by Tier 5 - Excellent, Tier 4 - Very Good, Tier 3 - Good, Tier 2 - Satisfactory and Tier 1 - Weak (Malaysian Qualification Agency, 2011). Unfortunately, none of the Malaysian Public or Private Higher Education Institutions is listed in the Tier 6 category. However, a total of 35 HEIs have been accorded with Tier 5 SETARA rating system and out of which, 22 of them are PHEIs.

Table 1: Malaysia PHEIs Rating based on SETARA 2011

SETARA 2011 Rating	Name of Private Universities
TIER 6 : OUTSTANDING	None of the universities are listed in this category
TIER 5 : EXCELLENT	Asia Pacific University College of Technology and Innovation (now known as Asia Pacific University of Technology and Innovation)
	Binary University College of Management and Entrepreneurship (now known as Binary University of Management and Entrepreneurship)
	Curtin University of Technology Sarawak Campus
	Cyberjaya University College of Medical Sciences
	International Medical University
	Kuala Lumpur Infrastructure University College (now known as Infrastructure University Kuala Lumpur)
	Management and Science University
	Monash University Sunway Campus
	Multimedia University
	Nilai University College (now known as Nilai University)
	Open University Malaysia (ODL)
	Segi University College (now known as SEGI University)
	Sunway University
	Swinburne University of Technology Sarawak Campus
	Taylor's University
	Universiti Kuala Lumpur
	Universiti Teknologi PETRONAS
	Universiti Tenaga Nasional
	Universiti Tun Abdul Razak
	Universiti Tunku Abdul Rahman
	University of Nottingham Malaysia Campus
	Wawasan Open University (ODL)

With the current landscape of education industry, where ranking and status of a university are the pre-dominant factors in attracting students and sponsors; university needs to put extra attention on the staff retention strategy. Human Resource Management is one of the important aspects in ensuring that the quality services level provided by the University are always at the highest level. As such, HRM practices such as recruitment process, human resource development, salary, and compensation management are among the important aspects which have direct impact on the level of quality in the service delivery process. If these aspects of human resource management are taken care perfectly, it can integrate and develop the positive attitude of the organization workforce.

3. THE NON-ACADEMIC STAFF

The Malaysian Prime Minister, Datuk Seri Najib Tun Razak during the launching of the Economic Transformation Programme (ETP) on 25th October 2010 had highlighted 12 National Key Economic Areas (NKEAs) key contributors towards realizing the government aspirations in transforming Malaysia from a middle-income nation to a high-income nation status by the year 2020. The NKEAs contributors are greater KL / Klang Valley, oil, gas and energy, financial

services, wholesale and retail, palm oil, tourism, electronic and electrical, business services, communications and content infrastructures, **education**, agriculture and healthcare (PEMANDU, 2010). With the insertion of Education as one of the 12 NKEAs key contributors towards realizing the government aspirations, it shows that the government recognizes the importance of this industry in the development of the Malaysian economic status. To achieve this aspirations, Y.B. Dato' Seri Mohamed Khaled Nordin, the former Minister of Higher Education Malaysia during the launching of Economic Transformation Programme had pointed out the importance of the private higher education sector as the catalyst to the education industry transformation and the indispensable partners to the Government efforts in raising the education quality standards as well as in creating the international higher education brand for Malaysia (PEMANDU, 2010). PHEIs are also regarded as one of the important contributors towards ensuring the nation's continuous growth through the development of quality human capital (Md. Noor, 2013). With the above recognition, it is an undeniable fact that the contribution of PHEIs in the development of the nation is equally important as compared to other established Government own Universities.

These remarkable achievements will be realized with the strong support of the entire workforce; it is the results of strong collaborations between the academic and non-academic staff of the PHEIs. Unfortunately, in normal circumstances, the remarkable achievements are normally associated with the contributions of the university's academic members and all benefits provided will normally put the academic staff at superior end while giving the non-academic staff the sense of a second class citizen treatment. This situation is further worsening with the inclusion of academicians in certain important administrative functions and this has further side-lined the contributions of the non-academic staff (Amri, 2010). Similarly, not much emphasis has been given to the non-academic staff behaviour and the factors that might influence their behaviour either positively or negatively. Their frustration and motivation, the sources of their frustration and motivation and how to address their problems in such a way that they stay at the top of their performance have not been fully explored.

The non-academic staff are part of the vital components in a university, who need to always be trained and motivated at all time (Kuu-Ire & Tanko, 2012). They are the engine of their institutions and they make things happen (Md. Noor, 2013). In highlighting the importance of creating a healthy working environment, Ayub (2010) emphasized on the needs of the University's management to foster a good communications between the academic and non-academic as this is the main ingredients for making a healthy relationship. Any weak link in the running of a university will definitely affect the institutional rating and performance. This should be a cause of worry to the whole university community because it requires full integration from all university members (Kuu-Ire & Tanko, 2012). According to Amri (2010), although the non-academic staff are not totally left out from the university's strategic planning, the university's management however, had failed to fully capitalize their potential and expertise towards the development of the university. The role played by the non-academic staff is always taken lightly. However, when salaries, allowances, research funds are not credited on time or budget deadlines are not met, only then people will start to realize the importance of this group of people in the running of a university (Kuu-Ire & Tanko, 2012).

Higher Education Institution requires competent administrators to manage their day to day activities (Sonaje & Chincollar, 2012). As such, the academic and non-academic staff should not belittle each other (Ayub, 2010). According to Sonaje and Chincollar (2012), administrative position comes with significant responsibility "coordinating and interacting with faculty members, parents, students, community members, business leaders and state and local policymakers can be fast paced and stimulating, but also stressful and demanding" (p. 121). Therefore, by understanding the Malaysian PHEIs employees' job satisfactions and its contributing factors will provide greater advantage and will assist the institutions to further enhance the employees - employers' relationship. This will subsequently eliminate the employees' negative perceptions towards the institution, hence, increasing the employees' work performance and eliminating unnecessary negative behaviour of the employees.

With the current changes and challenges faced by PHEIs, retaining a competent employee will no longer be an easy job. Hong, et al. (2012) stated that due to the growing concern on

institutional global ranking, institutions are now starting to realize the importance of employee retention practices. This is further added by the stiff competition and the shortage of talent faced by higher education institutions at developing nations like Malaysia (Hong, et al., 2012). Therefore, the ability of the Malaysian PHEIs in retaining their capable workforce will be one of the strong predicaments in determining their survival.

4. INTENTION TO STAY

The term – intention to stay resembles that the employee is having a clear mind-set and behaviour that he/she is still interested to be associated with its current organization for a certain duration of time or as long as they still feel intact with the organization. According to Johari, Tan, Adnan, Yahya and Ahmad (2012), intention to stay is an opposite concept of turnover intention - quitting the organization to search for another employment elsewhere. Turnover intention is regarded as the employee's calculated probability that they will be permanently leaving the organization within the nearest time possible (Vandenberg & Nelson, 1999).

5. HRM PRACTICES

Werner and DeSimone (2009) defined HRM as the process of recruiting the right candidates and utilizing them effectively towards achieving the organization goals and strategies. According to McShane and Von Glinow (2008), a reputable company may not face any problem to employ qualified applicants, retaining them however will be the most challenging task. According to Wright, McMahan and MacWilliams (1994), HRM practices are good tools for the employers to shape their employees' behaviour, perception and attitudes. A good management of HRM practices will bring positive feedback to the organization and if it is well accepted by the employees, they will definitely reciprocate with positive attitudes and committed to the wellbeing of the organization (Whitener, 2001). When employees believe that their employer takes care of their wellbeing, they will react positively, be committed, diligent, dedicated and will produce quality work (Samuel & Trevis, 2006). Only through this understanding, the employees will react positively towards the organization aspirations. This is further supported by a study conducted by Johari, et al. (2012), which found that HRM practices have some degree of influence in determining the employees' intention to stay. Therefore, in order for companies to survive the stiff competition, it is very important for them to retain their committed employees (Chew & Chan, 2008). To ensure that they remain committed towards the organization wellbeing, Kotler (2003) emphasized on the importance of employers to make sure that employees are given the task that will make them feel that their existence are somehow very important to the organization and that their efforts towards accomplishing the given assignments are very crucial in assisting the organization to achieve its goals.

It is anticipated that through the strong support of a good HRM practices, it will be easier for the organization to manage its employees. The process to guide and direct the employees towards realizing the above fulfilment are normally assisted by the HRM practices attributes, which include human resource planning, recruitment, selection, socialization (orientation), training and development, performance appraisal, and promotions, transfers, demotions and separations (Stoner, Freeman & Gilbert, 1995). In addition to recruitment, training and development, and performance appraisal, Dessler (2011) further added few other attributes such as compensation, providing healthcare services, work safety, employee relations and fair treatment to the list. Besides, several other researchers have from time to time attempted to identify the HRM practices attributes, either separately or in combination, which influence the employees' intention to stay. However, the studies were found to suggest different sets of HRM practices or attributes that coherently depend on the scope and the industry where the studies were conducted. This has created a gap in the literature, especially when it involves the non-academic staff at PHEIs.

Table 2: HRM Practices Attributes Based on Previous Literatures

Author(s)	Year	HRM Practices Construct	Research Settings
Aluwi & Saihani	2013	Recruitment and selection, training and development, performance management, and socialization	Malaysian employees in New Zealand
Ghosh, Satyawadi, Prasad & Shadman	2013	Staffing, compensation, performance appraisal, and training and development	Employees from Indian global transmission and distribution business
Johari, Tan, Adnan, Yahya and Ahmad	2012	Training and development, compensation and benefit, career development, and performance appraisal	Employees in manufacturing companies in the Northern Region of Peninsular Malaysia
Nadarajah, Kadiresan, Kumar, Ahmad Kamil and Mohd Yusoff	2012	Employment security, training and development, compensation and selective hiring	Academicians at Malaysian PHEIs
Dessler	2011	Recruitment, training, performance appraisal, compensation, providing healthcare services, work safety, employee relations, and fair treatment	Not applicable
Abdullah, Ahsan and Shah Alam	2009	Training and development, compensation/incentives, and HR planning	Employees at medium scale enterprises in Malaysia
Chew and Chan	2008	Effective selection, reward and recognition of employee, provision of effective training, challenging employment structures and opportunities, and equity of compensation and benefits	Employees from nine Australian organizations
Stoner, Freeman & Gilbert	1995	Human resource planning, recruitment, selection, socialization (orientation), training and development, performance appraisal, and promotions, transfers, demotions and separations	Not applicable

In relation to the above literature findings, it can be concluded that HRM practices differ from one country to another and also from one industry to another. There are several factors within and outside of the organization, which affect the organization HRM practices, thus, the management team should carefully analyse these factors before deciding on the best HRM practices for their companies. Based on the above literature among the top HRM practices attributes (starting from the most important to the least important attributes) according to the above selection that companies can focus on are:

1. Training and development.
2. Performance appraisal.
3. Recruitment and selection.
4. Compensation and benefits.
5. Promotions, transfers, demotions and separations.

6. Challenging employment structures and opportunities.
7. Rewards and recognitions of employees.
8. Career development.
9. Socialization.
10. HR planning.
11. Providing healthcare services.
12. Work safety.
13. Employee relations.
14. Fair treatment.

From the above literature findings it can be concluded that companies need to well select the most appropriate HRM practices or attributes which are significant to their companies' setting and environment. This is due to the fact that they provide significant impact towards influencing the employees' intention to stay. The above studies on HRM practices had uncovered fourteen underlying HRM practices which can help companies to improve their business performance, nevertheless only four attributes - training and development, performance appraisal, recruitment and selection, and compensation and benefits were found to be consistently highlighted as the key components of a good HRM practices by all of the above scholars. Therefore, this research will only be emphasizing on the above four attributes as the key elements of a good HRM practices.

5.1 Training and Development

Training and development would be one of the best strategies to be implemented in order to upgrade and enhance the employee's skills and knowledge. It can be used to increase the employee's capabilities towards achieving organizational goals. Training is the process of improving the employees' skills in executing their current job responsibilities, while development programs are activities prepared for the employee for career promotion (Stoner, et al., 1995). The human resource development activities are created with the intention to prepare the employees with the required skills and competencies for them to be able to fulfil their current and future job requirements (Werner & DeSimone, 2009). With an effective and structured training and development programs, organization will be able to create a positive working environment for its employees.

Organization however, needs to provide equal opportunities to all employees to attend the required programs in which they are lacking of knowledge and skills. Proper monitoring and controlling system need to be implemented in order to ensure that the training and development programs attended by the employees are very significant towards the development of the organization and the employees.

5.2 Performance Appraisal

Stoner, et al. (1995) defined performance appraisal as the process of evaluating employee's job performance and comparing the achievements with the standards and objectives which had been pre-assigned based on the individual's job roles and position. The main objective of this activity is to evaluate the employee's performance and it is the process of separating the high flyers from the low achievers. Rewards may be awarded accordingly to the high flyers, while necessary remedial action will need to be taken against the low achievers. Performance appraisal will also be a good tool for the low performers to identify their weaknesses and area of improvements for future developments.

Organization however, needs to implement transparent and unbiased performance appraisal systems in order to ensure fair treatment to all employees. Otherwise, the consequences towards unfair treatment or bias towards certain individuals can result in a disaster for the organization.

5.3 Recruitment and Selection

Recruitment and selection or also known as staffing is the gateway in ensuring that only suitable candidates are selected and appointed to join the organization. Cable and Judge (1997) in addressing the importance of this process had indicated that recruiters tend to be very selective in the selection process in order to ensure that only suitable candidates are appointed, so that they will be able to succeed in the organization. The main objective of this activity is to ensure that only suitable candidates are recruited for the offered position (Cameron, Miller & Frew, 2010).

Living in the 21st century, there are a lot of options that organization can embark on (advertisement in audio and visual media, employment agencies, word of mouth, etc.) in order to attract the relevant pool of talent to apply for the position offered. In order to ensure that only the best candidate is selected and offered the job placement, organization can consider using forms, resumes, interviews, employment and skill test, and reference checks as the selection tools before deciding on the right candidate (Stoner, et al., 1995).

5.4 Compensation

In order for the organization to allure and secure the placement of its shortlisted candidate into the organization, a good compensation package or also known as fringe benefits will normally be the ultimate deciding factor. According to Pohlen and La Londe (1994), only through fair compensation practices, organization will be able to create, maintain, motivate and produce a competent employee. Compensation package can exist in the form of monetary or non-monetary approaches. Namasivayam, Miao and Zhao (2007) divided compensation into two (2) categories - direct and indirect compensations. The elements available in the direct compensation are salary, bonuses and profit sharing. Indirect compensation, on the other hand, consists of the benefits received by the employees in the form of medical coverage and work insurance. According to Sanjeevkumar and Wei (2012), providing effective compensation system will be able to influence and increase the employees' commitment, work productivity and loyalty spirit.

6. CONCLUSION

Organization should well manage their HRM practices because employees will reciprocate with higher commitment and lower intention to leave if organization implements excellent HRM practices. Management needs to also understand that such practices are giving a direct significant impact towards employees' satisfaction and performance. These practices, on the other hand, will be indirectly translated into their commitment, performance, quality of work and loyalty. As such, this study is designed with the intention to answer the questions being raised above and also to serve as a guide to all Higher Education Institutions in understanding and resolving their non-academic staff motivational issues. The research framework of this study will focus on the four identified attributes which are training and development, performance appraisal, recruitment and selection, and compensation and benefits as key HRM practices. It can be concluded that with the identification of the above attributes, it will allow the researcher to extend this research further by examining and confirming the relationship between HRM practices and intention to stay among non-academic staff at the Malaysian Private Universities.

Nevertheless, this study is limited in several ways, firstly, there are very limited literature focusing on HRM practices at Malaysian universities, especially within the PHEIs context thus restricting the generalization of the findings. Second, research consideration is needed on the pre-existing differences between the groups with respect to the differences in the research settings as well as the industries that they operate. This consideration is also needed to determine the potential moderating effects of the management ideology, company's size and the company's openness towards technology.

REFERENCES

Abdullah, Z., Ahsan, N., & Shah Alam, S. (2009). The effect of human resource management practices on business performance among private companies in Malaysia. *International Journal of Business and Management,* 4(6), 65-72.

Akta Institusi Pendidikan Tinggi Swasta. (1996). *Akta 555.* Pesuruhjaya Penyemak Undang-Undang Malaysia.

Aluwi, A. H., & Saihani, S. B. (2013). Human resource management practices and employment experience of Malaysian employees in New Zealand. *Procedia – Social and Behavioral Sciences.* 107 (2013), 43-51.

Amri, A. (2010). *Transformasi pentadbiran di institusi pengajian tinggi awam.* Retrieved December 10, 2014, from https://uniprof.wordpress.com/2010/10/14/transformasi-pentadbiran-di-institusi-pengajian-tinggi-awam/

Armstrong, M. (2006). *A handbook of human resource management practice* (10th ed.) London: Kogan Page Limited.

Ayub, A. (2010). Administrators' role in managing changes in institutional of higher learning. *Official Opening and Keynote Address of Tan Sri Dato' Seri Arshad Ayub at the 15th University Administrator's Conference*. Retrieved February 2, 2015, from https://eprints.uitm.edu.my/3033/1/Pages_from_SP_Konferensi_Pentadbir_Universiti_Ke_15_%28UiTM%29_2010_Official_Opening.pdf

Cable, D.M. & Judge, T.A. (1997). Interviewers' perceptions of person organization fit and organizational selection decisions. *Journal of Applied Psychology,* 82, 546-561.

Cameron, L., Miller, P. & Frew, E. (2010). Relationship marketing in the recruitment and retention of service industry staff in family owned business: an Australian regional study. *Journal of human resources in hospitality and tourism,* 9(1), 71-91.

Chew, J. & Chan, C.C.A. (2008). Human resource practices, organizational commitment and intention to stay. *International Journal of Manpower*, 29(6), 503-522.

Davies, R. (2001). How to boost staff retention. *People Management*, 7, 54-56.

Dessler, G. (2011). *Human resource management* (12th ed.). New Jersey: Pearson Education, Inc.

Ghosh, P., Satyawadi, R., Prasad, J. J. & Shadman, M. (2013). Who stays with you? Factors predicting employees' intention to stay. *International Journal of Organizational Analysis*, 21(3), 288-312.

Hong, E. N. C., Hao, L. Z., Kumar, R., Ramendran, C. & Kadiresan, V. (2012). An effectiveness of human resource management practices on employee retention in institute of higher learning: A regression analysis. *International Journal of Business Research and Management*, 3(2), 60-79.

Jabatan Pengajian Tinggi Malaysia. (2012). *Buku informasi IPTS Malaysia*. Kementerian Pengajian Tinggi Malaysia.

Johari, J., Tan, F.Y., Adnan, Z., Yahya, K.K. & Ahmad, M.S. (2012). Promoting employee intention to stay: do human resource management practices matter?. *International Journal of Economics and Management,* 6(2), 396-416.

Kementerian Pengajian Tinggi Malaysia. (2011). *Internationalisation policy for higher education Malaysia 2011*. Ministry of Higher Education Malaysia.

Kotler, P. (2003). *Marketing insights from A to Z, 80 concepts every manager needs to know*. New Jersey: John Wiley & Sons, Inc.

Kuu-Ire, S. M. & Tanko, I. M. (2012). The university administrators as a partner in meeting the complexities of the current trends in university administration in Ghana. *Journal of Higher Education Management,* 27(1), 103-117.

Malaysian Qualifications Agency (2011). *2011 Rating system for Malaysian higher education institutions*. Kementerian Pengajian Tinggi Malaysia.

McCallum, J.S. (1988). Involving business. Ivey Business Quarterly, 62, 65-68.

McShane, S.L. & Von Glinow, M.A. (2008). *Organizational behavior* (12th ed.). New York: The McGraw Hill Companies, Inc.

Md. Noor, A. R. (2013). Higher education blueprint for Malaysia: role of Higher Education Institution in the 21st Century. *Keynote Address by Datuk Ab. Rahim Bin Md. Noor, the Secretary General of Higher Education Malaysia at National Seminar for University Administrators 2013.* Retrieved February 2, 2015, from: http://www.iium.edu.my/pma/nasa2013/papers/KEYNOTE%20SPEECH.pdf

Nadarajah, S., Kadiresan, V., Kumar, R., Ahmad Kamil, N. N. & Mohd Yusoff, Y. (2012). The relationship of HR practices and job performance of academician towards career development in Malaysian private higher education institutions. *Procedia - Social and Behavioral Sciences,* 57(2012), 102-118.

Namasivayam, K., Miao, L. &Zhao, X. (2007). An investigation of the relationship between compensation practices and firm performance in the US hotel industry. *Hospitality Management*, 26, 574-587.

Performance Management and Delivery Unit (PEMANDU). (2010). *Economic transformation programme: A roadmap for Malaysia*. Jabatan Perdana Menteri.

Pfeffer, J. (1998). Seven practices of successful organizations. *California Management Review,* 40, 96-125.

Pohlen, T. & La Londe, B. (1994). Implementing activity based costing (ABC) in logistics. *Journal of Business Logistics*, 15(2), 1-23.

Samuel, C.C. & S. Trevis, C. (2006). *Modern management* (10th ed.). New Jersey: Pearson Education, Inc.

Sanjeevkumar, V. & Wei, W. (2012). A case study on determinants of human resource practices influencing retention of employees in Kedah state development corporation, Malaysia. *International Journal of Business and Social Research,* 2(2), 42-53.

Sonaje, N. P. & Chincollar, P. R. (2012). Redefining the role of university administrators: an Indian scenario. *Journal of Higher Education Management,* 27(1), 118-126.

Stoner, J.A.F., Freeman, R.E. & Gilbert Jr., D.R. (1995). *Management* (6th ed.). New Jersey: Prentice Hall, Inc.

Vandenberg, R. J. & Nelson, J. B. (1999). Disaggregating the motives underlying turnover intention: When do intention predict turnover behaviour?. *Human Relations,* 52(10), 1313-1336.

Walker, J.W. (2001). Perspectives. *Human Resource Planning,* 24, 6-10.

Werner, J.M. & DeSimone, R.L. (2009). *Human resource development* (5th ed.). USA: South Western Cengage Learning.

Whitener, E. (2001). Do high commitment human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modelling. *Journal of Management,* 27(5), 515-535.

Wright, P.M, McMahan, G.C. & McWilliams, A. (1994). Human resources as a source of sustained competitive advantage: a resource-based perspective. *International Journal of Human Resource Management,* 5, 301-326.

The Influence of Leader's Sources of Power on Organizational Citizenship Behaviour in Call Centre Industry

Noor Azlina Mohamed Yunus[1], Noorlaila Hj. Yunus[2], Kadulliah Ghazali[3] and Norfadzilah Abd Razak[4]

1 Faculty of Business and Management, Universiti Teknologi MARA, Selangor, Malaysia
nooraz2939@puncakalam.uitm.edu.my
2 Faculty of Business and Management, Universiti Teknologi MARA, Selangor, Malaysia
nlaila814@salam.uitm.edu.my
3 Faculty of Business and Management, Universiti Teknologi MARA, Selangor, Malaysia
kadul827@puncakalam.uitm.edu.my
4 Faculty of Business and Management, Universiti Teknologi MARA, Selangor, Malaysia
norfadzilah0438@gmail.com

ABSTRACT

In this an era of intense competition, Malaysia aspires to be a fully developed country by 2020 and desires its citizens to perform and execute excellent work behaviours. For that reason, organizations are focusing on employees' positive and constructive behaviors such as organizational citizenship behavior (OCB). They expect employees to not only complete their required duties by providing excellent performance but keenly go beyond their roles that are not specifying in their formal job descriptions to ensure organizational success. The role and duty to acquire employees to engage and connect in OCB is the responsibility of a leader. Thus, leaders can utilize their sources of power to enable subordinates to accomplish organizational objective including OCB. Therefore, this paper formulates a framework postulating leader's sources of power as an antecedent of organizational citizenship behaviour (OCB). The discussion on implications for future theory development is discussed.

Key Words: Organizational citizenship behaviour (OCB), leader's sources of power, call centre industry, conceptual paper.

1. INTRODUCTION

In the age of struggling large-scale economy, the organizations exclusively call centre search for employees with good citizenship behaviour who are dedicated to the good of the organization [1]. Basically, call centre is a centralized office used for the purpose of receiving and transmitting a large volume of request via telephone from employees [2]. In call centre perspectives, employee is an important component of doing business because it will lead and steer to excellent customer experience that is consistent with customer satisfaction and customer loyalty [3]. It is not sufficient for employees to merely or simply do their job [4]. The organizations mainly call centre are focusing on employees' positive behaviors so called organizational citizenship behavior (OCB).

Initially, OCB is defined as individual behaviours that are discretionary and not rewarded directly by the organization [5]. According to [6], he posited that OCB consist of five dimensions namely altruism, conscientiousness, sportsmanship, courtesy and civic virtue. Obviously, in organizations particularly call centre, a leader plays the important role to ensure employees to engage in OCB. Great leaders have a vision to achieve large-scale ideas that they dream of accomplishing and they have the personal power to enact it [7]. In addition, great leaders make things take place by utilizing their sources of power [8]. Leaders can try to shape the work environment to provide greater opportunities for OCB. Leader's sources of power in an organizational sense could affect employee's organizational perceptions especially in engaging of

OCB because leaders are individuals who influence organizational members through power and authority [8].

According to [9], power is defined as the ability to influence others. Power also considered as the capacity to produce effects on others or the potential to influence other [10]. Power is a natural process in the organizational life [11]; [12]. To add, leaders use the sources of power to guide behaviours of organizational members. Leaders with strong power values enjoy competition and being seen as influential and drive hard to make an impact. One of the leading and influential theories of power comes from the work of [13] that attempted to determine the leader's sources of power use to influence others. Reference [13] original power taxonomy was comprised of five types of power that known as French and Raven's Five Bases of Power. The French and Raven's five bases of power consist of legitimate power, reward power, coercive power, expert power and referent power.

2. PROBLEM STATEMENT

In the history of two decades, a large body of successive research has demonstrated and established that OCB formulates important contributions to individual, group and organizational success [5]. Despite its value and important, OCB is not constantly undertaken or valued by others as a genuine act of goodwill [14]; [15]. Although scholars have documented and acknowledged that OCB can be contributed to either self-serving or other-serving motives, little research has concentrated the conditions under which leader's sources of power will make positive versus negative contributions for OCB. It is important to investigate how leader's sources of power impacts the evaluations of performance especially OCB. Furthermore, various studies in social and organizational psychology have examined the impact of leader's sources of power on various outcomes in the organizational context [16]. Therefore, the researchers are aware of little research that has examined and observed the effect of leader's sources of power specifically in OCB and call centre industry. Yet, it remains unclear and uncertain as to what leader's sources of power are needed to encourage and support OCB in organization.

In Malaysia perspective, there is lack of research being done to examine and study the behaviours associated with leader's sources of power and determine if there are specific dimensions of a leader's sources power that predicts the development of an employees' willingness to perform OCB. To worsen the issue, OCB among employees in call centre also has been given least attention and concentration. Yet, there have been few research studies in social sciences and management context, research effort on leader's sources of power and OCB especially in call centre industry.

In reality, highly job demand in call centre environment creates and forms terrible burden to the employees [17]. The call centre itself should be able to identify and address this issue since stress and hassle in the job brings bad consequences towards employees. These consequences include feeling frustrated and dissatisfied among employees. According to [18], when employees are frustrated and dissatisfied, this will lead and direct to the intention to leave the organization. Consequently, the management of call centre should be noted that the costs of losing employees are usually higher than retaining them. The more employees leave the organization, the more investment the organization has to incur. According to [19], there is a significant and major economic impact when organizations especially call centre starts losing critical employees. According to [20], employees who are leaving organization mean that the turnover is high.

Responding to the issues, leaders can fully utilize their sources of power to promote and encourage on employees' positive behaviors such as organizational citizenship behaviour (OCB). Leaders can potentially encourage OCB by changing the structure and arrangement of the tasks employees performs as well as the conditions under which they do their work and human resources practices that govern their behaviour. For that reason, leaders require to understand and recognize which sources of power have a tendency to be more strongly interrelated to OCB in different context in organization. Thus, this study attempts to investigate the influence of leader's sources of power and OCB.

3. LITERATURE REVIEW

3.1. Organizational citizenship behaviour (OCB)

In an era of globalization, opposition among rivals and restructuring as well as merging in organizations especially in call centre industry required them to search for employees who can contribute to the achievement and accomplishment of the organization. For that reason, the organizations generally call centre are focusing on employees' productive behaviors such as organizational citizenship behaviour (OCB). Therefore, OCB has rapidly become one to the most extensively and comprehensively studied topic in applied psychology and organizational behaviour [21].

Reference [22] further stated that OCB are required and necessary in the labour market and there is increased attention and understanding in developing such behaviour on the job. In the past two decades, a large body of subsequent research has documented that OCB makes significant contributions to individual, group and organizational success and accomplishment [5]. Initially, OCB has been defined in many ways by different researchers. The concept of OCB was first introduced by [23] as cited by [24] in an empirical study to explore the causes of OCB. The earlier empirical studies [25]; [26] addressing OCB were published in the early 1980s testing the relationship between job satisfaction and OCB. The interest in these citizenship-behaviours expanded from the field of organizational behaviour to a variety of different domains and disciplines. These include marketing, hospital and health administration [27] and leadership [28].

OCB has been described and expressed as extra-role behaviours, contextual performance, pro-social organizational behaviour, organizational spontaneity, counter-role behaviour and taking charge [29]. Even though, these work behaviours are different from each other in real meaning, they involve cooperation and helping others. Originally, OCB is defined as individual behaviours that are discretionary and not rewarded directly by the organization [5]. They further stated that OCB related to the individual behaviours that are discretionary and not rewarded directly by the organization. These behaviours are voluntary, those employees offer to the organization which are neither enforceable within the formal job description nor punishable or come with any guarantee of immediate compensation [30]. Some of the examples of citizenship behaviours include providing voluntary assistance to fellow employees, taking on additional assignments, following rules and procedures, persisting with extra effort, publicly defending or promoting the organization and volunteering one's time for organizational effectiveness [31].

According to [6], he posited that OCB comprise of five dimensions namely altruism, conscientiousness, sportsmanship, courtesy and civic virtue.

- Altruism

According to [6], the dimension of altruism measures discretionary behaviour directed at helping a specific other person with an organizationally relevant task or problem. Based on [32], some examples of altruism behaviour such as covering for others when they needed a day or certain hours off, helping others with heavy workloads, helping train new employees and being someone others turn for help on the job.

- Conscientiousness

According to [6], the dimension of conscientiousness appears to capture a person's internalization and acceptance of the organization's rules, regulations and procedures even when no one is there to observe or monitor compliance. Reference [21] further stated that conscientiousness also refers to discretionally behaviours on the part of the employee that go beyond the minimum role requirements of the organization, in the areas of attendance, obeying rules and regulations, taking breaks and so on. To add, the reason that this behaviour is regarded as a form of citizenship behaviour is that even though everyone is expected to obey organization regulations, rules and procedures at all times, many employees simply do not [1]. Subsequently, an employee who religiously obeys all rules and regulations even when no one is watching is regarded as specifically "good citizens" [21].

- Sportsmanship

According to [6], the dimension of sportsmanship measures discretionary behaviour that indicates the willingness of people to tolerate the inevitable inconveniences and impositions of work without complaining. Additionally, [21] mentioned that this dimension related to the willingness of employees to tolerate less than ideal circumstances without complaining. Some examples of sportsmanship behaviour such as the employees not only do not complain when they are inconvenienced by others but also maintain a positive attitude even when things do not go their way, are not offended when others do not follows their suggestions, are willing to sacrifice their personal interest for the good of the work group and do not take the rejection of their ideas personally [21].

- Courtesy

According to [6], the dimension of courtesy is measures discretionary behaviour that is aimed at preventing the occurrence of work-related problems. In other words, this behaviour on the part of an individual aimed at preventing work-related problems with others from occurring [21]. It includes considerate gestures such as 'touching base' with others whose work would be affected by one's decisions or commitments [1].

- Civic virtue

According to [6], the dimension of civic virtue measures discretionary behaviour that indicates the employee concern about the political life of the organization. Some examples of civic virtue include attending meetings, engaging in policy debates, giving suggestions and keeping up with changes in the industry that might affect the organization [33]. Besides, the other examples such as participating in organizational events, vocalizing opinions, reading internal mail, talking about work issues on personal times and becoming involved in organizational issues [21].

3.2. Leader's sources of power in organization

Initially, in organizations an especially call centre, the role to get the employees to engage in OCB is the responsibility of a leader. It is well known that great leader and effective leadership are becoming the most significant aspect of organizational success. Leader is responsible for ensuring that their planning efforts are consistent with the organization's mission, vision and so forth. In his view, leader administers the resources based on management practices to produce results that are expected to meet set benchmarks. According to [34], leadership is a process of influencing others in order to achieve organizational objective. In other words, leadership is related to the actions taken by a leader to influence of his or her subordinates. As a result, the subordinates be able to achieve something is much easier if they have the inspiration to do so.

Great leaders have a vision to achieve large-scale ideas that they dream of accomplishing and they have the personal power to enact it [7]. To add, great leaders make things happen by utilizing their sources of power [8]. Thus, leaders can utilize their sources of power to enable subordinates to accomplish organizational objective including OCB. Leaders can try to shape the work environment to provide greater opportunities for OCB. Leader's sources of power in an organizational sense could affect employee's organizational perceptions especially in engaging of OCB because leaders are individuals who influence organizational members through power and authority [9].

According to [9], power is defined as the ability to influence others. Similarly, power also considered as the capacity to produce effects on others or the potential to influence other [10]. Power is a natural process in the organizational life [11]; [12]. One of the leading and influential theories of power comes from the work of [13] that attempted to determine the leader's sources of power use to influence others. Reference [13] original power taxonomy was comprised of five types of power that known as French and Raven's Five Bases of Power. The French and Raven's five bases of power consist of legitimate power, reward power, coercive power, expert power and referent power.

- Legitimate power

Legitimate power is a person's ability to influence other's behaviour because of the position that person holds within the organization [13]. Meaning to say, this power derived from being in a particular organizational role or position which induces an obligation based on the norm that subordinates should obey the orders of a superior.

- Reward power

Besides, reward power is a person's ability to influence other's behaviour by providing them with things they want to receive [13]. Meaning to say, this power involves promising some positive outcomes to motivate changes in behaviour. In other words, it is based on having access to commodities that others value.

- Coercive power

Moreover, coercive power is a person's ability to influence other's behaviour by punishing them or by creating a perceived threat to do so [13]. Furthermore, this power also known as punishment power that involves threatening to deliver aversive outcomes and punishment to force a subordinate to change his or her behaviour.

- Expert power

Additionally, expert power is a person's ability to influence others' behaviour because of recognized knowledge, skills or abilities [13]. This power actually based on the subordinates attributing some greater knowledge to the influencing them, on the faith that the superior knows what is the best thing to do in that particular situation.

- Referent power

Last but not least, referent power is a person's ability to influence other's behaviour because they like, admire and respect the individual [13]. They further stated that this power is based on a subordinate's desire to identify with and be similar to a liked and esteemed superior.

4. CONCEPTUAL FRAMEWORK

For the purpose of this study, the independent variable is leader's sources of power that consisted of legitimate power, reward power, coercive power, expert power and referent power that have been adapted from [13]. The dependent variables is OCB that consisted of altruism, conscientiousness, sportsmanship, courtesy and civic virtue. Essentially, OCB have been adapted from [6]. Therefore, this study proposed the following framework that illustrated in Fig. 1.

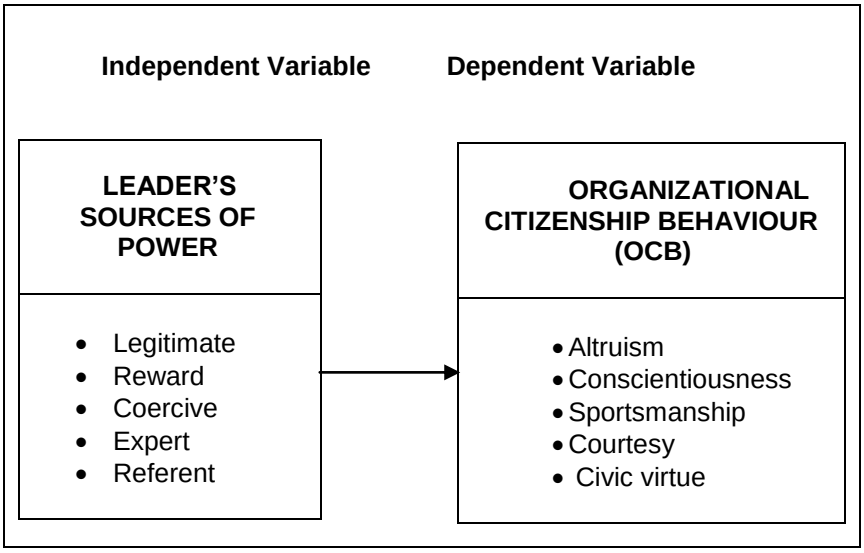


Figure 1: The Influence of Leader's Sources of Power on Organizational Citizenship Behaviour (OCB)

On the basis of literature reviews and the development of conceptual framework, the following hypotheses have been identified. The following hypotheses are described as below.

H1 = There is a positive relationship between leader's sources of power (coercive, reward, legitimate, expert and referent) and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

H1a = There is a positive relationship between leader's legitimate power and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

H1b = There is a positive relationship between leader's reward power and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

H1c= There is a positive relationship between leader's coercive power and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

H1d= There is a positive relationship between leader's expert power and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

H1e= There is a positive relationship between leader's referent power and organizational citizenship behaviour (altruism, conscientiousness, sportsmanship, courtesy and civic virtue)

5. DISCUSSION AND RECOMMENDATION

5.1. Call centre industry

The finding of this study should become the main subject in the call centre industry that leader's sources of power namely coercive, reward, legitimate, expert and referent enhances organizational citizenship behaviour (OCB) whereby dramatically ensures high business performance. It clearly assists the industry in realizing economic goals like profitability, market share and return on investment.

5.2. Leader in call centre industry

Moreover, the study should also help the leaders especially in the call centre industry to understand how power is acquired, know how and when to use it as well as be able to anticipate its probable effects. Hence, by learning how power operates in organizations, the leaders will be able to use that knowledge to become more effective leaders. The findings of this study also may provide leaders with a clear picture of their sources of power preferences and how it might impact the level of OCB of employees in organization. At the same time, the leaders will enable subordinates to accomplish organizational objective including OCB.

5.3. Employees

The study should also enhance employees' positive behaviour in which promote employees' workplace friendship. When workplace friendship is increased, employees will be more willing to assist colleagues. In addition, highly cohesive groups are likely to have a strong sense of social identity and belonging that can increase organizational members' desire to help one another as well as engage in OCB.

5.4. Theoretical implications

Besides, the finding of this study also should enrich the existing theoretical framework by providing additional evidence on the relationship of leader's power on organizational citizenship behaviour (OCB) especially for call centre industry. Eventually, the findings provide empirical support to the concepts and theories that are currently discussed in the leader's sources of power literature to be applied especially in the context of call centre perspective in order to stay competitive among other competitor. It is also anticipated that the results of the study contribute to

the research literature on leader's sources of power and OCB that providing further clarifications and explanations of both constructs in an organizational context.

6. CONCLUSION

As conclusion, organizations must seek new areas for sustainable competitive advantage. Today's employees offer a great opportunity to today's organization to excel, to be the best and to separate themselves from other competitors. In other words, employees offer organizations with unique and distinctive human resource competencies that are capable of generating and producing a competitive advantage and OCB is one category of behaviour that may contribute to that advantage. Employees with good citizenship behaviour who are passionate and enthusiastic to the good of the organization are the fundamental and basic factor to create advantage that cannot be simply and merely replaced by competitors. OCB contributes to a positive impression that employee makes on his or her supervisor and also influences recommendations for a promotion or a salary increase. Moreover, OCB benefits the organization as a whole such as punctuality, having a positive attitude and making suggestions for the organization's improvement.

On top of that, OCB is important for organizations because it facilitates the accomplishment of organizational goals and enhances organizational performance Scholars believed that leadership can help facilitate qualitative change by radically shifting the employees' viewpoint on what they considered as meaningful things in their job. It is also reported that supervisors as leaders play an important role in shaping the attitude and behaviour of their subordinates. In exchange for positional resources (e.g., privileged information, challenging projects), the member commits himself or herself to higher degree of involvement in the unit's functioning, including greater time and energy expenditures than required by the formal contract, acceptance of greater responsibility and a vested interest in the success of unit functioning. Therefore, OCB is affected by the leader's power in which it facilitates the accomplishment of organizational goals and enhances organizational performance. To summarize, leader's sources of power affected OCB that particularly important to organizational context to become more independent and achieve competitive advantage

REFERENCES

[1] S. Khasawneh, "Shared leadership and organizatioanal citizenship behaviour in Jordanian public universities: Developing a global workforce for the 21st century", *Educational Management Administrative and Leadership*, vol. 39(5), pp. 621-634, 2011.

[2] T. Indridason and C. L. Wang, "Commitment or contract: What drives performance in public private partnerships?" *Business Strategy Series*, vol. 9(2), pp. 78-90, 2008.

[3] D. Shaw and B. Haynes, "An evaluation of customer perception of FM service delivery", *Facilities*, vol. 22(7/8), pp. 170-177, 2004.

[4] C. Yen and H. Teng "The effect of centralization on organizational citizenship behavior and deviant workplace behavior in the hospitality industry" , *Tourism Management*, vol. 36, pp. 401-410, 2013.

[5] D. W. Organ, P. M. Podsakoff and S. B. Mackenzie, "Organizational Citizenship Behavior: Its nature, antecedents and consequences", London: Sage, 2006.

[6] D. W. Organ, "Organizational citizenship behavior: The good soldier syndrome", Lexington, MA, 1988.

[7] J. L. Gibson, J. M. Ivancevich, J. H. Donnelly and R. Konopaske, "Organizations: Behavior, structure, processes, 14 ed., New York: McGraw-Hill Irwin, 2012.

[8] J. Pfeffer, "Power: Why some people have it-and other don't", New York: HarperCollins, 2011.

[9] D. L. Nelson and J. C. Quick, "Understanding organizational behavior", 4th ed., Mason, OH: South-Western/Cengage Learning, 2012.

[10] R. B. Kaiser and G. Curphy, "Leadership development: The failure of an industry and the opportunity for consulting psychologists" *Consulting Psychology Journal: Practice and Research*, vol. 65(4), pp. 294, 2013.

[11] M. Haugaard and S. Clegg, "Power and organization", *Thousand Oaks, CA: Sage*, 2012.

[12] D. C. McClelland and D. H. Burnham, "Power is the great motivator", *Harvard Business Review*, vol. 81(1), pp. 117-129, 2003.

[13] J. R. P. French and B. Raven, "The bases of social power", In D, Cartwright (Ed.), *Studies in Social Power*, University of Michigan, Institute for Social Research, Ann Arbor, MI, pp. 150-167, 1959.

[14] D. M. Bergeron, “The potential paradox of organizatioanal citizenship behavior: good citizens at what cost?”, *Academy of Management Review*, vol. 32(4), pp. 1078-1095, 2007.

[15] A. M. Grant and D. M. Mayer, “Good soldiers and good actors: prosocial and impression management motivates as interactive predictors of affiliative citizenship behaviors”, *Journal of Applied Psychology*, vol. 94(4), pp. 900-912, 2009.

[16] G. Yukl, “Leadership in Organization”, Prentice-Hall, Upper Saddle River, NJ, 2010.

[17] J. Connel and Z. Hanif, “Call centers, quality of work life and HRM practices: An in-house/outsourced comparison”, *Employee Relations.* vol. 31(4), pp. 363-381, 2009.

[18] J. P. Sharma and N. Bajpai, “Role clarity a phenomena based on organizational origin is a catalyst for job satisfaction: A comparative study launched in India revealing some new facts”, *European Journal of Scientific Research,* vol. 49(1), pp. 61-72, 2011.

[19] M. Pepe and S. College, “The impact of extrinsic motivational dissatisfiers on employee level of job satisfaction and commitment resulting in the intent to turnover”, EABR and ETLC Conference Proceedings, Dublin, Ireland, (2010).

[20] E. Gunlu, M. Aksarayli and N.S. Percin, “Job satisfaction and organizational commitment of hotel managers in Turkey”, *International Journal of Contemporary Hospitality Management*, vol.22(5), pp. 693-717, 2010.

[21] E. Podsadoff, J. MacKenzie, J. Paine and D. Bachrach, “Organizational citizenship behaviors: A critical review of the theoritical and empirical literature and suggestions for future research ,” *Journal of Management*, vol. 26, pp. 513-563, 2000.

[22] J. A. LePine, A. Erez and D. E. Johnson, “The nature and dimensionalibility of organizational citizenship behavior: a critical review and meta-analysis”, *Journal of Applied Psyhology*, vol. 87, pp. 52-65, 2002.

[23] C. A. Smith, D. W. Organ and J. P. Near, “Organziational citizenship behavior: Its nature and antecedents”, *Journal of Applied Psychology*, vol. 68, pp. 655-663, 1983.

[24] D. W. Organ and K. Ryan, “A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior”, *Personnel Psychology*, vol. 48(4), pp. 775-802, 1995.

[25] T. S. Bateman and D. W. Organ, “Job satisfaction and the good soldier: The relationship between affect and employee ‘citizenship’”, *Academy of Management Journal*, vol. 26(4),pp. 587-595, 1983.

[26] L. J. Williams and S. E. Anderson, “Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors ”, *Journal of Management*, vol. 17, pp. 601-617, 1991.

[27] Y. Altinkurt and K. Yilmaz, “Relationship between the school administrators’ power sources and teachers’ organizational trust levels in Turkey”, *Journal of Management Development*, vol. 31(1), pp. 58-70, 2012.

[28] P. M. Podsakoff, R. H. Moorman, R. Fetter and S.B. McKenzie, “Transformational leaders behavior and their effects on follower’s trust in leader, satisfaction and organizational citizenship behavior”, *Leadership Quarterly*, vol. 1, pp. 107-142, 1990.

[29] E. W. Morrison, “Role definitions and organizational citizenship behavior: the importance of employee’s perspective”, *Academy of Management*, vol. 37, pp. 1543-1567, 1994.

[30] N. T. Feather and K. A. Rauter, “Organizational citizenship behaviors in relation to job status, job insecurity, organizational commitment and identification, job satisfaction and work values”, *Journal of Occupational and Organizational Psychology*, vol. 77, pp. 81-94, 2004.

[31] P. E. Spector, “Job Satisfaction: Application, assessment, causes and consequences”, Alexandria, VA: Society for Human Resource Management, 1997.

[32] M. A. Vey and J. P. Campbell, “In-role or extra-role organziational citizenship behavior: which are we measuring?”, *Human Performance*, vol. 17, pp. 119-135, 2004.

[33] T. E. Becker and M. C. Kernan, “Matching commitment to supervisors and organizations to in-role and extra-role performance”, *Human Performance*, vol. 16, pp. 327-348, 2003.

[34] W. B. Zachary and L. W. Kuzuhara, “Organizational behavior: Integrated models and applications, South-Western Pub, 2005.

The Influence of Leaders' Interpersonal Communication Skills on Employees' Innovative Behaviour: A Conceptual Framework

DarmaTasiyah Gumbri[1], Siti Asiah Md Shahid[2] and Abdul Kadir Othman[3]
1 Arshad Ayob Graduate Business School, Faculty of Business Management,
Universiti Teknologi MARA Shah Alam Malaysia, email: tasya 0409@gmail.com
2 Institute of Business Excellence, Faculty of Business Management,
Universiti Teknologi MARA Shah Alam Malaysia, e-mail: sitia348@puncakalam.edu.my
3 Faculty of Business Management, Universiti Teknologi MARA Shah Alam Malaysia,
e -mail: abdkadir@puncakalam.uitm.edu.my

ABSTRACT

The health care system operates in an environment of constant change and challenge. The demand for creativity and innovation among nurses has dramatically increased due to high competition in the hospitality services within health care organizations and between private and public hospitals. Due to the rules and SOPs that have been regulated by the MOH, nurses are not really concerned that innovative behaviour is important to their working styles. Literatures suggest that leaders with good interpersonal communication skills can stimulate positive aura and commitment among nurses to behave innovatively in the workplace. However, literatures indicate that there is a serious lack of communication practices from leaders that influence the innovative behaviour of employees, especially in health care organizations. Additionally, literatures indicated that leaders are perceived as trustworthy by their subordinates if they have good interpersonal communication skills. Although the government has enforced the importance of innovation in health care industry, little research has been done related to interpersonal communication skills and innovative behaviour of employees in healthcare industry. This concept paper discusses the concepts of interpersonal communication skills, perceived trustworthiness and innovative behaviour.

Key Words: Health care, Interpersonal communication skills, innovative behaviour, perceive trustworthiness.

1. INTRODUCTION

The changing landscape of healthcare in Malaysia is parallel with the Malaysian Government's aspirations in transforming nurses towards innovation in responding to varying patient expectations and values (Ministry of Health, 2011). Therefore, the role of nurses in health care organizations is critical in the provision of high-quality care and healthy work environment in healthcare delivery systems (Baumann, 2011; Hughes, 2006).

According to Malaysia's Ministry of Health (MOH), the great expansion and globalization of health care delivery system has forced nurses to increase their knowledge base and become a technology driven society (MOH, 2011). With that emphasis, nurses also need to evaluate their knowledge, to think critically and to be able to demonstrate creativity in managing health care services (Mohamad Said & Zulhamri, 2012). These challenges have forced nurses to deliver high-quality care that is safe and cost-effective in their current work environment (Yuan & Woodman, 2010). In addition, nurses are also responsible in creating innovation in their task performance as well as their own work environment (Baumann, 2011; Hughes, 2006; Lachman, Glasgow & Donnelly, 2006; McCabe & Sambrook, 2014).

2. SCENARIO IN PUBIC HEALTH CARE

Due to the competitive workforce environment, public hospitals have to compete with private hospitals especially in serving good hospitality and high quality work. Nurses also have been urged to play a role in ensuring that innovations are effectively implemented and adapted to meet local circumstances and needs (Amo, 2006a; MOH, 2014).

Nevertheless, the question arises here is, how can innovative behaviour among nurses be influenced? Can it be generated automatically without any support from anybody? These issues need to be studied because their nature of work is full of challenges, especially in the era of globalization whereby nurses also need to keep pace with advances in information technology, they need to have high work integrity and at the same time be more innovative in their work. According to Huber (2014), advances in medical equipment and technology has formed a significant driver to change in clinical practices, demanding new skills and techniques as well as new ways of working (Huber, 2014).

Besides, increasing quality of work and innovation in clinical practices, nurses must also follow the standard operating procedures (SOPs) that have been outlined by MOH in serving their clients and patients (MOH, 2013) Furthermore, the health care system operates in an environment of constant change and challenges by which, changes in demographics and the burden of disease continue to present new demands on the health care systems (Amo, 2006a).

Statistically, there are about 143 government hospitals including Sabah and Sarawak (MOH, 2008). Until May 2012, there were 95,958 nurses in Malaysia, out of which 66,175 are working in the public sector and the remaining are working in the private sector (Utusan Malaysia, 2012).

The demand for creativity and innovation among nurses has dramatically increased due to high competition in the hospitality services within health care organizations and between private and public hospitals (MOH, 2012). Due to the rules and SOPs that have been regulated by the MOH, nurses are not really concerned that innovative behaviour is important to their working styles (MOH, 2011). Meanwhile, the innovative behaviour is necessary for nurses' career development and nurses' daily working process. Due to the current competitive environment, just fulfilling the Key Performance Index (KPI) and following the Nursing Acts, are still insufficient to compete with the private health care organizations that are already moving forward in implementing innovation (MOH, 2013).

Borins (2002) postulated that innovative behaviour is not important to public sector services including public hospitals as they are continuously operating with service performance rather than working towards innovation because they have a monopoly over this service and no competitive pressure. Therefore, leaders have not critically paid attention to the importance of communicating effectively with subordinates.

As a consequence, nurses are overwhelmed with stress and work overload (Janssen, 2000; 2003) and at the same time they have to make decisions by themselves (MOH, 2013). Furthermore, poor interpersonal communication skills will lead to more resignations, absenteeism, negative well-being, high fatigue (Subramony & Holtom, 2012) and the output could worsen patient service levels in return (Berita Harian, 2015).

In public healthcare organizations, it is crucial for head nurses to serve and treat subordinates accordingly because they reflect the public hospitals' image. Besides, the Ministry of Health has proposed that, in achieving its goal towards realization of the Government's Transformation Programme and holding steadfast to the motto "1Malaysia, People First, Achievement Now", the Ministry of Health Malaysia strives to provide excellence in its services in ensuring the health and well-being of the nation (Ismail Merican, 2010). Moreover, the effectiveness of their organizational leadership is the mirror of the government sector's image because nurses are the front-liners of the organization who deal with clients every day.

The government has invested lots of efforts and budget like allowances and intensive training, to improve and upgrade the nurses' quality of work. However head nurses' disability in approaching and communicating with their subordinates affect the subordinates' quality of work and poor services to patients. In addition, subordinates will only behave accordingly when they are perceived as trustworthy by their leaders.

The purpose of this paper is to determine if communication skills of head nurses are related to nurses' innovative behaviour in public hospital settings. It is expected that the findings of the study can be used to avoid the negative perception of distrust in the interpersonal relationship and

public hospital management. Specifically, the objectives of this study include; examining the influence of head nurses' interpersonal communication skills on nurses' innovative behaviour, and determining the role of perceived trustworthiness in moderating the relationship between head nurses' interpersonal communication skills and nurses' innovative behaviour.

3. INNOVATIVE BEHAVIOUR

Whilst Kanter (1988) has outlined three dimensions of innovative behaviour of idea recognition, idea promotion and idea realization into organizational practice, there are still some arguments about how the innovative behaviour should be measured (Janssen, 2001; Scott & Bruce, 1994). In accordance to that, Amo (2005) and Janssen (2001; 2003) have used a one-dimensional construct to examine these three dimensions of innovative behaviour in nursing studies. Their results indicated that there is a positive correlation between innovative behaviour with leadership style.

Janssen (2003) articulated that, innovative nurses are able to adapt and adopt the new medical technology advancement beyond their area of expertise, are able to involve in identifying emerging technology, able to provide leadership in the development and dissemination across national and regional departments of the new medical findings and, are able to work together as a team with other nurses. Janssen (2003) emphasized that, although innovation does not require high technology to get a high impact, it requires great creativity and imagination to produce success. However, subordinates should act based on the information they gathered from their leaders in order to prevent and avoid any mistakes or illegal actions that could disrupt the healthcare image (Janssen, 2001; 2003).

4. INTERPERSONAL COMMUNICATION SKILLS

Interpersonal communication has been defined as the process by which people exchange information, feelings and meanings through verbal and non-verbal message or through face-to-face interaction (Jablin & Krone, 1994; Janssen, 2000; Knol & van Linge, 2008). In the study of interpersonal communication skills, Jablin and Krone (1994); Janssen (2000; 2003) have explored the superior-subordinates communication patterns in depth beyond working interaction which involve factors of social support in the relationship between supervisor and subordinate in the organizational setting from the developmental and lifespan perspective.

Accordingly, Jablin and Krone (1994) stressed that interpersonal communication area of leader-subordinates communication has been extensively being studied in great detail. They have expanded leader-subordinate communication pattern that stressed on the component of social support from the leader which consists of five dimensions. These dimensions focused on the key area of leader's interpersonal communication skills including awareness of self and self-disclosure, self-expression and clarity, awareness of others, acceptance of feedback and evaluation and, coping with feelings and differences. By utilizing this model, it provides a sense of personal control that involves two persons face-to-face communicative interactions whether formal or informal situations, direct or indirect observation and codification, survey, in-depth interviews or combinations thereof (Jablin & Krone, 1994). According to them, the dyadic portion can easily be implemented to all communication patterns and to obtain information when studying interpersonal communication (Jablin & Krone, 1994). By using this method, the uncertainty can be reduced. Additionally, it shows a strong correlation between supervisor and subordinate (Jablin & Krone, 1994). Therefore, due to the evolutionary in the communication process and pattern, the area has become the most frequently researched topic (Janssen, 2001; 2003; Knol & van Linge, 2008).

5. PERCEIVED TRUSTWORTHINESS

According to Mayer, Davis and Scoorman (1995), the perceptions about the three components of trustworthiness which consists of ability, benevolence and integrity will affect how much trust the head nurses can gain and the extent to which subordinates will have confident in

their leader. According to Mayer et al. (1995) the way leaders communicate would affect subordinates' perception on trusting their leaders. Mayer et al. (1995) argued that perceive trustworthy has been identified to have a positive correlation that deduced the relationship between both leaders' interpersonal communication skills and nurses' innovative behaviour. Additionally, Mayer et al. (1995) proposed that engaging in trusting action requires one to take a risk and that risk-taking in a relationship will lead to trust depending on the situation.

Meanwhile, Owen and Powell (2006) stressed that trust is fragile and thus can easily be undermined and destroyed. The outcomes of gaining trust from subordinates will influence trust indirectly through the perceptions of ability, benevolence, and integrity at the next interaction to create relationship (Mayer et al., 1995; Owen & Powell, 2006).

Furthermore, an effective leader tends to adapt and adopt various techniques and processes in solving a problem, maintaining group effectiveness and developing group identification that could inspire and motivate their team members (Middleton, 2011). Additionally, Middleton (2011) contended that, leaders who are able to implement these characteristics in their daily working styles, attempt to win the respect and trust of team members. These behaviours will lead to a development of clinical practice.

It can be concluded that an effective communication skills plays a key role in acquiring trustworthiness of employees to enhance their innovative work behaviour. Working together as a team enable groups to improve ideas and enhance subordinates to be even more innovative. A leader who is able to implement good interpersonal communication skills, is able to create an innovative working atmosphere that benefited to the whole health care industry.

6. LITERATURE REVIEW

The review of the literature indicates a serious lack of communication practices from leaders that influence the innovative behaviour of employees, especially in health care organizations. Accordingly, Scott and Bruce (1994 & 1998) found that there is a strong correlation between innovative behaviour and leadership roles. A study conducted by Amo (2006a) on 555 Norwegian health care workers, of which 120 were staff nurses found that, the greater the encouragement and support given by the leader, the more people tend to act innovatively. This shows that the leader's interpersonal communication skills in any aspect are necessary for creating a positive action to behave innovatively in return. Consistently, a study conducted by Janssen and Van Yperen (2004) on 170 employees from an energy supplier found a positive correlation between leaders' social exchange behaviour on employees' innovative behaviour.

The general ideas of social exchange theory are consistent with Scott and Bruce's (1994) prediction that high-quality exchange relationship of leaders will form mutual trust among employees that could influence employees' innovative work behaviour. Poor interaction between leaders and subordinates will result in low qualities of relationship (De Jong & Den Hartog, 2007). The satisfaction generated from the way leaders communicate with their subordinates will generate trust. This situation will result in a positive outcome value in their daily work. However, if subordinates perceive that the relationship yields more drawbacks than benefits, a negative outcome value will be generated. With that emphasize, Jablin and Krone (1995) indicated that building trust is considered a pivotal activity in managerial and must be led by good interpersonal communication practices. In return, nurses will be satisfied with the leaders and motivated to cooperate very well, thereby having an effect in their behaviour to behave innovatively.

6.1 THE LINKAGE BETWEEN INNOVATIVE BEHAVIOUR, INTERPERSONAL COMMUNICATION SKILLS, AND PERCEIVED TRUSTWORTHINESS

Although there is no specific nursing literature on the relationship between each components of innovative behaviour and interpersonal communication skills, in other managerial behaviour and commitment, this issue has been extensively discussed (Fereday & Muir, 2004; Hayati, Charkhabi. & Naami, 2014, Lamberton & Evans, 2010; Lawrence, 2014). Meanwhile, there are incumbent studies on the relationship between the three components of perceived trustworthiness and

innovative behaviour in various management fields (Mayer et al., 1995; Savolainen, 2011; Savolainen & Fresno, 2012; Savolainen & Hakkinen, 2011).

Generation of idea in nursing study means, generating concepts for the purpose of improvement (Janssen, 2000). Ideally, generating idea can forms an extensive link to grab opportunities (De Jong & Den Hartog, 2008). The ability to construct the ideal alternatives to generating new ideas and concepts for the purpose of improvement and development is the key to idea generation (Kanter, 1988). It is also the combination of existing information and concepts to solve problems or to improve performance (De Jong & Den Hartog, 2008).Indeed, with the ability to generate ideal ideas, nurses can find unique solutions to various problems or situations in order to optimize patients' satisfaction (Weberg, 2009).

Similarly, De Jong and Den Hartog (2008) indicated that the realization of new idea begins when people realizing the chances to discovering the opportunity or problem arising that require immediate response. In addition, the realization of new ideas in possessing the unexpected atmosphere in the work place is intentionally crucial to improve and discover the applicable solutions. Therefore, they claimed that the capability in reorganizing the relevant concepts is one of the best predictors of creative achievement in responding to the opportunity or problem that arises. A behaviour that encompass both of the generation and the realization of ideas at work enable subordinates to introduce and implement new ideas either by oneself or adopted from others (Yuan & Woodman, 2010).

Meanwhile, the innovative nurses attempt to promote new ideas when they feel they have strong backup and support from leaders (Janssen, 2003). Having a strong connection within leader and subordinate will enhance positive behaviour to be innovative in workplace (Janssen, 2003; Xerri, 2012). Nurses who have high spirit of behaving innovative able to push a creative idea and promote it by persuading and influencing management to support their idea to be implemented and put into practice (Janssen, 2001;Kanter, 1988; Xerri, 2014).

However, innovation is not a self-generated (Janssen, 2003). It exists as a result of the combination between knowledge, work styles and satisfactions from various disciplines that allows subordinates to work in pleasure without compromising the aspects of the efficiency and quality (De Jong & Den Hartog, 2007). In fact, leaders' support and encouragement become an important ingredient to influence the nurses' attitude to behave positively and innovatively (Amo 2005a; Xerri, 2014). Hence, these definitions have provided a foundation in studying nurses' innovative behaviour in healthcare.

Apart from that, Nanthakumaran (2015), vice director of Health Management of Negeri Sembilan claimed that leaders who practice good communications are able to present continuous development in innovative processes. The knowledge aspects of interpersonal communications are very important in supporting and managing staffs in facing the global challenges of rare disease and implementing high-quality work in health care organizations.

Lamberton and Evans (2010) stated that the leaders who practice openness in communication, self-disclosure and honesty create insights in passion, personal strengths and weaknesses and other aspects. These positive behaviours can cultivate the employee's positive behavioural reaction and innovative behaviour. They further added that the leaders who are more honest to admit their weaknesses in turn will gain trust from subordinate hence, creating the perception of having high integrity and self-awareness.

In fact, the leaders who have good self-expression and clarity can easily transmit their inspirational motivation in influencing subordinates' behaviour (Hayati, Charkhabi & Naami, 2014). In addition, the ability of leaders to increase the clarity of their communication by constantly trying to place themselves inside the subordinates' psychological framework is positively influenced the subordinates' attitude. Whereas, the clarity to see the communicative situation from the subordinates' point of view will apprehend the subordinates' trustworthiness to behave innovatively in return (Hayati et al., 2014).

Awareness of others helps leaders to develop the leadership quality (Hayati et al., 2014). Accordingly, this attitude enables leaders to influence the subordinates' behaviour to act positively. By providing strong base support and concerning on subordinates' career development enable leaders to enhance and influence subordinates to behave innovatively (Hayati et al., 2014). This is because the leadership behaviours have a great influence on the employee and organizational outcomes (Hayati et al., 2014).

In relation to the performance feedback, Fereday and Muir (2004) said that leaders' evaluation and feedback allows subordinates to identify the level of performance of their daily work. According to Fereday and Muir (2004), leaders' feedback offers an overall assessment of the subordinates' viewpoint. It also allows subordinates an opportunity to provide feedback and influence the way they are managed and led. Hence, it can create a culture where subordinates become more ready to commit themselves to seek and accept feedback. Conversely, due to the human sensitivity, sometimes subordinates tend to act negatively when they are not satisfied with their leaders' trait and vice- versa (Fereday & Muir, 2004).

Meanwhile, leaders who have an ability to cope with employees' feeling will generate a positive atmosphere in workplace (Scott & Bruce, 1994; Xerri 2012; 2014). Thus, could increase communication between both leaders and subordinates which in turn could influence nurses' behaviour to be innovative. This is because, leaders who implement good communication skills play an important role in enhancing subordinates' innovative behaviour. Therefore, it is essential that the dimension which leads nurses to behave innovatively is properly understood so that the appropriate interpersonal communication skills of a leader can be identified, practiced and followed religiously.

Additionally, Savolainen and Fresno (2012) have found that the ability of leaders in any matters show that trustworthiness could influence employee's perception on them in sustaining innovations. They added that in today's business competitive environment, it is essential to be alert about the importance of gaining trustworthiness from subordinates and the importance of being skilled in demonstrating it has been widely discussed in literature and business practice.

Apart from that, Gallardo and Suazo (2012) in their research have identified sixty-one critical incidents associated with distrust of nurses towards their leaders. Although Gallardo and Suazo (2012) do not point specific variables that contribute to distrust, however, they claimed that various situations exist that can arouse the subordinates' distrust. One of the factors is poor interpersonal communication which according to them has contribute to a negative perception of nurses' trustworthiness. As a result, this behaviour leads to a negative effect on organizational management. Their result showed that sixty-three percent of nurses who distrust the integrity of their head nurses have negative attitudes towards their work. This indicates that nurses tend to behave ineffectively when they are not satisfied. On the other hand, if they trust their leaders and perceived that they are being treated well, they will behave positively, which in the end resulting more innovative behaviour (Janssen, 2003).

Mayer and Davis (1999) also stressed that leaders in any position are responsible for communicating the purpose of acknowledging and rewarding performance that shows their integrity in building trust among subordinates. Their responsibilities are not just planning, organizing, leading and controlling the organization, but also include humanization. It is believed that good leaders possess integrity and attributes valuable to a human relationship which is important for organizational success (Vosburgh, 2005).

8. PROPOSITION

Based on the discussion, the following research propositions are highlighted:

P1: Head nurses' interpersonal communication skills significantly influence nurses' innovative behaviour.

P2: Perceived trustworthiness significantly moderates the relationship between head nurses' interpersonal communication skills and nurses' innovative behaviour.

9. CONCEPTUAL FRAMEWORK

As this is a quantitative study, a conceptual framework will focus on the context that is associated with the nurses' innovative behaviour based on literature. The interpersonal communication skills of head nurses will be adapted from Jablin and Krone (1994). Meanwhile, nurses' innovative behaviour will be adapted from Janssen's (2003) model whereas, perceived trustworthiness will be adapted from the organizational trust models that developed by Mayer, Davis and Scoormans (1995).

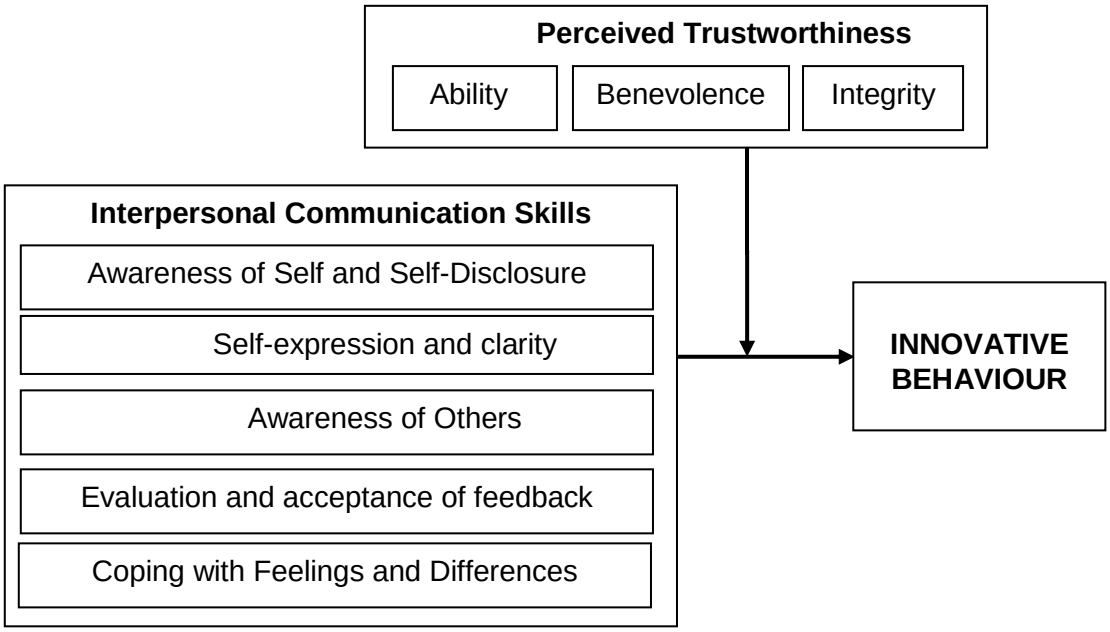


Figure 1: Conceptual Framework

10. CONCLUSION

It can be concluded that a leader who is able to implement good interpersonal communication skills is able to create an innovative working atmosphere that benefits the whole health care organization. Further research should take into consideration nursing culture and nursing citizenship behaviour that might affect the nurses' commitment to behave innovatively. However, it is not easy to achieve it when they have to move alone without support and encouragement from their leaders. Working together as a team enables the group to improve ideas that stimulate subordinates to be innovative. The findings of the study will contribute to the health care organizations literature in fulfilling the intention of the government to increase privatization of public hospitals for better quality of services in the future.

REFERENCES

Amo, B. W. (2005a). Organizational strategy, individual personality, and innovative behaviour. *Journal of Enterprising Culture*, 13(1), 7-20.

Amo, B. W. (2006a). Employee innovation innovative behaviour in health care: The influence from management and colleagues. *International Council of Nurses*, 53, 231-237.

Baumann, P.K. (2011). The relationship between individual and organizational characteristics and nurses innovative behaviour. *(Doctoral Dissertation).*

Berita Harian (April 1st. 2015). Lambakan kerja punca tekanan petugas hospital. [Available at: bhnews@bh.com.my].

Borins, S. (2002). Leadership and innovation in the public sector. *Leadership and Organization Development Journal*, 23(8), 467-476.

De Jong, J. & Den Hartog, D. (2007). How leaders influence employees' innovative behaviour. *Management*, 10(1), 41–64.

De Jong, J. & Den Hartog, D. (2008). Innovative Work Behaviour: Measurement and Validation. *SCALE*. Scientific Analysis of Entrepreneurship and SMEs.

Fereday, J. & Muir, C.E. (2004). Evaluating performance feedback: A research study into issues of credibility and utility for nursing clinicians. *PubMed.gov*. National Institute of Health. U.S. National Library of Medicine, 137(48).

Gallardo, R.V. & Suazo, V. (2012). Critical incidents of trust erosion in leadership of head nurses. *US National Library of Medicine*. National Institute of Health.

Hayati Davood, Charkhabi, M. & Naami Abdol Zahra. (2014).The relationship between transformational leadership and work engagement in governmental hospitals nurses. A survey study. *SpringerPlus Open Journal*. National Institute of Health. U.S. National Library of Medicine, 3.

Huber, R. (March, 7th. 2014). Achieve Health at Healthcare Innovation Symposium [*Online*] [Retrieved from: http://www.achieveinternet.com/web-application-blog/achieve-health-healthcare-tech-conference].

L

Hughes, F. (2006). Nurse at the forefront of innovation. *International Nursing Review, 53*, 94-101.

Ismail Merican. (March, 2010). Towards Excellence in Pharmacy Services. [*Press released*] Ministry of Health Malaysia. [Available at: http//www.portal.bpfk.gov.my].

Jablin, F. M. & Krone, K. J. (1994). Task/work relationship: A life-span perspective. In M. L. Knapp, G. R. Miller (Eds.). *Handbook of interpersonal communication*. 2nd edition. Beverly Hills. CA: Sage, 621-675.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness, and innovative behaviour. *Journal of Occupational and organizational psychology*, 73,287-302.

Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of Management Journal*, 44(5), 1039-1050.

Janssen, O. (2003), Innovative behaviour and job involvement at the price of conflict and less satisfaction with co-workers. *Journal of occupational and organizational psychology,* 76(3), 347-364.

Janssen, O. & Van Yperen, N.W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal,* 45, 368 – 384.

Kanter, R.M. (1988). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations. *Research in Organizational Behaviour. B Staw (ed.). Greenwich*, CT: JAI Press.

Knol, J. & van Linge, R. (2008). Innovative behaviour: the effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing,* 65(2), 359-370.

Lachman, V. D., Glasgow, M. E. & Donnelly, G. F. (2006). Teaching Innovation. *Nursing Administration Quarterly, 33*(3), 205-211.

Lamberton, L. & Evans, L.M. (2010). Human Relation: Strategies for success. Self-awareness and self-disclosure. 3rd. edition. *McGraw Hill Inc.*

Lawrence, L. (2014). Communication Skills for Healthcare Professionals Mass Market Paperback. A comprehensive guide to the communication process for healthcare professionals. 1st. edition. *Brightday*, 296.

Mayer, R. C. & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology,* 84, 123–136.

Mayer, R.C., Davis, J.H. & Schoorman, F.D. (1995). An integrative model of organizational trust. Academy of Management Review, 20, 709-734.

McCabe, T.J. & Sambrook, S. (2014). An exploration of the antecedents, attributes and consequences of trust amongst nurses and nurse managers: A concept analysis. *International Journal of Nursing Study*, 51(5), 815-27.

Middleton, J. (2011). Leadership Skill for Nurses. *Nursing Times Leadership Supplement.* [Available at: http://www.nursingtimes.net/Journals].

Ministry of Health Malaysia (2008). Towards Achieving Better Health through Consolidation of Services. Strategic Plan 2006–2010. [*Online*] [Available at: http//www.moh.gov.my/gov hospitals].

Ministry of Health Malaysia (2011). Country Health Plan. 10th Malaysia Plan. [Available at: http//www/moh/gov.my].

Ministry of Health Malaysia (2012). Annual Report.2012. [Available at: http// www.moh/gov.my/].

Ministry of Health (2013). Health System in Transition: Asia Pacific Observatory on Health System and Policies. *Malaysia Health System Review*, 3(1).

Ministry of Health (2014). [*Online*]. [Available at: http//www.moh.gov.my /index. php/ database].

Mohamad Said Awang & Zulhamri Abdullah (2012). Relationships among leader's discretion, communication exchange and organizational commitment. *Malaysian Journal of Communication,* 28(1), 121-136.

Nanthakumaran, M. (2015). Kolaborasi Pencetus Transformasi. Perutusan Amanat Timbalan Pengarah Kesihatan Negeri (Pengurusan). Halatuju Pelan tindakan Program Pengurusan Tahun 2015. *Jabatan Kesihatan Negeri Sembilan.*

Owen, T. & Powell, J.L. (2006). Trust, professional power and social theory, Lessons from a post-focauldian framework', *International Journal of Sociology and Social Policy*, 26 (3/4), 100-120.

Savolainen, T. (2011). Leadership by trust in renewing human intellectual capital. In Puusa, A. and Reijonen, H.(ed.), *Aineeton pääoma organisaation voimavarana.* Finland: Unipress, 117-141.

Savolainen, T. & Hakkinen, S. (2011). Towards new leadership by trust: Leader's trustworthiness makes a difference to co-creation. *Proceedings of the 10th EBRF International Conference* 15-17.9.2010, Nokia, Finland.

Savolainen, T. & Fresno, P.L. (2012). Trust in Leadership for Sustaining Innovations: How Leaders Enact on Showing Trustworthiness. *Nan Yang Business Journal*, 2(8), 129.

Scott, S.G. & Bruce, R.A. (1994). Determinants of innovative behaviour: A path model of individual innovation in the workplace. *Academy of Management Journal,* 38, 1442-1465.

Scott, S.G. & Bruce, R.A. (1998). Following the leader in R&D. The join effect of subordinate problem-solving style and leader-member relations on innovative behaviour. *IEE Transactions on Engineering Management*, 45, 3-10.

Subramony, M. & Holtom, B. C. (2012). The long-term influence of service employee attrition on customer outcomes and profits. *Journal of Service Research*, 15(4), 460-473.

Utusan Malaysia (May 8th. 2012). 90% Nurses fulfilled. *Utusan Online* [Available at: http://www.utusan.com.my/].

Vosburgh, R.M. (2005). The one thing you need to know about great managing, great leading, and sustained individual success. *Human Resource Planning*, 28(2), 27-31.

Weberg, D. (2009). Innovation in healthcare: A concept analysis. *Nursing Administration Quarterly*, 33(3), 227-237.

Yuan, F. & Woodman, R.W. (2010): Innovative behaviour in the Workplace: The Role of Performance and Image Outcome Expectations, *Academy of Management Journal,* 53(2), 323-342.

Xerri, M.J. (2014). Examining the relationship between organizational justice, job satisfaction and the innovative behaviour of nursing employees. *International Journal of Innovation Management, 1*8(1).

Xerri, M.J., Brunetto, Y. (2012). Social exchange and innovative behaviour of nursing employees: A hierarchical linear examination. Paper presented to *International Research Society for Public Management Conference*: Contradictions in Public Management. Managing in volatile times, Rome, Italy, 11-13 April.

The Influence of Managers' Communication Styles on Employees' Job Satisfaction among Local and Expatriate Managers

Abdul Kadir Othman[1], Muhammad Iskandar Hamzah[1] & Zaini Abdullah[1], Nooraini Abdul Rahim[1]

1 Faculty of Business and Management, UniversitiTeknologi MARA Shah Alam, Selangor, Malaysia

Email: abdkadir@salam.uitm.edu.my

ABSTRACT

In today's borderless business environment, companies are operating in different locations across the globe to ensure that they can gain competitive advantage over their competitors at different countries. To ensure common strategic mission, vision and objectives of the company across the globe, managers from different countries of origin are sent to different countries to equip them with global mind-set in managing the company. The problem is that they have different ways of communication as compared to local managers. These might affect the level of job satisfaction of employees. This study was intended to investigate the influence of different communication styles of expatriate and local managers on employees' job satisfaction in manufacturing companies in Malaysia. From the analysis of 170 data collected from the employees, the results indicate that telling, selling and joining communication styles of local managers are the significant predictors of employees' job satisfaction. For expatriate managers, only selling communication style contributes significantly to the level of employees' job satisfaction. The implications of the study are discussed in detail in the paper.

Key Words: Communication styles, expatriate, local managers, job satisfaction, manufacturing company.

1. INTRODUCTION

Driven by a strong demand for skilled and professional workforce in addition to continuing flow of foreign direct investment, Malaysia is fast becoming the chosen place for foreign expatriates to offer their knowledge and expertise. According to the HSBC Expatriate Explorer Survey 2014, Malaysia is ranked 19th out of 34 countries in terms of expatriates' overall impression in which the country is still lagging behind its regional peers; namely, Singapore in the 2nd place and Thailand in the 7th place. Due to enormous emphasis placed by the government in increasing the number of expatriates, studies involving expatriates are indeed a matter of national interest. However, this study is focused on discovering the differences between employees' work environment under the supervision of both expatriate and local managers. Rather than attempting to discover the acceptance of expatriates towards the locals, this paper seeks to investigate the relationship between managerial communication styles (of both expatriates and local managers) and employees' job satisfaction.

Recent studies on expatriates working in Malaysia are quite few, and focus on their cross cultural adjustment and work outcomes. These involved hotel industry (Halim, Bakar & Mohamad, 2014; Halim, Rahman & Mohamad, 2013), multinational corporations (Tahir & Ismail, 2007) and higher education (Hassan & Hashim, 2011; Tahir & Ismail, 2007). Besides, these studies are focusing on expatriates themselves, rather than local employees' work outcomes as a result of their perception towards the expatriates. Given that expatriates usually held higher level positions compared to their local counterparts, their sense of supervisory and managerial styles would certainly determine the work outcome of their subordinates. The void in the literature that

compares the work outcomes of employees who are under the supervision of their respective local and expatriate managers necessitates the undertaking of this study.

2. LITERATURE REVIEW

2.1. Job Satisfaction

A study involving job satisfaction among expatriates is considered as highly relevant in the expatriate literature (Li, 1996). There are situations where expatriates may impose incompatible demands that might be difficult to be followed by local employees, due to different cultural and work environments (Kim & Slocum, 2008). Besides, expatriates employed in joint venture companies or subsidiaries may experience role conflict due to contradictory requirements between the parent firms and local firms (van Oudenhoven, van der Zee & van Kooten, 2001). Such role conflict was often associated with lower levels of job satisfaction (Mohr & Puck, 2007). These can be addressed through better social adjustment of the expatriates, in terms of their interaction with host country employees (Kim & Slocum, 2008).

Local and foreign employees may have different levels of work satisfaction despite being employed within the same organization. For instance, local academicians achieved higher levels of job satisfaction compared to their foreign counterparts in public learning institutions (Hassan & Hashim, 2011). Besides, supervisors' nationality was found to be a determinant job satisfaction of expatriates. Expatriates who worked under the supervision of their foreign supervisors have shown higher job satisfaction than their counterparts who work for host-country national supervisors (Froese & Peltokorpi, 2011).

In terms of local employees' acceptance towards foreign expatriates, different scenario emerged. Local employees' may have different satisfaction towards their expatriate managers based on their country of origin. Leung, Wang and Smith (2001) who studied local expatriates of Chinese Joint Venture companies, discovered that employees working with managers from Japanese, Hong Kong and Taiwan were significantly less satisfied and less committed compared to those who worked with the Western, Singaporean and Malaysian managers.

Studies pertaining to job satisfaction have always been linked to interactional justice (Masterson et al., 2000; Nadiri & Tanova, 2010). The organization's management fairness in providing treatment to employees' regardless of their nationality is imperative in building the work morale and behavior of local employees. Inequitable treatment between expatriates and local employees may lead to low commitment and poor job performance among the locals (Toh & DeNisi, 2005). Within the local scenario, there is no difference regarding the perception of social treatment among locals and expatriates (Hassan & Hashim, 2011). However, it is not the case with UAE's Arab locals who view foreign expatriates as a threat to their career progression, while the expatriates stereotyped the locals as being lazy and lack of attention towards details (Ariss, 2014). This can perhaps be attributed to the expatriates' higher sense of organizational loyalty and greater risk-taking attitude in making decisions, as compared to the local Emiratis (Ali, Krishnan & Azim, 1997).

2.2. Management Communication Styles

In getting their message effectively delivered across the hierarchies in a top-down approach, higher level managers need to decide on their approach of either being autocratic or democratic. However, both leadership styles are dichotomous, with the former being absolute in terms of sole control of authority and the latter being absolute in task delegation and collective decision making. In order to establish leadership behaviour as a flexible form of subordinates' level of participation between the two extremes, Tannenbaum and Schmidt (1973) suggested the use of leadership continuum. In this case, a leader can be boss-centered (autocratic), subordinate-centered (democratic), or in between of the two leadership behaviors. Within the field of communication, the values highlighted in the leadership continuum are reflected in Johnson's (1993) dominance continuum. Based on the dominance continuum, people with low dominance

tend to cooperate but low in assertiveness and willing to be controlled by others, while those with high dominance tend to be more initiative, assertive and seeking control over others.

Richmond and McCroskey (1979) offered a simpler and well-defined approach to the leadership continuum by proposing the Management Communication Styles (MCS) that consists of Tell, Sell, Consult and Join. Following the dearth of studies that employed the MCS scale particularly in Malaysia, Rozilah, Muhammad and Kamaluddin (2013) improvised the MCS instrument through interviews, validated the scale using EFA and discriminant analysis, and established fit indicators for the measurement model. However, the predictive validity of MCS was not reported. Each definition of the four MCS dimensions is described in Table 1 below:

Table 1: Management Communication Styles dimension (Richmond & McCroskey, 1979)

Dimensions of MCS	**Definition**	**Communication Direction**
Telling	Manager provides top-down directive which is non-interactive and lack of subordinates' concern.	Primarily downward & unidirectional.
Selling	Manager makes decisions by persuading subordinates to accept them. Questions from subordinates are encouraged but counterarguments are provided if the decisions are challenged.	Primarily but not exclusively downward, & sometimes bi-directional.
Consulting	Manager makes decisions only when problems and solutions have been discussed with subordinates, to ensure that their well-being needs are met.	Primarily upward, bi-directional & interactive.
Joining	Manager delegates total authority to the subordinates, by setting the limit within which the decisions must be made and allowing decision to be made upon majority's opinion.	Primarily horizontal, sometimes bi-directional & highly interactive.

Expatriates working in culturally and linguistically distant countries may find it difficult to get their messages across effectively. A study by Peltokorpi (2010) involving Nordic expatriates working in Japan found that intercultural communication are affected due to their lack of cultural competencies and also host country employees' low proficiency in mastering non-native language. This scenario serves as a glaring reminder to international companies that deployed expatriates in foreign countries to review problems arising from intercultural interactions. As the expatriates are commonly positioned in the middle to upper management level, the extent their management communication style differs from their local counterparts in shaping the attitude among the employees is a matter of concern for both practitioners and academicians.

Malaysians are renowned as a society whose culture is seen as collectivist (Bochner, 1994) and having high power distance (Hofstede & Bond, 1988). In an attempt to better understand the unique cultural diversity of Malaysians in the workplace setting, Bakar, Walters and Halim (2014) developed and validated the Malaysian Communication Style scale that are divided into two factors; namely, the use of language (*pekerti*) and communication and interaction (*budi*). Both factors significantly affect workgroup-level OCBs via structural equation modelling, thus affirming the predictive validity of the instruments. However, given that this study focuses on understanding the communication styles of both locals and expatriates, a globally accepted scale would be considered as more appropriate.

Organizational justice research may give a good indicator of the managerial communication styles perceived by employees, since their attitude towards the management are generally guided by justice and fairness (DeConinck, 2010). Mixed results were reported by several expatriate studies that involve organizational justice among expatriates in Asian host countries. Interactional justice, which reflects employees' perception of fairness from social treatment by superiors, was found to be not significantly related to job satisfaction among expatriates (Hassan & Hashim, 2011). Nevertheless, others found that there is positive effect of interactional justice on job satisfaction (Leung, Wang & Smith, 2001).

2.3 Management Communication Styles and Job Satisfaction

The understanding of job satisfaction among the employees under the expatriate supervisions serves as indicator of acceptance that may lead to the employees' support towards the expatriate's adjustment. Previous study by Halim et al. (2014) found that sensitivity towards new cultural environment and open-mindedness are significant predictors of job satisfaction among expatriates. They further suggested that local employees' support towards the expatriates would help them in performing better at work. Such relationship may also work in a reversal manner, where expatriates' support would eventually lead to employees' job satisfaction.

Existing research on expatriates tends to focus on the issues of expatriates social perception and adjustment with their current environment. Nevertheless, it was found that work adjustment does not affect job satisfaction among expatriates (Kim & Slocum, 2008). Work adjustment is defined as the extent of expatriates' comfort and adaption regarding different performance standards and work values in a new environment (Black, 1998). Thus, research on local employees' attitude and satisfaction towards the expatriates may contribute towards the improvement of expatriates' work adjustment in future research.

The attitude of local employees towards expatriates may actually determine their preference in providing cooperation towards them. Arman and Aycan (2013) had developed and validated 24-item Attitude towards Expatriates (ATEX) scale, consisting of adaptation, transformational capacity, openness, professionalism and perceived justice of expatriate privileges. It was further found that local employees who have positive attitudes towards expatriates are more likely to prefer to work with expatriate managers as compared to local managers (Arman & Aycan, 2013).

Better cross-cultural understanding between local and foreign employees is the precursor for equal representativeness in getting their voices heard and unbiased decisions. Eventually, both top-down and bottom-up managerial communication styles that are equally diffused to both local and foreign employees are good predictors of their job satisfaction (Hassan & Hashim, 2011). The understanding of how expatriates' managerial communication styles affect job satisfaction among employees is relevant considering the local employees negative perception towards expatriates. Specifically, local employees tend to stereotype expatriate managers with their perceived national culture, and they believed that expatriates are not keen in passing knowledge to them (Ariss, 2014). The abovementioned attitude of local employees is assumed to be the results of the decision making and communication styles employed by their foreign managers. Based on the above discussions, the following hypotheses are drawn:

H1: Telling Communication Style of local managers positively predicts job satisfaction of their subordinates.
H2: Selling Communication Style of local managers positively predicts job satisfaction of their subordinates.
H3: Consulting Communication Style of local managers positively predicts job satisfaction of their subordinates.
H4: Joining Communication Style of local managers positively predicts job satisfaction of their subordinates.
H5: Telling Communication Style of expatriate managers positively predicts job satisfaction of their subordinates.
H6: Selling Communication Style of expatriate managers positively predicts job satisfaction of their subordinates.
H7: Consulting Communication Style of expatriate managers positively predicts job satisfaction of their subordinates.
H8: Joining Communication Style of expatriate managers positively predicts job satisfaction of their subordinates.

3.0 METHODOLOGY

This study is correlational in nature and was conducted using cross sectional research design. The population of the study consists of 300 non-managerial employees working in three steel manufacturing companies in Klang Valley, which are joint venture companies between Malaysian and Japanese, Malaysia and Korea, and Malaysian and Australia. The sampling frame for the study is unavailable due to confidentiality of the information; therefore, non-probability sampling was utilized to select the samples. However, extra care was taken to ensure that the characteristics of samples represent those of the population. A total of 180 respondents were selected to participate in the study based on the suggested sample size by Krejcie and Morgan (1979). The response rate for the study is 94%.

The instrument used in the study is a survey questionnaire, which items were adapted from previous studies. Managerial communication styles were measured using Management Communication Scale, which was developed by by Rozilah, et al. (2013) based on the conceptualization of the construct by Richmond and McCroskey (1979). The measure contains 27 items measuring telling (five items), selling (eight items), consulting (six items), and joining (eight items). The responses were gauged using a 5-point Likert scale, ranging from 1 for strongly disagree to 5 for strongly agree. It was reported that the measure is highly reliable with Cronbach's alpha of 0.92 (Butts, 2010). The sample items are "My manager receives decision from the top management and announces it to subordinates" (telling), "My manager persuades the subordinates of the desirability of decisions made by the top management or him/her" (selling), "My manager only makes final decisions after he/she has discussed it with the subordinates" (consulting), and "My manager always delegates decision-making to the subordinates" (joining).

Job satisfaction was measured using Job in General Scale (JIG) developed by Ironson, Brannick, Smith, Gibson and Paul (1989). The scale contains 18 items assessing overall feelings about one's job. It consists of a list of short phrases and adjectives of five and less words such as pleasant and bad. The responses were gauged using a 5-point Likert scale, ranging from 1 for strongly disagree to 5 for strongly agree. A previous study found the measure is highly reliable with Cronbach's alpha of 0.91 (Schneider & Dachler, 1978).

Table 2: Respondents' Profile

Variable	Descriptive	Frequency	Percentage
Gender	Male	87	51.2
	Female	83	48.8
Age	20-30 years old	47	27.6
	31-40 years old	58	34.1
	41-50 years old	54	31.8
	>50 years old	11	6.5
Race	Malay	76	44.7
	Chinese	40	23.5
	Indian	51	30.0
	Others	3	1.8
Marital Status	Single	62	36.5
	Married	100	58.8
	Others	8	4.7
Education	Degree	48	28.2
	Diploma	36	21.2
	STPM/SPM/PMR	78	45.9
	Others	8	4.7
Length of Service	1-5 years	42	24.7
	6-10 years	55	32.4
	11-20 years	56	32.9
	>20 years	17	10.0
Work Division	Human Resource	14	8.2
	Marketing	31	18.2

	Finance	23	13.5
	Logistics	15	8.8
	Delivery	26	15.3
	Info Tech	10	5.9
	Factory Admin	18	10.6
	Quality Control	13	7.6
	Production	20	11.8

Respondents' information in the study was analyzed using descriptive analysis to examine its distribution. The 170 responses were almost equally divided between male and female (87 or 51.2% for male and 83 or 48.8% for female). With regard to age distribution, 47 respondents or 27.6% were in the age group of 20-30 years old, 58 respondents or 34.1% were in the age group of 31-40 years old, 54 respondents or 31.8% were in the age group of 41-50 years old and 11 respondents or 6.5% were more than 50 years old. Pertaining to respondents' race, 76 of them or 44.7% are Malays, 40 of them or 23.5% are Chinese, and 51 of them or 30% are Indians. Most of the respondents (100 respondents or 58.8%) were married and 62 of them or 36.5% were single. Examining their education levels, 78 respondents or 45.9% had STPM/SPM/PMR qualification; it is followed by those with bachelor degree represented by 48 respondents or 28.3%, then ensued by those with diploma amounting to 36 respondents or 21.2%.

Concerning the length of service of the respondents, 42 of them or 24.7% had been working for less than five years, 55 of them or 32.4% had between 6-20 years of working experience, 56 of them or 32.9% had between 11-20 years of working experience and 17 of them or 10% has been working for more than 20 years. The respondents were from various departments comprising Human Resource (14 respondents or 8.2%), Marketing (31 respondents or 18.2%), Finance (23 respondents or 13.5%), Logistics (15 respondents or 8.8%), Delivery (26 respondents or 15.3%), Information Technology (10 respondents or 5.9%), Factory Administration (18 respondents or 10.6%), Quality Control (13 respondents or 7.6%), and Production (20 respondents or 11.8%).

3.1 Factor Analysis

Principal Component Factor Analyses with varimax rotation were utilized to identify the underlying structure or dimensions in the independent and dependent variables in this study. Factor analysis can recognize whether a common factor or more than a single factor is present in the responses to the items. In essence, factor analysis was used to understand the underlying structure in the data matrix, to identify the most parsimonious set of variables, and to establish the goodness of measures for testing the hypotheses (Hair, Black, Babin, Anderson, & Tatham, 2006).

Conducting factor analysis, several statistical values are observed to establish whether the items are suitable to be factor analyzed. This is accomplished by examining the values of Measure of Sampling Adequacy (MSA), Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of Sphericity. The MSA value for the individual items was set to be above .50 and the KMO (overall items) value to be above .60. The Bartlett's test of Sphericity is observed to detect the presence of significant correlations among variables. It is appropriate to proceed with the factor analysis if the value of the test is large and significant ($p<.05$) (Hair et al., 2006).

Overall, three (3) factor analyses were performed independently for each scale concerning managerial communications styles (for local and expatriate managers) and employees' job satisfaction. Two criteria were used to determine the number of factors to be extracted: (1) the absolute magnitude of the eigenvalues of factors (eigenvalue greater than one criterion), and (2) the relative magnitude of the eigenvalues (scree test plot) (Hair et al., 2006). The eigenvalue of a factor represents the amount of total variance accounted by the factor. The total amount of variance explained by the factor(s) was set at 60.0 % and above (Hair et al., 2006). In addition, the scree test plot was also inspected to find a point at which the shape of the curve changed direction and became horizontal. All factors above the elbow, or a break in the plot, were retained as these factors contributed the most to the variance in the data set. In interpreting the factors, only items with a loading of .40 or greater on one factor were considered. In the case of cross-loadings (an item that loads at .32 or higher on two or more factors (Tabachnick & Fidell, 2001) or the difference

between and among factors is less than .10 (Youndt, Snell, Dean, & Lepak, 1996), the items were considered for deletion. The clean factors were then interpreted or named by examining the largest values linking the factors to the items in the rotated factor matrix. Reliability tests were subsequently carried out after factor analyses.

Table 3: Results of Factor Analysis for Managers' Communication Styles – Local

		Component			
		1	2	3	4
S4_Local		.868			
S5_Local		.860			
S3_Local		.801			
S6_Local		.791			
S1_Local		.700			
S8_Local		.683			
S7_Local		.642			
C1_Local			.855		
C2_Local			.774		
C5_Local			.670		
C6_Local			.669		
C4_Local			.654		
J7_Local				.824	
J8_Local				.814	
J6_Local				.808	
J5_Local				.600	
T3_Local					.786
T2_Local					.735
T4_Local					.725
% variance explained		27.206	20.147	18.144	9.547
MSA					.601-.951
KMO					.903
Bartlett's Test of Sphericity	Approx. Chi-Square				2776.168
	Df				177
	Sig.				.000

Assessing the validity of the managerial communication styles of local managers, Principle Component Factor Analysis was conducted. There were initially 27 items for the scale with different number of items for the four dimensions; telling communication style (5 items), selling communication style (8 items), consulting communication style (6 items), and joining communication style (8 items). Factor analysis with varimax rotation was used to determine factors' dimensionality. The results of the analysis revealed that 19 items formed four structures equivalent to the original structures.

The results are shown in Table 3. The KMO measure of sampling adequacy for the managerial communication style scale is .903, indicating that the items were interrelated. Bartlett's Test of Sphericity shows a significant value (Approx. Chi-Square = 2776.168, $p<.01$) indicating the significance of the correlation matrix and appropriateness for factor analysis. Moreover, the individual MSA values range from .601 to .951, indicating that the data matrix was suitable to be factor analyzed. Results of factor analysis with varimax rotation indicated the existence of four factors with initial eigenvalues greater than one that explained 75% of total variance. The results of a scree test also provided support for a four-factor solution.

The first factor comprises seven items with loadings range from .642 to .868. This factor mainly embraces selling communication style of local managers; therefore, the original name was retained. One item was removed due to high cross loadings or it loaded differently from the original conceptualization. The second factor was extracted with factor loadings ranged from .654 to .855. This factor consisted of five items which reflected consulting communication style; therefore, the

original name was retained. One item was removed due to high cross loadings or it loaded differently from the original conceptualization. The third factor reflects joining communication style of local managers comprising four items with factor loadings ranged from .600 to .824, thus, the original name was maintained. Four items were removed due to high cross loadings or they loaded differently from the original conceptualization. The fourth factor contains only three items with factor loadings ranged from .725 to .786. This factor relates to telling communication style of local managers; therefore, the original name was used. Two items were removed due to high cross loadings or they loaded differently from the original conceptualization.

Table 4: Results of Factor Analysis for Managers' Communication Styles – Expatriate

		Component			
		1	2	3	4
J6_Expat		.824			
J5_Expat		.824			
J3_Expat		.795			
J4_Expat		.757			
J2_Expat		.725			
J7_Expat		.706			
J1_Expat		.698			
C4_Expat			.840		
C3_Expat			.835		
C2_Expat			.818		
C1_Expat			.792		
C6_Expat			.708		
S4_Expat				.870	
S3_Expat				.811	
S5_Expat				.811	
S6_Expat				.700	
T3_Expat					.827
T2_Expat					.788
T4_Expat					.729
T1_Expat					.576
% variance explained		24.531	20.831	15.510	13.068
MSA					.781-.957
KMO					.892
Bartlett's Test of Sphericity	Approx. Chi-Square				2737.140
	Df				190
	Sig.				.000

Principle Component Factor Analysis was also conducted to establish the validity of the managerial communication styles of expatriate managers. There were originally 27 items for the scale with different number of items for the four dimensions; telling communication style (5 items), selling communication style (8 items), consulting communication style (6 items), and joining communication style (8 items). Factor analysis with varimax rotation was utilized to determine factors' dimensionality. The results of the analysis indicate that 20 items formed four structures resembling the original structures.

The results are presented in Table 4. The KMO measure of sampling adequacy for the managerial communication style scale is .892 indicating that the items were interrelated. Bartlett's Test of Sphericity shows a significant value (Approx. Chi-Square = 2737.140, $p<.01$), indicating the significance of the correlation matrix and appropriateness for factor analysis. Moreover, the individual MSA values range from .781 to .957, indicating that the data matrix was suitable to be factor analyzed. Results of factor analysis with varimax rotation indicated the existence of four factors with initial eigenvalues greater than one that explained 74% of total variance. The results of a scree test also provided support for a four-factor solution.

The first factor comprises seven items with loadings range from .698 to .824. This factor mainly reflects joining communication style of expatriate managers; therefore, the original name was retained. One item was discarded due to high cross loadings or it loaded differently from the original conceptualization. The second factor was extracted with factor loadings ranged from .708 to .840. This factor comprises five items which reflect consulting communication style; therefore, the original name was retained. One item was discarded due to high cross loadings or it loaded differently from the original conceptualization. The third factor reflects selling communication style of expatriate managers consisting of four items with factor loadings ranged from .700 to .870, thus, the original name was maintained. Four items were discarded due to high cross loadings or they loaded differently from the original conceptualization. The fourth factor contains only four items with factor loadings ranged from .576 to .827. This factor reflects telling communication style of expatriate managers; therefore, the original name was used. One item was discarded due to high cross loadings or it loaded differently from the original conceptualization.

Table 5: Results of Factor Analysis for Employees' Job Satisfaction

		Component
		1
JS1		.829
JS3		.729
JS5		.734
JS7		.759
JS9		.755
JS10		.695
JS11		.826
JS13		.757
JS15		.760
JS17		.813
% variance explained		58.812
MSA		.888-.919
KMO		.904
Bartlett's Test of Sphericity	Approx. Chi-Square	1018.708
	Df	45
	Sig.	.000

Determining the unidimensionality of the employees' job satisfaction variable, Principle Component Factor Analysis was also performed. The results of factor analysis are displayed in Table 5. The KMO measure of sampling adequacy for the managerial communication style scale is .904 indicating that the items were interrelated. Bartlett's Test of Sphericity shows a significant value (Approx. Chi-Square = 1018.708, $p<.01$), indicating the significance of the correlation matrix and appropriateness for factor analysis. Moreover, the individual MSA values range from .888 to .919, indicating that the data matrix was suitable to be factor analyzed. Results of factor analysis with varimax rotation indicated the existence of one factor with initial eigenvalues greater than one that explained 59% of total variance. The result of a scree test also provided support for one-factor solution. Originally, there were 18 items measuring the variable. However, the result of factor analysis with varimax rotation indicates the existence of one factor with 10 items. The remaining eight items were removed because of high cross loadings or they loaded differently from the original conceptualization.

3.2 Reliability and Correlation Analysis

Table 6: Results of Correlation Analysis

No	Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1	Telling (Local)	3.59	.88	(.681)								
2	Selling (Local)	3.77	.89	.178**	(.943)							
3	Consulting (Local)	3.84	.88	.019	.733**	(.932)						
4	Joining (Local)	3.65	.86	.132*	.666**	.715**	(.890)					
5	Telling (Expat)	4.29	.72	.559**	.389**	.334**	.218**	(.623)				
6	Selling (Expat)	3.70	1.00	.248**	.453**	.347**	.301**	.292**	(.905)			
7	Consulting (Expat)	4.23	.85	.241**	.474**	.591**	.412**	.389**	.601**	(.930)		
8	Joining (Expat)	3.99	.89	.340**	.386**	.382**	.327**	.453**	.557**	.622**	(.920)	
9	Job Satisfaction	3.65	.66	.236**	.619**	.506**	.628**	.264**	.405**	.348**	.375**	(.916)

Notes: **. Correlation is significant at the 0.01 level (1-tailed); *. Correlation is significant at the 0.05 level (1-tailed); N=170

The results of reliability analysis denote that the measure gauging the intended variables has high internal consistency and stability with Cronbach alpha values range from .623 for telling communication style for expatriate managers to .943 for selling communication style for local managers (George & Mallery, 2003). Results of correlation analysis indicate that all variables are highly correlated with each other. The highly correlated variables indicate significant relationships among them which should be highly considered in explaining the phenomenon of interest. Significant correlations are observed between the independent variables or managerial communication styles for local and expatriate managers. The lowest correlation is between telling communication style for local managers and consulting communication style for local managers ($r=.019$, $p>.05$). The highest correlation is between selling communication style for local managers and consulting communication style for local managers ($r=.733$, $p<.01$). These significant correlations signify convergent validity of the independent variables. Besides, significant correlations are also observed between independent variables and the dependent variable with the lowest correlation between telling communication style for local managers and employees' job satisfaction ($r=.236$, $p<.01$). The highest correlation is found between joining communication style for local managers and employees' job satisfaction ($r=.628$, $p<.01$). These significant correlations denote concurrent validity of the measures.

3.3 Regression Analysis

Table 7: Results of Regression Analysis

	Local Managers	**Expatriate Managers**
Variables	**Standardized Beta Coefficients**	**Standardized Beta Coefficients**
Telling	.117*	.097
Selling	.367**	.256**
Consulting	-.058	.063
Joining	.409**	.150
R	.695	.456
R^2	.483	.208
F value	38.506	10.802
Sig. F value	.000	.000
Durbin Watson	1.664	1.729

Regression analysis is performed to determine the influence of managerial communication styles (telling, selling, consulting and joining) on employees' job satisfaction. With regard to local managers' communication style, the regression model is significant with R^2 of .483, indicating that 48.3% of the variance was explained by communication styles (F (4, 165) = 38.506, p = 0.000). Looking at the contribution of the individual independent variable, telling (β = .117, $p<.05$), selling

(β = .367, p<.01) and joining (β = .409, p<.01) are significant predictors of employees' job satisfaction. Thus, H1, H2 and H4 are supported, while H3 is not supported.

Concerning the expatriate managers, the regression model is significant with R^2 of .208, indicating that 20.8% of the variance in employees' job satisfaction was explained by the expatriate managers' communication styles (F (4, 165) = 10.802, p = 0.000). Looking at the contribution of the individual independent variable, only selling style (β = .256, p<.01) is a significant predictor of employees' job satisfaction. Thus, only H6 is supported, while H5, H7 and H8 are not supported.

4.0 DISCUSSION

For local managers, telling, selling and joining are significant to influence employees' job satisfaction. These factors are significant because local managers share similar characteristics in terms of personality, work behaviour and to certain extent the aspiration. Therefore, employees expect the managers to involve them in their work especially when it comes to making important decisions pertaining to their work. They also expect the managers to convince them by selling their ideas to them (providing ample reasons) besides telling them on what to do. The line of authority between local managers and employees seems to appear both unidirectional and bidirectional, and also both instructive and interactive. Based on a logical perspective, the practice of utilizing various management communication styles is common in the workplace because different circumstances may require dynamic and contingent style of leadership behavior (Hersey, Blanchard & Johnson, 2001).

As for expatriate managers, selling style is the only significant predictor of the employees' job satisfaction. In this case, the expatriate managers can only be effective in fulfilling their employees' work satisfaction when they are able to convince or persuade them to perform their tasks, albeit with less upward interaction and opinion seeking. This is perhaps the best communication style for expatriate managers as they are regarded as foreigners who have different traits, ways of doing things, and different objectives with regard to the work being performed. The result may not be surprising since Malaysia-based expatriates considered the locals as having a slower working pace than themselves (Tahir & Ismail, 2007). Furthermore, a significant number of the employees are Malays, whom are believed to be less extrovert and less open to experience compared to the Westerners (Mastor, Jin & Cooper, 2000). In such circumstances where subordinates are unable to match their speed but show positive willingness to perform, selling style may serve as the most appropriate communicative behaviour by leaders to match with their subordinates' lower level of readiness (Hersey, Blanchard & Johnson, 2001).

Based on the findings of the local managers, they are able to do more than just persuade the employees that they are churning the right decisions. Their 'joining style' or inclined attitude towards employees' delegation positively affects the employees' job satisfaction. In this regard, their supportive behaviour is more effective as compared to their expatriate counterparts. It is assumed that incompatible demands, role conflicts and lower level of social adjustment between the expatriates and local employees are the possible reasons for the less supportive behaviour perceived by the latter (Kim & Slocum, 2008; van Oudenhoven, van der Zee & van Kooten, 2001). Undeniably, supportive communication by the superiors is vital to ensure employees' satisfaction. When employees perceive that they received ample supervisory support, they will feel more secure and sense that the management is taking care of their welfare (DeConinck, 2010)

Another reason for the existence of different communication styles for local and expatriate managers is that normally both managers have different job positions or job levels. For example, certain positions are 'locked' only for locals due to security concerns (Ariss, 2014). Meanwhile, it is commonly believed by local employees that expatriates hold certain privileges that are less accessible to them (Toh & DeNisi, 2005; Hailey, 1996). Expatriate managers are usually positioned to be special advisors to ensure the alignment of company's objectives with those of other companies in the group. Local managers, on the other hand, are more inclined towards implementing the strategies agreed at the higher levels. In this regard, it is assumed that the local managers held execution roles while the expatriates performed strategic planning roles. Because of their differing job scopes, local managers are working more closely with the employees and the communication styles used are more towards higher involvement among employees. For

expatriate managers, selling type of communication is more appropriate as they use it to convince or persuade others to accept their ideas for the improvement of the organization as a whole.

5.0 CONCLUSION

In the global business era, companies are establishing their branches in different countries. Expatriate managers are sent to these countries to help in aligning the goals of the companies with the mother company. In ensuring that the employees' job satisfaction levels are above the desired levels, the model of managerial communication styles of expatriate and local managers should be established. This study was conducted to achieve this objective by suggesting the communication models for local and expatriate managers that are linked to job satisfaction of employees in manufacturing companies in Malaysia. The findings of the study indicate that telling, selling, and joining styles are significant predictors of employees' job satisfaction for local managers. For expatriate managers, only selling style is found to be able to influence employees' job satisfaction. Besides, the re-validated MCS scale is highly suitable to be used within the Malaysian workplace context based on the results of factor analysis.

5.1 Managerial Implications

Since the findings of the study indicate the existence of different communication models for local and expatriate managers that contribute to employees' job satisfaction, organization should ascertain that the managers are equipped with the right skills to choose the best types of communication when dealing with the subordinates. Although the objective of communication is to convey the message to the recipients, the end result that is related to the emotional acceptance of the employees is also important. By having the right communication styles, managers can ensure that their subordinate can execute the tasks assigned with an open heart and the right attitude.

The socio-cultural dissonance between expatriates and local employees are barriers for effective adjustment and inter-cultural communication at the workplace. Being able to adapt and function effectively in new cultural surroundings are the hallmarks of cultural intelligence, which was found to be a significant predictor of job performance (Ramalu, Chuah & Rose, 2011). Therefore, the management should actively promote informal and off-site engagement activities between local employees and expatriates managers to establish a stronger bond between them and abolish the stereotypes and negative vibes that are associated with the opposite culture (Ariss, 2014).

Effective communication does not only involve one party but it includes various parties engaged in communication in the form of two way communication. Therefore, employees should be trained so that they are able to familiarize themselves with the communication styles used by their local or expatriate managers. In this case, exposure to cross cultural communication is essential. Cross-cultural programs may acculturate both parties to accept and value the cultural differences between the locals and expatriates (Zakaria, 2000). Training programs designed by the company should incorporate different cultural aspects in the communication process such as body language, intonation, explicit and implicit meanings of certain terms, time orientation and others so that messages transmitted during the communication process can be accurately translated by the recipients.

5.2 Suggestion for Future Research

The present study was conducted among employees in a manufacturing industry. Some factors unique to the industry might have affected the findings such as nature of work, structure of the organization, organizational culture, and others. The fact that most of the facets of MCS, which originated from the West failed to predict job satisfaction of employees under the supervision of expatriates as compared to the locals, reduces literature gap pertaining to the MCS model. Notwithstanding, theoretical contribution do exists regardless whether a certain theory does or does not work under new settings, which necessitates remedial and alternative approaches in future research (Whetten, 1989). Although the generalization of the findings is possible, extra care should be exercised when interpreting the findings. To ensure the smooth transition from research

to application, replication of this study with different subjects or industries is highly recommended. Besides, in the present study, the items used to measure job satisfaction includes both positively and negatively worded items. When factor analysed, two factors emerged indicating that positive and negative items tend to measure two distinct aspects. Therefore, researchers are suggested to use only positive or negative items to measure certain variables in order to avoid confusion among the respondents.

REFERENCES

Ali, A. J., Krishnan, K., & Azim, A. (1997). Expatriate and indigenous managers' work loyalty and attitude toward risk. *The Journal of Psychology*,*131*(3), 260-270.

Bakar, H. A., Walters, T., & Halim, H. (2014). Measuring communication styles in the malaysian workplace: Instrument development and validation. *Journal of Intercultural Communication Research*, *43*(2), 87-112.

Black, J. S. (1988). Work role transitions: A study of American expatriate managers in Japan. *Journal of International Business Studies, 19*(2), 277–294.

Bochner, S. (1994). Cross-Cultural Differences in the self concept a test of Hofstede's individualism/collectivism distinction. *Journal of Cross-cultural Psychology*, *25*(2), 273-283.

DeConinck, J. B. (2010). The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust. *Journal of Business Research*, *63*(12), 1349-1355.

Froese, F. J., & Peltokorpi, V. (2011). Cultural distance and expatriate job satisfaction. *International Journal of Intercultural Relations*, *35*(1), 49-60.

George, D., & Mallery, M. (2003). Using SPSS for Windows step by step: A simple guide and reference (10th Ed.). *Boston, MA: Allyn & Bacon.*

Hailey, J. (1996). The expatriate myth: Cross-cultural perceptions of expatriate managers. *The International Executive*, *38*(2), 255-271.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.

Halim, H., Abdul Rahman, N. A., & Mohamad, B. (2013). OEs vs SIEs: Exploring the cross-cultural adjustment of hotel expatriates in a multicultural society. Proceedings of the International Conference on Communication, Media, Technology and Design, 2-4 May 2013, North Cyprus, pp. 413-419.

Halim, H., Bakar, H. A., & Mohamad, B. (2014). Expatriate adjustment: validating multicultural personality trait among self-initiated academic expatriates. *Procedia-Social and Behavioral Sciences*, *155*, 123-129.

Hassan, A., & Hashim, J. (2011).Role of organizational justice in determining work outcomes of national and expatriate academic staff in Malaysia. *International Journal of Commerce and Management*, *21*(1), 82-93.

Hersey, P., Blanchard, K. H., & Johnson, D. E. (2001). *Management of organizational behavior: Utilizing human resources (8th Eds.)*. Upper Saddle River, NJ: Prentice Hall.

Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational dynamics*, *16*(4), 5-21.

Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a Job in General scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, *74*(2), 193-200.

Johnson, D. W. (1993). *Reaching out: Interpersonal effectiveness and self-actualization*. Allyn & Bacon.

Kim, K., & Slocum, J. W. (2008). Individual differences and expatriate assignment effectiveness: The case of US-based Korean expatriates. *Journal of World Business*, *43*(1), 109-126.

Leung, K., Wang, Z., & Smith, P. B. (2001). Job attitudes and organizational justice in joint venture hotels in China: the role of expatriate managers. *International Journal of Human Resource Management*, *12*(6), 926-945.

Li, L. (1996). Predictors of expatriate hotel manager satisfaction in Asian Pacific countries. *International Journal of Hospitality Management*, *15*(4), 363-372.

Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, *43*(4), 738-748.

Mastor, K. A., Jin, P., & Cooper, M. (2000). Malay culture and personality: A big five perspective. *American Behavioral Scientist*, *44*(1), 95-111.

Mohr, A. T., & Puck, J. F. (2007). Role conflict, general manager job satisfaction and stress and the performance of IJVs. *European Management Journal*, *25*(1), 25-35.

Nadiri, H., & Tanova, C. (2010). An investigation of the role of justice in turnover intentions, job satisfaction, and organizational citizenship behavior in hospitality industry. *International journal of hospitality management*, *29*(1), 33-41.

Peltokorpi, V. (2010). Intercultural communication in foreign subsidiaries: The influence of expatriates' language and cultural competencies. *Scandinavian Journal of Management*, *26*(2), 176-188.

Ramalu, S., Chuah, C. W., & Rose, R. C. (2010).The effects of cultural intelligence on cross-cultural adjustment and job performance amongst expatriates in Malaysia. *International Journal of Business and Social Science, 2*(9), 59-71.

Richmond, V. P., & McCroskey, J. C. (1979). Management communication style, tolerance for disagreement, and innovativeness as predictors of employee satisfaction: A comparison of single-factor, two-factor, and multiple factor approaches. *Communication Yearbook*, *3*, 359-373.

Rozilah, A. A., Muhammad, M., & Kamaluddin, N. (2013). Validity and reliability of the Management Communication Style scale. *International Journal of Social Science and Humanity*, *3*(4), 390-395.

Schneider, B., & Dachler, H. P. (1978). A note on the stability of the Job Descriptive Index. *Journal of Applied Psychology*, *63*(5), 650-653.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate analysis*. California State University, Northridge: Harper Collins College Publishers.

Tannenbaum, R., & Schmidt, W. H. (1973). How to choose a leadership pattern. *Harvard Business Review*, May-June, 3-12.

Tahir, A. H. M., & Ismail, M. (2007). Cross-cultural challenges and adjustment of expatriates: A case study in Malaysia. *Turkish Journal of International Relations*, *6*(3/4), 72-99.

Toh, S. M., & DeNisi, A. S. (2005). A local perspective to expatriate success. *Academy of Management Executive, 19*(1), 132–146.

Van Oudenhoven, J. P., van der Zee, K. I., & van Kooten, M. (2001). Successful adaptation strategies according expatriates. *International Journal of Intercultural Relations*, *25*(5), 467-482.

Whetten, D. A. (1989). What constitutes a theoretical contribution?. *Academy of Management Review*, *14*(4), 490-495.

Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, *39*(4), 836-866.

Zakaria, N. (2000). The effects of cross-cultural training on the acculturation process of the global workforce. *International Journal of Manpower*, *21*(6), 492-510.

The Influence of Personality Traits on Job Satisfaction Among Teachers

Maimunah Mohd Shah[1], Zarini Ahmad Rashid[2], Syamim Hariri[3]

1 Faculty of Business and Management, University Technology MARA, Shah Alam Selangor
monamohdshah@yahoo.com, maimu697@puncakalam.uitm.edu.my
2 Faculty of Business and Management, University Technology MARA, Shah Alam, Selangor
zarynnrashid07@gmail.com
3 Faculty of Business and Management, University Technology MARA, Shah Alam, Selangor
syamim.hariri@yahoo.com

ABSTRACT

As a noble profession, a good personality is therefore very important in developing high quality teachers. Absence of job satisfaction and a mismatch in personality amongst teachers could result in a chaotic school administration. Furthermore, academic performances of the students could be hampered. Therefore, needs arises as to statistically examine the factors of Big Five Personality that would influence job satisfaction and in this case, amongst 160 teachers. A model developed by McCrae and Costa (1987) was used. Using SPSS, Independent Sample T-Test was computed to find the differences in mean score based on the gender of the teachers. Correlation and multiple regression analysis were computed to find the relationship values and its variance. The results revealed that Extraversion is significant and has a strong positive relationship with job satisfaction. Another revelation is that Emotional Stability is significant but has an overall weak relationship with job satisfaction.

1. INTRODUCTION

Employee and personality are closely related to each other. A good personality is therefore very important in developing high quality employees. This is so because a good personality would increase the level of confidence amongst the said employees to carry out their respected work in their line of duty. This is especially true when the task at hand would involve any form of dealings or contact with external customers of the firm. Without good employees, the organization is unable to stand firm on its own. There is a level of agreement in the literatures that exists about the determinants of job satisfaction (Sutherland, 2012). According to Eskildsen and Kristensen, (2010), job satisfaction is measured by most universal organizations with a specific end goal to enhance the associations of Human Resource and administration proficiencies. While the traditional model of job satisfaction focuses on all the feelings that an individual encompasses about his/her job. However, what creates a job as satisfying or unsatisfactory for an employee is not necessarily contigent towards the environment of the job alone but would also factor in aspeacts such as anticipations of any particular individual on what their job has to offer (Hong Lu, Baribball, Zhang and While, 2012). In addition to this, Sutherland, (2012) reported that studies on job satisfaction may form three natures: “first, those which seek to explore further certain features of the determinants of job satisfaction, second, those which seek to examine some paradoxes which have appeared in the empirical literature and, third, those which examine the relationship between job satisfaction and employment status, where the principal focus has been upon differences in job satisfaction between the self-employed and those in waged work”. Therefore, it goes without saying that to

ensure employees stay loyal with the organization, employers should take employee job satisfaction as a core issue that is constantly needed to be identified and taken into context. Many measures have been shown to show support that employee satisfaction is a critical factor in employee motivation, employee goal achievement and positive employee morale in the workplace or work setting. Each employee would bring his or her own personality traits and this might carry some form of influence in their selection of job where that particular individual would deem as “satisfying”. Furthermore, characteristics of any particular job may prove to be the main determinants regarding the level of job satisfaction an employee actually experiences, once that employee is effectively employed. As far as this research shall go, it will be conducted based on the usage of the Big Five Personality Traits Model that were developed by McCrae and Costa (1987). The Big Five are Extraversion, Agreeableness, Conscientiousness, Emotional Stability/Neuroticism and Openness to Experience. It is worth highlighting that according to Spagnoli (2012), “job satisfaction can be defined as a disposition people have about their job”. Job satisfaction would come from impressions that are formed in respect to their job and the degree to which there is a decent fit between that of the individual and that of the organization. This goes on to prove that job satisfaction is therefore the affective orientation that an employee has towards his or her work (Price, 2001 as cited in Hong Lu, *et. al.,* 2012). It can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job.

For years, organizational researchers have been intrigued by employee satisfaction with their respected work (Syukrina Alini, Noor Azzah, Noor’ain, Sri Fatiany, Dilla Syadia and Rudzi, 2014). Past studies have shown that the ownership of certain personality aspects and traits are connected in choosing the right job and people not having these traits have been shown to be more inclined in displaying a low level of job satisfaction (Dole and Schroeder, 2011). The organizations may confront issues with the outcomes of productivity and terrible nature of the administration. “Absence of personality additionally influences how employees experience work event and work conditions and how they sincerely and behaviorally counter with them” (Templer, 2012). As far as this research is concerned, teachers are chosen as respondents as according to past researchers, it has come to realization that in education, it is witnessed as critical to identify the variables that would impact the teachers' dedication and job satisfaction to his or her profession (Aydin, (2012). The teaching profession is considered as the Person-Job (P-J) and it is conclusively defined as the compatibility between a person’s characteristics and those of the job or tasks that he/she performs at work (Hoffman & Woehr, 2006). It has been determined that when an employees’ self-concept, abilities, personality traits, and preferences are in alignment with what their job requires, it would eventually lead to an increase in employee satisfaction, job performance, and other positive individual outcomes (Hoffman & Woehr, 2006, Kristof-Brown, Zimmerman, Johnson, 2005).

2. OBJECTIVES

The main objective of the paper is to share the literature on the study of personality traits and job satisfaction in a different setting. It also presents the results of the factor analysis on the variables used in this study. The rest of this paper reported the finding analysis based on the statistical results. Brief discussion on the implication of the study is also included in this paper.

3. LITERATURE REVIEW

The organization of the literature focuses on the main variables used in the study.

3.1 Employees' Job Satisfaction

Acuna. S. T. et al (2009) stated that "highest job satisfaction is precisely the ones whose members score highest for the personality factors agreeableness and conscientiousness". Job satisfaction describes how content an individual is with his or her job (Syukrina Alini, et. al., 2014). Gupta & Joshi (2008) concluded and found in their study that job satisfaction is a significant method that may be used to inspire employees to work harder. Gupta and Joshi (2008) are also of the notion that job satisfaction is an essential element due to employees spending a sizeable chunk of their lives at the workplace. (Bontis, Richards & Serenko, 2011) states that employees would have a more positive perception and outlook on the organization's product and services when they have achieved job satisfaction and this would further result in them being able to deliver better services. Job satisfaction has been among others found to be connected to routine within the work setting (Landeweerd and Boumans, 1988) and "therefore researchers have attempted to identify the various mechanisms of job satisfaction, measure the relative significance of each element of job satisfaction and observe what effect these components have on workers' efficiency" (Hong Lu, et. al., 2012).

As for the finding by Sezer Ayan in *The Relation between the Level of Job Satisfaction and Types of Personality in High School Teachers*, it was discovered that more than half of those teachers that were studied at 62%, had extroverts personality. Another study by Sumaira Naz (2013), had concluded that "Neuroticism has significant negative while extraversion, openness, agreeableness, and conscientiousness have significant positive correlation with job satisfaction; age, education, salary, and marital status have significant positive correlation with job satisfaction; and women are more satisfied with their jobs than men". According to Lavanda Cleare (2013), in the *Study of the Relationship between Personality and Job Satisfaction amongst Workers in the Bahamas* the findings show "it is suggested that personality is a dispositional source of job satisfaction, as some individuals are predisposed to negative affectivity, whilst others are predisposed to positive affectivity". According to Judge, Heller and Mount (2002), "the estimated true score correlations with job satisfaction were -.29 for Neuroticism, .25 for Extraversion, .02 for Openness to Experience, .17 for Agreeableness, and .26 for Conscientiousness. Results had further indicated that only the relations of neuroticism and extraversion with job satisfaction generalized across studies. As a set, the Big Five traits had a multiple correlation of .41 with job satisfaction, indicating support for the validity of the dispositional source of job satisfaction when traits are organized according to the 5-factor model".

A theory was developed by Herzberg (1974), which is famously known as "motivator hygiene theory". According to Herzberg (1974), the opposite of job satisfaction is no satisfaction and opposite of dissatisfaction is no dissatisfaction. The main difference between job satisfaction and that of dissatisfaction is that job satisfaction is the feeling of an individual about matters related to the content of the job where as dissatisfaction however is due in part to the feelings of an employee regarding the context or environment in which his or her work is accomplished. Furthermore, according to this theory, the motivator are the variables that relate to actual content of the job such as recognition or achievement. Motivators are seen to be basically more related to the satisfaction side of the job. The Hygiene aspect is basically and more inclined to those pertaining to the context of the job. It includes aspects such as employee benefits. Hygiene factors are seen as geared towards a dissatisfaction side of the job (Herzberg, 1974).

Job satisfaction is a critical component inside the working environment as well as the attitudes and behaviors that are shaped by personality traits (Manojlovich, M., Laschinger, S. and Heather, K. (2002). According to Li, Lin and Chen (2007), the need for achievement may be identified and related with personality traits. They go on to mention that personality traits will play a huge part in figuring out how an individual will perform in

and under certain conditions. Thus, it is highly crucial to understand the relationship between personality traits and job satisfaction as well as between job satisfaction and job involvement (Li, Lin and Chen, 2007).

Sutherland. J. (2012), through his study in Employment status and job satisfaction found that there are contrasts in job satisfaction between the independently employed who had employed no one and those that employed employees.

3.2 Personality Traits

Hamid Bahramiza & Hadi Bahrami Ehsana, (2011) stressed that an ultimate question posed in personality research is exactly how many plain dimensions are required in order to adequately describe individual dissimilarities in personality. They further indicated that over the course of previous years, researchers have made extensive improvement in answering this question by using a method of hierarchical models that group behavioral measures into higher-order clusters. Many other researchers have also conducted research on the personality traits by using differing models such as that of Jungian Personality (Sensation, Intuition, Thinking and Feeling) developed by Jung (1921) and Myers Briggs Theory (Extraversion or Introversion, Sensing or Intuition, Thinking or Feeling and Judging or Perceiving) that were developed together by Myers and Briggs (1962). In the present, the most widespread used and acknowledged models of personality are the Big Five (Goldberg, 1990) and the Five Factor Model (Costa & McCrae, 1995). Within these models, it is established that there are five broad personality fields such as Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness and they are used in describing an individual differences in personality rankings (Matthias Ziegler, 2014). According to Alexandra Panaccio, (2012) the Big Five personality model (Digman, 1989; McCrae & Costa, 1987) has grown in stature and established constant approval within the scientific community and that it has resulted in a resurrection of personality research in organizational behavior and I/O psychology. This model has also been used to study relationships between personality and variables that are of concern to organizations such as dimensions of leadership (Bono & Judge, 2004), job satisfaction (e.g., Judge, Heller, & Mount, 2002), job performance (e.g., Barrick, Mount, & Judge, 2001) and also turnover (e.g., Zimmerman, 2008).

4. METHODOLOGY

This research is a co-relational research which attempts to describe the linear relationship that exists between the Big Five Personality Traits and job satisfaction. A correlation test was performed and ran to determine the relationship among the variables. A multiple regression test was also computed in an attempt to identify the variance(s) in the dependent variable which had explained the undue influence of the independent variable. The Big Five Personality Traits includes groups or traits such as that of Extraversion, Emotional Stability, Openness to Experience, Agreeableness and lastly, Conscientiousness. As for the population of the study, a grand figure of 230 teachers from both SMK Sri Andalas and SK Sri Andalas, Klang, Selangor were used for this study. A stratified sampling technique and simple random distribution were used to collect the data through a set of carefully crafted questionnaire. The demographic information pertaining to the study had asked respondents on subject matters that included gender, work experience, education level, marital status, race and age. The 5-point Likert scale was used to measure the level of perception among the respondents. As for the actual content of the questionnaire, the content were validated by those that are regarded as experts within the area of study. Some changes had however been made on some items as to simplify its meaning. Prior to the actual research, a pilot study was conducted. It

showed that the measurement of reliability and validity had indicated stability and consistency of the said instruments. This had helped to assess and determine the goodness of a measure. The Cronbach's Alpha score for the research were all above 0.70 and this is generally deemed as acceptable. SPSS was used as the main software in analyzing the data that were collected in the study.

5. FACTOR ANALYSIS

The purpose of sharing the factor analysis result is for general future references. Factor analysis was used and ran in the research to reduce the large number of variables into a smaller set and to identify similar items and group them together. Coakes, Steed and Ong (2009) had further established that factor analysis is one of the data reduction technique that could group the underlying variables into a same set. In light of this development, the researchers therefore decided to conduct factor analysis to ensure that items underlying the variables were in the best possible set of items. For the purpose of this study, Principal Components Factor Analyses with varimax rotation had been performed, where there were 5 items from each dimension of the Big Five Personality traits; Extraversion, Agreeableness, Conscientiousness, Openness to Experience and Emotional Stability. Altogether there were 25 items. The other 5 items in the dependent variable consisted of employees' job satisfaction. All of the 30 items were tested on coefficient with values of less than 0.3 at absolute suppressed. For Factor Analysis, several statistical values had been analyzed to determine whether these items were suitable to be factor analyzed. Initially, the researchers had examined the values of the Kaiser-Meyer-Olkin, Bartlett's test of Sphericity and Communalities. The MSA values and Communalities for individual items is determined and they should be higher than a value of .30. On the other hand, the researchers had looked at the Kaiser-Meyer-Olkin (KMO) and it states that the overall values should be higher than .50. On a side note, in order to actively seek and determine the existence of significant correlations between the variables were determined using Bartlett's test of Sphericity. Hair (2010) had indicated that the value of the test must be large and significant ($p<.05$) and this must be fulfilled in order to move on with Factor Analysis. If the respected item is found to have two values, it is an absolute must that the researchers ensure that the range of the two values are not lesser than 0.1. If however the difference between the two values is lesser than 0.1, the items should be deleted and omitted (Youndt, Shell, Dean & Lepak, 1996). As in regards to this study, Factor Analyses had been conducted for the Independent Variables, which is the Big Five Personality Traits, while for the Dependent Variable, the Employees' Job Satisfaction. The main criterion used in order to find out the number of factors to be extracted is the absolute magnitude of the eigenvalues of factors that is greater than one criterion (Hair, 2010). The eigenvalue of a factor would represent the amount of total variance accounted by the factor and the total amount of variance explained by the factor was significantly set at 60% and above. The result had shown and indicated that most of the respondents generally had perceived positively on the Big Five Personality traits and they are quite satisfied with their professions as teachers. Based on the skewness and kurtosis of the whole data, the range is +2 and this indicates that the data for the variables were in fact normally distributed. As a matter of fact, factor analysis had been conducted on the data to ensure that the items underlying the variables were in the best possible set of items. The Kaiser-Meyer-Olkin (KMO) values were higher than .50. The eigenvalue of a factor represents the amount of total variance accounted for by the factor and the total amount of variance explained by the factor was set at 60% value and above. The data obtained is therefore valid and acceptable for further analysis. Assumptions on matters that related to pairs, scale of measurement, linearity and homoscedasticity were met before conducting the bivariate and multivariate correlation analysis.

6. DATA ANALYSIS AND FINDINGS

A total of 200 sets of questionnaires were distributed. The researchers had managed to collect a return of 175 sets of questionnaires. However, 15 questionnaires were void due to being incomplete thus rendering their use. Therefore, 160 sets were used as final analysis.

6.1 Demographic of the respondents

The definite breakdown of respondents consisted of 134 (84%) female teachers and 16 male teachers (16%). The bulk of these teachers were Malays at over 78% of the respondents while the balance were made up of teachers of Chinese and Indian descent. The bulk of the teachers were aged 26 to 35 at 44% and this is then followed by those in the range of 36 to 45 years of age. 92% of the respondents were married. As for education background, 90% of the teachers surveyed had had a Bachelor's degree while only a fraction of those at 6% had held a Master's Degree. As far as salary, a huge number of the respondents at 113, had earned between RM 4001 to RM 5000. A majority of the teachers surveyed had had a working experience ranging from 8 to 20 years and this would generally imply that they have been in the teaching profession either serving the same school all these years or some changing in between.

6.2 Descriptive analysis

Table 1: Mean and Standard Deviation (N=160)

Variable	Mean	Std Dev
Openness to experience	4.31	.424
Emotional Stability	4.33	.420
Agreeableness	4.45	.381
Extraversion	4.58	.464
Conscientiousness	4.37	.372
Job Satisfaction	4.30	.336

6.3 The impact of Big Five Personality and job satisfaction among teachers

The result indicates that the highest mean or the factor/variable that lead to the job satisfaction is Extraversion with 4.58. The second highest mean at 4.45 is Agreeableness. This is then followed by conscientiousness sitting at third with a mean value of 4.37. The fourth rank with mean value of 4.31 is Openness to Experience. The mean score for Emotional Stability is 4.1875. All the variables were evaluated based on a Five point Likert Scale which denotes as follow; 1-strongly disagree, 2-disagree, 3-neutral, 4-agree and 5-strongly agree. The standard deviation which is a measure of dispersion for interval data indicates the existing distribution of the data within the context of this study. The statistics had shed light and explained that the majority of the data spreads to the right. Based on Table 1, it shows that the standard deviation for Extraversion is .464 and Agreeableness is .381. Standard deviation for Conscientiousness is .372. While Openness to Experience with .424 and the last variable which is Emotional Stability with a standard deviation of .420.

Furthermore, in respect with the result of the analysis, it demonstrates that the highest mean of independent variable is; Extraversion leads to Employees' Job Satisfaction with a mean value of 4.5698 and a standard deviation value of 0.43174. The lowest score was Emotional Stability with mean value of 4.1875 and a value of standard

deviation at 0.46834. Exclusive to this study, extraversion is the most significant item/variable that would lead to employees' job satisfaction. This is in light of the fact that extroverted individuals (teachers) are often times associated with positive emotions, energy and sociability (Walker, 2014). By having these particular traits ingrained into their personality, it would possibly lead these teachers in achieving their own job satisfaction. Evidence also indicated that extroverts are proven to have more friends and that they seem to spend more time in social events and situations. Because of their social facility, they are likely to find interpersonal interactions more rewarding (Timothy A. Judge, Daniel H. & Michael K. Mount, 2010). Emotional stability, meanwhile had the lowest score that lead to employees' job satisfaction because employees with low emotional stability, are likely to be unsatisfied with their jobs possibly due to their natural tendency to dwell on negative experiences in the workplace resulting in feeling nervous, worried, embarrassed, irritated, and depressed (Lavanda Cleare, 2013).

This result was evidently supported by Qingguo Z (2013), where it was discovered that extraversion was the strongest predictor of job satisfaction and also subject wellbeing. The finding implies that extraversion could therefore be more important than other factors in the Big Five in predicting job satisfaction. Based on the results, it is thought that teachers need to be extroverts as they will face among others long working hours, many administrative duties and obligations, grading, managing large classes and keeping students interested for a period of 90 minutes. When these tasks and responsibilities are shouldered by an introvert, it will make the job just that much harder and this would most likely result in that the teacher being less satisfied with their job.

6.4 Mean difference in gender

The researchers had conducted a t-test in this study to effectively identify the differences that existed between both genders and employees' job satisfaction. The purpose of this test was to determine and compare the mean scores for both male and female teachers. Based on Levene's test result, since the p-value is shown to be more than 0.05, this meant that there is no significant mean difference in gender in terms of their job satisfaction. A t-test was also used to determine whether there existed a significant difference between the two sets of scores. The researchers had used an independent sample t-test between all demographic variables and Employees' Job Satisfaction. After finishing conducting the test, the result seems to show that there is no significant difference between the demographic variables presented in this study and Employees' Job Satisfaction at SMK and SK Sri Andalas, Klang, Selangor. It concluded that there was no significant differences in the mean scores on demographic categories on employees' job satisfaction.

6.5 Relationship between Big Five Personality Traits and job satisfaction

It is discovered that there is no significant relationship between extraversion and job satisfaction. The r-value of the independent variables and Employees' Job Satisfaction were .335 and the p-value is less than 0.01). This value strongly indicates that there is a significant low relationship at the 0.01 level. It is a sign that there is a low significant relationship between the Big Five Personality Traits and Employees' Job Satisfaction in two schools in Klang, Selangor.

There is no significant relationship between agreeableness and job satisfaction as proven by the value of Pearson Correlation between Extraversion and Employees' Job Satisfaction. Based on the above, the value of the correlation is (r =

.343, $p < 0.01$). This value would indicate that there is therefore a significant low relationship at the 0.01 level (1 tailed). It is then proven that there is a strong significant relationship between Extraversion and Employees' Job Satisfaction in two schools in Klang, Selangor.

There is also no significant relationship between conscientiousness and job satisfaction as proven by the value of Pearson Correlation between Agreeableness and Employees' Job Satisfaction. Based on the table above, the value of the correlation is determined to be at ($r = .195$, $p < 0.01$). This value further on indicates that there is a significant relationship at the 0.01 level. There is therefore a low significant relationship between Agreeableness and Employees' Job Satisfaction in two schools in Klang, Selangor

In regards to Openess To Experience and Job Satisfaction, it was discovered that there existed no significant relationship between the two. This is ascertained based on the value of the Pearson Correlation between Conscientiousness and Employees' Job Satisfaction value at ($r = .296$, $p < 0.01$). This value seems to indicate that there is a significant relationship at the 0.01 level (1 tailed). According to the V rules established by Cramer. There exist a strong significant relationship between Conscientiousness and Employees' Job Satisfaction in both schools.

There is also no significant relationship between emotional stability and job Satisfaction. Based on the value of Pearson Correlation between Openness to Experience and Employees' Job Satisfaction which the value of correlation is standing at a level of ($r = .170$, $p < 0.01$). This value indicates that there is a significant relationship at the 0.05 level (1 tailed). Therefore there existed a moderate significant relationship between Openness to Experience and Employees' Job Satisfaction in both schools in Klang, Selangor.

As for the value of Pearson Correlation between Emotional Stability and Employees' Job Satisfaction, the value of the correlation is ($r = .068$). This value seems to suggest that there is no significant relationship. According to Cramer's V rules, there is therefore a weak relationship that exists between Emotional Stability and Employees' Job Satisfaction in both schools.

Based on the Pearson Correlation analysis, this study had found that there is a positive strong relationship between Big Five Personality traits and Employees' Job Satisfaction. While for each items in the Big Five Personality Traits, there was a significant relationship between Extraversion and Employees' Job satisfaction ($r = .343$, $p < 0.01$) and also Conscientiousness and Employees' Job Satisfaction ($r = .296$, $p < 0.01$). The results obtained is also in line and supported by previous researchers where it is stated that "extrovert employees tend to experience positive effects and to get more out of social interaction, good interpersonal and communication skills, expressive in ideas, taking the initiative to form interaction in leaderless discussion groups, forming positive relationships and networking, joining groups and associations, and facilitating meetings and discussions" (McCrae & Costa, 1997). Sumaira Naz (2013), further indicates that "all these characteristics are keys to perform better in job. It should be noted that the positive finding for Extraversion aligns well with recommendations that interpersonal skills and communication should receive special emphasis in banking professional training".

However, while there was no significant relationship in Emotional Stability and Employees' Job satisfaction at a value of ($r = .068$), Cramer's V rules that there is however a very weak relationship between both these variables. This result is supported by previous researchers. Amongst others, Judge and Larson (2001) had

established low emotional stability as an individuals' propensity to display poor emotional alteration and practice undesirable emotions. They proposed that employees with low emotional stability are probable and more prone to be dissatisfied with their jobs, as they are inclined to publically withdraw in reaction to dissatisfying job conditions, permitting situations to get poorer as a direct result. Additionally, Judge (2009) suggested that "low emotional stability should be negatively related to job satisfaction because it is a strong predictor of job stress".

This is also supported by Mhlanga (2012), where she states that; "Employees with a high dimension of personality can adapt themselves easily to new working environments, obtain achievement and produce high quality work, increase job satisfaction and diminish the boredom of the job environment". The researchers had also conducted the Pearson Correlation Coefficient to analyze the relationship on each item in Big Five Personality to Employees' Job Satisfaction. For each item in Big Five Personality Traits, there was a strong and significant relationship between Extraversion and Employees' Job satisfaction at a value of ($r = .343$, $p < 0.01$). Down the line, it was established that there was no significant relationship in Emotional Stability and Employees' Job satisfaction at a value of ($r = .068$). According to Cramer's V Rules, it is postulated that there is a weak relationship between both variables. These results are then supported by Mhlanga (2012), where it was stated that a job which contains an excessive contract of interpersonal relations (teachers) may entail an individual to be agreeable and extraverted in order to perform at a high level. It is postulated that the a teacher must have an extraverted personality, as extroverts are naturally more compassionate towards their subject, tend to display positive sentiments and are more friendly; therefore, they implement well in sociable surroundings.

6.6 Multiple regressions between Big Five Personality and Employees' Job Satisfaction

The results of the findings had helped to identify which among the Big Five Personality dimensions had had the most influence towards Employees' Job Satisfaction in both schools in Klang, Selangor. The researchers had found that Extraversion was most influential on Employees' Job Satisfaction. The score for significant value is ($p<0.01$), and Extraversion had also obtained the highest score of Beta value at ($\beta = 303$). Meanwhile, Conscientiousness had a beta value of only ($\beta = 238$). This result is also in line with previous researchers work among others where according to Sezer A. & Faruk K. (2010), teachers who displayed and had extrovert personalities satisfied at higher levels with their jobs compared to teachers who had displayed strong introvert characteristics.

7. CONCLUSION

The researchers feel that educating is a noble profession and that it is at the same time an immortal calling. It is subsequently thought of as premise of every other calling. Great teachers sow seeds at the very beginning of the process that in due time would produce in the distant future great specialists, great bookkeepers, great open workers, great statesmen, great cabbies, and great space travelers to name a few. However, for one to become and considered as good teachers, one undoubtedly should also have personality traits as an educator. When the teachers themselves display an extrovert personality, as this study and countless others have shown, it was observed that it would likely lead to a higher degree of job satisfaction.

Teaching is considered as The Person-Job (P-J) and this is further defined as a compatibility between a person's characteristics and that of the job that the said individual would perform at work (Hoffman & Woehr, 2006). It has also been discovered that when employees' self-concept, abilities, personality traits, and preferences are in alignment with that of their job, it will lead to increases in not only employee satisfaction but would also bring an increase in job performance and also other positive individual outcomes (Hoffman & Woehr, 2006, Kristof-Brown, Zimmerman, Johnson, 2005). The researchers would henceforth suggest due to the findings of this research that principals or headmasters of schools to be actively aware of the different personalities among the teachers under their care. These different personalities under their care would carry with it variances/differences in personal needs that should be met and satisfied as an effort to improve their satisfaction towards their job. On a last note, the researchers have also managed to conclude in this study and along with numerous past studies that have been extensively quoted that extraversion has a strong relationship with job satisfaction and that the schools, namely the principals and headmasters need to actively develop some form of strategies in dealing with teachers that would seem to indicate less job satisfaction.

8. REFERENCES

Acuña, S. T., Gómez, M., Juristo N. (2009). "How do personality, team processes and task characteristics relate to job satisfaction and software quality?" *Journal of Information and Software Technology 51,* 627–639.

Alexandra Panaccio, C. V. (2012). Five-factor model of personality and organizational commitment: The mediating role of positive and negative affective states. *Journal of Vocational Behaviour 80*, 647-658.

Aydin, A., Uysal, S., Sarier, Y., (2012). "The Effect of Gender on Organizational Commitment of Teachers: A Meta Analytic Analysis" *Journal of Social and Behavioral Sciences 46*, 356 – 362.

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next?*International Journal of Selection and Assessment*, 9(1/2), 9–30.

Coakes, S. J., Steed, L., & Ong, C. (2009). "SPSS 16.0 for windows: Analysis without anguish. Australia: John Asian" *Social Science,* Vol. 9, No. 10; 2013, 122, Wiley and Sons.

Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personalityassessment using the revised NEO Personality Inventory. *Journal of PersonalityAssessment*, 64, 21–50.

Digman, J.M. (1990). "Personality Structure: Emergence of the Five-Factor Model", *Annual Review of Psychology*, Vol. 41, pp. 417-40.

Dole, C. and Schroeder, G.R. (2011). "The impact of various factors on the personality, job satisfaction and turnover intentions of professional accountants", *Managerial Auditing Journal*, Vol. 16, No. 4, pp. 234-245.

Eskildsen, J., Kristensen, K., Antvor, H. J., (2010). "The relationship between job satisfaction and national culture", *The TQM Journal*, Vol. 22 Iss: 4, pp.369 – 378.

Gupta K. Shashi & Joshi Rosy (2008). *Human Resource Management.*

Hair, J., F., J., Black, W., C., Babin, B., J., Anderson, R., E., & Tatham, R.,L., (2010). Multivariate data analysis (6th Ed.). New Jersey: Pearson Education, Inc.

Hoffman, B.J., Woehr, D.J. (2006) A quantitative review of the relationship betweenperson-organization fit and behavioral outcomes. Journal of Vocational Behavior, 68, 389-399.

Hong, Z. -R., & Lin, H. -S. (2011). An investigation of students' personality traits andattitudes toward science. *International Journal of Science Education*, 33(7),1001–1028.

Hong Lu, K. L. (2012). Job satisfaction among hospital nurses revisited: A systematic review. *International Journal of Nursing Studies*, 1017-1038.

Judge, T.A., and Watanabe, S. (1993). "Another look at the job satisfaction-life satisfaction relationship", *Journal of Applied Psychology*, Vol. 78, pp. 939-948.

Judge, T.A., Heller, D. and Mount, M.K. (2002). "Five-factor model of personality and job satisfaction: a meta-analysis", *Journal of Applied Psychology*, Vol. 87, pp. 530-541.

Jung, C. G. (1921). Psychologische Typen. Zürich: Rascher.

Landeweerd, J.A., Boumans, N.P.G., 1988. Nurses' work satisfaction andfeelings of health and stress in three psychiatric departments. International*Journal of Nursing Studies* 25, 225–234.

Lavanda Cleare, (2013). Personality as a Predictor of Job Satisfaction: Study of the Relationship between Personality and Job Satisfaction amongst Workers in Bahamas. *Journal of Management Research*, Vol. 5, No.3.

.

Li, C.I, Lin, M.C and Chen, C.M. (2007). Relationship between personality traits, job satisfaction and job involvement among Taiwanese community health volunteers. *Journal of Public Heatlh Nursing*, Vol. 24, No. 3, pp. 274-282.

Manojlovich, M., Laschinger, S. and Heather, K. (2002). "The relationship of empowerment and selected personality characteristics to nursing job satisfaction", *Journal of Nursing Administration*, Vol. 32, No.11, pp. 586-595.

McCrae, R.R. and Costa, P.T., Jr. (1987). "Validation of the five-factor model of personality across instruments and observers", *Journal of Personality and Social Psychology,* Vol. 52, pp. 81-90.

Mhlanga, Tatenda Shaleen, (2012), An investigation into the relationship between certain personality traits and job satisfaction. A case of selected bank employees in Certain Cape Province.

Timothy A. J., Daniel H., Michael K. M., (2010), "Five-Factor Model of Personality and Job Satisfaction: A Meta-Analysis", *Journal of Applied Psychology*, 2002, Vol. 87, No. 3, 530–541.

Templer, K.J. (2012). “Five-factor model of personality and job satisfaction: the importance of agreeableness in a tight and collectivistic Asian society”, *Journal of Applied Psychology*, Vol. 61, No.1, pp. 114-129.

Youndt, M. A., Snell, S. A., Dean, J. W., & Lepak, D. P. (1996). “Human resource management, manufacturing strategy, and firm performance*”. Academy of Management Journal*, 39, 836 – 866. doi:10.2307/256714.

Zimmerman, B., J., (2008), “Investigating Self-Regulation and Motivation: Historical Background, Methodological Developments, and Future Prospects”, *American Educational Research Journal*, Vol. 45, No. 1, pp. 166 –183.

The Influence of Structural Design on Managerial Innovativeness: Does Formalization and Centralization Impact on Managerial Information Seeking Behavior

Za'faran Hassan
Universiti Technologi MARA
Center for Post Graduate and Professional Studies
Faculty of Business Management, UniversitiTeknologi MARA, 40450, Shah Alam, Selangor, Malaysia.
E-mail: **zafaran@salam.uitm.edu.my**

ABSTRACT

Creating the kind of "learning organization" that can change successfully is a challenge and opportunity that confronts management. Global demands increase the importance of strategic learning in organizations. The impetus for change should come from the people in the organizations. Nevertheless, "knowledge–creating company" should have in place the organizational roles, structure, and practices needed to guide continuous innovation. Individuals who have gained insight into a problem area typically generate knowledge. The ability to develop new knowledge depends on the culture and values of an organization. Organizational work environment may influence both organizational and individual innovativeness, through the encouragement or discouragement of the creation or adoption of new ideas and information. Past research had been carried out linking structural dimensions to organizational performance and strategy. And it should also be noted that structural design can be the focus of imbedding change and organizational culture. Organization culture, in turn, can assist in molding organizational members' work behavior. Thus this study attempts to investigate the influence of structural variables, specifically formalization and centralization on managerial information seeking behavior in Malaysian organizations. Results indicate that both formalization and centralization have a significant negative influence on managerial information seeking behavior and managerial innovativeness.

Key Words: Structural Design, Formalization, Centralization, Managerial Innovativeness, Information Seeking Behavior

INTRODUCTION

A new standard of performance is being applied to strategic managers, who must cope with an increasingly turbulent environment of today. No longer is strategy simply the analysis of alternatives, or determining what marketing approaches will eat our customers. Performance measure such as return on investment, earnings growth, and market share must be augmented to include other measures as flexibility, responsiveness, and adaptability. Today's organizations will need to empower their employees by sharing decisions, to obtain commitment and innovations from employees, and to evolve a culture that promotes the ability to be adaptive and responsive.

Research Objectives

This research attempts to:

1. Investigate the influence of 'Structural Variables' on individual behavior of managers in Malaysian organizations.

2. To test the significance and direction of relationship between 'Formalization' and 'Centralization' on Malaysian managers' information seeking behavior

LITERATURE REVIEW

Individual Innovativeness and information seeking behavior

According to Rogers and Shoemaker (1971) the concept of individual innovativeness refers to the extent to which an individual adopts an innovation much earlier than others in his or her social system. Individuals can be categorized into different group of adopters depending on when the individual first adopt a new idea: opinion leaders, innovators, early adopters, early majority, late majority and late consumers (Rogers, 1983). Midgeley and Dowling (1978) define individual innovativeness as openness to new ideas and making a decision on adoption of an innovation free from the influence of others' experience. According to them, the concept of individual innovativeness is best understood from the context of the individual's social system. Based on this perspective, they implicitly implied that individual innovativeness is a personal characteristic possessed by all members of a social system. Individual personality is a behavioral tendency that distinguishes an individual from another individual (Wolman, 1973).

Knowledge about an innovation occurs when an individual or an organizational unit is exposed to the existence of an innovation and has an understanding of the function of the innovation. Encouragement occurs when an individual or an organizational unit form an attitude about the innovation, of liking or not liking a particular innovation. A decision is then made whether to adopt or to reject the innovation. If the innovation is adopted, implementation occurs. This step is followed by confirmation, where the individual or organizational unit looks for support for the innovation decision. Nevertheless, the decision may be changed based on any new contradictory information on the adopted innovation. According to Rogers and Shoemaker (1971) innovators are active new information seekers and their network extends beyond their social system.

Therefore, the innovation adoption is an information seeking and information processing process. Through this activity, the individual or organizational unit attempts to reduce uncertainty with regards to the innovation. An individual's personality, depending on his or her social system may determine the type of information that is received, the source of the information and how the information is interpreted (Rogers & Shoemaker, 1971). The categories of innovators can be based on different models of information diffusion (Mahajan & Peterson, 1985; Mahajan et. al, 1990, Tanny&Derzko, 1988). Becker (1970) found that new ideas are initially adopted and tried by individuals who tend to be more exposed to information and are more easily influenced by those outside their group.

Organization Structure

Tornatzky and Fleischer (1990) state that there is empirical support for the relationship between increased innovation adoption, environmental uncertainty and structural characteristics such as complexity, formalization and centralization. New organizational models have been developed, with rapid accelerating technological change. These models tend to focus on roles and relationships within the organization, rather than on bureaucratic structures in which hierarchical and staff-led processes tend to dampen initiatives and innovation (Bartlett &Ghoshal, 1993). Instead of vertical relationships of the traditional systems, new management systems need to focus on horizontal relationships. (Otley, 1994)

Formalization

Formalization refers to emphasis on compliance to rules and procedures related to organizational activities, such as rule manuals and job details Pugh et. al., 1967) Formalization emphasizes on work rules and flexibility facilitates the adoption of new ideas (Aiken &Hage 1968; Burns & stalker, 1961). Thus formalization can influence the individual information seeking process. By curtailing organizational members' freedom to behave (Van de Ven, 1980; Wood & Bandura, 1989; Zmud, 1982).

Centralization

Centralization refers to locus of decision-making and authority and the extent to which he authority to make decision is dispersed or centralized within an organization (Pfeffer, 1981). Centralization of decision-making does not encourage creative problem solving and decentralized decision-making autonomy is a prerequisite for encouragement of new idea adoption and participation in organizational decision-making process (Pierce &Delbecq, 1977). Centralization has often been studied from the perspective of organizational members' participation and involvement in organizational decision-making process (Aiken &Hage, 1968; Kaluzney et. al. 1974) or from the perspective of organizational members' autonomy and freedom to make decisions (Corwin, 1975).

METHODOLOGY

Research Design and Sampling

A survey was conducted amongst financial institutions in the Klang Valley. A purposive random sampling was conducted on middle-level managers in organizations in the financial industry of Malaysia. The sampling frame comprise of firms listed in the Directory of Banks and Insurance Companies. A total of 600 questionnaires were distributed to 60 organizations. The estimated required sample size was computed based on the formula suggested by Clover and Basley (1986) and the requirements of moderate effect size and power for the use of statistical regression analysis as suggested by Cohen (1992). A total of 579 completed and useable questionnaires were returned and analyzed

Instrumentation and Data Collection

The research questionnaire comprise of two sections: Section A contains items on the demographic and background profile of respondent. Section B contains items related to the research constructs. Structured Questionnaires were distributed to 60 companies (30 banks and 30 insurance companies). For each selected organization, 10 sets of questionnaires were distributed to the middle-level manager with the assistance of the Human Resource or Training and Development Managers of these organizations. Questionnaires were self-administered by the respondents with guidelines presented in the questionnaire booklet

Research Hypotheses

Hypothesis 1

Formalization has a negative influence on managerial information seeking behavior

- *Hypothesis 1a:* Formalization has a negative influence on managerial information-seeking behavior, in terms of looking for novelty

- *Hypothesis 1b:* Formalization has a negative influence on managerial information seeking behavior, in terms of openness to information

- *Hypothesis 1c:* Formalization has a negative influence on managerial Information-seeking behavior, in terms of independentness

Low formalization creates openness that encourages new ideas and behaviors (Pierce &Delbecq, 1979).

Hypothesis 2

Centralization has a negative influence on managerial information seeking behavior

- *Hypothesis 2a:*

Centralization has a negative influence on managerial information seeking behavior in terms of looking for novelty

- *Hypothesis 2b:*
  Centralization has a negative influence on managerial information seeking behavior in terms of openness to information

- *Hypothesis 2c:*
  Centralization has a negative influence on managerial information seeking behavior, in terms of independentness

Past research indicates that centralization negatively influence the process of innovation adoption (Damanpour, 1992; Dewar & Dutton, 1986).

Operationalization of Key Research Variables

This study measures 'Centralization' as the extent to which managers participate in decision-making process about new ideas to be adopted. The scale measure for centralization is adapted from the questionnaire items developed by Aiken and Hage (1968) and that has been utilized in many other researches (Hage& Aiken, 1970, Hage& Dewar, 1973, Kaluzny et. al, 1974 and Zmud, 1982). Centralization was operationalized using nine questionnaire items. Four of these items measure 'Personal Participation in Decision-making'. Five items measures the 'Authority Hierarchy'. The reported reliability for the centralization scale is Cronbach alpha 0.70 (Zmud, 1982). Fourteen items were utilized to measure Formalization and these items were adapted from the original seventeen items proposed by Aiken and Hage (1968). Five items measure the 'Job Specification' dimension, and three items each were utilized to measure the 'Rule Compliance', 'Task Explanation System, and 'Supervisor Approve Decision' dimensions respectively. Information seeking behavior was measured utilizing thirteen items, with six items measuring 'Looking for Novelty', five items measuring 'Openness to Information' and two items measuring 'Independentness'. All of these research constructs were measured on a seven point Likert scale. The reliability of these adapted scale measures were again analyzed for this study. The following table explains the details of the research constructs for the study.

Table: 1 Research Constructs

CONSTRUCT	CONSTRUCT CATEGORY	CONSTRUCT MEASURE	BORROWED/ ADAPTED/ DEVELOPED	METHOD OF SCORING	CONSTRUCT VALIDITY
Formalization 1. Job Specification 2. Rule Compliance 3. Task Explanation System 4.Supervisor Approve Decision	Independent Variable	Original scale:17items 1. 5 items 2. 3 item 3. 3 items 4. 3 items	Adapted	Linear summation of average score for each item response from each respondent	Positive relationship with formalization Division of labor Positive relationship with dissatisfaction Positive relationship with social relationship Hair et. al.(1995) Factor Analysis: 3 factors explain 70% variance Cronbach Alpha:0.74
Centralization 1.Participation in Decision-making 2.Authority Hierarchy/ Autonomous Decision-making	Independent Variable	Original scale: 8 items 1. 4 items 2. 5 items	Adapted	Linear summation of average score for each item response from each respondent	Increased Autonomy ⟶ Increased Span of Control Reduced participation ⟶ Increased rules and control Perceived organizational Structure Factor Analysis Reliability Coefficient Alpha: 0.85
Information Seeking Behavior 1.Looking for Novelty 2. Openness to Information 3.Independentness	Dependent Variable	1. 6 items 2. 5 items 3. 2 items	Developed	Linear summation of average score for each item response from each respondent	Factor Analysis: 3 factors explain 75 % variance Reliability Coefficient Alpha: .7977

FINDINGS

Sample Characteristics

75% of respondents comprise of middle managers and executive working in departments such as finance, administration, personnel, marketing, claims, credit and underwriting. Only 3% of respondents are from research and development and 1% from information system, which represent newly created departments in Malaysian organizations. 82% of respondents possess an advance diploma, degree or a professional qualification. Education is an important influence on individuals' information seeking behavior in terms of information search and innovative problem solving behavior (Scott & Bruce 1994). 43% of respondents in banking organizations and 52% respondents in insurance firms have service tenure of more than 10 years. This service tenure is suitable for investigation of innovative action and decision in the work place (Aiken et al. 1980; Kimberly &Evanisko 1981; Meyer & Goes 1988). Demographic profile of respondents indicates that 82% are aged between 25 and 40 years old, with 58% being male and 42% female. The majority of respondents are Malays (58%) with Chinese and Indians being 25% and 14% respectively.

Factor Analysis

Results of factor analysis for each research variable, methods of extraction and rotation, as well as the resulting number of factors are shown as follows:

Table 2: Extraction and Rotation Method in Factor Analysis

Variable	Extraction	Rotation	No. of Factors
Individual Information Seeking behavior	ML	Quartimax	13
Formalization	ML	Varimax	14
Centralization	ML	Varimax	9

Each factor is labeled, and the methods of extraction and rotation were utilized on the basis of item convergence and correlation matrix that is easily interpreted.

Factor analysis of construct items and examination of item correlation matrix indicates that factor loading conform to the construct measures. Items that were insignificant were only a few. Thus items appear to converge towards similar domain. Item correlation matrix of research measures was examined. Convergent measures are depicted through high and uniform correlation amongst items within a construct. Examination of construct correlation pattern for items in the independent variables measures shows moderate correlation and absence of uniformity. In general, correlation between construct is low, compared to inter item correlation for similar construct.

Table 3: Factor Analysis

No	Measures	No of Items	Mean	Standard Deviation	Alpha Coefficient	% of Explained Variance
1	**Information Seeking Behavior**					
	1. looking for novelty	6	35.63	6.37	0.80	30.8
	2. Openness to information	6	32.59	4.75	0.77	10.0
	3. Independentness	2	9.13	2.58	0.60	9.8
2	**Formalization**					
	1. Jon Specification	5	30.79	6.33	0.74	36.4
	2. Rule Compliance	3	18.71	4.77	0.74	22.8
	3. Task Explanation System	3	20.88	4.03	0.61	9.2
	4. Supervisor Approve Decision	3	19.08	3.98	0.62	4.1
3	**Centralization**					
	1. Participation in Decision-making	4	23.08	4.32	0.90	31.5
	2. Autonomous Decision-making	5	18.62	6.48	0.85	29.6

Correlation Analysis

Validity of objective measures in difficult to determine based on conventional methods. The Pearson correlation between research variable shows that the independent variables are positively and significantly correlated as hypothesized. Nomological validity of measures can be shown based on significant correlation between variables and in the expected direction (Campbell, 1979). Furthermore, the suitability of the research measures and the definition of constructs are an indicator of content validity (Schwab 1980). Thus, the similarity between constructs and its empirical reference as well as nomological support gives sufficient evidence on the validity of the research constructs utilized. The following table depicts the Pearson Correlation Coefficients for the research constructs.

Table 4: Pearson Correlation Coefficients

Research Variable	Mean	Std Deviation	Looking for novelty	Openness to information	Independentness	Formalization	Centralization
Looking for novelty	40.5745	6.0326	1.0000				
Openness to information	32.5924	4.7541	.591**	1.0000			
Independentness	9.1261	2.5701	.1793**	.3322**	1.0000		
Formalization	63.4145	9.8179	.0854*	.0996*	-.1904**	1.0000	
Centralization	41.6960	8.2812	-.1632**	-.1142**	.1710**	.0633	1.0000

* p<0.05

** P<0.01

Multicolinearity Analysis

Results of multicolinearity analysis shows that the tolerance values for each independent variable in the research model is high (>0.40) and low V.I.F. or variance inflation factor values (<10.0). This implies that the problem of multicolinearity is not significant and does not impact upon the study's findings. This is supported by an examination of situation index which shows no value exceeding 30 (<30.0).

All analysis was performed using SPSS Windows Version 8.0. Because multivariate regression analysis was utilized for this data analysis, tests for assumptions underlying the use of multivariate regression analysis were also carried out. This includes linearity test using SPSS 'BREAKDOWN' procedure, Lilliefors test for normality and Box's M test for heteroscedasticity. These procedures are supplemented by graphical examination of histograms, 'casewise' standardized error plots and normality plots.

Hypotheses Testing

Results of multivariate regression analysis show a positive and significant ($p<0.01$) correlation for managerial information seeking behavior in terms of openness to information with formalization and a negative and significant ($p<0.01$) correlation with centralization. Similarly, this research shows that there is a positive and significant ($p<0.01$) correlation for managerial information seeking behavior in terms of looking for novelty with formalization and a negative and significant ($p<0.01$) correlation with centralization. The findings also indicate a negative and significant ($p<0.01$) correlation for managerial information seeking behavior in terms of independentness, and the structural variables of formalization and centralization.

The adjusted R^2 value for managerial information seeking behavior in terms of looking for novelty and for openness to information is 0.06 each, followed by 0.18 for managerial independentness. In summary, the results of multivariate regression analysis generally support the research model proposed except with regards to the direction of relationship. Interestingly, the correlation of managerial information seeking behavior, in terms of looking for novelty and openness to information, with formalization is significant but in the positive direction instead. In summary, it can be said that the findings support hypothesis 1c, and hypotheses 2a, 2b, and 2c as postulated earlier on in this research. Hypotheses 1a and 1b, however, is not supported by the results of the statistical analysis. Table 5 shows the standardized beta, standardized beta error, t values and the significant t values obtained from the multivariate analysis. However, this model can only explain six percent (6 %) of the variance for individual information seeking behavior, in terms of looking for novelty, six percent (6 %) for the variance in managerial openness to information, and eighteen (18%) of the variance in managerial independentness. Taking each of these dimensions of managerial information seeking behavior individually, this means that from the perspective of effect size value the variance contribution is small (Hair et. al. 1995). However, together, all the three dimensions of the managerial information seeking construct as a whole is significantly influenced by the structural variables of formalization and centralization (30% explained variance), albeit in unique and different ways

Table 5: Hypotheses testing

Dependent variable	**Independent variable**	**Standardized Beta**	**Standardized Beta Error**	**t**	**sig.t**
Information Seeking behavior					
1. Looking for Novelty Adj. $R^2 = 0.06$ F value = 9.3955 Sig. F = 0.0000	**FORMALZATION** **CENTRALIZATION**	0.0368 - 0.0760	1.202 -1.980	0.2298 0.0854	0.03 0.04
2.Openness to information Adj. $R^2 = 0.06$ F value = 10.2263 Sig. F = 0.0000	**FORMALZATION** **CENTRALIZATION**	0.0032 -0.2310	4.073 -3.807	0.0000 0.0011	0.02 0.01
3.Independentness Adj. $R^2 = 0.18$ F value = 30.6052 Sig. F = 0.0000	**FORMALZATION** **CENTRALIZATION**	-0.1920 -0.0281	-1.810 -1.604	0.0708 0.1092	0.01 0.01

DISCUSSION

The set of hypotheses relating to the influence of centralization on managerial information-seeking behavior are all well supported by the findings of this research. The findings concur with the findings of Pierce and Delbecq (1977) who state that centralized decision-making authority does not encourage creative problem-solving and decentralized decision-making autonomy is a necessity to encourage adoption of new ideas and innovation. The results of this study support the findings that formalization can hinder independent behaviors of organizational members in adopting innovations (Cohn &Turyn 1980; Van de Ven, 1980). Although formalization may have a negative impact on managerial independentness, formalization perhaps can also have a positive influence in terms of providing policies, rules of conduct and guidelines for allowable and approved methods for seeking information and new ideas to enhance managerial decision-making and work performance. Managers may rely on formalization in terms of formal chain of command to make contact with one another, on a reasonably, sustained basis. Formalization may also reduce conflict and uncertainty and thus encourages openness to information and new ideas. Folger and Konovsky (1989) imply that procedures may not simply be regarded by employees as means to an end but rather as ends in themselves. This implication is consistent with the suggestion made by Tyler and Caine (1981) that procedures can be ends in themselves when they provide intangible and symbolic outcomes as respect. This may enhance organizational commitment and a more proactive action to seek for information and enhance contribution toward organizational performance.

The findings can be analyzed from the perspective of organizational behavior, the work behavior of organizational members in Malaysian organizations and the influence of cultural values on task performance. The freedom to make decisions and environmental control encourages an individual to seek for information and will also enhance organizational commitment. The cultural values of organizational members influences perception, motivational needs and ways in which organizational members interact and perform work tasks. Asma Abdullah (1994) states that Malaysians are more 'collectivistic' than 'individualistic' in terms of work behavior. Malaysians like to do things in the spirit of 'togetherness'. The 'we' orientation also influences individual's work behavior in Malaysian organizations. Thus Malaysians in organizational work context, emphasize interpersonal relations and are willing to conform to those in positions of higher authority. This may discourage managers from seeking for new ideas or acting independently if they perceived such actions as not favored or approved by top management (Za'faran Hassan, 2010, Za'faran Hassan, Ramachandran, K. K., &NorlidaKamaluddin, 2013).).

The uniqueness of this study's sample also gives rise to certain implications. The study sample comprises of middle level managers and the largest percentage of the sample is Malays. Islamic religion amongst the Malays influences every aspect of their lives including their behavior and interpretation of work concepts. Perhaps the Islamic value of gratefulness ('Kesyukuran') discourages these Malay middle managers from acting innovatively to seek for novelties and information, for they should be contented with what they already have.

As a critical lever for strategy implementation and organizational change, information resourcing plays dual roles. One role is to connect various parts of the organization, facilitating coordination and integration; the second is to provide better measures; thus influencing organization's behavior (Miller, 1998). Complex organizations must make such

separations to structure their work. Without a separation of groups and individuals, organizations may be unable to bring about any meaningful specialization of tasks, and organizations would become collectives of generalists. While formalization and centralization continue to be fundamental tenets of organizing, they sometimes create stumbling blocks to strategy implementation and organizational innovativeness. Thus information-resourcing systems are essential for organizational integration. Information resourcing is often needed at the individual, team, organizational and even inter-organizational level.

IMPLICATIONS

a) Organizational Implications

This study highlights the fact that the unique characteristics of Malaysian middle managers should be taken into consideration in the design and development of work group activities and programs in order to nurture innovativeness amongst them. Top management should support programs that encourage these managers to socialize beyond their organizations, attend seminars and conferences or training programs, which will expose middle managers to new ideas and information and make them more cosmopolite in nature.

Polakoff (1987) found that information technology and new products sets free the middle managers from the traditional co-ordination function. New technologies will also increase the complexity of organizational operations and this in turn will increase the role that middle managers have to play to contribute toward organizational effectiveness and efficiency (Buchanan &McCalman 1988; Schilit 1987). Thus middle managers must rise to this new challenge. Middle managers must be given the opportunity to obtain new skills such as the determination of organizational information needs as well as independent self-evaluation on the use of information obtained. These efforts may possibly lead to encourage middle managers' innovativeness and adoption of organizational innovation.

Middle managers have different tasks and responsibilities as compared to top managers. They are at a unique level in the organizational hierarchy, in between top managers and lower level managers. Perhaps middle managers are in a position where they may be more responsible to decide on possible innovation suggestions and adoptions in organizations. They are also more likely to be influenced by top management's directives and instructions on tasks delegated by top management. Thus middle managers' innovativeness will be influenced by their perceptions regarding support and encouragement of top management and contextual characteristics of organizational structure.

Individual knowledge and cognition is essential in innovation adoption process (Swan 1995). Knowledge from the perspective of adoption of innovation refers to understanding and information on ways to implement various organizational procedures and activities, as well as computers, technical systems and equipment. However, organizational adoption of innovation still involves the action choice of organizational members. Organizational politics and cognitive process influence innovative choice decisions. Firms that do not have managers who are able and

willing to use knowledge effectively and firms that do not provide or encourages suitable knowledge enhancement amongst managers will be highly unlikely to increase its organizational innovativeness (Wilkstrom&Normann 1994).

Positive correlation between middle mangers' innovativeness and organizational innovation may not exist is a cultural climate and work related norms which do not encourage the active search for new ideas, information and open communication, or does not support openness to change and risk taking behavior. Banks and insurance firms that emphasize conformity and the use of autocratic leadership will not increase middle managers' participation in organizational innovation process. Middle managers' innovativeness will also not lead to organizational innovativeness without building in structural flexibility and reward systems that value and give recognition to new ideas and information.

b) **Research Implications**

Arawati and Za'faran (2001) stressed the importance of personnel differentiation as part of Malaysian manufacturing firm's differentiation competitive strategy that is linked to firm's competitive advantage and financial performance. Thus research efforts, can be directed at investigating managerial innovativeness and its possible linkage to differentiation strategies of firms in the different Malaysian industrial sectors that may, perhaps, also be linked to competitive advantage and financial performance of these service firms.

The research carried out has also contributed towards the development of scales for measurement of professionalism and individual innovativeness, as well as the testing of adapted scales that were formally utilized among Western respondents. The factor analysis carried out in this study reflects that these adapted scales have sufficient reliability for utilization amongst Malaysian respondents. Therefore other research can be carried out utilizing these scale measurements and perhaps further refine the validity and reliability of the scales that have been developed and utilized in this study, to enhance its use in research within the Malaysian cultural context.

RESEARCH LIMITATIONS

The result of this study is limited in its focus on correlates of managerial innovativeness only at the middle level of organizations. The study carried out, like any other correlation analysis, has a caveat regarding causation, which applies to all cross sectional research. Furthermore, this study utilized a purposive specific sample from banks and insurance organizations only. Although this allows for control of extraneous variable not included in the hypothesized relationship proposed, this sampling strategy may be limited in terms of the generalizability of its findings. Another caveat to this study is the variance research design approach, which is limited in terms of its static perspective. The survey method utilized is also limited in terms of problems of common method variance arising from the use of a single research data collection method, as well as data based solely on individual's perception and cognition.

REFERENCE

Aiken, M. &Hage, J. 1968.Organizational interdependence and organizational structure.*American Sociological Review* **33**: 919-929.

Aiken, M. 1971. The organic organization and innovation.*Sociology* **5**: 63-82.

Aiken, M. et al. 1980. Organizational structure, work process and proposal making in administrative bureaucracies. *Academy of Management Journal* **20**: 63-652.

Arawatiagus and Za'faran Hasan. 2001 Enhancing Competitive Advantage Through TQM: An Empirical Study of Malaysian Manufacturing Companies. *The Fourth Asian Academy of Management (AAM) Conference 2001 Proceedings*, 10-13 November, JohorBahru, Malaysia

.

Asma Abdullah. 1994. Leading and motivating the Malaysian workforce. *Malaysian Institute of Management (MIM)* **29** (3): 24-40.

Barlett, C. A. and Ghosal, S. (1993). Beyond the m-form: toward a managerial theory of the firm. Srategic Management journal, 14, pp.23-46

Becker, M.H. 1970. Sociometric location and innovativeness: reformulation and extensions of the diffusion model. *American Sociological Review* **35:** 267-304.

Burns, T. & Stalker, G.M. 1961.*The Management of Innovation.*London: Tavistock Publications.

Campbell, J.P. 1976. Psychometric theory. Marvin, D.D. (Ed..). *Handbook of Industrial and Organizational Psychology:* 185-222. Chicago: Rand McNally.

Clover, V.T. and Basley, H.L. 1984.*Business Research Methods.*Columbus, Ohio: Grid Publishing.

Cohen, J. 1992. A power primer.*Psychological Bulletin* **112** (1): 155-159.

Cohn, S.F. &Turyn, R.M. 1980.The structure of the firm and the adoption of process innovations.*IEEE Transactions on Engineering Management* **28**: 98-102.

Corwin, R.G. 1975. Innovation in organizations: the case of schools. *Sociology of Education* **4** (Winter): 1-37.

Damanpour, F. 1992. Organizational size and innovation. *Organization Studies* **13** (3): 375-402.

Dewar, R.D. & Dutton, J.E. 1986. The adoption of radical and incremental innovations: an empirical analysis. *Management Science* **32**: 1422-1433.

Folger, R. and Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journa*l, 32 (1), p.115-130.

Hage, J. & Aiken, M. 1970.*Social Change in Complex Organizations.* New York: Random House.

Hage, J. & Dewar, R. 1973.Elite values versus organizational structure in predicting innovation.*Administrative Science Quarterly* **18**: 279-290.

Hair, J.F. Jr. Anderson, R.E., Tatham, R.L.& Black, W.C. 1995. *Multivariate Data Analysis.*Englewood Cliffs, N.J.: Prentice Hall.

Kaluzny, A.D. Veney, J.E. & Gentry, J.T. 1974. Innovation of health services: a comparative study of hospitals and health departments. *Health and Society* **52**: 51-82.

Kimberly, J.R. &Evanisko, M. 1981. Organizational innovation: the influence of individual, organization, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal* **24**: 689-713.

Mahajan. V. et al. 1990. Determination of adopter categories by using innovation diffusion models.*Journal of Marketing Research* **27** (Feb): 37-50.

Mahajan, V. & Peterson, R.A. 1985.*Models for Innovation Diffusion.*Beverley Hills, C.A.: Sage Publications, Inc.

.

Meyer, A.D. & Goes, J.B. 1988. Organizational assimilation of innovations: a multilevel contextual analysis. *Academy of Management Journal* **31**: 897-923.

Migeley, D.F. & Dowling, G.R. 1978. Innovativeness: the concept and its measurement. *Journal of Consumer Research* **4**: 229-242.

Miller, A. 1998.Strategic Management. New York: McGraw-Hill

Norusis, M.J. 1990. SPSS Statistical Data Analysis, Chicago, Ill.: SPSS Inc.

Nunnally, J.C. 1978. *Psychometric Theory.*New York: McGraw Hill.

Otley, D.T. (1994). Management control in contemporary organizations: Towards a wider framework. Management Accounting Research, 5, pp. 289-299

Pierce, J.L. &Delbecq, A.L. 1977. Organizational structure, individual attitudes, and innovation.*Academy of Management Review* **2**: 65-105.

Polakoff, J.C. 1987. Will middle managers work in the factory of the future? *Management Review* **26**: 50-51.

Pugh, D.S., Hickson, D.J., Hinings, C.R. & Turner, C. 1968.Dimensions of organization structure.*Administrative Science Quarterly* **13**: 65-105.

Rogers, E.M. 1983. *Diffusion of innovation.*New York: Free Press.

Rogers, E.M. & Shoemaker, F.F. 1971.*Communication of Innovations.* New York: Free Press.

Sawyer, A. & Ball, A.D. 1981. Statistical power and effect sizes in marketing research.*Journal of Marketing Research* **2**: 275-290.

Schilit, W.K. 1987. An examination of the influence of middle level managers in formulation and implementing strategic decisions.*Journal of Management Studies* **24**: 271-293.

Schwab D., Gottlieb, J.O. &Heneman, H. III. 1979. Between subjects expectancy theory research: a statistical review of studies predicting effort and performance. *Psychological Bulletin* **86**: 139-147.

Schwab, D.P. 1980. Construct validity in organizational research. *Research in Organizational Behavior* **2**: 3-43.

Scott, S.G. & Bruce, R.A. 1994. Determinants of innovative behavior: a path model of individual innovation in the work place. *Academy of Management Journal* **37**(2): 580-607.

Statistical Package for the Social Science. 1986. *SPSS - X user's guide* Chicago: SPSS Inc.

Swan, J. A. 1995. Exploring knowledge and cognitions in decisions about technological innovations: mapping managerial cognitions. *Human Relations* **48**: 121-1270.

Tanny, S.M. &Derzko, N.A. 1988.Innovators and initiators in innovation diffusion model.*Journal of Forecasting* **7**(4): 225-234.

Tornatzky, L.G. & Fleischer, M. 1990.*The process of technological innovation* Lexington, Mass.: Lexington Books.

Tyler, T. R. and Caine, A. (1981).The influence of outcomes and procedures on satisfaction and formal leaders.*Journal of Personality and Social Psychology*, 41, p.642-655.

Van de Ven, A. 1980. Problem solving, planning and innovation.*Human Relations* **33**: 711-740, 757-779.

Van de Ven, A.H., Angle, H.L., Poole, M.S. 1988. *Innovation and Management.*New York: Harper & Row.

Wikstrom, S. &Normann, R. 1994.*Knowledge and Value: A New Perspective on Corporate Transformation.* London: Routledge.

Wood, R. & Bandura, A. 1989.Social cognitive theory of organizational and management.*Academy of Management Review* **14** (3): 361-384.

Za'faran Hassan &ArawatiAgus (2010) *Total Quality Management and Its Linkage to Strategic Management, Research Perspective on Tools and Techniques of Strategic Analysis Amongst Malaysian Firms,* Shah Alam, Selangor: UPENA, UniversitiTeknologi MARA

Za'faran Hassan, Ramachandran, K. K., & NorlidaKamaluddin (2013), Managing market competitive strategy successfully: An empirical testing of successful generic strategy implementation leading to product quality and customer satisfaction, *International Journal of Management (IJM),* Volume 4, Issue 4, July-August, pp. 09-22

Zmud, R.W. 1982. Diffusion of modern software practices: influences of centralization and formalization. *Management Science* **28**: 1421-1431.

The Relationship between Occupational Safety and Health Practices with Employees' Safety Behaviour

Rabiah Abdul Wahab[1], Noor Azura Dahalan[2], Nor Azairiah Fatimah Othman[3] and Farah Nadiah Ismail[4]

1 Faculty of Business Management, Universiti Teknologi MARA, rabiahaw@salam.uitm.edu.my
2 Faculty of Business Management, Universiti Teknologi MARA, azuradahalan@salam.uitm.edu.my
3 Faculty of Business Management, Universiti Teknologi MARA, norazairiah@salam.uitm.edu.my
4 farahnad84@gmail.com

ABSTRACT

Safety is a main concern to any organization owing to substantial cost directly and indirectly attached to it. Common problem of safety issue at workplace is that every human activity is subject to fault. Many studies had identified that main causes of occupational injuries are from the human behaviour. All this while, relatively few studies had been paid to safety within organizational behaviour literature. Of late, safety researchers have increasingly turned their focus to employees' safety behaviour in achieving safe and healthy workplaces. This study examines occupational safety and health practices of a utility provider organization. The study investigates the relationship between training, supervision and safety & health work procedure with safety behaviour. The questionnaires were administered to two hundred sixty five (265) respondents. A total of one hundred fifty (150) returned questionnaires were used in statistical analyses. A behavioural measure of safety was used. A positive strong relationship was found between training and supervision with employees' safety behaviour. A positive strong significant relationship between safety and health work procedures and employee's safety behaviour are also found. Evidently, the most influential practices for employee safety behaviour are training and supervision. The finding of this study hopes to contribute as potentially solution to present and forthcoming occupational health and safety challenges.

Key Words: **Occupational Safety and Health Practices, Safety Behaviour**

1. INTRODUCTION

When Occupational Safety and Health Act are introduced in 1994 in Malaysia, many organizations have started to integrate the occupational safety and health in the organization operation. Occupational Safety and Health Act and Notification of Accidents, Dangerous Occurrences, Poisoning and Occupational Diseases – NADOOPOD are among regulations addressing accidents in the country. National Institute of Occupational Safety and Health (NIOSH) is the responsible body that conduct programs to reduce the numbers of occupational accident. At present most organizations have implemented Employee Safety Handbook as a guideline for the employee in doing their routine work. The studied organization (Organization X), a utility provider organization is among of those whom proactively practicing health, safety and environment policy, applying safety management system, empowering safety guidelines and executing many activities compliance to safety, health and environmental aspects. However, regrettably the number of industrial accident in the organization has raised the management concerns towards safety matters. Although no fatality is recorded up to this point; yet the mounting calamity if are not being addressed properly, may result in fatal outcome in form of financial, ethical and legal obligations. Typically, there are two types of accident that may occur in the organization. The first type is industrial accident. An industrial accident is defined as "accidents, including injuries, loss of product and damage of equipment that occur during daily operations in the industrial sectors"

(Othman, 2011) resulting a loss of productivity and the injury of single or multiple employees in the organizations. The latter type is commuting accident. The commuting accident occurs when accident happens to a worker when she or he is on his way to the workplace or coming back from the workplace. In relation to Organization X context, the accident type that has becomes the main concern by the management is industrial accident. Most accident relates with calamity that occurred while a worker is in the process of executing their works, as for instances for not using the proper Personal Protective Equipment (PPE) provided by the organization. Align with the act requirements stipulated that organization should ensure the safety and health of their workers and other persons that may be affected by their operations (Othman, 2011) and Cui, Fan, Fu and Zhu (2013) recommendation which call for a deeper understanding of human behaviors in occupational health and safety (OHSA), therefore, this study will examine the following relationship of i). training and supervision and employees' safety behaviour and ii). safety and health work procedures and employees' safety behaviour.

2. LITERATURE REVIEW

At this moment, safety management research is focusing on the perspective of attitudinal, organizational, cultural, and social on occupational safety (Bjerkan, 2010; Cooper and Phillips, 2004 and Glendon and Stanton, 2000). Since many organizations have started to integrate the occupational safety and health in the organization operation and yet according to Lindop and Rotblat (1971), "every human activity is subject to human error and therefore accidents will happen", this study made an attempt to investigate how applicable occupational safety and health practices effect employees safety behaviour in Organization X. This study will focus only on the practices of training and supervision and safety & health work procedure. Relevant literature pertinent to studied issues as described below.

2.1 Training and Supervision

Any employees performing work tasks, yet are inadequately trained can cause serious injuries or even death. Robson (2010) suggested training is given to employees in order to decrease or preventing injury, illness and death in the workplace. Safety and health training provides information and guidelines about potential hazards and how to avoid it (Sawe, 2013). Safety and health training for the employees is an integral for the development of employee knowledge of work procedures into the making decision procedures (Weinstock and Slatin, 2012). Training plays the essential roles to enhance safety and health performance in organization (Ali, Abdullah and Subramaniam, 2009). Parra (2003) highlighted that there are many different types of safety and health training programs designed to minimize employee injuries and workplace safety hazards while assisting the workplace safety behaviour among employees. According to Armstrong (2006), safety and health training is a key aspect of the precautionary programme and should start as part of the induction course. Amrstrong notion is supported by Gruetzner (1998), proposing that each of new employees must receive an introduction to the organizational safety and health policies as part of the orientation program. Additionally, training for the employees and induction program should contain safety and health standards, procedures, guidelines, responsibilities and liabilities of the organization (Akpan, 2011). Dessler (2005) argues that safety and health training for new employees may decrease unsafe and unhealthy acts. Accidents at workplace can be decrease with the provision of comprehensive on-the-job safety and health training for all new employees that employed by the organization (Moleman, 2006).

Therefore, this study hypothesized the following hypothesis of;

> H_1: There is a positive relationship between training and supervision and employee safety behaviour in the organization.

2.2 Safety and Health Work Procedure

Tulonen (2010) highlighted that most workplace accidents happen because certain safety and health procedures are not carried out prior to work. Offences of rules and procedures are generally recognised as important causal aspects in workplace accidents (Dahl, 2013) contributor to as much as 70% total of the number of accidents (Mason, 1997). According to Wright (1986), working under time pressure to meet work deadlines causes employees not to follow the safety and health procedures, leading to unsafe work practices and more often than not resulting fatalities and accidents. Alike to Wright notion, Hoffman and Stetzer (1996) agree that working under time pressure can cause employees to ignore safety and health procedures and often leading to accidents at the workplace. Rightly, employees must put up with organization safety and health policies and no to make their own rules or guidelines (Chauke, 2011). Organizational rules and procedure explains how people should behave, how to deal with the relevant work equipment, what to get ready, type of personal protective equipment required and so on (Dahl, 2013). Safe working procedure shall secure employees and the public from accidents and occupational hazards (Sawe, 2013). Seo et al. (2015) assert that safety compliance involves adhering to safety procedures and finishing work in a safe manner

Therefore, this study hypothesized the following hypothesis of;

H_2: There is a positive relationship between safety and health work procedure and employee safety behaviour in the organization.

2.3 Safety Behavior

Geller (2000) and Johnson (2003) arguing that the main causes of occupational injuries are from the human behaviour. Alike Mahmood, Mohd Isa, Mustafa, Abdul Aziz and Salleh (2010) assert that major contributor to occupational accidents at workplace is human behaviour. 76% of all injuries causes of the industrial disaster were caused by employee behaviour (McSween, 2003). Johnson (2003) said in the study that to decrease the occupational accidents or injuries at the workplace is by attending to the safety behaviour. Organizations view safety behaviours as employee conformity with behavioural safety routines. These behaviours consist of safety activities that are part of the formal work role and procedures, such as using personal protective equipment properly, properly performing lock-out and tag-out procedures, applying appropriate work practices to reduce exposure to potential hazards and injury, and following safety policies and procedures (Fugas, Silva and Melia, 2012). Safety behaviour among the employees is important to make sure the employee to avoid any circumstances that can be dangerous for them while working. The efficient solution to decrease the accidents in the workplace is changing the unsafe behaviour among the employees (Geller, 2000). Safety behaviour is defined as human behaviour towards problem of the safety in the workplace (Cooper, 1999). Also the behavioral factor of safety refers to employee motivation and performance improvement through behavior constrains (Khdair et al., 2011). Safety behaviour indicate that individual actions taken for self-protection such as following safety rules to avoid risk to self or others, and wearing protective gears that is Personal Protective Equipment, following procedures properly (Garavan and O'Brien, 2001; Neal, A., Griffin, M.A., Hart and P.M., 2000). Their notion is supported by Othman (2011) proposed that the most appropriate way to ensure the safety and health of their workers and others is by integrating practicable occupational safety and health practice in organizational operation. Safety behaviour is considered as the most visible expression of safety culture and safety behaviour can reflect organizational values and beliefs towards safety and health. The manager of the organization should give visible leadership and commitment to safety and health, communicate and also challenge and questions about safety and health issues at all times. The employees also should involve definitely in safety and health activities and be self-motivated to be compliant with the safety and health system at the workplace (Hamouda, 2013)

3. METHOD

The methodology adopted in this study was quantitative. Survey approach provides the best means in addressing the relationship between safety and health work procedure and employee safety behaviour. The questionnaire for this study is based on the previous research by Chauke (2011). A sample of 265 respondents who are working in company's head quarters was randomly drawn from the database. The sample frame ranging from managerial, executive to operational employees. The sample size of 265 respondents deems the rightly size for a studied population of nearly thousand employees according to Krejcie and Morgan (1970) recommendation. A set of questionnaire was specifically designed to elicit necessary information. The questionnaire was divided into three sections; the first section is demographic information such as position level, age, gender, level of high education, length periods working and employment status; the second section is regarding safety and health work procedures and the third section is regarding safety behavior. In sum this study surveyed seven (7) questions on demographic and safety and health work procedure and another 14 questions on safety behaviour, totaling 28 items from Chauke (2011). The questionnaires apply Likert-type interval scales ranging from 'Strongly Disagree' to 'Strongly Agree' and was adapted wherever possible in this study.150 usable first-hand responses out of 265 sample of was collected over a 2-week period in 2015 for a response rate of 58%. Interpretation of frequencies, means, reliability analysis, descriptive analysis, correlation and regression will be made using Statistical Package for Social Science (SPSS) Version 21 software program.

4. RESULT

As result of analysis, the finding of the study as the following below;

4.1 Demographic Findings

An analysis of the demography of the respondents showed that 53% of the respondents were in the age category of 21-30 years while 36% were between 31-41 years old. The remaining 11% is either in the age category below 20 years or 41 years. Of the 150 respondents, 80(53%) were males and 79(47%) were females. All of the respondents are well-educated with majority have university degrees (46%) and the rest had a certificate, diploma and master education. The respondents reported a wide range of position level. The analysis of the respondent position level indicate that 26(17%) of the respondents are managerial level and 60(40%) are executive level. Operational level accounted for 64(43%) of the total respondents. The organization tenure of the respondents ranged from less than 2 years to over 15 years. 16% had been with the organization for 1 year or less, 41% for 1 to 5 years, 31% for 6 to 10 years, 10% for 11 to 15 years and remaining over 15 years. The respondent type ranged from permanent staff (85), contract staffs (10) and management trainee (5%) (Figure 1 – Figure 7)

Figure 1: Age

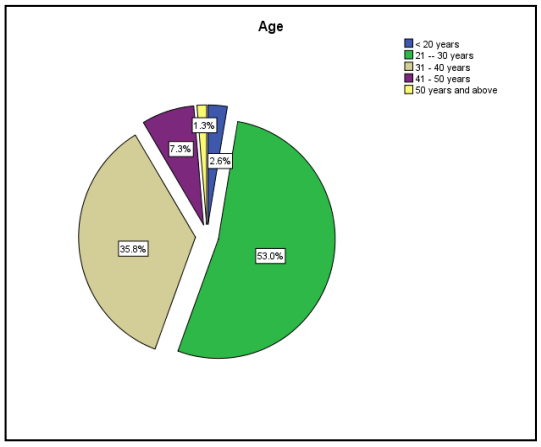


Figure 2: Gender

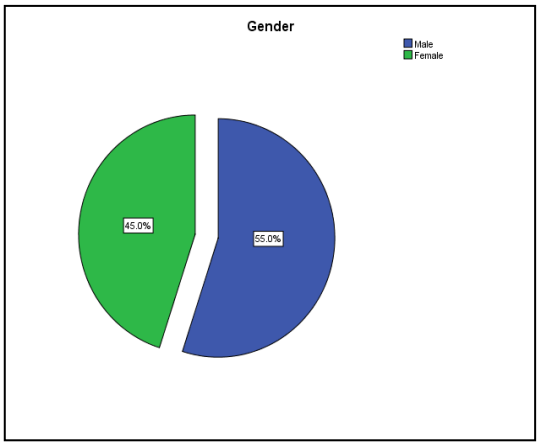


Figure 3: Marriage Status

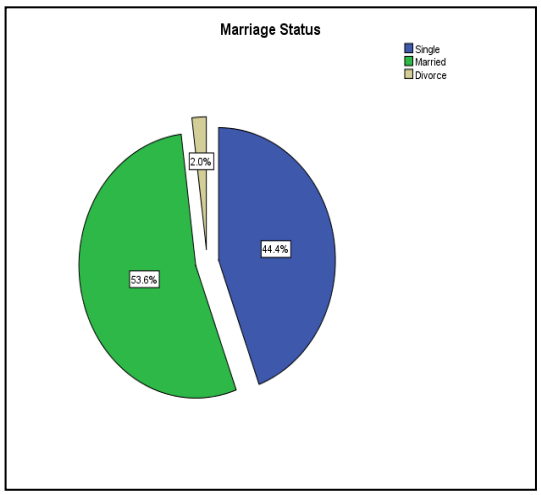


Figure 4: Race

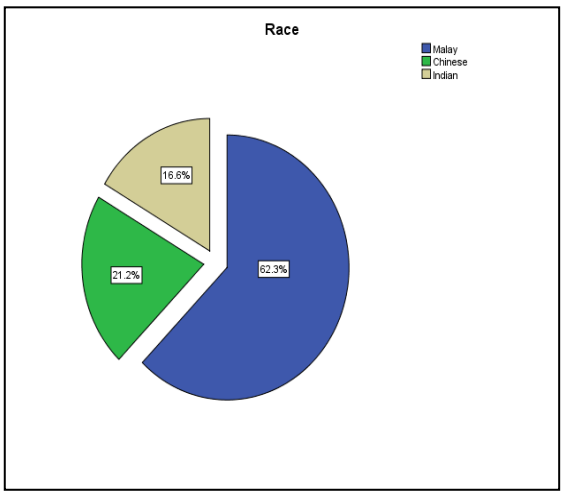


Figure 5: Level of Education

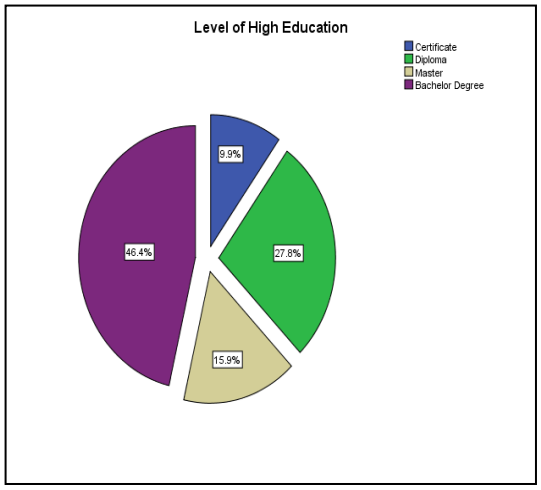


Figure 6: Position

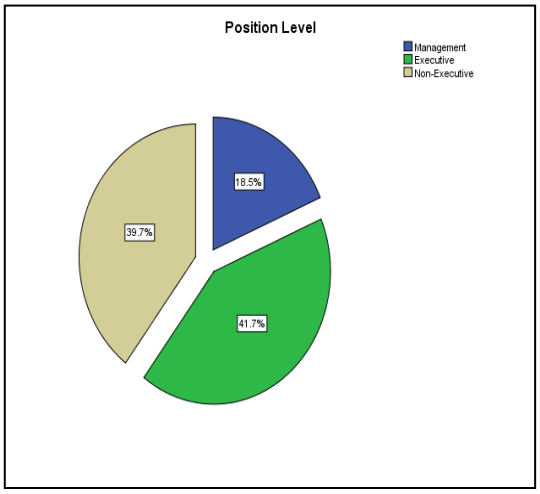
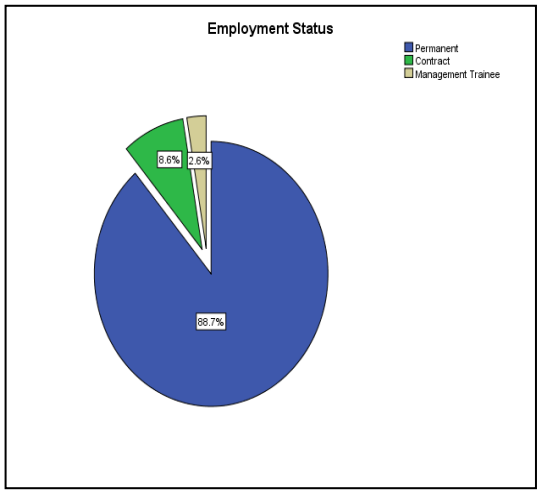


Figure 7: Employment Status



4.2 Training and Supervision, Safety and Health Work Procedure and Safety Behaviour.

The relationships between all studied variables were investigated using the Pearson product-moment correlation coefficient. The Cronbach's alpha reliability statistic of the variables studied as shown in table below.

Table 1: Survey Instrument Reliability

Construct	Cronbach's Alpha	N of items
Training and Supervision	.897	8
Safety and Health Work Procedures	.888	7
Safety Behaviour	.713	14

The reliabilities shown in Table 1 above exceed the recommended value of 0.70, ranging from .713 to .897 providing support for the validity of the measures of the research (Nunnally, 1967).

Table 2: Descriptive Analysis

	Mean	Std. Deviation
Training and Supervision	4.301	.507
Safety and Health Work Procedure	3.942	.490
Safety Behavior	4.045	.323

The result had shown as above in Table 2. The respondents felt that there was high training and supervision practices within the organization (mean score = 4.301). The also felt that there were high safety and health work procedure being applied (mean score = 3.942). The respondent perceived that they behavior go well with the demand for high safety behavior as demanded by the organization (mean score = 4.045). .

Table 3: Correlation Analysis

		Safety Behaviour	Training and Supervision	Safety and Health Work Procedures
Safety Behaviour	Pearson Correlation	1	.703**	.643**
	Sig. (2-tailed)		.000	.000
	N	150	150	150
Training and Supervision	Pearson Correlation	.703**	1	.667**
	Sig. (2-tailed)	.000		.000
	N	150	150	150
Safety and Health Work Procedures	Pearson Correlation	.643**	.667**	1
	Sig. (2-tailed)	.000	.000	
	N	150	150	150

		Safety Behaviour	Training and Supervision	Safety and Health Work Procedures
	N	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 reports the correlations between all studied variables. In reference to Guilford's Rules of Thumbs (2012), the relationship between training and supervision with safety behavior is considered to be strong and significantly positively correlated with r = .703 and P < 0.01. Meanwhile, with respect to the relationships between safety and health work procedures with safety behavior was significant at P < 0.01 and also strong positive correlated with r = 0.*643*.

5. DISCUSSION

All work is involving the risk of accidents. Though accidents may be assumed can be avoided yet reduction in, however prevention of human error is the most effective way of reducing accidents (Pidgeon and O'Leary, 2000). As argued by Weinstock et al., (2012), safety and health training for the employees is an integral part of occupational safety and health. Organization should realize how well are they training and supervising their employees in health and safety. Under-trained employee can cause serious injuries and even death. Even safety and health-trained employees still apply incorrect practice when work under stress or supervised badly by their employer (Chauke, 2011). For that reason, organization should implement a systematic and comprehensive safety and health training to enhance the safety behaviour among the employees in the organization. The employees need to be guided and directed in safe working practices and procedures, notify the potential hazards and perform on creating a safety and health awareness at the workplace in order to create positive attitude and motivation supportive to safety and health rules at workplace. The most precious management strategy of all (Cooper, 1995) is to know how important training is and get involved all levels of the management as their presence delivered a clear concept to all employees about the importance of safety and health within the organization (Gruetzner, 1998). Previous research (Shimmin et al., 1981) has shown that in a sample of accident victims, accidents are due to inappropriate behaviour or equipment usage. It is shows that, the employee accidents are due to low level of safety behaviour. Proactive safety behaviour represents the employee actions that go beyond normal roles involving such as giving safety recommendations and supporting other employees to perform safety and etc. (Tas and Rowlinson, 2014).

Safety behaviours that are appropriate in construction are the compliance and proactive safety behaviours. Compliance of safety behaviour is the behaviour of following formal work procedure and safety routine such as adhering to safe work practice (Tas and Rowlinson, 2014). From previous study, Chauke (2011) said that with safety and health procedure, it can help to make sure that the task that employee do in their routine work are implemented safely especially for employee that recently appointed and less experience because it will make the behaviour of the employee to do their work in safety manner. By following the safe work procedures that prescribed by safety and health policies and procedures such as by wearing and using personal protective equipment that provide by the organization and be conscientious and proactive about safety and health at workplace, it should minimize the workplace injury by taking the safety behaviour as part of the employee routine work (Johnson, 2014). The occupational accidents can be decrease when the safety behaviour changes and a positive (Gruetzner, 1998). Genuine safety behaviour is constituted by adhering to organizational safety policies, rules and regulations, contribution in organizational safety committee and a strong personal commitment to improve safety and health within the organization. Employers and employees with good safety behaviour are particularly play a significant role in achievement of safety compliance to occupational, safety and health improvement in the construction industry. Studies have shown that an improvement need to be done whereas employers' behavioural safety compliance factors are strongly recommended to be provided and strengthened by employers to the employees in order to achieve organization goals

and eliminate industrial accidents. Active participation of behavioural safety compliance identified will led to greater influence among employees and improves safety behaviour (Zin et al., 2012).

5. CONCLUSION

Safety is an integral part of the workplace that unsafe behaviour is detrimental to an effective and efficient organizational operation. However any organizations are always open to potential mishap of industrial accident due to human behaviour. Parra (2003) highlighted in the study that if employees receive the appropriate training, have proper equipment to do their schedule or routine work and follow the correct working behaviour their understanding of workplace safety behaviour improved and consequently the quantity of working injuries will decreased. Safety and health training should take place right after joining the organization of a new hiring and consist of clear guidelines (Chapeskie and Breslin, 2003). It is hope that this study is useful to grasp deeper understanding of the linkage of applicable OSHA practice and safety behaviour will ultimately help organization to identified specified preventive measure that reduce risk among the employee at workplace.

REFERENCES

Lindop, P. J., & Rotblat, J. (1971). Radiation pollution of the environment. Bulletin of the Atomic Scientists, 27(7), 17–24.

Pidgeon, N., & O'Leary, M. (2000). Man-made disasters: Why technology and organisations (sometimes) fail. Safety Science, 34(1–3), 15–30.

Geller, E.S. (2000). The psychology of safety handbook. Boca Raton, Florida: Lewis Publishers.

Johnson, S.E. (2003). Behavioral safety theory: Understanding the theoretical foundation. Professional Safety, 48, 10.

Mahmood, R., Mohd Isa, M. F., Mustafa, M., Abd Aziz, F. S., and Salleh, A. (2010). Safety Behaviour: The Role of Safety Commitment.

Bjerkan, A. M. (2010). Health, environment, safety culture and climate - analysing the relationships to occupational accidents. Journal of Risk Research, 13(4), 445–477.

Cooper, M. D., & Phillips, R. A. (2004). Exploratory analysis of the safety climate and safety behavior relationship. Journal of Safety Research, 35(5), 497–512.

Glendon, A. I., & Stanton, N. A. (2000). Perspectives on safety culture. Safety Science, 34(1–3), 193–214.

Armstrong, M. (2006). A handbook of Human Resource Management Practice, 10th ed. London: Kogan Page Limited.

Sawe, M.J., (2013). Effects of occupational health and safety practices on employee's productivity in Mumias Sugar Company, Kenya, Master, MOI University.

Weinstock, D. and Slatin, C. (2012). Learning to take action: The goals of health and safety training, new solutions, Vol. 22(3) 255-267.

Ali, H., Abdullah, N.A. & Subramaniam, C. (2009). Management practice in safety culture and its influence on workplace injury an industrial study in Malaysia Disaster Prevention and Management, Vol. 18, No. 5, pp. 470-477.

Chauke, T.L., (2011). The impact of cardinal rules on employee safety behaviour at power stations in Mpumalanga, Master Degree, North-West University.

Dahl, O. (2013). Safety compliance in a highly regulated environment: A case study of workers' knowledge of rules and procedures within the Petroleum Industry, Safety Science, Vol. 60 pp 185-195.

Tulonen, T. (2010). Electrical accident risks in electrical work, degree of doctor, Tampere University of Technology.

Cui, L., Fan, D., Fu, G. and Zhu, C. J., (2013) An integrative model of organizational safety behavior . Journal of Safety Research 45 (2013) 37–46.

Khdair, W. A., Shamsudin, F. M. and Subramaniam, C. (2011) Improving safety performance by understanding relationship between management practices and leadership behavior in the oil and gas industry in Iraq. 2011 International Conference on Management and Artificial Intelligence.

R. Krause and R. Russell (1994), "The behavior-based approach to proactive accident Investigation," Professional Safety, vol.39,1994.

Mason, S. (1997). Procedural violations – causes, costs and cures, In: Redmill, F., Rajan, J. (Eds.), Human Factors in Safety Critical Systems. Butterworth Heinemann, Oxford, pp. 287-318.

McSween, T.E. (2003). The values-based safety process: Improving your safety culture with behavior-based safety.

Neal, A., Griffin, M.A and Hart, P.M. (2000). The impact of organizational climate on safety climate and individual behaviour. Safety Science, 34, 99-109.

Neal, A. and Griffin, M.A. (2006). A Study of the lagged relationship among safety climate, safety motivation, safety behavior and accidents at the individual and group Levels. Journal of Applied Psychology, 91 (4), 946-358.

Garavan, T.N. and O'Brien, F., (2001). An Investigation into the relationship between safety climate and safety behaviours in Irish Organizations. The Irish Journal of Management (incorporating IBAR), 22, 1, pp. 141-170.

Akpan, E. I., (2013). Effective Safety and Health Management Policy for Improved Performance of Organizations in Africa. International Journal of Business and Management, Vol. 6, No. 3

Chapeskie, K., Breslin, F.C., (2003). Securing a safe and healthy future: the road to injury prevention for Ontario's young workers. Rehabilitation Community Care

Cooper, J.B. (1995). The incident reporting system does not detect adverse drug events: a problem for quality improvement

Cooper, M.D., (1998). Working at heights: A psychological perspective. Journal of the Institution of Occupational Safety and Health, 2(1):7-13

Cooper, M.D. (2000). Towards a model of safety culture. Safety Science, 36, 111-136

Cooper, M.D. (2005). Exploratory analyses of managerial commitment and feedback consequences on behavioural safety maintenance. Journal of Organizational Behavior Management.

Fugas, C. S., Silva, S. A. and Melia, J. L. (2012) Another look at safety climate and safety behavior: Deepening the cognitive and social mediator mechanism. Accident Analysis and Prevention 45, 468-477

Garavan, T.N. and O'Brien, F., (2001). An Investigation into the Relationship Between Safety Climate and Safety Behaviours in Irish Organizations, The Irish Journal of Management (incorporating IBAR), 22, 1, pp. 141-170

Geller, E.S. (2000). The psychology of safety handbook. Boca Raton, Florida: Lewis Publishers

Geller, E. (2011). Psychological science and safety: large-scale success at preventing occupational injuries and fatalities, Association of Psychological Science, Vol. 20 No. 2, pp. 109-14

Gruetzner, C.C., (1998). Management Practices that Affect the Embedding of Occupational Health and Safety into an Organization's Culture, Degree of Doctor Philosophy, Walden University

Hamouda, A.S., (2013). Attitude towards Safety Culture among Employees at Incentive Care Unit in the Governmental Hospital of Gaza City, Master Degree, Islamic University, Gaza

Hofmann, D.A. and Stetzer, A., (1996). A cross-level investigation of factors influencing unsafe behaviors and accidents. Personnel Psychology, vol. 49, no. 2, pp. 307-39

Hofmann, D.A. and Stetzer, A., (1998). The role of safety climate and communication in accident interpretation: Implications for learning from negative events. Academy of Management Journal, 41(6):644-657

Mason, S. (1997). Procedural violations – causes, costs and cures, In: Redmill, F., Rajan, J. (Eds.), Human Factors in Safety Critical Systems. Butterworth Heinemann, Oxford, pp. 287-318.

Moleman, S., (1997). Discovering the Barriers to Workplace Health and Safety Training for New and Young Workers. Master Degree, Dalhousie University

Othman, T. A. (2011). The Cause Factors And Identification Of Countermeasures On Motorcycles Accident Among Syarikat Bekalan Air Selangor (SYABAS) Workers, Master Degree Dissertation, UKM, Malaysia

Parra, L., M. (2003). The Efficacy of Safety and Return-To-Work Programs on Employees' Perception of Workplace Safety Climate, Nova Southeastern University

Robson, L.S. (2010). Institute for Work and Health and the National Institute for Occupational Safety and Health, A Systematic Review of the Effectiveness of Training & Education for the Protection of Workers (DHHS (NIOSH) Publication No. 2010-127)

Sawe, M.J., (2013). Effects of Occupational Health and Safety Practices on Employee's Productivity in Mumias Sugar Company, Kenya, Master, MOI University

Seo, D., (2005). An explicative model of unsafe work behavior, Safety Science, 43:187-211

Tulonen, T. (2010). Electrical Accident Risks in Electrical Work, Degree of Doctor, Tampere University of Technology

Weinstock, D. and Slatin, C. (2012). Learning To Take Action: The Goals of Health and Safety Training, New solutions, Vol. 22(3) 255-267

Zin, S.M. and Ismail, F., 2012. Employers' Behavioural Safety Compliance Factors toward Occupational, Safety and Health Improvement in the Construction Industry. Procedia-Social and Behavioral Science, 36, 742-51.

Nunnally , J. C. (1967). Psychometric Theory. New York: McGraw-Hill.

The Relationship between Talent Management Practices and Employee Retention in the Information and Technology (IT) Organizations in Selangor, Malaysia

Nurul Ezaili Alias[1], Roshidi Hassan[2] and Rozana Othman[3]
1 1Faculty of Business Management, Universiti Teknologi MARA Melaka,
Kampus Bandaraya Melaka, 110 Off Jalan Hang Tuah, 75300 Melaka, Malaysia
nurulezaili193@bdrmelaka.uitm.edu.my
2 Faculty of Business Management, Universiti Teknologi MARA Shah Alam,
40450 Shah Alam, Selangor Darul Ehsan, Malaysia
roshidih@salam.uitm.edu.my
3 Faculty of Business Management, Universiti Teknologi MARA Melaka,
Kampus Bandaraya Melaka, 110 Off Jalan Hang Tuah, 75300 Melaka, Malaysia
rozana@bdrmelaka.uitm.edu.my

ABSTRACT

As Information Technology (IT) industry is vital to the country's economic growth, it is thus, important that its operations been run smoothly so that long term growth and development can be achieved with fewer obstacles. Hence, a constant availability of a large pool of talented and competent employees is crucial to carry out these functions. However, employee turnover problem is a critical phenomenon within IT industry both locally and globally. To curb this problem, academic attentions have diverted their focus upon the implementation of talent management practices that helps to improve employee retention. The main objective of this conceptual paper is to examine the role of talent management practices (managerial support, employee career development and rewards and recognitions) how it links with employee retention within IT organizations, specifically in Selangor. A quantitative study was deployed. The research instrument involved comprised of a self-administered questionnaire. A convenience sampling technique was used for this research. A total of 581 respondents responded valid questionnaires and it gives an average response rate of 77 % for the study. Data gathered were initially analysed using SPSS version 20.0. The findings of based on Regression analysis indicate talent management practices (managerial support, employee career development and rewards and recognitions) were significantly related with employee retention.

Key Words: Talent Management Practices, Employee Retention, IT organizations, Turnover.

1. INTRODUCTION

It is reported that the transformative use of Information, Communication and Technology (ICT) sector has been recognized as the main driver to accelerate the achievement of Malaysia's 2020 aspirations (Economic Planning Unit, 2010, 2012). The ICT sector is targeted as one of the vital areas for engendering the Malaysia's economic growth and becomes a very important industry due to its role in stimulating expansion for other industries in Malaysia (Prime Minister Department, 2012). The ICT sector in Malaysia accounted for 9.8% of GDP in 2009 and it is targeted to increase to 10.2% by 2015 (Economic Planning Unit, 2010). In conjunction to this, the government has recognized the human capital development in this sector represents a critical component to the Malaysia's economic growth. In order to achieve the goal is through enhancing the human capital capabilities and addressing their needs. Thus, one of the initiatives to develop this type of human capital is by strengthening the talent management practices in entire organizations in Malaysia (Bux, Ahmad, & Othman, 2009; Bux & Othman, 2010; Syed Abd Nasir, Hassan, Embi, & Rahmat, 2012). This shown that the government clearly acknowledges the

retention of employees in Information and Technology (IT) sector is crucial and critical to attain economic growth. Hence, both Malaysia's public and private organizations in ICT sector must devise strategic initiatives of talent management practices not only to attract employee talents but also to enhance commitment in retaining them.

Although the nature of this relationship is interesting, there is no study has analysed the relationships between the three (3) constructs of talent management practices and employee retention in Asian's setting and particularly in the Malaysia's IT industry. Hence, new chapter unfolds whereby retention of employee talents becomes critical to the organization and economic. Therefore, scholars and researchers believe the needs to focus on talent management practices influence to employee retention of human capital is crucial. After extent review of the workplace talent research literatures, the author sets out to design a testable hypothesized model linking between talent management practices and employee retention. This paper seeks to address the gap in knowledge field by determining the relationship between talent management practices (managerial support, employee career development and rewards and recognitions) and employee retention in the selected IT organizations in Selangor.

2. TURNOVER ISSUE

IT industries globally have been characterized by a high rate of employee turnover (Tham, Pee, Kankanhalli, & Tan, 2008; Westlund & Hannon, 2008) and this critical phenomenon has emerged since 1990s (Acton & Golden, 2002; Naggiar, 2001). As a matter of facts, Malaysia's IT organizations are also facing the same issue in retaining their employees. This is reported from surveys conducted by the Malaysian Employers Federation (MEF) (2012) and Ministry of Human Resource (MoHR) (2013), the data reveal ICT sector facing the highest employee turnover rate in Malaysia (Goh, 2012; Ministry of Human Resource, 2013). In addition, according to the data obtained from the Retrenchment Unit, Department of Labour (JTK), Malaysia, on employee turnover rate within ICT organizations across main states in Malaysia, it reveals Selangor is facing the highest voluntary turnover rate in 2010 and 2011 with 50 and 18 cases were reported. Manifestly, it can be seen, IT industries globally and locally are facing this critical phenomenon of high employee turnover. Hence, this become a threat to the industry and economic growth.

3. EMPLOYEE RETENTION

Employee retention is an important dimension in strategic human resource management (HRM) to sustain a competitive advantage for companies, particularly in IT industries in today's global market (Alias, Noor, & Hassan, 2014; Alias, Nor, & Hassan, 2014; Arokiasamy, 2013; Mohlala, Goldman, & Goosen, 2012). Studies on the benefits of retaining employees in IT companies have significantly indicated that IT companies can gain a higher operating performance, higher returns on assets and higher returns on capital employed (Kumar, 2012). In contrast, the loss of employees is expensive and may thus be detrimental to IT companies (D. Lockwood & Ansari, 1999; Tham et al., 2008). Further, the effect of losing employees has significantly impacted on the performance of IT companies, loss of knowledge, experience, and know-how of companies and thus results in loss of profits (Tseng, 2010). Therefore, IT companies must understand the serious impacts of the loss of their employees and find a way to retain them. This is the focus of this study.

4. RELATIONSHIP BETWEEN TALENT MANAGEMENT PRACTICE AND EMPLOYEE RETENTION

Talent management practices that demonstrate commitment to manage the human resources result in more engaged employees and lower the employee turnover rate (Arokiasamy, 2013; N. Hassan, Mohammad, Mohd, Rozilah, & Ali, 2015; R. Hassan, 2014). In contributing to the effective implementation, an organization's talent management should also contribute to employee retention (Alias, Noor, et al., 2014; Alias, Nor, et al., 2014). Organizations that can fully retain their employees through effective talent management practice will clearly have a competitive advantage

(Lightfoot, 2015; Williams, 2015). Effective employee retention fosters an environment of stimulation, such as satisfactory provide development and learning, support, rewards and recognitions in their talent management program (Glen, 2006; N. R. Lockwood, 2007; Williams, 2015). Improved outcomes in winning the employee talents' heart will only come to those organizations that learn to master talent management pracrices (Sweem, 2009). Therefore, organizations need to rethink their approaches to talent management and how it affects employee engagement (Grossman, 2007).

4.1. Talent Management Practice (Managerial Support) and Employee Retention

The role of a manager is a key component to retain employee. Supports from them enable employee commitment to the job and the organization. Managers also are an important key in practicing effective talent management in retaining employees (Ellehuus, 2012). Further, managers need to create the environment where employees feel more passionate about their work and exhibit the behaviors that organizations need to drive better results, not only for the organizations, but also for employees as individuals (Mat Nor, Alias, & Hassan, 2013; Stahl et al., 2012). Hence, managerial support is a very important predictor of talent management strategy in retaining employee talent. However, Tymon Jr. et al. (2010, p. 111) state "a large empirical study in a developing country is lacking". Further, managerial support for employees also plays an important role in organizational effectiveness (Riccio, 2010). Therefore, it is hypothesized that,

Hypothesis 1 (H1): There is significant relationship between talent management practice (managerial support) and employee engagement.

4.2. Talent Management Practice (Employee Career Development) and Employee Retention

Learning is no longer solely associated with education and is no longer viewed as a pre-career affair. There has been a shift from job security and lifelong employment to lifelong learning, employability, and talent management (Nilsson & Ellström, 2012; Subramaniam & Arumugam, 2013). Moreover, Riccio (2010) outlines his professional experience which illustrates his passion for employee career development and for institutions to incorporate a holistic talent management initiative for individuals at all level of the organization. This is to ensure the bright opportunities for employees to further grow in future times. Further, the main purposes of employers nowadays in implementing employee career development programs are not only to support the employees in developing career but also use the initiatives to retain their potential employees (Alias, Noor, et al., 2014; Mustafa Kamil, Abdul Hamid, Hashim, & Omar, 2011). Therefore, it is hypothesized that,

Hypothesis 2 (H2): There is significant relationship between talent management practice (employee career development) and employee engagement.

4.3. Talent Management Practice (Rewards and Recognitions) and Employee Retention

Talent management practice of extrinsic rewards also called as hygiene factors, tend to result in an increase in intrinsic motivation when they were expected and linked to a set of standards. Research has shown recognitions to be associated with a number of desirable work outcomes. These include retention to the job: work competence and work progress or performance (Mustapha, 2013; Tymon Jr., Stumpf, & Doh, 2010). Tymon Jr. et al. (2010) found intrinsic rewards (recognitions) have indirect effect to employee engagement. Therefore, it is hypothesized that,

Hypothesis 3 (H3): There is significant relationship between talent management practice (rewards and recognitions) and employee engagement.

5. METHODOLOGY

5.1. Research Design

A research design embodies the design and plans employed in gathering, analyzing and interpreting data. It comprehends the basic structure of the study. This is a quantitative study. It incorporates a scientific research inquiry designed to study the relationship between the independent, mediating and dependent variables. The research instruments comprise of self-administered questionnaires (primary source). A set of questionnaire using Likert type scale (1-5) were administered to respondents by the researcher. The Cronbach alpha values at the pre-test and actual test are above 0.8. It is found that the cronbach's alpha value for this study is reliable where it is above 0.8. Data collected were analyzed using SPSS software (version 20.0).

5.2. Research Framework

The variables of this study are talent management practices: managerial support, employee career development and rewards and recognitions (independent variables), employee engagement (mediating variable) and employee retention (dependent variable). These are depicted in the research framework in Figure 1:

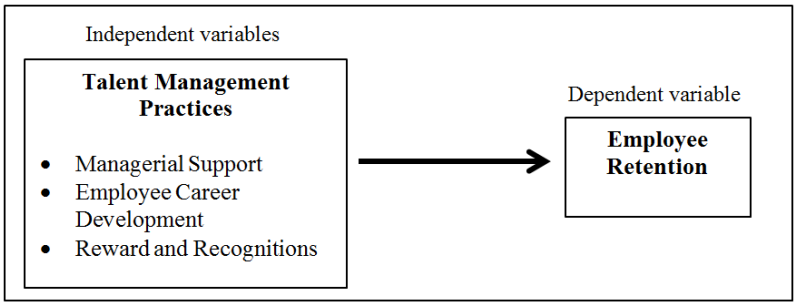


Fig. 1 Research framework

5.3. Sampling

The sample of target population was drawn from executives and above who work in IT companies in Selangor. This study conveniently selected three (3) IT companies in Selangor and there were 840 employees from a convenience sampling. The unit of analysis of the study were executives and above level from various departments of the selected IT companies.

5.4. Data Analysis

In order to test the relationship between variables, Regression analysis is performed to determine the relationships between variables and test the hypotheses.

6. RESULTS

6.1. The Relationship between Talent Management Practices (Managerial Support, Employee Career Development and Rewards and Recognitions) and Employee Retention

In this section, the relationship between each independent variable and dependent variable were analyzed. There are three (3) hypotheses pertaining to the correlation between independent variables and mediating variable, H1, H2, and H3. Table 1, Multiple regression results between talent management practices and employee retention

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.758	.550		1.377	.169
	Managerial support	.092	.034	.097	2.723	.007
	Employee career development	.360	.044	.337	8.237	.000
	Rewards and recognitions	.387	.034	.428	11.533	.000
a. Predictors: (Constant), Rewards and Recognitions, Managerial Support, Employee Career Development						
b. Dependent Variable: Employee Retention						

According to Table 1, significant relationships of independent variables (talent management practices: managerial support, employee career development and rewards and recognitions) to the dependent variable (employee retention) were found above. The regression results confirm that all three (3) independent variables has a significant relationship to the dependent variable.

Individually, the first variable talent management practice: managerial support shows lowest contribution towards employee retention with lowest beta value (B = 0.092, p = 0.007). This finding is consistent with previous studies (Alias, Noor, et al., 2014; Doh, Stumpf, & Tymon Jr., 2011; Ellehuus, 2012). The second variable talent management practice (employee career development) (B = 0.360, p = 0.000) shows a significant contribution towards employee retention because the p value is lower than 0.05. This finding is consistent with previous studies (Alias, Nor, et al., 2014; Mustafa Kamil et al., 2011; Nilsson & Ellstrom, 2012). The third variable talent management practice (rewards and recognitions) (B = 0.387, p = 0.000) shows the highest significant contribution towards employee retention. This finding is consistent with previous studies (Alias, Nor, et al., 2014; Tymon Jr. et al., 2010). As a result, talent management practices (managerial support, employee career development and rewards and recognitions) have significant relationship with employee retention. Therefore, H1, H2 and H3 were supported.

7. DISCUSSION AND CONCLUSION

The findings provide new insight to the field of study of talent management and employee retention. Talent management practices and employee retention constructs were a neglected area of study. Generally, the findings of the study also explained, when employees being provided with satisfactory talent management practices (managerial support, employee career development and rewards and recognitions), they will be more retained with the job and organization, and therefore, they tend to remain in the same organization for a long run.

8. ACKNOWLEDGEMENTS

First of all, Alhamdulillah, we thank Al-Mighty Allah SWT for giving us the opportunity and health for the researchers to complete the research successfully. Thanks to Dean of Faculty of Business Management (UiTM), Professor Dr Zaini Abdullah, who had supported us by giving us the permission and fund to attend some conferences. We would also like to convey our special appreciation to our families for their prayers, support, understanding, compassion, sacrifices and inspiration for us to successfully complete this research study.

REFERENCES

Acton, T., & Golden, W. (2002). Training: The Way to Retain Valuable IT Employees ? In *InSITE - "Where Parallels Intersect"* (pp. 1–12). Publisher@Informing Science.org.

Alias, N. E., Noor, N. M., & Hassan, R. (2014). Examining the Mediating Effect of Employee Engagement on the Relationship between Talent Management Practices and Employee Retention in the Information and Technology (IT) Organizations in Malaysia. *Journal of Human Resources Management and Labor StudiesOnline) Journal of Human Resources Management and Labor Studies*, *2*(22), 227–242.

Alias, N. E., Nor, N. M., & Hassan, R. (2014). The Relationships Between Talent Management Practices, Employee Engagement and Employee Retention in the Information and Technology (IT) Organizations in Selangor. *International Conference on Business Management (AiCoMB 2014)*.

Arokiasamy, A. R. a. (2013). A qualitative study on causes and effects of employee turnover in the private sector in Malaysia. *Middle East Journal of Scientific Research*, *16*(11), 1532–1541. doi:10.5829/idosi.mejsr.2013.16.11.12044

Bux, S. R., Ahmad, H. A., & Othman, H. (2009). *Talent Management Practices At Government-Linked Companies (GLCs)*. Malaysia Productivity Corporation.

Bux, S. R., & Othman, H. (2010). *Talent Management Practices At Government-Linked Companies (GLC) II*. Malaysia Productivity Corporation (MPC).

Doh, J. P., Stumpf, S. A., & Tymon Jr., W. G. (2011). Responsible Leadership Helps Retain Talent in India. *Journal of Business Ethics*, *98*(S1), 85–100. doi:10.1007/s10551-011-1018-3

Economic Planning Unit. (2010). *Tenth Malaysia Plan 2011-2015*.

Economic Planning Unit. (2012). *The Malaysian Economy in Figures 2012*.

Ellehuus, C. (2012). Transforming business leaders into talent champions. *Strategic HR Review*, *11*(2), 84–89. doi:10.1108/14754391211202143

Glen, C. (2006). Key skills retention and motivation: the war for talent still rages and retention is the high ground. *Industrial and Commercial Training*, *38*(1), 37–45. doi:10.1108/00197850610646034

Goh, L. (2012). Why job-hoppers hop. *Malaysian Employers Federation (MEF)*.

Grossman, R. J. (2007). HR Magazine IBM's HR Takes a Risk. *HR Magazine*. Retrieved from http://www.shrm.org/Publications/hrmagazine/EditorialContent/Pages/0407grossman.aspx

Hassan, N., Mohammad, A., Mohd, F., Rozilah, A. A., & Ali, S. (2015). Religiosity Perceptions and Employee Turnover Intention in Malaysia. *International Journal of Social Science and Humanity*, *5*(1), 120–125. doi:10.7763/IJSSH.2015.V5.436

Hassan, R. (2014). FACTORS INFLUENCING TURNOVER INTENTION AMONG TECHNICAL EMPLOYEES IN INFORMATION TECHNOLOGY ORGANIZATION : A CASE OF XYZ (M) SDN . BHD. *International Journal of Arts and Commerce*, *3*(9), 120–137.

Kumar, J. V. (2012). HRM Practice On The Retention Of Employees Of Information Technology Sector. *International Journal of Scientific Research*, *1*(2277), 4–6.

Lightfoot, G. E. (2015). *Talent Retention in Organizations Facing Staff Reductions via Layoffs*.

Lockwood, D., & Ansari, A. (1999). Recruiting and retaining scarce information technology talent : a focus group study. *Industrial Management & Data Systems Emerald Article*, *99*(6), 251–256.

Lockwood, N. R. (2007). *Leveraging Employee Engagement for Competitive Advantage: HR's Strategic Role*.

Mat Nor, N., Alias, N. E., & Hassan, R. (2013). Linking Talent Management Practices to Employees' Engagement and Retention: A Case of Malaysian Information and Technology (IT) Organizations in Selangor.

Ministry of Human Resource. (2013). *Retrenchment by Sector* (Vol. 2).

Mohlala, J., Goldman, G. a., & Goosen, X. (2012). Employee retention within the Information Technology Division of a South African Bank. *SA Journal of Human Resource Management*, *10*(2), 1–11. doi:10.4102/sajhrm.v10i2.438

Mustafa Kamil, B. A., Abdul Hamid, Z., Hashim, J., & Omar, A. (2011). A study on the implementation of talent management practices at Malaysian companies. *Asian Journal of Business and Management Sciences*, *1*(4), 147–162.

Mustapha, N. (2013). The Influence of Financial Reward on Job Satisfaction among Academic Staffs at Public Universities in Kelantan , Malaysia. *International Journal of Business and Social Science*, *4*(3), 244–249.
Naggiar, J. L. (2001). *An exploration of retention practices in the IT industry*. Concordia University.
Nilsson, S., & Ellstrom, P.-E. (2012). Employability and talent management : challenges for HRD practices. *European Journal of Training and Development*, *36*(1), 26–45. doi:10.1108/03090591211192610
Nilsson, S., & Ellström, P.-E. (2012). Employability and talent management: challenges for HRD practices. *European Journal of Training and Development*, *36*(1), 26–45. doi:10.1108/03090591211192610
Prime Minister Department. (2012). *Economic Transformation Programme Annual Report 2012*.
Riccio, S. J. (2010). *Talent Management In Higher Education: Identifying And Developing Emerging Leaders Within The Administration At Private Colleges And Universities*. University of Nebraska.
Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., … Wright, P. (2012). Global Talent Management: How Leading Multinationals Build and Sustain Their Talent Pipeline. *Sloan Management Review*, *53*(2), 25–42. Retrieved from http://epub.wu.ac.at/3616/1/globaltalent.pdf\nhttp://www.insead.edu/facultyresearch/research/doc.cfm?did=2738
Subramaniam, I. D., & Arumugam, T. (2013). Barriers To Women Managers' Career Progressions In Malaysian Government Link Companies (GLCs), *7*(2), 248–256.
Sweem, S. L. (2009). *Leveraging Employee Engagement through a Talent Management Strategy: Optimizing Human Capital through Human Resources and Organization Development Strategy in a Field Study*. *Copyright 2009 by ProQuest LLC.* Benedictine University.
Syed Abd Nasir, S. J., Hassan, R., Embi, R., & Rahmat, A. K. (2012). Managing Talent in Two Leading Companies in Malaysia. *International Conference on Technology and Management*, *21*, 125–130.
Tham, Z.-C. G., Pee, L. G., Kankanhalli, A., & Tan, G. W. (2008). *Turnover in Information Systems Development Projects - Managing Forgetting*. *PACIS*.
Tseng, C. (2010). *The retention of software development employees in the IT industry in Taiwan*. Southern Cross University, Australia.
Tymon Jr., W. G., Stumpf, S. A., & Doh, J. P. (2010). Exploring talent management in India: The neglected role of intrinsic rewards. *Journal of World Business*, *45*(2), 109–121. doi:10.1016/j.jwb.2009.09.016
Westlund, S. G., & Hannon, J. C. (2008). Retaining Talent: Assessing Job Satisfaction Facets Most Significantly Related To Software Developer Turnover Intention. *Journal of Information Technology Management*, *XIX*(4), 1–15.
Williams, S. K. (2015). *Talent Management And Retention In Small Family-Owned Businesses: A Multiple-Case Qualitative Study*.

Understanding Determinants of Customer Retention among Three Service Providers in Malaysia

Syukrina Alini Mat Ali[1], Noor'ain Mohamad Yunus[2], Sri Fatiany Abd Kader Jalaini[3]

PhD Candidate, Department of Economic and Management Studies, International Islamic University Malaysia, Kuala Lumpur

PhD Candidate, Department of Economic and Management Studies, International Islamic University Malaysia, Kuala Lumpur

PhD Candidate, Department of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur

ABSTRACT

This paper contributes to greater understanding on how the factors may influence customer retention in telecommunication industry. The telecommunication industry in Malaysia in 2014 shows a positive growth, whereby the level of penetration is higher than the previous years. This is due to the improvement of coverage areas, Internet access connection and others. Maxis, Digi and Celcom penetrate almost 87% of the telecommunication market shares in Malaysia. Therefore, with the rapid competition from these three service providers, the customers can make a wiser decision to switch and migrate to another service provider if they are dissatisfied with the services provided. Hence, this study was conducted to describe the factors that determine customer retention in telecommunication industry in Malaysia. The results were drawn from ten semi structured interviews. Moreover, the result has uncovered five main themes for the reason to choose a service provider, determinants of customer retention, experience, expectation and reason to switch from the respondents towards their service provider. Furthermore, participant addressed the main factor to retain them as; line and network coverage, price, good services, word of mouth and branding. It is recommended for the service provider to focus on the issues addressed by the participants. Future studies should be carried out to identify the service failure and recovery in the retention context.

Key Words: Customer Retention, connectivity, price, telecommunication industry, Malaysia

1. INTRODUCTION

Customer retention in mobile industry is critical since the service provider lose about 27-30 percent of their subscribers every year (Peighambari, 2007; Ranaweera & Prabhu, 2003; Vandenbosch & Dawar, 2002). It is estimated that almost every month, these service providers lost around 2.2 percent and the cost of acquiring new customers were estimated around $600 and $800 that include advertising, marketing sales and commissions (Vandenbosch & Dawar, 2002).

Many studies have shown that it is far more expensive to attract new customers rather than to retain existing customers. A past researcher stated that marketing resources should be focusing and spending on the existing customers rather than getting a new one. This statement is agreed by other researchers in the banking industry which advocate the importance of retaining the existing customer. (Al-hawari, Ward, & Newby, 2009) In addition, (Boohene, Agyapong, & Gonu, 2013) posit that retaining current customers bring a lot of benefits to the bank.

The user of cellular phone in Malaysia can be considered as the highest number in Asia Pacific based on the statistics of the Malaysian Communication and Multimedia Commisson (MCMC) in 2013. It is reported that, the number of users per 100 are as follows: Singapore, 155.9 %, Vietnam, 130.9 %, Malaysia, 143.8 %, Cambodia, 133.9 % and Thailand, 140.3 %. (SKKM report, 2014). Surprisingly the figure shows that most of the citizens in Malaysia own more than one mobile phone. In 2014 the number of users increased to 3.3 % per 100 users, showing an increment of 148.3 % per 100 users.

In Malaysia, Maxis, Digi and Celcom are the three major competing companies in terms of providing different types of services for the customers. According to the current statistics from these three providers, (www.thestaronline.com) in 2012 alone Maxis had almost 13.8 million users, Celcom 13 million users and Digi 10.5 million users in Malaysia. It shows that these numbers are quite close and the numbers kept changing each year. The country has 42.6 million mobile subscribers, representing 143% penetration rate as of June 30, 2013. Of that, 7.5 million are postpaid users and 35 million are prepaid.

This figure shows that customers tend to subscribe and migrate to other service providers or choose to maintain the account but subscribe to new service provider. In the year of 2013, there is a positive increment of mobile subscription by 4.9% or two million to 43 million. (Malaysian Communications and Multimedia Commission, 2014) The trend is increasing due to the booming of new mobile devices that support data services with affordable price, customer subscribes to the second mobile and the government introducing youth communication package (Pakej Komunikasi Belia) that offers a RM200 rebate for the youth that has a monthly income of RM3,000 and below to purchase a selected smartphone with 3G facility. It is estimated that 1.5 million youths redeem that package.

Furthermore, based on the research conducted by Frost & Sullivian involving 1,300 participants that was randomy selected from online panel starting from October to November 2014, 83% of consumers in Malaysia stated their wilingness to change to other telecom services due to transparency issues in price and subscription plan. (Frost & Sullivian, 2015) Moreover, according to Celcom CEO Datuk Seri Shazali Ramly, in the Stars Newspaper, September 2013 ... "*in this competitive market, customer also demanding quality services. In the future, it is predicted that the service provider try to provide the best services to maintain their customers.*"

Customers nowadays have the ability to draw comparisons and choose which company provides good services and ensure that the service provider can fulfil their satisfaction. According to Locke, 2001, customers nowadays are more demanding on products and services they buy. Issue on customers' satisfaction are widely discussed in most of the research in many industries including telecommunication industry. That is why it is important for the company to manage and increase customers' satisfaction in telecommunication industry in gaining more profit and extend the relationship with the customers (Ranaweera & Prabhu, 2003).

A review of related studies on customer retention reveals the focus on these two primary topics; service quality and customer retention (Al-Zoubi, 2013; Amin, Ahmad, & Hui, 2012; Blery et al., 2008; Fullerton, 2014; Karin & Pervez, 2004; Loke, Taiwo, Salim, & Downe, 2011; Özer, Argan, & Argan, 2013; Ranaweera & Neely, 2003; Sirikit, 2000) Although these factors have been studied, several questions still exist, which is mainly due to the determinant of customer retention and their expectation towards service providers. As stated, analysis on the determinants of customer retention is receiving increasing attention in almost all nations. The factors such as service quality satisfaction, loyalty, promotion and advertising and word of mouth have been found to contribute to the service use. Although the major determinant of customer retention has been defined in a theoretical perspective, but there is a need for a new explanation. In addition, data about customer retention in telecommunication industry are well established in the western countries. However, to date, there is insufficient information that addresses the determinants of customer retention in

Malaysia qualitatively. In addition, the expectations of the mobile customer from the service provider had received less attention.

Many literature reviews in the western countries disclose that existing studies of customer retention are primarily quantitative, specifically secondary data analysis. (Chakraborty & Sengupta, 2013; Gerpott, Rams, & Schindler, 2001; Karin & Pervez, 2004; Keiningham, Cooil, Aksoy, Andreassen, & Weiner, 2007; Lewis, 2004; Martey, 2014; Ranaweera & Neely, 2006; Ranaweera & Prabhu, 2003). Although the findings can be generalized to the entire population, qualitative investigations however, provide detailed views, understanding and specific context of the phenomena. By adopting the qualitative approach, this study will be conducted to understand the determinants of customer retention among three service providers in Malaysia. At the same time, it seeks to investigate the expectations of the customer towards these service providers. In general, this study aims to describe the factors that determine customer retention from the participants' point of view. Two questions were asked to guide this study: 1) to understand the determinants of customer retention among three service providers in Malaysia 2) to investigate the expectations of customer towards the service providers

2. METHODOLOGY

This study was done qualitatively to get a greater understanding on determinant of customer retention among three service providers in Malaysia. Moreover, it is also intended to understand the expectations of the customer towards the telecommunication service provider. Convenience sampling is used to select participants as the researcher believe that they can provide accurate answer as they fulfil with the criteria set by the researcher in order to achieve the research objectives. Three suitable criteria's for the prospective participants selected by the researcher are: 1) Citizenship: all participants must be Malaysian; 2) possess a mobile phone and 3) user of either Celcom, Digi or Maxis. By approaching a personal contact, ten participants had been selected and interviewed. The researcher chose the recommended sampling until a point of saturation or redundancy is reached (Merriam, 2009). Thus, when the information given by the participants are redundant for this study, the researcher decided to stop conducting the interview on the tenth participant.

Next, the researcher prepared an interview guideline that contains the details of the interview, the process of conducting the interview, a few advice before commencing the interview and the structure of the question that will be asked by the researcher. The researcher began the interview by introducing the name and the purpose of conducting the study. Then, the participants were informed that all the information given will remain confidential so that they felt free to talk and offer their ideas or opinions in answering the questions. The interview began with a structure question on demographic profile.

Fundamentally, the participants were encouraged to tell their stories about the reason of continuation with the same service provider. They were asked about their experience of using the service provider, the factor that led them to retain with the same provider, and their expectations towards their service provider. Each of the interview session took approximately 10-15 minutes. The interview conversations were recorded by using a tape recorder to ensure all the information given by the respondents were recorded for data analysis process. Moreover, a piece of paper and pen were also used as a substitute in the event of any technical difficulty or problem on the audiotape. Towards the end of the interviews session, the researcher extracted some important points raised by the participants for the purpose of confirmation and verification of the researcher's understanding.

Based on the recorded interview, the data was manually transcribed in Microsoft Office Word by the researcher after each of the interview session. The researcher required between 15-20 minutes to complete one interview session in order to ensure every single word was captured and

transcribed into text format. After completing all the transcribing process, the researcher went through all the transcripts to obtain the important points or ideas in the conversation.

The study was conducted to understand the determinants of customer retention in telecommunication industry in Malaysia. Thus, the unit of data that the researcher looked for within the transcript were participants' feedback on motives and factors that influenced their decision in choosing and maintaining with the service provider. The potential answers were highlighted for further action. The process was done continuously for every interview conducted. It was done manually and simultaneously throughout the data collection process in order to allow the researcher to gain insightful and clear understanding towards the emerging of data and the study generally.

Based on unit of data identified, the researcher started to focus on the emerging of response patterns and themes to the question of what were the factors that determine the retention of customer among three service providers and their expectations.

3. Finding

The interview conducted found three major competitors of mobile service providers in Malaysia, namely Celcom, Digi and Maxis. The participants shared their reasons for choosing the service as below

Stable and good network connection

The interviews in general points to the grounds of stability and good network connection that led them to choose the service provider. Two participants are more concerned about stability and good network connection in their rural residential areas in Kuala Selangor and Selayang respectively.

"Celcom provides better service in term of connection mmmm… in my area compared to other service providers because I live in the area that can be considered as a mmmmm…… suburban area which is in Kundang, …..in the area of Selayang." (Participant 1)

"I am living…… quite a remote area… quite far from the city… in Puncak Alam, so basically Digi line is quite ok in my area." (Participant 2)

Furthermore, one of the participants, who is in the business industry indicated the significance of stable and good connection network, especially when she needs to travel, as it is pertinent for her mobile line to be easily accessible anywhere.

"My job required me to travel a lot..mm .. so far celcom never let me down in term of connection" (participant 5)

Value for Money

Half of the participants are unanimous that value for money is one of the factors in determining their service provider. Their priority is to ensure the price that they have paid is commensurate with the data plan and coverage provided by the service providers.

"*I choose Digi because it offers the cheapest package plan with a reliable coverage especially in Klang Valley. I think it suits me well because I live in Shah Alam and rarely go for outstation. The other reason is because I frequently use mobile internet service …..to surf internet & WhatsApp,… I need a plan that comes with reasonable and affordable charge that can cater my personal need." (Participant 4)*

Word of Mouth

The study conducted on the factor of word of mouth, revealed that participant who has been influenced by the word of mouth, had, switched to the new service provider even though they had no issue with their current network coverage. Thus, word of mouth is one of the essential tools for customers in choosing the preferred service provider. This is illustrated by the statement made by one of the participants who is a librarian that:-

> *"…….From word of mouth…. and also friend's experiences and recommendation…... Before I change to Digi, I asked a few of friends about which one is the best ….I did google for several websites, read blogs…. and….I read other people testimonials… mmm…just to be sure I make the right choice..(Participant 8)*

Branding

Based on the responses obtained by all the participants, it can be concluded that most of them are not concerned with the branding as long as they can get connected. Furthermore, the implementation of Mobile Number Portability is another added point where the customer could still retain their mobile phone number even though they have changed the service provider. However, participant 9 who works as a Legal Advisor in Shah Alam had different view on this:

> *"…..mmmmmm I guess it is because of the strong branding and people always talk about how good maxis is that make me feel attracted to maxis"(Participant 9)*

The second question was asked to the participants in order to ponder on the factors that influence them to retain with the service provider. Furthermore, experiences were shared by the participants in order to confirm the factor that lead to retention. The factors given by the participants are as follows:-

Extensive Coverage

The study revealed that the majority of the participants, 80% indicate that an extensive coverage area provided by their service provider as their main reason to continue using the services. Hence, as long as the line is still good and available wherever they go, they will continue using the services. Participant 1 share the significance of having connection when she shared her story which are as follows:-

"I still remember that day… mmmm….. Something bad happens to the Celcom connection at my house….. Not sure why it happened……. and all of my family use Celcom……. and we can't make or received any call from outside…... Luckily it was the weekend, but they manage to settle the issue on the same day." (Participant 1)

As for participant 2 who is currently pursuing her study at IIUM, revealed that she is loyal with the current service provider because of her satisfaction with the services.

"…sometimes I went to IIUM Gombak to meet my supervisor or having discussion.. and I am happy with the extensive coverage provided by Digi. Sometimes when I went back to my Kampung in Batu Pahat, the coverage is very good. I think I am going to maintain with this service provider because I am satisfied with the services provided by them."

Excellent Services

Besides the connectivity factor, 30 % of the participants agreed that an excellent service will ensure them to retain with the service provider. Excellent service would benefit the service provider

as the participants will share their satisfaction and joy with their friends. One of the participants who have been using Digi for more than 5 years shares his experience.

"It was three months after I change to Digi, I called their service center….. I think during office hour… to increase my maximum limit of credit from RM100 to RM350,……They manage to process within 5 minutes.… That was very fast and I'm impressed." ({Participant 8)

Good Price

The last factors which guarantee the participants to continue with the service provider is the price. Due to the high cost of living, 30% of the participants are concerned about the amount of money that need to be allocated monthly to the service provider. According to a male lecturer in a public university,

"The main factor is about the pricing plan…mmm and charge imposed by Digi. My monthly bill reduced significantly since I used this particular network. I no longer need to frequently call the contact center like I used to do before to ask for clarification about my excessive monthly bill".(Participant 4)

When question 4 was asked to the participants, the majority of the participants gave similar answers on the factors that were already discussed earlier like connection, price and good customer service. However, only four participants addressed additional factors that made them feel attracted to use the mobile services.

Advertisement

Interestingly, for participant 8 who is a librarian and love to engage in sport activities, he indicated that the advertisement does affect his trust towards his service provider.

"…. More advertisement I always involve with running in the marathon almost 3-4 times a year, so I notice that Digi is always involved in social event….mmm I mean my marathon event. It does increase… my trust toward Digi ….. As a stable company.. When they involve with my running event and other CSR activities.(Participant 8)

Convenient Services

Based on the interviews conducted, three participants, representing three different service providers, namely Maxis, Digi and Celcom, specify the convenient services that they received from their service providers.

"It is easy for me to top up my internet line because my line always exceed the limit….It is because of my 4 children always play with my mobile phone, watching cartoons and videos in the YouTube." (Participant 1)

I have the option of having my bills to be paperless, and accessible via their customer service portal (Participant 3)

"My husband also uses Maxis services. Between Maxis to maxis is a free of charges". (Participant 9)

Expectation towards mobile service provider

The participants shared their hope for better services in the future based on dissatisfaction from the previous service provider and their unpleasant experience. Below are few suggestions highlighted by the participant for their service providers:-

Increase efficiency

The interview question no 4 is aimed to investigate the expectation of customer in telecommunication industry. Six participants expressed their anticipation that their service provider will increase their efficiency in the services. In addition, 4G services, increase Internet connectivity and expand line coverage area are the expectation for the future improvement.

"To provide better and excellent coverage everywhere" (Participant 6)

"I expect Digi to maintain their current pricing plan as I think it is reasonable and affordable for the customers. However, maybe Digi can upgrade or improve their network coverage in certain areas and try to remain competitive in the market as some other network providers are ahead from Digi". (Participant 4)

"I hope they can improve some of the services like for example the 4G.. Mmmm, I'm not sure what was the term called… mmmm 4G coverage. Currently in my area mmmmm.. They covered up to 3G only, so I hope in the future they can expand their services up to 4G so that we can experience fast internet connectivity". (Participant 2)

Less Price

It is observed that based on the price factor, six of the participants unanimously agree that the service provider should reduce the price. One of the participants who is a lecturer staying in Putrajaya complained about the price in Malaysia compared to other Asian countries who enjoyed less price with better data plan and coverage.

….. With affordable price. If we can compare with other Asian countries examples like Indonesia and Thailand they can provide a higher data plan and good coverage with low price to pay" (participant 6)

"You may recall in pre-2006 where the prices of postpaid are like 50 sen per minute. Then until 2010, telcos were aggressive in reducing their rates, where in some cases prepaid rates were reduced to nearly as low as the postpaid plans. During the last 5-6 years, competitions were getting softer, and the rate of price reduction became slower and stagnant. However, recently MCMC, requested telcos to reduce broadband prices and things seem to point towards that trend in the near future….. So, I believe they are going to increase their efficiency and pass on the cost reductions to consumers in the form of reduced prices". (Participant 3)

Added Value

Three participants expressed their expectations that the service provider may improve on the data plan to cater for the demands and needs of the customers. A participant who is working as a Senior Executive at Petronas, expects the service provider to add other services to the customer

as he has been a loyal Celcom user.

More transparent

One of the participants, who is loyal to Maxis, expects the service provider to be more transparent when charging the customers as agreed by the former customer who complained about the hidden charges in their bill. Another participant, who is a Legal Advisor also questioned Maxis on the charges imposed on the customer.

"They should be more transparent in terms of hidden costs and they should detail out the charges… mmm…. Itemize billing can be questionable, sometimes… the issue is whether the billing can be subjected to review and who can really determine the accuracy of the billing". (Participant 9)

Stay competitive

Interestingly, one lecturer from public university, addressed that the service provider should stay competitive as there are other competitors that are far ahead from his own his service provider.

"……try to remain competitive in the market as some other network providers are ahead from Digi" (Participant 4)

3. Discussions

Stable and good network connection.

The result of this study is in agreement with (Chakraborty & Sengupta, 2013; Edward & Sahadev, 2011; Joachim, Oyeniyi, & Osibanjo, 2012) who conducted a survey on the customer satisfaction and retention in telecommunication industry found that good network coverage has positive influence on customer retention. However, research conducted by (M. Rahman, 2014) on network coverage and satisfaction in Bangladesh, contradict the finding from the previous researcher.

Price

Price is one of the important factors of customer retention as the amount paid by the customer is equal to the services that they get from the service providers. There are many researchers conducted the studies relating this construct with satisfaction, retention and loyalty not only in telecommunication industry but also in banking, tourism, restaurant and other service industry. (Cheimelie, 2013; Han & Hyun, 2015; Haque, Ahmed, & Rahman, 2010; Kaura, Prasad, & Sharma, 2015b).Thus, the result from this study is aligned with the previous study (Qadri & Khan, 2014) as price does contribute as a major factor of customer retention.

Brand Image

The finding of the study is in line with (S. Rahman, Haque, & Ahmad, 2011) as brand image is less important compared to price and service quality. Only one respondent addressed brand image as an important factor that influenced her to maintain with her service provider. The result is also supported that brand image is a small in importance comparatively to other variable but it still give an impact customer retention (Qadri & Khan, 2014), in telecommunication industry in Pakistan,

Convenient service

Most of the participants agree that convenience services provided by the service providers contribute to retention. This is consistent with the findings conducted by (Kaura, Prasad, & Sharma, 2015a; Wen & Hilmi, 2011) where the researcher found that convenient services are related with customer retention.

Expectations

All of them agree that the service providers should provide better services in the future based on the unpleasant experience from their previous service provider. Majority of the participants expect their service provider to increase efficiency in term of line and network coverage. Furthermore, they also suggested that it would be beneficial for the loyal customer to be offered with more added value services to increase the loyalty among customer. Majority of the respondents also raised an issue of price since they think that the service provider should reduce their current charges as compared to the rates from Indonesia and Thailand. One of the respondents also suggested that her service provider should be more transparent in terms of bill charges and questioned about the accuracy of the bill.

4. Conclusion

The finding of this study is similar to the previous research as retention is a major concern in telecommunication industry. The result reveals that line and network coverage, price, good services, word of mouth and branding influence the determinant of customer retention. The result further reveals that when a customer experience service failure or defect, they will resort to other competitors. However, not many of the participants are patient enough to just wait and see on the improvement or changes made by their service provider. Hence, retaining customer more than five (5) years still is no guarantee that the customer will be loyal to the service provider. Thus, it is important for the service provider to ensure that they can provide the best services to the customer that can fulfil their wants.

It is recommended that the service providers in the telecommunication industry to improve their line and network coverage with reasonable charges to the customer. Future studies should look into the study of the service failure and recovery in the service industry.

REFERENCES

Al-hawari, M., Ward, T., & Newby, L. (2009). The relationship between service quality and retention within the automated and traditional contexts of retail banking. *Journal of Service Management*, *20*(4), 455–472. doi:10.1108/09564230910978539

Al-Zoubi, M. R. (2013). Service Quality Effects on Customer Loyalty among the Jordanian Telecom Sector “Empirical Study.” *International Journal of Business and Management*, *8*(7), 35–45. doi:10.5539/ijbm.v8n7p35

Amin, S. M., Ahmad, U. N. U., & Hui, L. S. (2012). Factors Contributing to Customer Loyalty Towards Telecommunication Service Provider. *Procedia - Social and Behavioral Sciences*, *40*(6), 282–286. doi:10.1016/j.sbspro.2012.03.192

Blery, E., Batistatos, N., Papastratou, E., Perifanos, I., Remoundaki, G., & Retsina, M. (2008). Service quality and customer retention. *Journal of Targeting, Measurement and Analysis for Marketing*, *17*(November), 27–37. doi:10.1057/jt.2008.26

Boohene, R., Agyapong, G. K. Q., & Gonu, E. (2013). Factors Influencing the Retention of Customers of Ghana Commercial Bank within the Agona Swedru Municipality. *International Journal of Marketing Studies*, *5*(4). doi:10.5539/ijms.v5n4p82

Chakraborty, S., & Sengupta, K. (2013). An exploratory study on determinants of customer satisfaction of leading mobile network providers – case of Kolkata, India. *Journal of Advances in Management Research*, *10*(2), 279–298. doi:10.1108/JAMR-11-2012-0049

Cheimelie, H. B. (2013). *Pricing and marketing strategies in the malaysian mobile telecommunications industry*.

Edward, M., & Sahadev, S. (2011). Role of switching costs in the service quality, perceived value, customer satisfaction and customer retention linkage. *Asia Pacific Journal of Marketing and Logistics*, *23*(3), 327–345. doi:10.1108/13555851111143240

Frost & Sullivian. (2015). 83% of consumers in Malaysia may switch telco provider. Retrieved July 3, 2015, from https://www.digitalnewsasia.com/mobile-telco/83pc-of-consumers-in-malaysia-may-switch-telco-provider-frost

Fullerton, G. (2014). The moderating of normative commitment on the service quality-customer retention relationship. *European Journal of Marketing*, *48*(3). doi:10.1108/EJM-06-2011-0333

Gerpott, T. J., Rams, W., & Schindler, A. (2001). Customer retention, loyalty, and satisfaction in the German mobile cellular telecommunications market. *Telecommunications Policy*, *25*(4), 249–269. doi:10.1016/S0308-5961(00)00097-5

Han, H., & Hyun, S. S. (2015). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, *46*, 20–29. doi:10.1016/j.tourman.2014.06.003

Haque, A., Ahmed, I. S., & Rahman, S. (2010). Exploring critical factors for choice of Mobile service providers and its effectiveness on Malaysian Consumers. In *4th Asian Business Research Conference,* (p. 20).

Joachim, P., Oyeniyi, O. J., & Osibanjo, O. A. (2012). Determinants of Customer Loyalty and Recommendations to Others in the Nigerian Telecommunication Industry. *Anvesha*, *5*(3), 1–9.

Karin, A., & Pervez, N. (2004). Service quality and customer retention : building long-term relationships. *European Journal of Marketing*, *38*(11).

Kaura, V., Prasad, C. S. D., & Sharma, S. (2015a). Service Quality, service convenience, price and fairness, customer loyalty and the mediating role of customer satisfaction. *Internation Journal of Bank Marketing33*, *33*(4), 404–422.

Kaura, V., Prasad, C. S. D., & Sharma, S. (2015b). Service Quality, service convenience, price and fairness, customer loyalty, and mediating role of customer satisaction. *International Journal of Ban*, *33*(4), 21.

Keiningham, T. L., Cooil, B., Aksoy, L., Andreassen, T. W., & Weiner, J. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing Service Quality*, *17*(4), 361–384. doi:10.1108/09604520710760526

Lewis, M. (2004). The Influence of Loyalty Programs and Short-Term Promotions on Customer Retention. *Journal of Marketing Research*, *41*(3), 281–292. doi:10.1509/jmkr.41.3.281.35986

Loke, S.-P., Taiwo, A. A., Salim, H. M., & Downe, A. G. (2011). Service Quality and Customer Satisfaction in a Telecommunication Service Provider. *2011 International Conference on Financial Management and Economics*, *11*, 24–29.

Malaysian Communications and Multimedia Commission. (2014). *Industry Performance Report*. Retrieved from http://www.skmm.gov.my/skmmgovmy/media/General/pdf/IPR2013_English.pdf

Martey, E. M. (2014). The Relationship between Customer Retention and Customer Loyalty in the Restaurant Industry in Ghana. *International Journal of Research (IJR)*, *1*(8), 51–66.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. *The JosseyBass higher and adult education series* (Vol. 2nd). doi:10.1097/NCI.0b013e3181edd9b1

Özer, A., Argan, M. T., & Argan, M. (2013). The Effect of Mobile Service Quality Dimensions on Customer Satisfaction. *Procedia - Social and Behavioral Sciences*, *99*, 428–438. doi:10.1016/j.sbspro.2013.10.511

Peighambari, K. (2007). *Developing and Testing a Model for Explaining Customer Retention Formation: Case of iranian Mobile Telecommunicatin Services*.

Qadri, U. A., & Khan, M. M. S. (2014). Factors Affecting On Customer Retention : A Case Study of Cellular Industry of Pakistan. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, *1*(1), 1–22.

Rahman, M. (2014). Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Bangladesh. *Business, Management and Education*, *12*(1), 74–93. doi:10.3846/bme.2014.06

Rahman, S., Haque, A., & Ahmad, M. (2011). Choice criteria for mobile telecom operator: Empirical investigation among Malaysian customers. *International Management Review*, *7*(1), 50–57. Retrieved from http://www.usimr.org/IMR-1-2011/v7n111-art6.pdf

Ranaweera, C., & Neely, A. (2003). Some moderating effects on the service quality-customer retention link. *International Journal of Operations & Production Management*, *23*(2), 230–248. doi:10.1108/01443570310458474

Ranaweera, C., & Neely, A. (2006). Some moderating effects on the service quality-customer retention link. *International Journal of Operations & Production Management*, *23*(2), 23. doi:10.1108/01443570310458474

Ranaweera, C., & Prabhu, J. (2003). The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting. *International Journal of Service Industry Management*. doi:10.1108/09564230310489231

Sirikit, A. (2000). *Service Quality, customer behavioral intention, and cust retention*.

Vandenbosch, M., & Dawar, N. (2002). Beyond Better Products : Capturing Value in Beyond Better Products : *MIT Sloan Management Review*, *43*(4), 34–42.

Wen, C. H., & Hilmi, M. F. (2011). Exploring Service Quality, Customer Satisfaction And customer loyalty in the Malaysian mobile telecommunication industry. *2011 IEEE Colloquium on Humanities, Science and Engineering*, (August), 733–738. doi:10.1109/CHUSER.2011.6163832

TRACK II

MARKETING, ENTREPRENEURSHIP AND COMMUNICATION

A Conceptual Framework on the Impact of Entrepreneurial Competencies on Small and Medium Enterprises Business Performance in the Malaysian Hospitality and Tourism Industry

Samuel Adeyinka-Ojo[1*], Shehnaz Tehseen[2] and Vikneswaran Nair[3]

[1&3]School of Hospitality, Tourism and Culinary Arts, Taylor's University, Lakeside Campus, Malaysia
*Corresponding author: samuel.adeyinka@sd.taylors.edu.my
[2]Universiti Kuala Lumpur Business School (UNIKL BIS)
[3]Centre for Research & Innovation in Tourism, Hospitality & Food Studies (CRiT)

ABSTRACT

This paper is set out to achieve two objectives. First is to identify the impact of entrepreneurial competencies on the business performance or success of small and medium enterprises (SMEs) in the Malaysian hospitality and tourism industry (HTI). The second objective is to develop a framework for the SMEs entrepreneurial competencies and business performance indicators in the HTI. This is important because the bulk of the existing and new entrants into the HTI are mainly from the SMEs. To do so, this paper has adopted content analysis to analyse the existing studies on entrepreneurial competencies, business performance, and SMEs in HTI. Findings indicate that very few of these SMEs are successful while a large percentage are operating at survival stage and others are on the verge of collapsing due to lack of entrepreneurial competencies which impact negatively on their business performances. Findings also show that the SMEs performance would depend majorly on internal and external factors; financial and non-financial measures. The theoretical contribution and managerial implications are also suggested.

Key Words: Entrepreneurial competencies, business performance, SMEs, HTI

1.INTRODUCTION

The hospitality and tourism industry (HTI) is regarded as one of the services economic sector in Malaysia (Siti-Nabiha, Wahid, & KamalulAriffin, 2010). According to Ottenbacher and Gnoth (2005), services are defined as intangible goods and services sector is known as the tertiary sector which involves the provision of services to businesses as well as final consumers or users. The hospitality and tourism industry is an important sector of the Malaysian economy. In 2010, Malaysia was ranked 9th most visited tourism country in the world after recording 24.7 million tourist arrivals and receipts of RM58.3 billions or US$19.3 (United Nations World Tourism Organisation [UNWTO], 2011), more than triple the number of tourist arrivals in 1999 at 7.9 million (Tourism Malaysia, 2011). Likewise, Malaysia recorded increase in the number of tourist arrivals of 25.1 million and receipts of RM60.6 billion or US$20.2 billion in 2012 (Tourism Malaysia, 2013). This increase in the number of tourist arrivals and receipts has led calls to improve the quality of

hospitality (hotel sector) because it plays an important role in attracting potential tourists and repeat visitors (SitiNabiha et al., 2010). This growth continues in 2013 with tourist arrivals of 25.7 million and receipts of RM67.3 billion or US$21.018 billion (UNWTO, 2014), and also in 2014 the number of tourist arrival in Malaysia increased to 27.3 million but the tourist receipt reduced to RM60.6 billion (UNWTO, 2014, Tourism Malaysia, 2014, 2015). It should be noted that the services sector is also growing because it contributed to about 60% of the Malaysian small and medium enterprises (SMEs) gross domestic product (GDP) (SMECorp Malaysia, 2014).

2. LITERATURE REVIEW

2.1 Theoretical Framework on SMEs

A review of the extant literature work indicates that there are different definitions of SMEs from different economies of the world. It has been observed that some countries used the term micro, small and medium enterprises (MSMEs) to refer to SMEs (Kushnir, 2010). Likewise, the variables used to explain MSMEs or SMEs include the number of employees, annual sales turnover, assets, capital investment and these varies from industry (Kushnir, 2010). The National SME development Council (NSDC) which is the highest policy making authority on SME development in Malaysia has grouped Malaysia SME's into three groups which are micro, small and medium. NSDC also standardize the use of common definition of SMEs based on two criteria, namely full-time employees and annual sales turnover (Rashid, Jaafa & Dahalan, 2013).

Since 2005, a common definition for SMEs endorsed by the National SME Development Council (NSDC) has been adopted across ministries and agencies, financial institutions and regulators involved in SME development programmes. The SMEs definition is summarised and presented in Table 1.

Table 1. SME Definition

Industry	Micro enterprise	Small enterprise	Medium enterprise
Manufacturing: manufacturing-related services and agro-based industries	Sales turnover of less than RM250,000 OR full-time employees less than 5	Sales turnover between RM250,000 and less than RM10 million OR full-time employees between 5 and 50	Sales turnover between RM10 million and RM25 million OR full-time employees between 51 and 150
Services: agriculture and ICT	Sales turnover of less than RM200,000 OR full-time employees less than 5	Sales turnover between RM200,000 and less than RM1 million OR full-time employees between 5 and 19	Sales turnover between RM1 million and RM5 million OR full-time employees between 20 and 50

Source: SME Corporation Malaysia (2010); Kaur and Sandhu (2013, p. 107)

However, in 2013 the NSDC categorised SMEs into definition by size of operation category. Microenterprises across all sectors: Sales turnover of less than RM300,000 or less than 5 full-time employees. Given that there have been many developments in the economy since 2005 such as price inflation, structural changes and change in business trends, a review of the definition was undertaken in 2013 and a new SME definition was endorsed by the NSDC Meeting in July 2013 (SMECorp Malaysia, 2014). The new definition is presented in Table 2.

Table 2: Definition by Size of Operation

Category	Small	Medium
Manufacturing	Sales turnover from RM300,000 to less than RM15 million OR full-time employees from 5 to less than 75	Sales turnover from RM15 million but not exceeding RM50 million OR full-time employees from 75 but not exceeding 200
Services & Other Sectors	Sales turnover from RM300,000 to less than RM3 million OR full-time employees from 5 to less than 30	Sales turnover from RM3 million but not exceeding RM20 million OR full-time employees from 30 but not exceeding 75

Source: SME Corporation Malaysia (2014)

Small and medium enterprises (SMEs) participation in the hospitality and tourism industry in Malaysia is important to the development of the national economy. This is because in general, SMEs is believed to be the backbone of the economic development of a country (Rashid et al., 2013). For example, in Malaysia, SMEs accounts for over 90% business establishments in the five economic sectors, namely manufacturing, construction, agriculture, mining and quarrying, and services which include hospitality and tourism services (SME Annual Report, 2011). The SMEs in hospitality and tourism industry would also have a huge impact in the economic growth and development of Malaysia.

2.2 SMEs Business Activities in the Hospitality and Tourism Industry

Small and medium-sized hospitality and tourism enterprises are usually managed by their owners who are in most cases married couples, using the term ‘copreneurs’ to represent the kind of family business (Morrison, 2002; Main, 2002; Rashid et al., 2013). This is because in the hospitality and tourism industry, there are opportunities for SMEs due to the small amount of start-up capital and barriers to entry appear to be relatively low (UNESCAP, 2005). This claim is consistent with the several studies undertaken over the years that there are opportunities in the HTI (Hanqin & Morrison, 2007; Sharma & Upneja, 2005; Rogerson, 2004; Thomas, 2000).

The SMEs businesses in the hospitality and tourism industry include local restaurant to provide for the needs of the tourists; accommodation in the form of homestays, longhouses,

budget hotel and boutique hotel; transportation; and other necessities (Rashid et al., 2013; Konrad & Ekiem, 2011). Othman and Rosli (2011) classified SMEs business activities in the hospitality and tourism into food and accommodation services, retail and souvenir, travel agent, transport, and tour guide and other services which are the request of the visitors. Likewise, SMEs business activities also include provision of accommodation, particularly the small bed and breakfast category (Rogerson, 2004); small hotels and restaurants (Sharma & Upneja, 2005); lodges and the handicraft industry (Mbaiwa, 2003). However, it appears previous studies have focused more on the interrelation between hospitality, tourism and SMEs business activities (Shaw, 2004; Thomas, Shaw, & Page, 2011), and accommodation service (Mshenga & Owuor, 2009). The entrepreneurial competencies of the owners of these SMEs have received lesser academic interest and how competencies impact on the SMEs performances in the HTI.

2.3 Entrepreneurial Competencies

Bird (1995) states that competency refers to the quality of entrepreneur's action that contributes to venture outcomes. The entrepreneurial competencies are associated with the formation, survival and venture's growth (Bird, 1995; Colombo & Grilli, 2005). There is evidence that an entrepreneur's skills lead to venture performance, expansion or growth (Bird, 1995; Lerner & Almor, 2002). Further, research has shown that entrepreneurial skills of entrepreneurs also contribute towards profitability and growth of business (Chandler & Jansen, 1992). According to them the literature focuses on different mechanisms whereby competencies can impact on performance. First, the competent entrepreneurs seek for better venture opportunities. Second, management competencies of entrepreneurs are related to formulate venture strategy that better fit within their businesses.

Freel (1999) noted that management deficiencies within small firms, for example, poor planning, inadequate delegation, insufficient marketing, and lack of functional expertise and discontinuity of management staff were related to the failure of small businesses. Personal qualities, self-confidence, leadership, innovativeness and risk-taking abilities are essential for entrepreneur success (Martin & Staines, 1994). Man et al. (2002) has identified ten areas of entrepreneurial competencies namely opportunity, relationship, innovative, analytical, operational, commitment, human, strategic, personal and learning competencies. Such competencies have either a direct or indirect influence on SME performance. Entrepreneur's skills keep on changing as the firm moves from one stage of development to another (Churchill & Lewis, 1983). Therefore, it is vital to understand the changes that result from venture's growth because entrepreneur's skills and capabilities for one stage will be not suitable for another (Mitchelmore, & Rowley, 2010). Since training can be used to develop essential entrepreneurial competencies. And managerial competencies are important to develop among entrepreneurs because they have to manage all business activities. Thus, the management development programs should be implemented in small

business sector to enhance the firm's ability to compete successfully in the market place to create greater economic value. Management development refers to the process of learning and improving the manager's abilities to plan, organize, lead and coordinate activities and resources in the businesses (Gabrielsson & Tell, 2009). On top of that, other studies have argued that the success or performance of SMEs is determined by both internal and external factors (Rogoff, Lee & Suh, 2004; Smallbone & Welter, 2001). Therefore, in line with the aim of this paper the methodology adopted is presented in the next section.

3. METHODOLOGY

Content analysis is found to be a useful technique that can be used to analyse any kind of text (Esterberg, 2002). For the purpose of achieving the aim of this paper, qualitative content analysis (QCA) was adopted to analyse the extant literature work reviewed in this paper. These studies include SMEs, hospitality and tourism enterprises, marketing, entrepreneurship, competencies, business performances and growth. More importantly, the criteria used to select the literature include the title of the journal articles must predominantly scoped within the fields of research spectrum reviewed in this study as mentioned above as well as the subtitles of these journal articles. Moreover, the eight steps in QCA recommended by Schreier (2012) were adopted as outlined. These include: (1) deciding on your research questions; (2) selecting your material; (3) building a coding frame; (4) dividing your material into units of coding; (5) trying out your coding frame; (6) evaluating and modifying your coding frame; (7) evaluating and modifying your coding frame; and (8) Interpreting and presenting your findings. Likewise, the five checklist suggested by Schreier (2012) were also applied which include: (a) when you are dealing with rich data that requires interpretation; (b) on verbal data, (c) on visual data; (d) on data that you have sampled from other sources (documents, internet, etc.); and (e) On data that you have collected yourself (interviews, focus groups, etc.). It should be noted that content analysis has been used in the past studies on hospitality and tourism research. These studies include case studies in tourism research (Xiao & Smith, 2006), and power in destination branding (Marzano & Scott, 2009) just to mention a few. This is followed by the findings and discussion section.

4. FINDINGS AND DISCUSSION

4.1 SMEs Entrepreneurial Competencies Factors and Business Performance

The results of the review of existing literature sources show that the SMEs business performance interms of success or failure in hospitality and tourism industry would depend on several entrepreneurial competencies factors as presented in the following Table 3.

T able 3. Entrepreneurial Competencies Factors and Business Performance Indicators of SMEs

Sources	Factors and Indicators
	Entrepreneurial competencies factors
Kaur & Sandhu (2013)	Individual-specific factors: background of founder/manager, entrepreneurial orientation
	Firm-specific factors: unique resources, networking ability
	External factors – globalisation forces, government support
Ferreira et al. (2011); Storey (1994)	The entrepreneur's characteristics; the small firm's characteristics; and the firm's development strategies
Mitchelmore & Rowley (2010)	Entrepreneur's demographic and behavioural attributes
Garney et al. (2006); Rogoff et al. (2004) Smallbone & Welter (2001)	Success and failure depends on internal and external factors
Sharma & Upneja (2005); Basu & Goswami (1999)	Educational level of the owners, previous business experience, family background, informal sources of finance, bank finance at start-up
Wijewardena & Tibbits (1999);	Individual entrepreneurs, firm-specific attributes, and external factors
Chandler & Jansen (1992)	Entrepreneurial skills, technical skills and managerial role
	Business Performance Indicators
Saad & Patel (2006); Maes et al. (2005)	Financial measures – turnover or sales, profit, productivity, return on investment
	Non-financial measures – number of employees, stakeholder's satisfaction, learning, communication, trust and competitive advantage

Source: Developed for this study

Many empirical studies in the field of entrepreneurship have used growth rate or profitability, or both, to measures the performance of venture performance (Lee & Tsang, 2001; Jo & Lee, 1996; Stuart & Abetti, 1990; Begley & Boyd, 1987). Also in the literature of entrepreneurship, the business performance is usually measured by growth in employees or sales, and/or by the increase in profits (Chandler & Hanks 1994; Box et al., 1993; Covin & Covin 1990; Gales & Blackburn 1990). The growth and profitability measure different aspects of performance, for instance, sometimes the growth are achieved at the expense of profitability in the short run (Zahra, 1991). Thus, it may not be suitable to combine profitability and growth rate to create a single measure of firm performance (Chandler & Jansen, 1992). Lee & Tsang (2001) also stated that most of entrepreneurial firms are of small or medium size that are privately held, and are not required legally to disclose information regarding their performance. Therefore, the most sensitive matter for SMEs is to disclose their financial performance but the business growth data may be a less sensitive matter for them (Lee & Tsang, 2001). Chandler and Hanks (1993) found better

internal consistency and content validity in self-reported data regarding business growth compared with self-reported data about performance of venture.

According to Brinckmann (2008), the growth is measured by employment growth or annual sales growth of the venture. These both dimensions can be assessed by the objective data and are frequently used to measure the growth (Baum & Silverman, 2004; Wiklund, 1999). In the existing literature, there is no consensus on the most appropriate performance measures of small firms and previous researchers focused only on those variables of performance measures for which information was easy to get (Cooper, 1993). However, past studies have advocated growth as an important measure of performance in the context of small firms (Brush & Vanderwerf, 1992; Chandler & Hanks, 1993; Fombrun & Wally, 1989; Tsai et al., 1991). Wilklund (1999) argued that growth is easily accessible indicator of performance and more accurate as well compared to the accounting measures and other measures regarding financial performance. But an alternative view exists regarding performance, according to which it is multidimensional in nature and integration of different performance dimensions will be more benefit in empirical studies (Lumpkin & Dess, 1996; Cameron, 1978). The growth and financial performance reveal unique and important information but both dimensions are regarded as different aspects of performance (Wilklund, 1999; Zahra, 1991).

Thus, the combination of growth and financial performance give detail description of the firm's actual performance than each gives separately (Wilklund, 1999). The researchers are agreed that sales growth is the best measure of growth. It describes short-term as well as long-term changes in the firm and can be easily obtained as well. Employment growth and firm's assets are other aspects to measure the firm's growth (Wilklund, 1999). The growth of firm's assets is considered as problematic in service sector (Weinzimmer et al., 1998). This measurement of growth in firm's assets is a main accounting problem. Whereas the intangible assets may expand in the growing service firms but that are not shown in company's balance sheets. Thus, it is difficult to get data regarding growth of assets in the service industry (Wilklund, 1999). Also the comparison of performance with the competitors gives supplementary information regarding the firm's performance (Wilklund, 1999; Birley & Westhead, 1990). In summary, the existing literature suggests that the performance measures should consider both financial performance and growth. Also the firm's performance should be compared with the competing firms. Sales expansion, employment growth and assets provide important and complementary information.

4.2 The Five Stages of Small Business Growth

The small businesses vary in size and have different growth capacity as well. It is vital to understand what different entrepreneurial competencies are needed at different stages of business growth. Many researchers have developed different models to examine businesses but were

criticized due to their limitations. For example, according to Churchill and Lewis (1983), the previous models are inappropriate for small businesses due to three reasons, firstly, they were based on assumption that company must grow and pass through all development stages. Secondly, the models were not acceptable due to their failure in capturing the company's early stages of origin and growth. Thirdly, such framework characterized company by their size either based on annual sales or number of employees and ignored other factors such as value added, product technology and so on. Thus, Churchill and Lewis (1983) proposed another model that characterized by size, diversity and complexity and described by management style, extent of formal systems, strategic goals, organizational structure and owner's involvement in business.

Due to suitability of this model to examine small businesses, this research will investigate the relationship of entrepreneurial competencies with the following stages of growth in small businesses as presented in Figure 1.

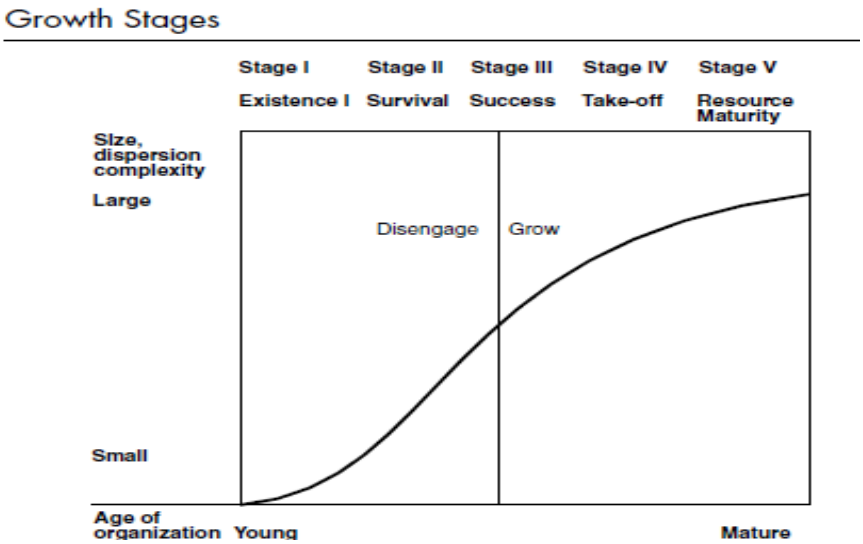


Figure 1. Adopted from Churchill & Lewis (1983)

Stage One: Existence

At this stage, the businesses mainly focus on attracting more and more customers and to deliver service or product on time according to contract. The owner is responsible to run business successfully at this stage by directly supervising subordinates of average competence but runs company without formal planning. This is because at this stage the company's goal is to survive. The companies in this stage range from newly started restaurants and retail stores to other technology companies that have to stabilize their production or product quality. If the companies fail to get the sufficient customers or product capability then, the businesses have to cease at this stage and the owners quit the businesses due to inability of business to survive.

Stage Two: Survival

At this stage, the businesses have enough customers who are even much satisfied with their current products or services. But at this stage, systems development and formal planning is

minimal as well, as the main aim of business is still survival only. From this stage, the enterprise may grow in profitability and size and can move towards stage 3 as well, or the enterprise maintains its survival stage for some time with marginal returns on capital and can go out of businesses when the owner retires or gives up. The major challenges faced by businesses at this stage are regarding cash generation to cover replacement of capital assets and generation of cash flow to stay in business or grow to large size.

Stage Three: Success

At this stage, the owner of business has to decide whether to expand the company's business or to maintain its stability or profitability only. Thus, owner's main issue is whether to grow company by starting up new enterprise while maintaining business in its status quo. There are two possibilities for success of company at this stage. Firstly, which is also called "Success-Disengagement sub stage" in which the company might gain economic success through its size and product-market penetration and earns average or above average profits. Thus, the company grows large enough that functional managers take over owner's duties. The company's managers usually monitor's the strategy to maintain its status quo. However, the product niche of some businesses do not permit growth especially in case of service businesses in small or medium - sized slowly growing communities. If the company can adapt itself according to the environmental changes then the owners may think to grow it, merge it or sell for profit. But if the company is unable to adjust according to the environmental circumstances, then it may just continue the stage of survival only.

The second possibility of any company in success stage is referred as "Success-Growth Sub-stage"; at this stage most important concern is to maintain the business at high profitability. The managers are hired by focusing on company's future rather than its current situation. Budget planning and strategic planning becomes vital and the owner's participation becomes more in all company affairs than compared to the disengagement aspect of this phase. This phase is considered as first attempt before implementing growth strategy. Thus, the company moves towards stage four when it is successful, otherwise the company can be sold out or become bankrupt as well.

Stage four: Take Off

The main problems are concerned with the rapid growth and financing of company. The major issues are regarding delegation and cash, for instance, it has to be decided whether the owner can delegate the responsibility to others in order to improve managerial effectiveness of rapid growing company. And whether there would be sufficient cash available to meet the growth demands. Thus, the key managers must be very competent to handle the growth stage of company. Specific managers are being involved in both operational and strategic planning. The

company is mainly dominated by the owner's presence. It is an important period in a company's life. If the company successfully overcome the financial and managerial challenges then it may become a big business, otherwise it can be sold out at profit if the owners recognises their limitations. Because most of the businesses become unsuccessful at stage four when the owners try to grow the business rapidly and run out the cash. If the company cannot grow then either it drops back to stage three, survival stage or even fail. For stage four, the strategic competency of entrepreneur is required to meet the challenges.

Stage Five: Resource Maturity

The company is concerned with the consolidation and control of financial gains as well as to maintain the advantages of small size at this stage. The company has to hire more management staff to enhance the company's rapid growth. Besides this, the company has to fully utilize its staff and financial resources for operational and strategic planning. At this stage the management is well experienced and decentralized, all systems are well developed, but owner and business are financially and operationally separated. The company has advantages of size, managerial talent and financial resources. More importantly, after this stage individual SMEs need to develop innovative strategy to remain as a market leader. Based on the findings of this paper, a framework for SMEs entrepreneurial competencies and business performance indicators in the HTI is derived. The conceptual framework is illustrated in Figure 2.

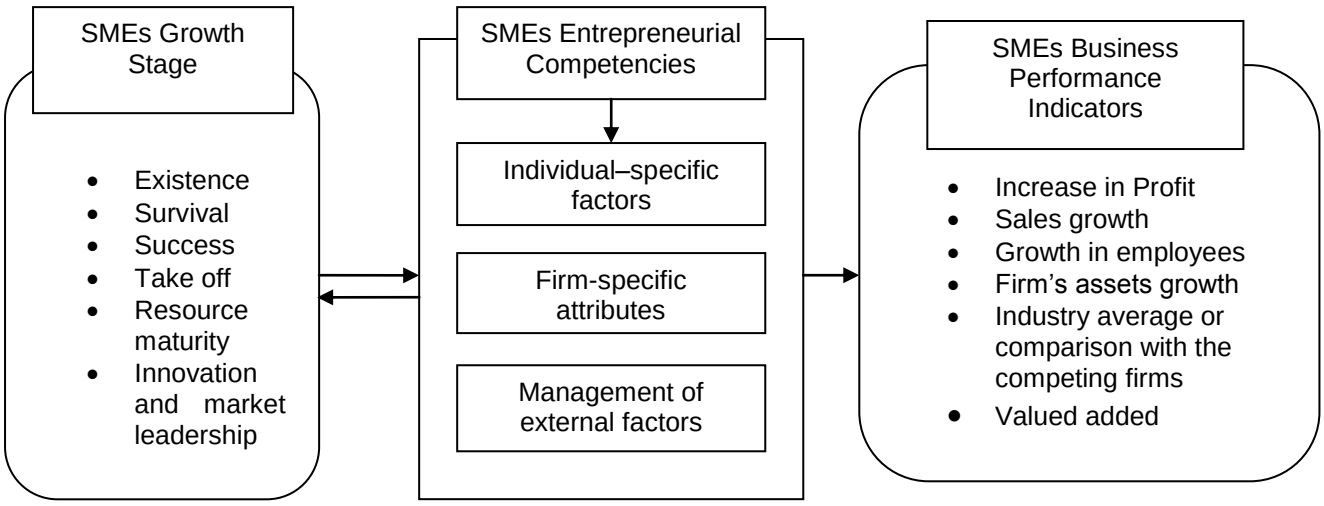


Figure 2. Framework for SMEs entrepreneurial competencies and business performance indicators

5. IMPLICATIONS AND CONCLUSION

As mentioned in the previous section that findings show that the SMEs business performance would depend majorly on internal and external factors; financial and non-financial measures. Similarly, entrepreneurial competencies would impact on the performance of SMEs in the HTI from the combination of the following important features: (a) the entrepreneur's characteristics; (b) the small firm's characteristics; and (c) the firm's development strategies

(Ferreira et al., 2011; Storey, 1994 cited in Ferreira et al., 2011). From the context of Malaysia studies on entrepreneurial competencies of SMEs performance on HTI is still lacking. This is consistent with the previous study that in Malaysia academic research on the impact of tourism on SMEs business performance is very limited or non-existent (Othman & Rosli, 2011).

The main theoretical contribution of this paper is that it has developed a framework for SMEs entrepreneurial competencies and business performance indicators for HTI. It has established the facts that internal factors such as individual SMEs entrepreneurs, firm-specific attributes, limited access to human, financial and organisation resources are entrepreneurial competencies that are still lacking among the SMEs operators in the Malaysian HTI. In addition, based on the previous work most of the SMEs in the HTI in Malaysia (Othman & Rosli, 2011), are operating on the survival level of the stage two of growth in small businesses (Churchill & Lewis, 1983).

Similarly, from the managerial implications findings indicate the framework developed in this paper can be applied by the SME operators in HTI. Practical implication indicates that the management of external factors (include perceived risks, security and assurance); globalisation forces and government support (Kaur & Sandhu, 2013) are beyond the control of SMEs in terms of demonstrating their entrepreneurial competencies for better performance. These findings are in harmony with Smallbone & Welter (2001) that external environment is beyond the control of entrepreneurial competencies of a business and can be either hostile; or in favour of small businesses (Othman & Rosli, 2011).

In conclusion, this study relies heavily on the extant literature work. Therefore, based on the findings from this paper, it is suggested that the future studies should involve empirical research that would involve qualitative research purposely to explore views and experiences of SMEs entrepreneurs. This is important in order to elicit detailed information of entrepreneurial competencies on SMEs performance in the HTI, specifically in Malaysia. Likewise, quantitative methodology is also important for the purpose of gathering large quantity of data for further analysis and comparison between the potential findings from the exploratory research.

Acknowledgement

The funding for this project is made possible through the research grant obtained from the Malaysian Ministry of Education Long Term Research Grant Scheme (LRGS) Programme [Reference No: JPT.S (BPKI)2000/09/01/015Jld.4(67)].

REFERENCES

Bird, B. (1995). Toward a theory of entrepreneurial competency. *Advances in Entrepreneurship, Firm Emergence, and Growth*, *JAI Press, 2,* 51-72.

Birley, S., & Westhead, P. (1990). Growth and performance contrasts between 'types' of small firms. *Strategic Management Journal*, *11*(7), 535-557.

Basu, A., & Goswami, A. (1999). South Asian entrepreneurship in Great Britain: factors influencing growth. *International Journal of Entrepreneurial Behaviour and Research*, *5* (5), 251-275.

Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, *2* (1), 79-93.

Box, T. M., White, M. A., & Barr, S. H. (1993).A contingency model of new manufacturing firm performance. *Entrepreneurship Theory and Practice*, *18*, 31-31.

Brinckmann, J. (2008). Competence of top management teams and success of new technology-based firms: a theoretical and empirical analysis concerning competencies of entrepreneurial teams and the development of their ventures. Springer.

Baum, J. A., & Silverman, B. S. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing*, *19*(3), 411-436.

Brush, C. G., & Vanderwerf, P. A. (1992). A comparison of methods and sources for obtaining estimates of new venture performance. *Journal of Business Venturing*, *7* (2), 157-170.

Colombo, M. G., & Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: A competence-based view. *Research Policy*, *34*(6), 795-816.

Churchill, N. C., & Lewis, V. L. (1983).The five stages of small business growth. *Harvard Business Review*, *61*(3), 30-50.

Cooper, A. C. (1993). Challenges in predicting new firm performance. *Journal of Business Venturing*, *8* (3), 241-253.

Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, *7* (3), 223-236.

Chandler, G. N., & Hanks, S. H. (1993).Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing*, *8*(5), 391-408.

Chandler, G. N., & Hanks, S. H. (1994). Founder competence, the environment and venture performance. *Entrepreneurship Theory and Practice*, *18*, 77-77.

Covin, J. G., & Covin, T. J. (1990) .Competitive aggressiveness, environmental context, and small firm performance.

Esterberg, K.G. (2002). *Qualitative research methods in social research.* Boston: McGraw-Hill Inc.

Department of Statistics, Malaysia. (2011). Economic census 2011, *profile of small and medium enterprise*. Retrieved from http://www.statistics.gov.my/portal/download_others

Kaur, S., & Sandhu, M.S. (2013). Internationalisation of born global firms: evidence from Malaysia. *Journal of the Asia Pacific Economy,* 19 (1), 101-136.

Freel, M. S. (1999). Where are the skills gaps in innovative small firms?.*International Journal Of Entrepreneurial Behavior & Research*, *5*(3), 144-154.

Ferreira, J. J., Azevedo, S., & Ortiz, R. (2011). Contribution of resource-based view and entrepreneurial orientation on small firm growth. *Cuadernos de Gestión* 11(1), 95-116.

Fombrun, C. J., & Wally, S. (1989). Structuring small firms for rapid growth. *Journal of Business Venturing*, *4*(2), 107-122.

Gales, L. M., & Blackburn, R. S. (1990). An analysis of the impact of supplier strategies and relationships on small retailer actions, perceptions, and performance. *Entrepreneurship Theory and Practice*, *15*(1), 7-21.

Greene, P. & Brown, T. E. (1997).Resources needs and the dynamic capitalism typology. *Journal of Business Venturing*, 12, 161-173.

Gabrielsson, J., Tell, J., & Politis, D. (2009). Business simulation exercises in small business management education: using principles and ideas from action learning. *Action Learning: Research and Practice*, *7*(1), 3-16.

Garnsey, E., Stam, E., & Heffernan, P. (2006). New firm growth: Exploring processes and paths. *Industry and Innovation*, *13*(1), 1-20.

Hanqin, Q.Z., & Morrison, A. (2007). How can the small to medium sized travel agents stay competitive in China's travel and service sector?. *International Journal of Contemporary Hospitality Management,* 19 (4), 275-285.

Jo, H., & Lee, J. (1996).The relationship between an entrepreneur's background and performance in a new venture. *Technovation*, *16*(4), 161-211.

Konrad, A. & Bongkochmas, E. (2011). Lanna boutique hotels: a new destination for cultural tourism in Chiang Mai, Thailand. Proceedings of 2nd Regional Conference o n Tourism Research., 22nd November, 2011, Universiti Sains Malaysia, Penang. (pp.287-303).

Kushnir, K. (2010). How do economics define micro, small and medium enterprises (MSMEs)? *companion note for the MSME country indicators*. Retrieve from: http://www1.ifc.org/wps/wcm/connect/

Lerner, M., &Almor, T. (2002).Relationships among strategic capabilities and the performance of women-owned small ventures. *Journal of Small Business Management*, *40*(2), 109-125.

Lee, D. Y., & Tsang, E. W. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of management studies*, *38*(4), 583-602.

Maes, J., Sels, L. & Roodhooft, F. (2005). Modelling the link between management practices and financial performance. Evidence from small construction companies, *Small business Economics,* 25, 17-34.

Main, H. (2002). The expansion of technology in small and medium hospitality enterprises with a focus on net technology. *Information Technology and Tourism*, 4, 167-174.

Man, T. W., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, *17*(2), 123-142.

Martin, G., &Staines, H. (1994).Managerial competences in small firms. *Journal of Management Development*, *13*(7), 23-34.

Marzano, G. , & Scott, N. (2009). Power in destination branding. *Annals of Tourism Research*, 36(2), 247-267.

Mbaiwa, J.E. (2003). The socio-economic and environmental impacts of tourism development on the Okavango Delta, north-western Botswana, *Journal of Arid Environments*, 54, 447-467.

Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, *16*(2), 92-111.
Morrison, A. (2002). Small hospitality business: enduring or endangered?. *Journal of Hospitality and Tourism Management*, 9 (1), 1-11.
Mshenga, P.M., & Owuor, G. (2009). Opportunities for micro and small scale businesses in the tourism sector: the case of the Kenya coast. *KC Journal of Business Management*, 2(2), 52-56.
Othman, P., Rosli, M.M., (2011). Impact of tourism on small business performance: empirical evidence from Malaysian Islands. *International Journal of Business and Social Science,* 2 (1), 11-21.
Ottenbacher,M., & Gnoth, J. (2005). How to develop successful hospitality innovation. *Cornell Hotel and Restaurant Administration Quarterly,* 46, 205-222.
Rashid, M.M.R., Jaafar, M., & Dahalan (2013). Tourism and SME businesses opportunity in Lenggong valley world archaeological heritage site Malaysia. Proceedings of International Conference on Tourism Development February 4 & 5 February, G Hotel Penang, Malaysia (pp.150-163).
Schreier, M., (2012). *Qualitative content analysis in practice*. Thousands Oaks, CA: Sage
Shaw, G. (2004). Entrepreneurial cultures and small business enterprises in tourism. *A Companion to Tourism*
Storey, D. J. (1994).Understanding the Small Business Sector. In Ferreira, J. J., Garrido Azevedo, S., & Fernández Ortiz, R. (2011).Contribution of resource-based view and entrepreneurial orientation on small firm growth.*Cuadernos de Gestión,* 11(1), 95-116.
Stuart, R. W., & Abetti, P. A. (1990).Impact of entrepreneurial and management experience on early performance. *Journal of Business Venturing*, *5*(3), 151-162.
Saad, M. & Patel, B. 2006. "An investigation of supply chain performance measurement in the Indian automotive sector", *Benchmarking: An International Journal,* 13(1/2, pp. 36-53.
Smallbone, D., & Welter, F. (2001).The distinctiveness of entrepreneurship in transition economies. *Small Business Economics*, *16*(4), 249-262.
SitiNabiha, A.K., Wahid, N.A., & KamalulAriffin, N.S.. (2010). The drivers and the outcomes of environmental management practices in the hotel industry: a proposed framework. *TEAM Journal of Hospitality and Tourism*, 7 (1), 13-26.
SMECorp Malaysia. (2014). *SME Definition*. National SME Development Council Malaysia Retrieved from www.smecorp.gov.my
SME (2011). *Annual Report 2010/2011*. National SME Development Council. Malaysia Retrieved from www.smecorp.gov.my
SME *Masterplan to accelerate growth of SMEs through comprehensive actions. Including Six high impact programmes*, (2011). Retrieved from http://www.smecorp.gov.my/node/15
Thomas, R., Shaw, G., & Page, S.J. (2011). Understanding small firms in tourism: a perspective on research trends and challenges. *Tourism Management*, 32 (5), 963-976.
Tsai, W. M. H., MacMillan, I. C., & Low, M. B. (1991).Effects of strategy and environment on corporate venture success in industrial markets. *Journal of Business Venturing*, *6*(1), 9- 28.
Tourism Malaysia (2011). Our mission statement. Retrieved from http://corporate.tourism.gov.my/aboutus.asp
Tourism Malaysia (2014). Malaysia tourist arrivals 2013. Retrieved from http://www.tourism.gov.my
Rogerson, C.M. (2004). Transforming the South Africa tourism industry: the emerging black-owned bed and breakfast economy, *GeoJournal*, 60, 273-281.
Rogoff, E.G., Lee, M.S., & Suh, D.C. (2004). Who done it? Attributions by entrepreneurs and experts of the factors that cause and impede small business success, *Journal of Small Business Management,* 42 (4), 364-376.
Saad, M. & Patel, B. (2006), An investigation of supply chain performance measurement in the Indian automotive sector. *Benchmarking: An International Journal*, 13 (1/2), 36-53.
Sharma, A., & Upneja, A. (2005). Factors influencing financial performance of small hotels in Tanzania. *International Journal of Contemporary Hospitality Management*, 17 (6), 504-515.
Thomas, R. (2000). Small firms in the tourism industry: some conceptual issues. *International Journal of Tourism Research*, 2, 345-353.
UNESCAP (2005). Major issues in tourism development in the Asian and Pacific region: Enhancing the role of tourism in socio-economic development and poverty reduction. http://www.unescap.org
United Nations World Tourism Organisation .(2011). World tourism barometer – tourism trends and marketing, Madrid.
United Nations World Tourism Organisation. (2014). *World tourism barometer – tourism trends and marketing*, Madrid.
Wiklund, J. (1999). The Sustainability of the TQ; Entrepreneurial Orientation - Performance Relationship. *Theory and Practice*, 24(1), 37–49.
Weinzimmer, L. G., Nystrom, P. C., & Freeman, S. J. (1998).Measuring organizational growth: Issues, consequences and guidelines. *Journal of management*, *24*(2), 235-262.
Xiao, H., & Smith, L.J. (2006). Case studies in tourism research: a state-of-the-art analysis. *Tourism Management*, 27: 738-749.
Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, *6*(4), 259-285.

A Confirmatory Factor Analysis in a Study of Consumer Complaint Behaviour, Satisfaction with Complaint Handling and Relationship Quality in the Malaysian Mobile Phone Services Industry

Mohd. Khirzan Badzli A Rahman[1], Sharifah Azizah Haron[2,3], Laily Paim[2], Syuhaily Osman[2], Abdul Kadir Othman[1]

[1]Faculty of Business and Management, Universiti Teknologi MARA, Shah Alam, Malaysia
[2]Faculty of Human Ecology, Universiti Putra Malaysia, Serdang, Malaysia
[3] Malaysian Research Institute on Ageing (My Ageing)

Email:
mohdkhirzan@gmail.com

ABSTRACT

A study was conducted to examine the relationships of consumer complaint behaviour, satisfaction with complaint handling and relationship quality in the Malaysian mobile phone services industry. A total of 285 complainers of mobile phone users were selected as the respondents. This paper presents the results of confirmatory factor analysis (CFA), AVE and CR of the study. The CFA measurement model which consist of public complaint soft action (PCSA), public complaint extreme action (PCEA), private complaint soft action (PVSA), private complaint extreme action (PVEA), satisfaction with complaint handling (SATCOM) and relationship quality show excellent goodness-of-fit with χ^2 = 638.781, df = 291, χ^2/df = 2.195, TLI = .926, NFI = .894, CFI = 938, PNFI = .741 and RMSEA = .069 respectively. The model has shown convergent and discriminant validity with AVE and CR fulfilled the requirement. The results indicate that the model can be used for analysis.

Keywords: Consumer complaint behaviour, satisfaction with complaint handling, relationship quality

1.0 Introduction

Customers' complaints and customers' feedbacks are the useful tools to determine the services rendered meet the customer's needs and wants. The tools are also used to identify customer's dissatisfaction/problem. Literally, complaint helps improve the hindrance that is unknown to the service provider. Hence, organizations are providing various types of channels for their customers to complain. On top of the complaint channels provided, mobile phone users in Malaysia are free to forward their complaints to the third parties such as Communication and Multimedia Consumer Forum of Malaysia (CFM), Malaysian Communication and Multimedia Commission (MCMC), National Consumer Complaints Centre (NCCC), any Consumer Associations in Malaysia, the government agencies such as Ministry of Domestic Trade Co-operatives and Consumerism, political leaders or the mass media.

The objective of the study is to investigate the relationships of consumer complaint behaviours, satisfaction with complaint handling and relationship quality. However, before proceeding to the structural model and test all hypotheses it is crucial that the constructs involved in the study meet the requirements for reliability and validity. Therefore this paper aims to highlight the results of CFA, reliability and validity of the constructs involved in the study. It is important that the constructs are reliable and valid before proceeding for further analysis.

2.0 Literature Review

2.1 Consumer complaint behaviour

Based on Hirschman's (1970) study, consumer complaint behaviour (CCB) has been conceptualised and defined in various perspectives. Throughout the decades CCB has been classified as two-level of hierarchical actions due to dissatisfaction (Day and Landon, 1977) and divided it into four actions namely complain personally to someone, do nothing, boycott the store or product or go through intermediaries (Warland et al., 1975). In the 80's CCB was defined and seen as the action taken by an individual as communicating something negative regarding a product or service to either the company or to some third-party entity (Jaccoby and Jaccard, 1981), involving three kinds of behaviours known as switching, making a complaint to the seller and telling the experience to others (Richins, 1983) and categorise CCB into voice, private and third party (Singh, 1988). In the 90's Hunt and Hunt (1990) incorporated retaliation, grudge-holding and avoidance as complaining behaviours in their own right and later, Huefner and Hunt (1994) simplified the conceptualising of complaining behaviour as four-dimensional phenomenon. Studies on CCB were continuously being conducted in the 2000's. Crié (2003) defined CCB as a process that constitutes a subset of all possible responses to perceived dissatisfaction around purchased episode, during consumption or during possession of the goods or services.

It has been in agreement by previous researchers that the results of dissatisfaction include public action, private action and no action (Day & Landon, 1977; Crié , 2003; Phau & Sari, 2004, Ndubisi & Ling, 2006), voice, private and third party (Singh, 1988), switching, making a complaint to the seller and telling the experience to others (Richin, 1983) and retaliation, grudge-holding and avoidance (Hunt & Hunt, 1990). Heung and Lam (2003) defined public actions as seeking redress directly, seeking refund from the seller, complaining to the media, instigating legal actions and taking direct complaint actions to the firm or consumer agency. Many authors characterised private actions as switching brands and firms, boycotting a firm's products, ceasing to patronize an establishment and negative word-of-mouth communications to friends and relatives (Kim et al., 2003; Tronvoll, 2011). Noticeably, the literature implies CCB as a set of multiple responses that are triggered by perceived dissatisfaction towards the service provider. Adopting taxonomy by Crié (2003) our previous study suggested that consumer complaint behaviour consisted of public complaint soft action (PCSA), public complaint extreme action (PCEA), private complaint soft action (PVSA) and private complaint extreme action (PVEA) (Rahman et al., 2015).

2.2 Satisfaction with Complaint Handling

"Complaint satisfaction" is the satisfaction of a complainer with a company's response to his or her complaint (Stauss, 2002). Nevertheless, several synonyms for this term are found in the literature such as "secondary satisfaction" (Etzel & Silverman, 1981; Oliver, 1997), "complaint response satisfaction" (Blodgett & Grandbois, 1992), "service recovery satisfaction" (Boshoff, 1999; de Ruyter & Wetzels, 2000), "satisfaction with complaint resolution" (Andreassen, 1999) "satisfaction with service recovery" (Maxham & Netemeyer 2002), "overall complaint satisfaction" (Stauss 2002), "satisfaction with the remedy" (Harris et

al., 2006) or “recovery disconfirmation” (McCollough et al., 2000). In all cases, the meaning is the same where they refer to customer evaluation on the company’s responses to complaint. The results of the evaluation determine the satisfaction level of the complainers which may exist based on several situations. In the study, satisfaction with complaint handling was adopted from Varela-Neira et al., (2010) to indicate complaint satisfaction. Satisfaction with complaint handling is also known as complaint satisfaction. Despite the linguistic differences, the general framework behind the definitions is the confirmation or disconfirmation the satisfaction of the complaint response (Oliver, 1980). This means customers compare their perceptions of the actual performance of the complaint handling procedures with their expectations towards that performance.

2.3 Relationship quality

Relevant literature has provided a number of definitions for relationship quality. Previous researchers conceptualised relationship quality as a higher-order constructs (Dwyer et al., 1987; Crosby et al., 1990; De Wulf et al., 2001). A higher-order concept is a latent variable, in which the indicators are themselves latent (Garson, 2009). Evidently, there is no consensus on the dimensions that make up relationship quality. However, satisfaction, trust and commitment have been emphasized as the important indicators of relationship quality (Dwyer et al., 1987; Crosby et al., 1990; Hennig-Thurau. & Klee, 1997; De Wulf et al., 2001). On the other hand, in an industrial context, specific dimensions are added from buyer-seller relationships. For example in an exporting firm and importer, four dimensions of relationship quality; namely, amount of information sharing, communication quality, long-term orientation as well as satisfaction in the relationship were added (Lages et al., 2005). Other researchers add minimal opportunism (Dorsch et al., 1998), customer orientation (Dwyer et al., 1987; Berry & Parasuraman, 1991) and ethical profile (Hunt et al., 1989) in their studies.

In the study, relationship quality is the dependent variable adopted from Roberts et al., (2003). The dimensions consist of trust in partner’s honesty, trust in partner’s benevolence, commitment, satisfaction and affective conflict. The reason for adopting Robert’s study is that, the dimensions are appropriate in assessing relationship quality in a services industry. The study of relationship is important for the benefits of consumers and service providers. On the seller/service provider’s side, Cohen (2004) proposed that organisations should focus on relationship building where learning and performance improvement are given attention so that the industry can truly add value to ensure increased business results. On the consumers’ side, high level of satisfaction can be achieved through collaboration of the parties involved (Chumpitaz & Paparoidamis, 2004).

3.0 Methodology and Analysis

3.1 Scale and measurement

The questionnaire comprises of three (3) parts. Part I consists of a question that requires a monosyllabic answer “Yes” or “No” in order to categorise respondents into complainers or non-complainers. Since the focus of the study is the complainer, respondent who answered “No” are not included in the study. Part II consists of questions with regard to the respondent’s demographic profile. Questions examining the public complaint soft action (PCSA), public complaint extreme action (PCEA), private complaint soft action (PVSA), private complaint extreme action (PVEA), satisfaction with complaint (SATCOM) and relationship quality were placed in Part III. Part III consists of sixteen (16) statements to measure the respondent’s complaint behaviour. Three (3) statements were meant to measure PCSA, four (4) for PCEA, six (6) for PVSA, three (3) for PVEA, five (5) for

SATCOM and fifteen (15) for relationship quality. All items were adapted from previous studies (Liu & McClure, 2001; Roberts et al., 2003; Ndubisi & Ling, 2006; Malhotra et al., 2008; Varela-Neira et al., 2010; Rahman et al., 2015).

All items were rated on a five-point Likert scale, which ranged from 1=strongly disagree to 5=strongly agree. As the study focused on the behavioural actions of the respondents, the opening of the statement to measure CCB was provided with a phrase "**For the problem that I have encountered with my service provider, I always…."** indicating that all responses must be based on the actual experience. The scores for all items were averaged to determine the mean score of a particular variable. The questionnaire was written in English and was translated into Malay language by professional translators and re-checked to ensure that the translation is correct before it can be used.

3.2 Procedures

The population for the study were the consumers of mobile phone services from all service providers available in Malaysia; namely, Maxis Berhad (known as Maxis), DiGi Telecommunication Sdn. Bhd. (known as DiGi), Celcom Axiata Berhad (known as Celcom), and U-mobile in the states of Selangor, Wilayah Persekutuan Kuala Lumpur and Putrajaya. They were chosen based on the fact that the total number of subscribers from these states represents 28.6% (1,945,143) of the total subscribers in Malaysia (MCMC, 009). Besides, the respondents can represent those from other states in terms of culture and values because the population in these locations come from various states in Malaysia. Thus, the selection ensures the representativeness of the sample. Using mall-intercept approach twelve shopping malls in Selangor, Kuala Lumpur and Putrajaya were selected as the centres for data collection activity. Selection of malls is based on the description suggested by Ibrahim and Ng (2002) and Guy (1998).

3.3 Confirmatory Factor Analysis

As suggested by many authors, this study performed the unidimensionality assessment prior to testing the reliability and validity of each construct (Anderson & Gerbing, 1982; Dunn et al., 1994 and Hair et al., 2010). Unidimensionality is as an assumption underlying the calculation of reliability and is demonstrated when the indicator of a construct has an acceptable fit on a single-factor (one-dimensional) (Hair et al. (2010). Using AMOS version 21, CFA was employed to explore statistical relationships among the items of each factor as well as to verify the unidimensionality. CFA is a statistical technique used to verify the factor structure of a set of observed variables. CFA allows testing of the hypothesis pertaining to a relationship between observed variables and their underlying latent construct. The goodness-of-fit are used to verify the model fitness. The goodness-of-fit measures are important to determine how well the model best representing the data reflects the underlying theory (Ho, 2006). With the consideration to counter the multivariate effect, the inclusion of non-normality and at least one index from each of the index categories from absolute fit, incremental fit and parsimonious fit, the fit indices of Root Mean Squared Error Approximation (RMSEA), normed Chi-Square (χ^2/df), Tucker-Lewis Index (TLI), Normed Fit Index (NFI), Parsimony Normed Fit Index (PNFI) and Comparative Fit Index (CFI) were considered in the study (Hair et al., 2010). In order to establish the model fit, the respective cut-off points of the indices have to be satisfied: RMSEA ≤ 0.08 (MacCallum et al., 1996), χ^2/df ≤ 5.0 (Schumacker & Lomax. 2010) and TLI, NFI, CFI ≥ 0.90 (Blunch, 2008).

3.4 Validity and reliability

The construct validity (standardized factor loadings and internal consistencies) and convergent validity (average variance extracted, AVE) were referred to test the robustness of

the model. The reliability and validity of the underlying constructs were assessed using alpha value of Cronbach's (1951), construct reliability (CR), and average variance extracted (AVE), the validity were assessed using construct, convergent and discriminant validity. In using confirmatory factor analysis, CR and AVE were calculated from model estimates using the formula given by Fornell and Larcker (1981).

$$\text{Extracted Variance} = \frac{(\sum SMC_i)^2}{(\sum SMC_i)^2 + (\sum \mathcal{E}_i)^2}$$

$$\text{Construct Reliability} = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + (\sum \mathcal{E}_i)}$$

According to Bagozzi and Yi (1988), CR should be equal to or greater than .60, and AVE should be equal to or greater than .50. Based on these assessments, measures used within this thesis were within the acceptable levels supporting the reliability of the constructs. In the case of validity, confirmatory factor analysis has also been used to assess construct, convergent and discriminant validity. Construct validity exists when the measure is a good representation of the variable that the researcher intends to measure and it is a necessary pre requisite for theory testing. In this study the results obtained from goodness-of-fit indices will confirm the construct validity (Hsieh & Hiang, 2004). As for convergent validity, all factor loadings for items measuring the same construct must be statistically significant (e.g: Anderson & Gerbing, 1988; Holmes-Smith, et al., 2006). The results of AVE provide an additional support for convergent validity. Discriminant validity was achieved by deleting the redundant items — a reason for the high correlation — and through the results of pattern structure; coefficients show that each factor in each measurement model was empirically distinguishable. Further analysis such as structural modelling to test the hypotheses can only be performed after having analysed the measurement models for unidimensionality, reliability, construct validity, convergent validity and discriminant validity.

4 Results

4.1 Demographic background of respondents

The study involves 285 mobile phone services users identified as complainers from the state of Selangor, Wilayah Persekutuan Kuala Lumpur and Wilayah Persekutuan Putrajaya in Malaysia. Demographic information from the sample shows that 141 male respondents (49.5 percent) and 144 female respondents (50.5 percent). The majority of the respondents aged between 21 to 30 years old which were represented by 49.6 percent. In terms of marital status, married respondents were slightly higher (53.0 percent). Although majority of the respondents were subscribing to one service provider, a substantial percentage of the respondents (35.4 percent) subscribed to two mobile phone services.

4.2 Results for Unidimensionality

Consumer Complaint Behaviour

Public complaint soft action (PCSA) was measured using three items CCB1, CCB2 and CCB3. The CFA provides a sufficient fit with all factor loadings above 0.50. The results

show chi-square = 1.635, CFI = .997, TLI = .992, RMSEA = .048 and RMR = .025. PCSA does not need further re-specification as the required indices meet the requirement. *Public complaint extreme action (PCEA)* was measured using four items CCB4, CCB5, CCB6 and CCB7. The CFA provides a sufficient fit with all factor loadings above 0.50. The result shows chi-square = 5.881 CFI = .991, TLI = .973, RMSEA = .085 and RMR = .027. Although the value of RMSEA (0.085) slightly exceeded the threshold value (< 0.08) re-specification was not conducted because another index (GFI) for absolute fit indices showed good value (.989). *Private complaint soft action (PVSA)* was measured using six items CCB8, CCB9, CCB10, CCB11, CCB12 and CCB13. The CFA provides a poor fit with chi-square = 597.607, CFI = .773, TLI = .562, RMSEA = .492 and RMR = .144. Examination of modification indicate that one item (CCB9) needs to be removed and the errors for items CCB8, CCB10 and CCB11 need to be correlated in order to get a good fit for the model. The final model shows a better fit to the data with chi-square = 3.653, CFI = .999, TLI = .995, RMSEA = .055 and RMR = .004. *Private complaint extreme action (PVEA)* was measured using three items CCB14, CCB15 and CCB16. The result shows chi-square = 8.815 CFI = .965, TLI = .947, RMSEA = .116 and RMR = .133. Although the value of RMSEA (0.116) did not meet the requirement (> .08), the GFI value has shown good value (.977) as an alternative index to measure Absolute Fit Indices. Therefore this construct was accepted for further analysis in the overall measurement model.

Satisfaction with Complaint Handling

Satisfaction with complaint handling (SATCOM) was measured by five items labelled as SATCOM1, SATCOM2, SATCOM3, SATCOM4 and SATCOM5_rc. The analysis indicated one item (SATCOM5_rc) did not meet the factor loading above the threshold of 0.50 and the overall model failed to meet goodness-of-fit indices benchmark as displayed by RMSEA figure, which exceeded 0.80. The chi-square is significant (χ^2=24.369, df =5, p=.000). The GFI is .969, AGFI=.906, CFI = .978, and RMSEA=.117. Item SATCOM5_rc was removed and CFA was performed again. The results of the re-specification were also not a better fit to the data which showed RMSEA=0.162 and χ^2/df = 8.486. Therefore, model re-specification was done to gain a better fit. Based on the modification indices (MI), measurement error covariance between SATCOM3 and SATCOM4 showed the highest modification index of 12.140. Accordingly, the measurement model for SATCOM was re-estimated by connecting the measurement error of SATCOM3 and SATCOM4. The modified model showed a better fit to the data where RMSEA had decreased to 0.07 and other fit indices showed good fit, GFI=0.996, CFI=0.998, χ^2/df = 2.382 (χ^2=2.382, df=1, p=.123). Besides, all of the standardized factor loadings of all indicators in the SATCOM latent variable were in the range of 0.75 to 0.94 to show the support of convergent validity for all items.

Relationship Quality

The initial hierarchical factor structure for relationship quality using the second order model was found to have imperfect fit with TLI=0.945, CFI=0.956, PNFI=0.755, RMSEA=0.082, normed chi-square=2.706 (χ^2=230.011, df=85, p=0.00). The factor loadings for trust in partner's honesty (TiPH) (RQ1, RQ2 RQ3), trust in partner's benevolence (TiPB) (RQ4, RQ5, RQ6) affective commitment (AFCM) (RQ7, RQ8, RQ9) satisfaction (SAT) (RQ10, RQ11, RQ12) and affective conflict (AFCON) (RQ13, RQ14, RQ15) were 0.91, 0.62, 0.86, 0.60 and 0.26 respectively. AFCN was found to have a very low factor loading (0.26) although the observed variables loaded on each factor were with standardized factor loadings of 0.84 to 0.91 (p<0.05). Therefore, to improve the model fit it was decided that the

factor which had a very low factor loading should be omitted from the model and the re-specification performed. After performing the first re-specification process, the results were found to have imperfect fit with GFI=0.907, CFI=0.951, PNFI=0.707, RMSEA=0.096, normed chi-square=3.636 (χ^2=181.817, df=50, p=0.00). However, the results indicated sufficient fit to the model and the data. Although the RMSEA (0.096) which is exceeded the threshold value (< 0.80) further re-specification was not done as the value of GFI (0.907) met the required value (> 0.90).

In the study, relationship quality was measured using the second order model to allow the researcher to examine the loadings of each factor whilst factor loading of less than 0.50 is omitted from the model (Hair, et al., 2010). However, it must be consistent with the underpinning theory. In this study, the affective conflict factor was found to have a very low factor loading (0.26) and it was decided that this factor would be omitted. Theoretically, relationship quality has inconsistent underlying factors. Relationship quality in this study was adopted from Roberts, et al., (2003) due to the reason that the studies are in the similar industry (services). The difference of this relationship quality in this study as compared to others is that Roberts, et al., (2003) has included affective conflict in the construct. However, the common factors used by many researchers for relationship quality are trust, commitment and satisfaction (Hennig-Thurau & Klee,1997). Hence, omitting affective conflict from relationship quality construct does not violate the true concept of relationship quality. Table 1 shows the item used and item deleted as a result of the re-specification.

Table 1: Items used and deleted

Original Item ***For the problem that I have encountered with my service provider, I always….***	Item Label	Item Deleted
Soft Public Action		
discuss the problem with manager or other employee of the service provider.	CCB1	
request the service provider to take care of the problem (e.g. to fix, replace item or to do better in the future).	CCB2	
inform the service provider for improvement in future.	CCB3	
Extreme Public Action		
write a letter to a local newspaper or mass media.	CCB4	
report the problem to a consumer agency.	CCB5	
complain to a government agency or politician.	CCB6	
take legal action against the service provider.	CCB7	
Soft Private Action		
speak to my friends about my bad experience with the service provider.	CCB8	
speak to my relatives about my bad experience with the service provider.	CCB9	Deleted
convince my friends not to do business with the service provider.	CCB10	Deleted
convince my relatives not to do business with the service provider.	CCB11	
tell my friends never to use this service provider's service again.	CCB12	
tell my relatives never to use this service provider's services again.	CCB13	
Extreme Private Action		
write on my internet social interactive mediums accounts to tell others about my bad experience with this service provider.	CCB14	
use this service provider when I absolutely have to	CCB15	
decided to use other service provider next time	CCB16	

Table 1: Items used and deleted (Continue..)

Original Item ***For the problem that I have encountered with my service provider, I always….***	Item Label	Item Deleted
SATCOM		
I am satisfied with the way the service provider handled my complaint.	SATCOM1	
I have a positive experience when complaining to this service provider.	SATCOM2	
I am very satisfied with the way the service provider handled complaints.	SATCOM3	
In my opinion, the service provider has provided me with a satisfactory answer to my problem.	SATCOM4	
Overall, I am not happy with the way my problem was handled (R).	SATCOM5_rc	Deleted
Relationship Quality		
Trust in Partner's Honesty		
My service provider is honest with problems.	RQ1	
My service provider has high integrity.	RQ2	
My service provider is trustworthy.	RQ3	
Trust in Partner's Benevolence		
My service provider is concerned about my welfare.	RQ4	
If I confide my problems to my service provider, I know they will respond with understanding.	RQ5	
I can count on my service provider considering how their actions affect me.	RQ6	
Affective Commitment		
I feel emotionally attached to my service provider.	RQ7	
I continue to deal with my service provider because I like being associated with them.	RQ8	
I continue to deal with my service provider because I genuinely enjoy my relationship with them.	RQ9	
Satisfaction		
I am delighted with the performance of my service provider.	RQ10	
I am happy with my service provider's performance.	RQ11	
I am content with my service provider's performance.	RQ12	
Affective Conflict		
I am angry with my service provider.	RQ13	Deleted
I am disappointed with my service provider.	RQ14	Deleted
I feel annoyed with my service provider.	RQ15	Deleted

4.3 Overall CFA Measurement Model

The overall measurement model involved all constructs in the study – PCSA, PCEA, PVSA, PVEA, SATCOM and relationship quality. The measurement model is crucial before proceeding to the structural model because it consists of all constructs examined in this study. The goodness-of-fit indexes were examined to verify the fitness of the overall model. Figure 1 portrays the final overall measurement model with all parameter estimates based on the results of confirmatory factor analysis. During the re-specification process three items, CCB14, RQ1 and RQ4 were deleted from the model. The results indicated that the overall measurement model was a good-fitting model although the value of GFI (0.838) was slightly below the threshold value (> 0.90). Other indices showed good values where the CFI=0.936, TLI=0.927, normed chi-square=2.178 (χ^2=668.626, df=307, p=0.00), RMSEA=0.069 and

RMR 0.076. Furthermore, all ß-weights were significant at p<0.001 with standardized factor loadings ranging from 0.601 to 0.988 (t-values of 7.915 to 50.372).

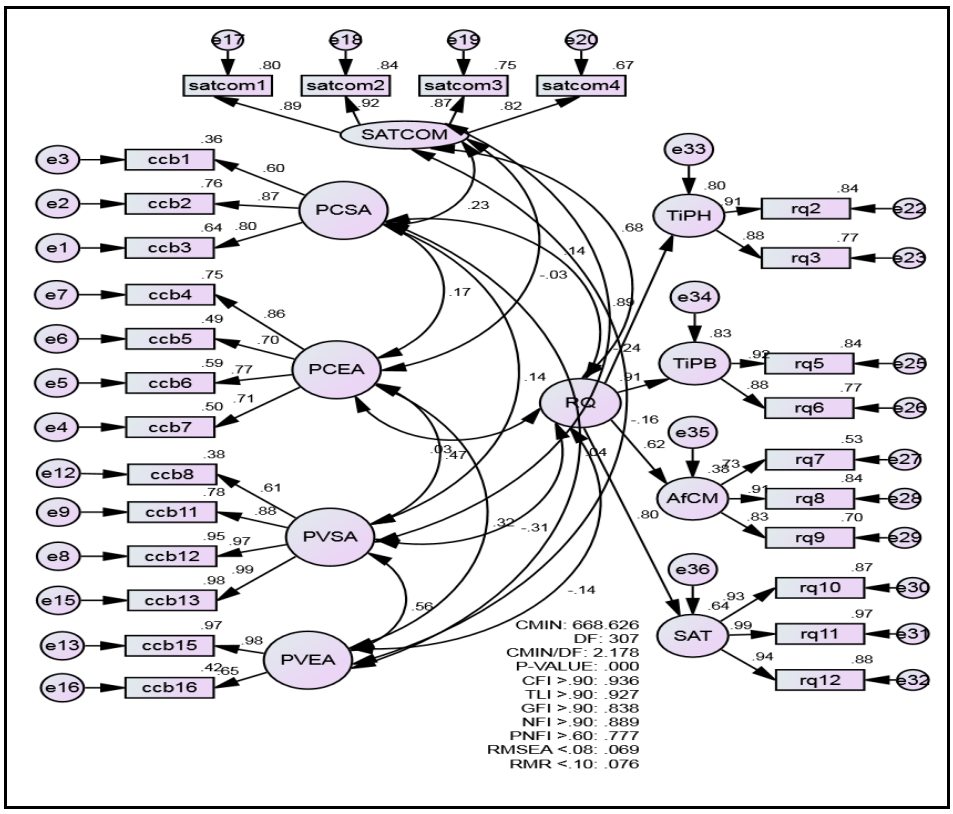


Figure 1: Final Overall Measurement Model

The results of the measurement model achieved the acceptable model fit criterion. Therefore, the model can be used for further analysis such as structural modelling for hypothesis testing.

4.4 Validity and reliability

This study performed the unidimensionality assessment prior to testing the reliability and validity of each construct as suggested by Anderson and Gerbing (1982), Dunn et al., (1994) and Hair et al. (2010). The unidimensional measurement model is more useful because it offers a more precise test of convergent and discriminate validity of factor measurement (Anderson & Gerbing, 1988). The construct validity (standardized factor loadings and internal consistencies) and convergent validity (average variance extracted, AVE) were referred to test the robustness of the model.

Table 2 shows the standardized factor loadings for all the items are exceeding the recommended value of 0.5 (Hair et al., 2010). Composite reliability values, which depict the degree to which the construct indicators reflect the latent construct, are in the range of .67 to .96 for complainers and .78 to .97 for non-complainers. The results exceed the recommended value of 0.7 (Hair et al., 2010), 0.6 (Fornell & Larcker, 1981; Tseng et al., 2006). The average variance extracted (AVE) values, which reflects the overall amount of variance in the indicators as accounted for by the latent construct, are in the range of .58 to .91 which exceeded the recommended value of 0.5 (Fornell & Larcker, 1981; Hair, et al., 2010).

Table 2: The result of Construct Reliability and Average Variance Extracted

Construct	Items	Standardized Loadings	Cronbach's alpha (α)	CR	AVE
		Complainer			
Soft Public Action	CCB1	0.60	0.72	0.71	0.59
	CCB2	0.87			
	CCB3	0.80			
Extreme Public Action	CCB4	0.86	0.73	0.76	0.58
	CCB5	0.70			
	CCB6	0.77			
	CCB7	0.71			
Soft Private Action	CCB8	0.61	0.89	0.91	0.77
	CCB11	0.88			
	CCB12	0.97			
	CCB13	0.99			
Extreme Private Action	CCB15	0.98	0.67	0.76	0.69
	CCB16	0.65			
SATCOM	SATCOM1	0.89			
	SATCOM2	0.92			
	SATCOM3	0.87			
	SATCOM4	0.82	0.92	0.91	0.77
Trust in Partner's Honesty	RQ2	0.97	0.89	0.86	0.82
	RQ3	0.84			
Trust in Partner's Benevolence	RQ5	0.92	0.87	0.87	0.80
	RQ6	0.87			
Affective Commitment	RQ7	0.72	0.86	0.82	0.68
	RQ8	0.91			
	RQ9	0.84			
Satisfaction	RQ10	0.93	0.97	0.97	0.93
	RQ11	0.99			
	RQ12	0.94			

In order to further confirm the reliability of the construct, the average variance extracted (AVE) and construct reliability (CR) are calculated based on the formula by Fornell and Larcker (1981). Construct validity testifies how well the results obtained from the use of the measure fit the theories around which the test is designed (Sekaran & Bougie, 2010). Construct validity can be examined through convergent and discriminant validity. Discriminant validity can be tested by comparing the correlations between constructs and the square root of the average variance extracted (AVE) for a given construct.

Following Zait and Bertea (2011), it is necessary to obtain a matrix where the correlation of each construct can be seen. The AVE values were inserted on the diagonal in order to compare it with the other correlation coefficient and the value of AVE. As shown in Table 2, it can easily be seen that the AVE values are above 0.5 and, moreover, are above the correlation coefficients for each type of the construct showing satisfactory of discriminant validity (Sridharan et al., 2011).

Table 2: Discriminant validity of constructs for complainers

	1	2	3	4	5	6	7	8	9
1. PCSA	**0.586**								
2. PCEA	0.167	**0.582**							
3. PVSA	0.138	0.474	**0.767**						
4. PVEA	0.044	0.316	0.599	**0.691**					
5. SATCOM	0.234	-0.033	-0.242	-0.163	**0.767**				
6. TiPH	0.119	0.014	-0.299	-0.167	0.650	**0.823**			
7. TiPB	0.170	0.050	-0.248	-0.095	0.586	0.792	**0.802**		
8. AfCM	-0.004	0.088	-0.065	-0.058	0.515	0.553	0.337	**0.684**	
9. SAT	0.115	-0.006	-0.302	-0.105	0.683	0.688	0.598	0.552	**0.910**

Note: Diagonals are the square root of the AVE; the off-diagonals are the correlations

5 Conclusion

The current study purify and validate the complaint behaviour, satisfaction with complaint handling and relationship quality scale and provide a psychometrically sound scale for future use. After a 2-stage process of purification and cross-validation, the final model show three (3) items were removed from the original CCB, one (1) item from SATCOM and five (5) items from relationship quality. The results showed that the 28-item scale is more parsimonious and more stable for this model. The confirmatory factor analysis has confirmed that the four subscales four relationship quality are acceptably unidimensional, which is important in scale development and purification processes (Anderson & Gerbing, 1988).

The unidimensional measures also provide clear meaning to the composite scores. Thus, using the purified scales should make marketing professionals more confident in the consumer style profile created from those measurements. Therefore, a better measurement of consumer complaint behaviour can contribute to the marketing discipline. The CFA results also provide support to the model and the PCSA, PCEA, PVSA, PVEA, SATCOM and relationship quality scale. The discriminant validity of the four complaint behaviour styles is established. The purification process also identified areas of the scale that need to be improved. The results of the current validation study show that the current measurement model does not require further modifications and can be used for further analysis.

References

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin,* 103(3), 411.

Andreassen, T. W. (1999). What drives customer loyalty with complaint resolution?. *Journal of Service Research*, *1*(4), 324-332.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Academy of Marketing Science*, 16, 76–94.

Berry, L. L., & Parasuraman, A. (1991). *Marketing services: Competing through quality*. New York: The Free Press.

Blodgett, J. G., & Granbois, D. H. (1992). Toward an integrated conceptual model of consumer complaining behaviour. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, *5*(1), 93-103.

Blunch, N. (2008). *Introduction to structural equation modelling using SPSS and AMOS*. Sage.

Boshoff, C. (1999). An instrument to measure satisfaction with transaction-specific service recovery, *Journal of Service Research*, 1 (3), 236-49.

Chumpitaz, R., & Paparoidamis, N. G. (2004). Service quality and marketing performance in business-to-business markets: exploring the mediating role of client satisfaction. *Managing Service Quality*, *14*(2/3), 235-248.

Cohen, S. (2004). Social relationships and health. *American psychologist*, *59*(8), 676

Crie, D. (2003). Consumers' complaint behavior. Taxonomy, typology and determinants: towards a unified ontology. *The Journal of Database Marketing & Customer Strategy Management,* 11(1), 60-79.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334.

Crosby, L. A., Kenneth R. E. & Cowles, D. (1990). Relationship quality in services selling: An Interpersonal Influence perspective. *Journal of Marketing*, 54 (July), 68-81.

Day, R. L., & Landon, E. L. (1977). Toward a theory of consumer complaining behavior. *Consumer and Industrial Buying Behavior,* 95, 425-437.

De Wulf, K., Oderkerken-Schr¨oder, G., & Iacobucci, D. (2001). Investment in consumer relationships: A cross-country and cross-industry exploration. *Journal of Marketing, 65,* 33–50.

Dunn, S. C., Seaker, R. F., & Waller, M. A. (1994). Latent variables in business logistics research: scale development and validation. *Journal of Business Logistics,* 15, 145-145.

Dorsch, M. J., Swanson, S. R., & Kelley, S. W. (1998). The role of relationship quality in the stratification of vendors as perceived by customers. *Journal of the Academy of Marketing Science*, *26*(2), 128-142.

Dwyer, F.R., Schurr, P. & Oh, S. (1987). Developing buyer-seller relationships, *Journal of Marketing*, 51, 11-27.

Etzel, M. J., & Silverman, B. I. (1981). A managerial perspective on directions for retail customer dissatisfaction research. *Journal of Retailing*, 50(3), 124-136

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research,* 382-388.

Garson, G. D. (2009). *Structural Equation Modeling*. Retrieved from http://faculty.chass.ncsu.edu/garson/PA765/structur.htm#negativevariance

Guy, C. M. (1998). Classifications of retail stores and shopping centres: some methodological issues. *Geo Journal*, *45*(4), 255-264.

Hair Jr, J. F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Upper-Saddle River, New Jersey: Prentice Hall.

Harris, K. E., Grewal, D., Mohr, L. A., & Bernhardt, K. L. (2006). Consumer responses to service recovery strategies: the moderating role of online versus offline environment. *Journal of Business Research*, *59*(4), 425-431.

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology & Marketing*, *14*(8), 737-764.

Heung, V. C., & Lam, T. (2003). Customer complaint behavior towards hotel restaurant services. *International Journal of Contemporary Hospitality Management,* 15(5), 283-289.

Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states* (Vol. 25). Harvard university press.

Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS*. CRC Press.

Holmes-Smith, P., Coote, L., & Cunningham, E. (2006). *Structural Equation Modelling: From the Fundamentals to Advanced Topic*s. Melbourne: SREAMS.

Huefner, J. C., & Hunt, H. K. (1994). Extending the Hirschman model: when voice and exit don't tell the whole story. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior,*7(1),267-270.

Hsieh, Y.C., & Hiang, S.T. (2004). A study of the impacts of service quality on relationship quality in search-experience-credence services. *Total Quality Management and Business Excellence,* 15(1), 43–58.

Hunt, D. H., & Hunt, K. H. (1990). Customer grudge holding: Further conceptualization and analysis. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior,* 3, 117-122.

Hunt, S. D., Wood, V. R., & Chonko, L. B. (1989). Corporate Ethical Values and Organisational Commitment in Marketing. *Journal of Marketing Science*, 53(3), 79-90.

Ibrahim, M. F., & Ng, C. W. (2002). Determinants of entertaining shopping experiences and their link to consumer behavior: case studies of shopping centers in Singapore. *Journal of Retail & Leisure Property,* 2(4), 338-357.

Jacoby, J., & Jaccard, J. J. (1981). The sources, meaning, and validity of consumer complaint behavior: A psychological analysis. *Journal of Retailing.* 57(3), 1981, 4-24.

Kim, C., Kim, S., Im, S., & Shin, C. (2003). The effect of attitude and perception on consumer complaint intentions. *Journal of Consumer Marketing,* 20(4), 352-371.

Lages, C., Lages, C. R., & Lages, L. F. (2005). The RELQUAL scale: a measure of relationship quality in export market ventures. *Journal of Business Research*, 58(8), 1040-1048.

Liu, R. R., & McClure, P. (2001). Recognizing cross-cultural differences in consumer complaint behavior and intentions: an empirical examination. *Journal of Consumer Marketing,* 18(1), 54-75.

MacCallum, R. C., & Browne, M. W. (1993). The use of causal indicators in covariance structure models: some practical issues. *Psychological Bulletin*, *114*(3), 533.

Malaysian Communication and Multimedia Commission. (2009). *Communications and Multimedia Pocket Books of Statistics Q3 2009.* Retrieved from: http://www.skmm.gov.my/Resources/Statistics/Hand-phone-Surveys.aspx

Malhotra, N. K., Oly-Ndubisi, N., & Agarwal, J. (2008). Public versus private complaint behavior and customer defection in Malaysia, appraising the role of moderating factors. *EsicMarket* (September–December),27-59.

Maxham J. G., & Netemeyer, R. G. (2002). Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent. *Journal of Retailing,* 78 (2002) 239 –252.

McCollough, M. A., Berry, L. L., & Yadav, M. S. (2000). An empirical investigation of customer satisfaction after service failure and recovery. *Journal of Service Research*, *3*(2), 121-137.

Ndubisi, N.O. & Ling, T.Y. (2006). Complaint behavior of Malaysian consumers. *Management Research News,* 29(1), 65-76.

Oliver, R. L. (1997). *Satisfaction: A Behavioural Perspective on the Consumer*, Irwin McGraw-Hill, Boston.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(November), 460-469.

Phau, I., & Sari, R. P. (2004). Engaging in complaint behavior: an Indonesian perspective. *Marketing Intelligence & Planning,* 22(4), 407-426.

Rahman, M. K. B. A., Haron, S. A., Paim, L. H., Othman, M., Osman, S., & Othman, A. K. (2015). Construct Validation of Consumer Complaint Behavioral Scale in the Malaysian Mobile Phone Services Industry. *Asian Social Science*, *11*(24), p6.

Richins, M. L. (1983). Negative word-of-mouth by dissatisfied consumers: a pilot study. *The Journal of Marketing,* 68-78.

Roberts, K., Varki, S., & Brodie, R. (2003). Measuring the quality of relationships in consumer services: An empirical study. *European Journal of Marketing*, *37*(1/2), 169-196.

Schumacker, R. E., & Lomax. R.G. (2010). *A beginner's guide to structural equation modeling*. (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Sekaran U., Bougie R., (2010). *Research methods for business: a skill building approach*. Wiley, UK.

Singh, J. (1988). Consumer complaint intentions and behavior: definitional and taxonomical issues. *The Journal of Marketing,* 93-107.

Sridharan, B., Deng, H., Kirk, J., & Corbitt, B. (2010, January). Structural Equation Modeling for Evaluating the user perceptions of E-learning effectiveness in Higher Education. In *ECIS 2010: Proceedings of the 18th European Conference on Information Systems* (pp. 1-13).

Stauss, B. (2002). The dimensions of complaint satisfaction: Process and outcome complaint satisfaction versus cold fact and warm act complaint satisfaction. *Managing Service Quality*, 12(3), 173-183.

Tronvoll, B. (2011). Negative emotions and their effect on customer complaint behavior. *Journal of Service Management,* 22(1), 111-134.

Tseng, W. T., Dörnyei, Z., & Schmitt, N. (2006). A new approach to assessing strategic learning: The case of self-regulation in vocabulary acquisition. *Applied Linguistics*, *27*(1), 78-102.

Varela-Neira, C., Vázquez-Casielles, R., & Iglesias, V. (2010). Explaining customer satisfaction with complaint handling. *International Journal of Bank Marketing*, *28*(2), 88-112.

Warland, R. H., Herrmann, R. O., & Willits, J. (1975). Dissatisfied consumers: Who gets upset and who takes action. *Journal of Consumer Affairs,* 9(2), 148-163.

Zait, P. A., & Bertea, P. E. (2011). Methods for testing discriminant validity. *Management & Marketing Journal*, *9*(2), 217-224.

A Research Study towards the perception of Organic Products in India

Abstract: The increasing awareness of organic brings knowledge about the type of food we eat. The nation is on the way to investigate present agricultural practices. The promising consumers with a rising positive attitude led an opportunity to the new market of consumers, for producers as well as retailers. However, the revenue of organic foods products has not improved by some large degree. This research paper explored the various perspectives of stakeholders towards organic products in India. We have reviewed many papers based on organic, inorganic agriculture and consumer's perception. In this paper we filtered out around 55 relevant research papers and mentioned the various perceptions, impacts of organic product on the market and environment. We also explored the challenges and issues in the organic food market.

Keywords: Organic food, perception, customer, behavior

1. Introduction

1.1 Motivation

The increasing awareness and curiosity among consumers about wellbeing, the keenness to know about organic product has increased in India. A C Nielsen's (Nielsen, 2006) stated that Indians are amongst the top 10 international buyers with 'health supplements' in the category of food product. In India, consumer is ready to pay a premium on quality products, especially on food goods, from the fitness point of view. The organic market in India is still on an emerging level as it has inadequate retail market with less certified producers. But nowadays, the organic market is slowly emerging and attracting the high end consumers. In India, organic markets are at the nascent phase of its expansion; relatively possess little level of knowledge (Squires, 2001). At the current stage there are handful of little group of marketers like ISayOrganic and Organic Garden so as to put up for sale organic fruits and vegetables categories through online. There are other actors like Ecotokri and Natural Mantra mostly put up for sale complete goods like packed quinoa seeds, honey and cosmetics amongst other players in organics. Top foodstuff retail chains like Godrej Nature's hamper stocks in organic brands like Navdanya as well as 24Mantra(Source: The Times of India). The problem with all the organic producers and marketers is how to encourage the usage of organic foods among consumers. From the promotion and selling viewpoint, it is essential to know customers perceptions, taste buds and pockets. This paper focussed on to understand the consumer's mindset in purchasing organic products, the consumers' behaviour and attitude towards organic products.

1.2 Organic food

The organic food meet strict government standard in most of the countries where as In-organic doesn't. E.g. The U.S. Department of Agriculture (USDA) standards take care in regulating how organic foods are growing, handling and processing. Organic agriculture practice are designed to benefit the environment by reducing pollution level. Organic agriculture practices helps in conserving water and soil quality. Synthetic pesticides commonly used in the conventional food production process can harm wildlife where as organic doesn't. Several studies show that organic foods contain more nutrients than nonorganic foods. The researchers found that organic food product had a 30 percent lower risk of pesticide defect than conventional fruits and vegetables. A cancer diagnosis often suggests re-evaluating their eating habits and inspiring many to incorporate more organically grown foods in their diets. The

Food and Drug Administration has concluded that the limited amount of pesticides found in nonorganic foods does not cause or contribute to any health related issues. The figure 1 listed few significant benefits of using organic food products.

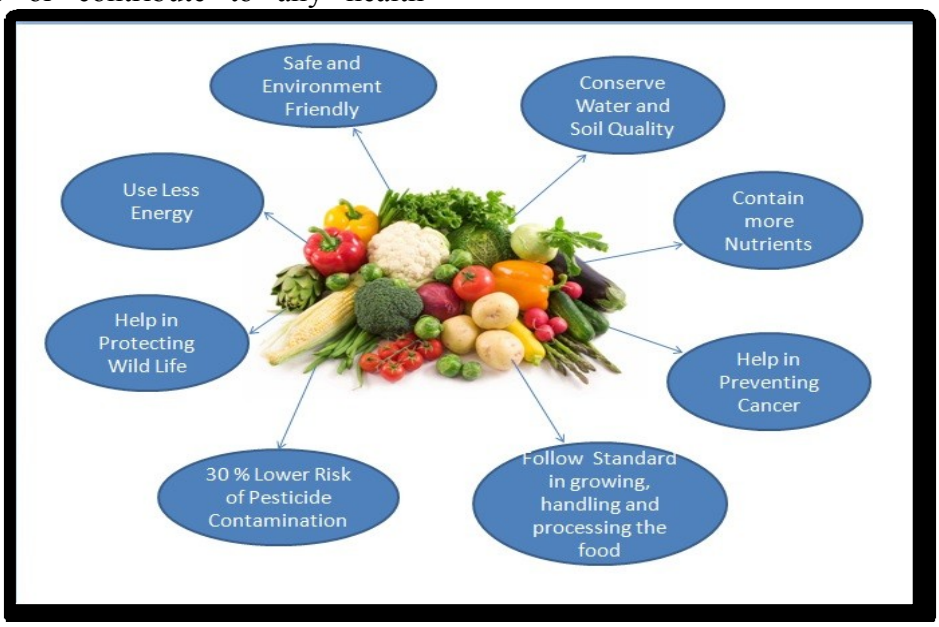


Figure 1: Benefits of Organic Food

1.2 Focus of the survey

The extant research survey explored some answers related to consumer's perception and attitude in the organic food category in India.

Hunt (2003) found a number of restrictions related with the description of consumer information and future definition in addition to measurement. The intention was to capture other essentials, but ignored factual dimensions. The study on consumer perceptions, attitudes and purchasing behaviour of organic product were explored in many countries (Williams and Hammitt, 2000; Jolly et al, 1989; Huang, 1996 in USA, Wright, 1997 in U.K, Hack, 1993 in Netherland, Von Alvensleben, 1998 in Germany and Saunders, 1999 in New Zealand), but limited research has been done in Indian consumers with respect to organic food products.

It has become the earnest need, to find out the answers related to consumer's perception and attitude through the review in the organic products in India. The paper is designed in order to bring awareness and information about consumer attitudes in the direction of organics product consumption. In this article, the principal aim is to explore and survey of extant research on the requirement of consumers to help in organic food product .The key addresses here concerns organic food product and factors that helps in the continuous growth of organic food consumption. The paper identifies the potential customers and perceptions about the organic products in India.

1.3 Research Methodology

The research methodology adopted in this article is as follows, we have investigated a systematic approach of existing study on consumer behaviour, awareness, different perceptions, attitudes and purchasing practices of organic product from various research bodies, journals and publications review as shown below in the section of reviews. The research papers are filtered according to the relevance into different

categories, they are: Consumer's Behaviour Models, Environmental Impacts, Farm Management and Policy, Consumer's Perception, Human food and Diet, Economic Performance and Marketing, Profile and Loyalty of Customer, Consumer Attitude, Labelling and Certification, Consumer Awareness and Learning. Around 30 relevant researches are listed with authors and observation of their work regarding organic. This paper mainly devoted to the study of organic food market and its consumer. The different challenges of organic and non-organic are addressed through the study in the section of discussion. In the following figure2, it demonstrates the methodology and findings in the areas.

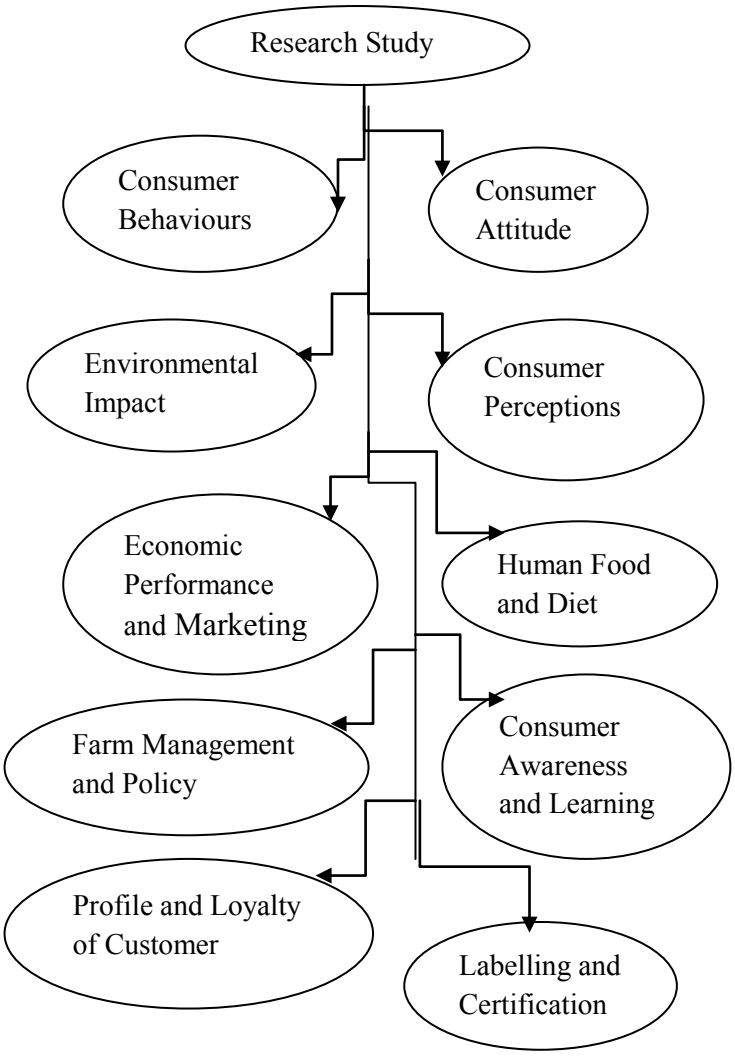


Figure 2: Different groups of research study

2. Reviews and Observations

In this paper, we clustered the research study according to consumers' behaviour, environmental impacts, human food and diet, profile and loyalty of customer, economic performance and marketing, consumer awareness and learning. In the end we discussed the challenges and issues in the consumer and farmer towards organic food and secondly on organic and in-organic food consumers.

A. Consumer's Behaviour

Vindigni et al., 2002 suggested the combination of investigation of data with multi-agent simulation of consumer behaviour. The research was done in the diffusion procedure of organic food utilization. The organic food consumption is related to different characteristics that were associated to various merchandisers and the environmental effect by the producer. To know the customers' perception, one can compute the cognitive processing information and then compared the tolerance value with some threshold value. Wier et al, 2005 worked on the research of the Danish organic food promote. It investigated the relationships between domestic purchasing behaviour and known morals, motives and different concerns. The results suggested that the intention of purchasing organic processed goods were extremely appreciated by respondents or consumers. It holds a variety of information such as branding, classification and information on packaging by means of origin or another characteristic of manufacturer or production process. The intense arrangement ensured efficiency, adequate provisions of homogenous qualities and low down cost premiums, suggested consumers to buy organic food product.

Lukas Zagata, 2012 worked on the hypothesis of community consumer's intention of purchasing and applicability of organic food products. The target collections of the study were Czech consumers those purchased organic food on regularly. The consumers' behaviour was conceptualised by means of the utilization of the theory of planned behaviour (ToPB). The ToPB model was tested then belief-based parameters that manipulated the decisions along with actions of consumers were explored. The hypothesis holds the true value and gives details of the actions of Czech organic consumers with respect to organics. Ingrid Gottschalk and Tabea Leistner, 2012 presented purchase actions in a discount supermarket into the field of organics. The study suggested that there was still a scope for the introduction of additional measures to encourage organic food consumption. First-time consumers were more likely to get the feel of validated decisions, the paper aimed at whether the organic products can be directly compared with conventional products.

B. Environmental Impacts

Wood et al., 2005 addressed the environmental effect of organic and conventional agriculture by showing different calculation of energy requirement and cost to various products. The review of organic agriculture and the observation stated that direct energy utilization, energy associated in emissions, and glasshouse gas emissions are superior for the organic agriculture in comparison with the conventional agriculture. Larger-scale farms illustrated that there are various ways to reduce energy, which helped in maintaining the community profit by per dollar productivity. Anthony Trewavas, 2004 discussed on various kinds of agricultural forms to examine the positive and negative characteristics. In the study different evaluation among organic and conventional agriculture were examined different strengths and weakness with respect to health, soil condition, environment, cost, overall energy.

Woese et al., 1997 reviewed by presenting with the evaluation of results from comparing the superiority of conventional food and organic food with aid of different fertilisation processes. The study included the experimentation of concentrations of wanted and unwanted ingredients, insect killer residues and environmental contaminants as well as sensory tests and feed animals using different techniques. The dietary study and investigations by means of holistic methods of examination were incorporated to disclose a number of differences in superiority between conventionally and organically produced foods.

Magnussona et al., 2002 worked on designing a survey concerned by means of attitudes and actions towards organic foods, environment friendly behaviour (EFB), and perceived consequences of organic food choice in conditions of human being healthiness, the environment and animal welfare. The study indicated that there are two motives known as self-centred and self –less motives in people. The awareness of self-centered people was the improved predictors buying the organic foods. The perceived health benefits were established to be more powerfully associated with attitudes and performance towards organic foods than were perceived environmental profit.

C. *Farm Management and Policy*

Acs et al., 2004 addressed different methods and results of experiments. The normative modelling study was at the farm stage by analysing farm management and other policies. It detailed about empirical and normative model to analyse the organic farming. The empirical models used mostly looked for the factors influencing definite dependent relative variable and normative models which can

be related to an average facts set one region or one sector.

D. Consumer's Perception

Suh et al., 2008 investigated different parameters of the association between Korean consumers' perception and purpose of buying organic food. The study elicited Korean consumer's purpose to buy and viewpoint regarding organic food based on the TPB model. It was found that the cost expense and the lack of accessibility are important barriers in purchasing organic food products. Also, the study found that a number of consumers did not believe in organic food because they perceived no differences among conventionally grown food and organically produced food. Dash et al., 2014 worked on to increase knowledge concerning consumer awareness, perception towards organic food product utilization and how socio-economic variables associated to consumer decision-making regarding the purchase of organic food products. The analysis was incidental as socioeconomic variables were related with consumer's optimistic attitude in the direction of organic food products. The learning was based on primary review of 100 respondents belonging to Odisha state, India by means of a structured questionnaire.

Manuela et al., 2013 worked on examining the heuristic position of the term 'organic' with the results which were indicated that the term 'organic' plays an important role as a heuristic indication of superiority and influence perceptions and beliefs concerning food products. To examine the organics, individual interviews were conducted with 800 persons. The study also highlighted the association between the option of conditions and the meanings understood by organic customers.

E. Human food and Diet

Billen et al., 2012 suggested localisation option which could be explored in concern with the common organisation of the agro-food scheme feeding Paris and the general stability of its inhabitants' go on a balance diet. The approach used in the paper was focused on the main biogeochemical fluxes linked with food manufacturing and consumption since these were the most part considerable in terms of environmental effect, including water quality. The different analysis was done upon the environmental condition of Paris's food utilization as nitrogen cycling in farming systems, contribute to animal products in human being total protein utilization of the world's countries , associations between urban demand for foodstuffs, and nitrate contamination of water resource.

Meyer-Höfer et al., 2012 worked on frequency analysis of organic food usage and factor analysis about the understanding of organic food product in Chile. It identified consumers' understanding and perceptions of organics and different barriers regarding organic food consumption. It suggested that the better insights into these aspects could help to target policy as well as marketing strategies to support the further development of these organic food markets. Pelin Özgen, 2012 analysed different methods and results of empirical study which investigated different outline of organic buyers and consumer faithfulness in organic food market. According to the results of the empirical study, the domestic market place for organic food products is enthusiastic for new food products. It is found that there is a strong loyalty among organic consumers towards different products. Marketing, promotion and sharing of organic foods are comparatively incompetent due to little volumes, which show the method to high premiums. By providing marketing channels for organic foods are improved and organized, after that the prices will

eventually decreased, which show the way to an increase in demand of organics.

G. *Consumer Attitude*

Sakthirama.V et al., 2012 worked on identifying attitude and purchase intention of consumers towards organic food in an urban city of India. The findings of the research learning indicated that knowledge and familiarity should be considered by organic food producers and marketers as a key factor influencing organic food consumption. By improving the knowledge of the consumer with positive consideration leads to create positive attitude and also leads to positive purchase intention towards organic food.

Ruchi Jain, 2014 worked on an additional specific attitude, attitude in the direction of organic food and examined the roles of health consciousness, ethical self-identity and environmental attitude in predicting consumer's attitude towards organic produce in Chhattisgarh. The investigation was based on the relationships between three key factors: health consciousness, ethical self-identity and environmental attitudes. This analyzed result can help different manufacturers and marketers to plan suitable promotional marketing strategies for organic food usage in Chhattisgarh.

Vesna et al., 2011 worked on the research that revealed new data and facts essential intended for assessment of organic food product market possible in Croatia, related for in cooperation of producers and retailers. It shows unlike evaluation of organic food product perceptions in Croatia with other market places. The aim of the research was to collect the socio-demographic characteristics of the organic food consumers, useful for the identification of a profile of the Croatian consumer of organic food. It identified the consumers' acquaintance with the exact definition of organic agriculture. The survey also investigated information channels used to gather information on organic food. Marangoz et al., 2014 worked on a model in which the parameters that impacts consumer attitudes and behaviours towards organics were found. The attitudes of consumer age group of 12-19 are modelled through structural equation modelling with using self-characteristics, health awareness and food wellbeing concern measurements. According to the results of the study, health consciousness has the highest impact on the attitude towards organic products among examined variables. According to the results, it is understood that customers pay more attention to their health, worry about food safety, aware about organic food and being sensitive to the environmental protection. It proposed a model in which the attitude towards organic food of adolescents who will decide buying or not buying organic foods in near future were the main actors.

(Michaelidou et al., 2008) examined different profiles of health awareness, food wellbeing be concerned and moral self individuality in predicting attitudes and purchase purpose inside the circumstance of organic produce. A theoretical model is derived and experienced via structural equation modelling. The findings are indicated food safety as the most important predictor of attitude while health consciousness appears to be the least important motive in contrast to findings from some previous research. In addition, ethical self identity is found to predict both attitudes and intention to purchase organic produce emphasizing that respondents' identification with ethical issues affects their attitudes and subsequent consumption choices.

(Fernandez-Polanco et al., 2008) determined the factors mainly affect attitudes towards aquaculture. The Consumer involvements by means of food wellbeing and sustainability and common promotion trustworthiness have revealed important effects over attitudes in the

direction of aquaculture. By consumer survey information, issue investigation techniques are used to find an attitude compute from a different set of scales. Salleh et al., 2010 attempted to increase the knowledge concerning consumer attitude in the direction of organic products. The findings in the research are indicated that fitness awareness issue has more effect on consumer buy purpose of organic food to a certain extent than the ecological concern.

H. Economic Performance and Marketing

Radojko Lukić, 2011 worked on in finding key factors of selling of organic food product, and to provide a comprehensive general idea of the hypothetical procedural and empirical issues and related problems. It also provided the precise measurement of economic performance put on the market sales of organic provisions. The Study is based on the empirical research. The results are based on the globalization of organic food product market, Determinants of organics sales performance, Specifics of the financial structure and profitability of the retail organic food. Matthew H. T. Yap, 2012 worked on case study to maintain the incessant increase of organic foods utilization. The study provided the different opportunity for educators, students, organic foods sellers and retailers to talk about and speak to Fiona's challenges for better consumption. Gil et al., 2001 worked on to show the results which point out that consumer's worried regarding healthy diet and environmental deprivation are more probable to pay money for organic food product. Consumers are keen to pay a higher premium for food stuff. The two issues were explored in the research that can affect the future growth of organic food production in Spain country. The first one was to identify different marketplace segments which might be possible consumers of organic food product. The second issue was the identification of the maximum premium the various market segments were willing to pay for such products in order to help producers to take adequate pricing strategies in domestic markets.

Attanasio et al., 2013 derived information that can add to improved planned and strategic marketing decisions making. It also exposed that most respondents are eager to disburse premium cost and shown the stage of acceptability varies significantly. The results are indicated that the intentions to buy organic products are influenced by the perception about the value of organic products and by the belief on the health and safety of the product. It confirmed that the main barrier to increasing the market share is consumer information. The # Study presents the consumers intention to purchase organic food products in Pontina Province(Italy). 280 consumers were interviewed using semi-structured questionnaires to examine the perception of the people about organic products and assess their readiness to pay for these products. The data obtained from the survey were analyzed using chi-square test and two ways ANOVA. The results are showed some similarities with the results of previous research in which the perceived value is an important factor and become the deciding factor to the purchase of organic food products Pearson et al., 2011 worked on to identify the realistic implications intended for common organic food marketing strategies in campaigns and for increasing the sales of definite products. The research conducted identified that most consumers buy organic, but only for some of the time, and hence they switch between organic and conventional on a regular basis. Aryal et al., 2009 presented the consumers' keenness in paying a cost payment for organic food products in Kathmandu Valley, Nepal. The group of 180 consumers surveyed using semi-structured questionnaires to examine peoples' perception about organic products and

assessed their willingness to pay for such products. The study revealed that all respondents are willing to pay price premium, but the level of acceptability varied considerably.

I. Labelling and Certification

Gracia et al., 2012 worked on to identifying whether Italian consumers pay attention to organic labelling when they do shopping and whether they are also impacted by other psychological or personal factors and associated variables to create purchase decisions influence. The research presented that increasing organic knowledge is of paramount importance to increase the attention paid by consumers to organic label. Findings also show that other factors explain the intention to purchase organic food products such as attitudes towards their purchase.

J. *Consumer Awareness and Learning*

Peter Kastberg, 2015 worked on the communication format encourages consumer participation and learning with respect to organic food. It explored that the main obstacle to consumers in purchasing additional and more organic foods is the lack of knowledge about the product. Communication operation is performed as a co-action that holds different talented qualities with respect to promote communication, sharing and education regarding organic foods to significant stakeholders. Kumar et al., 2011 analyzed different parameters impacting awareness level of consumers on organic food stuff by using a structured survey of 200 respondents from the national capital of India, New Delhi and a Uttar Pradesh state capital Lucknow. The consumer's awareness of various aspects of organic products is analyzed. It was considered as significant factor to build the markets for organic foodstuff in the starting phase of market process and development. In this the factor analysis operation is used to extract five important factors which is indicated by five groups of new potential organic consumers, and they are: Humanists, Food Phobic's, Healthy Eaters, Environmentalists and Hedonists, indicated that the consumer's attention in organic food is influenced by their knowledge that organically processed and formed food product is secure and better for fitness, environment and its surroundings and also in welfare of farmers.

Gomathi et al., 2013 examined the awareness and individual differences of consumers towards the organics foodstuff. A sample of 500 respondents was collected and the information obtained from the survey was analyzed through the help of convenience sampling method in Erode District of Tamilnadu state of India. Findings are dependent on the association between demographic parameters and various awareness levels of the respondents with respect to organic food. Sadek and Oktarani, 2009 explored the potential market for customers and to teach in depth the different behavioural procedure of consumers with respect to organic food products. It identified different viewpoint and attitudes which consist of positives as well as negative mindset on organic food of customers who pay money for and do not pay money for organic food. The affect of individual's attitudes on foodstuff selection meant for consumers who buy and do not buy organics, and to model consumer's food selection behaviour by means of organic food.

3. Discussion

The discussion of the above study has challenges and issues to be addressed which is divided into various perceptions as:

1. Ingredients of perceptions in Consumer and Farmer towards organic food

2. Organic and In-Organic food consumers

1. *Ingredients of perceptions in consumer and farmer towards organic food*

It was observed that the knowledge to differentiate between organic and inorganic products, awareness or mode of access, cost, nutritional value , safety and health, freshness of food products and taste are the major ingredients which helps in forming the perception of consumers to purchase organic products. The farmer or supplier faces day to day challenge in production and labor cost, energy requirements, distribution channels, marketing and commercial advertising of benefit of organic over inorganic products, profitability, ecosystem goods and services, consumption, economic benefit and limited availability of fertilizers and manures.

2. *Organic and In-Organic food consumers*

The improved variety in organic farming providing the consumer with better taste buds. The toxic free product provides sound health to everyone. The environmental friendly and green growth helps in better well-being. Since, in urban areas the consumer can pay better, so there is an ample opportunity to market organic food products. The nutrient value in organic food is quite high. In the food processing and hybridization no artificial additives are used. But, since the organic farming is quite expensive so it was less preferred among farmers. The organic farming requires more labor cost. To maintain the high quality of sufficient high quality is required to support production. The challenge is still there to market the organic food in the market. It needs marketers to promote the organic food among consumers to bring awareness. The awareness about the organic product is still lacking. The consumers also lack trust about the authenticity of the products

1) In-Organic Perceptive

The sustainable growth in the in-organic farming still has its hold and popularity in the consumers. The farmers make good profits in less cost incurred in in-organic farming. The artificial additives used in the production of inorganic food materials make the food attractive. The use of chemical fertilizers helps in high growth rate. From the consumer point of view the in-organic food is easily available and less expensive. However the in-organoc farming has degrading effect on the environment and on health but still the challenge exists about the awareness of the organic products in the market among consumers. The in-organic food contains less degree of nutrient values in it but its farming requires less labor input. From the marketers point of view they have lot many opportunity to sell in-organic products in urban and rural markets both.

4. Conclusion and Future scope of the work

This study suggests that market for organic food products is still in small state compared to in-organics. There are lots of issues associated with organic and in-organic food consumers which affect the marketing of related products. The Decision of purchasing the organic food or not depends upon the different set of factors. There is an improvement in awareness of food safety and health. Consumer is concerned about the nutrients value available in food. Consumer faces high price and unavailability of organics. Consumptions of organic food are less, so less preference among farmers and retailers. There is lack of trust on the purity of organic food about the authenticity to pay premium amount on quality products. More awareness and learning programs about the benefits of

organic products can help consumer, farmers and retailer in motivating towards organics that may avoid high price and unavailability of product. Proper labelling and certification can increase the trust on purity of organic food and can helpful in changing the attitude and perception of consumer towards the product. In addition, it can be helpful in changing the consumer purchasing behaviour with increment of production and sell.

The literature review shows that there are interesting future opportunities for consumers, retailer and producer in perceptive of organics. As long as consumer awareness related to environment, health, primary nutrients, good policy, quality food processing and certification etc parameters increase the positive attitude and perception of consumer would increase toward organic foods. Our findings are limited as the data were collected around 30 relevant researches. The review could be further refined in other areas of organics such as detail analysis of consumer attitude towards organic food, different segments of consumers like lifestyle, socioeconomic properties, their consumption levels, distribution planning that helps in finding appropriate marketing of the product.

References

1. ACNielsen, (2006, February 20). "Indians amongst the Top 10 Buyers of Foods with 'Health Supplements' Globally but Lack Access to Organic Food Products". 2. Hunt, D.P. 2003. "The concept of knowledge and how to measure it". Journal of Intellectual Capital. 4(1): 100-113.

3. Williams, PR & Hammitt, JK. 2000. "A comparison of organic and conventional fresh produce buyers in the Boston area". Risk Analysis, vol.20, No.5, pp.735–746.

4. Jolly, D., Schutz, H., Diez-Knauf, K. and J. Johal. 1989. "Organic Foods: Consumer Attitudes and Use". Food Technology, 43(11): 61-66.

5. Huang, CL .1996. "Consumer preferences and attitudes towards organically grown produce". European Review of Agricultural Economics, Vol. 23, No.3 pp.331-342.

6. Hack, Md. 1993. "Organically grown products: perception, preference and motives of Dutch consumers". Acta Horticultuae, Vol. 340, pp. 247-253.

7. Von Alvensleben, R. 1998. "Ecological aspects of food demand: The case of organic food in Germany". AIR-CAT 4th Plenary Meeting. Health, Ecological and Safety Aspects in Food Choice, Vol. 4, No1, pp.68-79.

8. Saunders, C. 1999. "The potential for expansion of the organic industry in New Zealand: A contingent valuation of consumers WTP for organic produce". Discussion paper no. 77. Commerce Division, Lincoln University, Canterbury.

9. Schifferstein, H.N.J., and Oude Ophuis, P.A.M. (1998). "Health-related determinants of organic foods consumption in The Netherlands". Food Quality and Preference, Vol.9, No. 3, pp. 119-33.

10. Grunert,G.K (1993),"Green Consumerism in Denmark: some evidence from the EKO foods project", Der Markt, vol. 32,No.3,pp.140-51.

11. Wandel, M. and Bugge, A. (1997),"Environmental concern in consumer evaluation of food quality", Food Quality and Preference, Vol.8 No.1,pp.19-26.

12. Vetter, H. and Christensen, A. (1996), "Evil Ecologists", paper presented at the IX EAAE Congress, Edinburgh.

13. Tregear, A., Dent, J.B and McGregor, M.J (1994), "The Demand for organically grown produce", British Food Journal, Vol. 96 No. 4, pp. 21-5.

14. Thompson, G.D and Kidwell, J. (1998), "Explaining the choice of organic produce: cosmetic defects, prices, and consumer preferences" , American Journal of Agricultural Economics, Vol. 80 No. 2, pp. 277-87.
15. Landell, M. (1992), "Organic Farming in Seven European Countries", report for the European Crop Protection Association, Brussels.
16. Roddy, G., Cowan, C.A and Hutchinson, G. (1996), "Consumer attitudes and behaviour to organic foods in Ireland", Journal of International Consumer Marketing, Vol. 9 No.2, pp.41-63
17. Fotopoulos , C. and Krystallis, A. (2002), "Purchasing motives and profile of the Greek organic consumer: a countrywide survey", British Food Journal, Vol. 104 No. 9, pp.730-765.
18. Magnusson, M.K, Arvola, A., Koivisto Hursti, U.-K., Aberg, L. and Sjoden, P.-O. (2003), "Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behaviour", Appetite, Vol. 40 No.2, pp. 109-17.
19. Lin, B.H., Payson, S.Y. and Wertz, J. (1996), "Opinions of professional buyers toward organic produce: a case study of mid-Atlantic market for fresh tomatoes", Agribusiness, Vol. 12 No.1, pp. 89-97.
20. Beharrel B. and MacFie, J.H (1991), "Consumer attitudes to organic foods", British Food Journal, Vol. 93 No.2, pp. 25-30.
21. Vindigni, Marco A. Janssen and Wander Jager (2002), "Organic food consumption A multi-theoretical framework of consumer decision making", British Food Journal,Vol. 104 No. 8, pp. 624-642.
22. Wood, Lenzen, Dey and Sven Lundie(2006)," A comparative study of some environmental impacts of conventional and organic farming in Australia", Agricultural Systems 89 , 324–348
23. Woese,Lange, Christian Boess and Klaus Werner (1997)," A Comparison of Organically and Conventionally Grown Foods-Results of a Review of the Relevant Literature", J Sci Food Agric 74, 281- 293.
24. G. Billen, J. Garnier, V. Thieu, M. Silvestre, S. Barles, and P. Chatzimpiros (2012), "Localising the nitrogen imprint of the Paris food supply: the potential of organic farming and changes in human diet", Biogeosciences, 9, 607–616.
25. Sakthirama.v and Dr. R.Venkatram (2012), "A Structural Analysis of Purchase Intention of organic consumers", International Journal of Management, Volume 3, Issue 2, May-August, pp. 401-410.
26. Ruchi Jain(2014), "Organic food is my choice: an analysis of consumption preference factors of consumers in chhattishgarh state", Journal of Management Research, Vol 2, Issue 1 March 2014.
27. Radojko Lukić (2014), "ESTIMATES OF ECONOMIC PERFORMANCE OF ORGANIC FOOD RETAIL TRADE", Ekonomska istraživanja, Vol. 24 No. 3 (157-169).
28. Yap (2012), "ORGANIC FOODS CONSUMERS IN HONG KONG", Tourism and Hospitality Management, Vol. 18, No. 1, pp. 141-146.
29. Peter Kastberg (2015)," Promoting communication, participation, and learning with regard to organic food products: a communication theoretical approach", Kastberg, P. 2015. Ecology and Society 20(1): 3.
30. Kumar and Ali (2011)," Analyzing the Factors Affecting Consumer Awareness on Organic Foods in India",Prepared for presentation at 21st Annual IFAMA World Forum and Symposium on the Road to 2050: Sustainability as a Business Opportunity, Frankfurt, Germany during June 20-23, 2011.

31. Gomathi and Dr. S. Kalyani (2013), "AWARENESS AND INDIVIDUAL DIFFERENCES ON ORGANIC FOOD PRODUCTS IN ERODE DISTRICT, TAMILNADU", VOLUME NO. 3 , ISSUE NO. 08 (AUGUST).
32. Gil J.M., Gracia A. and M.(2001)," Market segmentation and willingness to pay for organic products in Spain", International Food and Agribusiness Management Review, (2001), 3, 207-226.
33. Manuela ,Manuel , María , and Francisco (2013), "A Powerful Word: The Influence of the Term 'Organic' on Perceptions and Beliefs Concerning Food", International Food and Agribusiness Management Review Volume 16, Issue 4.
34. Salleh, Ali, Harun, Jalil and Shaharudin (2010), "Consumer's Perception and Purchase Intentions Towards Organic Food Products: Exploring Attitude Among Academician", Canadian Social Science, Vol. 6, No. 6, pp. 119-129.
35. Lukas Zagata (2012), "Consumers' beliefs and behavioural intentions towards organic food. Evidence from the Czech Republic", Appetite 59, pp. 81–89.
36. Magnusson, Arola, Hursti, Aberg and Sjoden (2003), "Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behaviour", Appetite 40, pp. 109–117.
37. Marangoz, Paksoy, Özçalici, and Çelikkan (2014), "Modeling attitude towards organic foods: A research on adolescents", Business Management Dynamics Vol.3, No.7, pp.40- 49.
38. Attanasio, Carelli, Cappelli, Papetti (2013), "ORGANIC FOOD: A STUDY ON DEMOGRAPHIC CHARACTERISTICS AND FACTORS INFLUENCING PURCHASE INTENTIONS AMONG CONSUMERS IN PONTINA PROVINCE", International Journal of Latest Research in Science and Technology,Volume 2, Issue 6: Page No.128-132.
39. Ingrid Gottschalk and Tabea Leistner (2012), "Consumer reactions to the availability of organic food in discount supermarkets",International Journal of Consumer Studies 37, pp. 136-142.
40. Grunert, S. and J.H. Juhl. 1995. "Values, Environmental Attitudes, and Buying of Organic Foods". Journal of Economic Psychology, 16: 69-62.
41. Lea, E., and T. Worsley. 2005. Australians´ organic food beliefs, demographics and values. British Food Journal 107 (11): 855-869.
42. Padel, S., and C. Foster. 2005. Exploring the gap between attitudes and behaviour. Understanding why consumers buy or do not buy organic food. British Food Journal 107 (8): 606-625.
43. Sangkumchaliang, P., and W. Huang. 2012. Consumers´ perceptions and attitudes of organic food products in Northern Thailand. International Food and Agribusiness Management Review 15 (1): 87-102.
44.Tsakiridou, E., C. Boutsouki, Y. Zotos, and K. Mattas. 2008. Attitudes and behaviour towards organic products: an exploratory study. International Journal of Retail & Distribution Management 36 (2): 158-175.
45. Chinnici,G., D'Amico, M., Pecorino, B. (2002): A multivariate statistical analysis of the consumers of organic products, British Food Journal, Vol. 104, No. 3/4/5, pp. 187-199.
46.Gil, J.M., Gracia, A., Sanchez, M. (2000): Market segmentation and willingness to pay for organic products in Spain, The International Food and Agribusiness management Review, Vol. 3, No. 2, pp. 207-226.

Customer Experience Creation in Retail Industry

Muhammad Hanif Abdul Gafar[1], Nor Amira Mohd Ali[2]
1 Faculty of Business Management UiTM Kedah, hanifgafar@kedah.uitm.edu.my
2 Faculty of Business Management UiTM Kedah, noram370@kedah.uitm.edu.my

ABSTRACT

Retail industry particularly hypermarket in Malaysia is growing since the past few decades. Tesco, Giant, Carrefour, Mydin, and Econsave are amongst the biggest retailers that have branches in almost every state within Malaysia. This rapid expansion is due to the Malaysian economy growth over the last fifteen years. The standard of living and life style of the society also contribute to the high numbers of the hypermarket. Consequently, the rise and expansion of these hypermarkets have contributed to high competition. Pricing strategies such as price discount and advertisement via flyers are the two common marketing strategies engaged by the hypermarkets. These strategies are short term measures to attract customers. Competing on the price cutting is unhealthy for the industry especially when the operating costs are escalating. Therefore, the hypermarkets need a better strategy to attract and retain customers for long term. It means the strategies must be able to create customer loyalty. This study will investigate the drivers that influence customers' experience in the retail industry by focusing on the hypermarket effort to create customers' loyalty.

Key Words: customers' experience management strategies, social environment, service interface, retail atmosphere

1. INTRODUCTION

Customer experience is the current studies in services marketing discipline. This is due to after the failure of customer relationship management to create the expected levels of value for customers and profitability for companies (Palmer, 2010); and the need to create the right expectations on the part of the customers and matching them through the offers of products and services that ensure sustainable values via a mutually satisfying and beneficial relationship (Varma, 2012). Therefore, customer experience is critical because it has a powerful force in influencing customer mind, emotion, and action. According to Berry and Carbone (2007), "an organization needs to create a cohesive, authentic, and sensory-stimulating total customer experience that resonates, pleases, and differentiates organization from the competition to build an emotional connection with customers". On the other hand, Pine and Gilmore (1998) observed that as services are becoming more commoditized, pioneering companies are competing more on the experience.

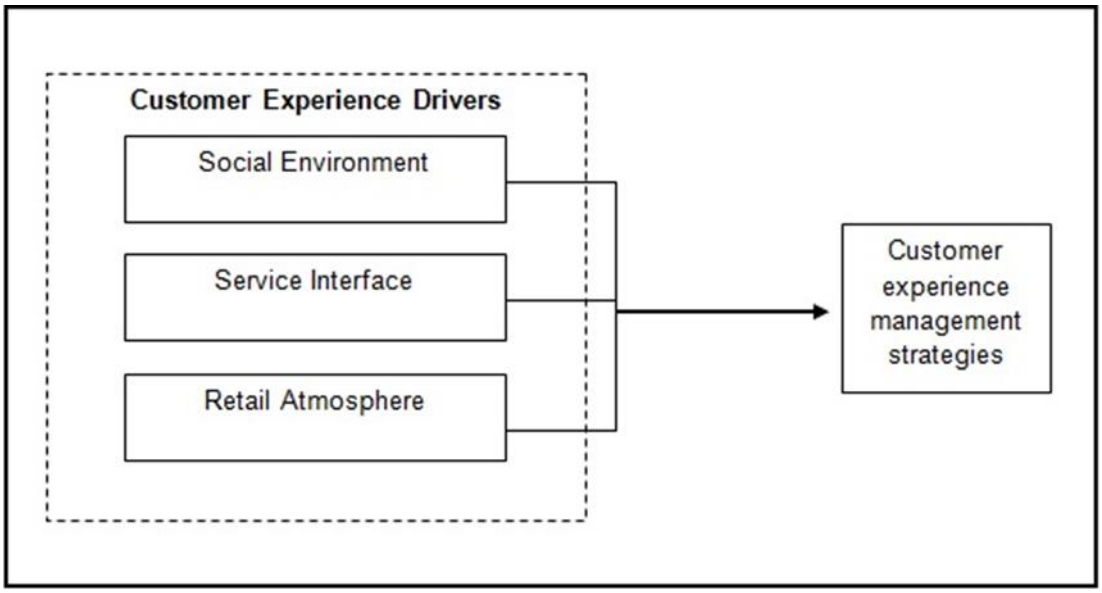
Besides that, customer experience is also one of the sources of sustainable competitive advantage for many industries regardless of services or manufacturing setting. The hypermarkets are no exception and almost certainly need to focus on delivering superior customer experiences since the price differentiation is no longer workable, and customers demanding more. Moreover, activity in the retailing setting has turned into delivering a joyful shopping experience (Jin and Sternquist, 2004). Hence, a hypermarket's ability to deliver a pleasing memorable experience in the eyes of its customers is very critical because it will increase the amount of customer spending with the company and, optimally, inspire loyalty. Presently, little is known about the influence of customer experience on customer loyalty within

retailing industry in Malaysia, even though it has been embraced by retailers globally (Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros, and Schlesinger, 2009). Therefore, this study will investigate the relationship so that it will be beneficial to the industry. Due to this, several objectives have been developed and tested.

i. To investigate the drivers for customer experience in the retail industry.
ii. To determine to what extend these drivers influence customer experience management strategies.

2. CONCEPTUAL MODEL

There are many studies reported in the literature concerning customer experience where they applied different sets of dimensions in measuring customer experience. For example, Nasermoadeli, Ling, and Severi (2013)'s study used three dimensions of customer experience that are sensory, emotional, and social experience. Tynan and McKechnie (2009) utilized eight dimensions such as sensory, emotional, social, functional/utilitarian, relational, informational, novelty, and utopian. Rose, Hair, and Clark (2011) applied two dimensions namely cognitive and affective state. However, this study will adapt a model developed by Verhoef et al. (2009). The decision to adapt the model because of its comprehensiveness, where it considers social environment, service interface, and retail atmosphere that will contribute to the creation of the customer experience management strategies. In addition, the model also incorporates a set of customer experience drivers that will answer one of the objectives of the study.



Conceptual model of customer experience creation adapt from Verhoef et al. (2009)

2.1. Customer Experience Management Strategies

Managing customer experience is one of the most important challenges that retailers face in today's competitive environment. Verhoef et al. (2009) agreed that, customer experience is a retailer's strategy to engineer the customer's experience in such a way to create value both to the customer and the firm. The differences between customer experience management and customer relationship management is that customer experience management focuses on customer's current experience and not the historical records of the customer. This situation happens because of the customer experience that originated from a set of interactions between a customer and a product, a company or a part of its organization which will provoke a reaction (Verhoef et al.2009). Different customer will give different reactions even though they are shopping in the same environment of the store and these reactions will bring a different experience for the customers as well as retailers. As business entities, retailers cannot control this kind of reactions because it is beyond their power. Thus, what they will do

is improve and control the internal environment of their store to ensure they can provide superior experience to their customer which will lead to customer satisfaction.

According to Joshi (2014) customer experience management is an intense effort from business organization in order to improve the quality of interactions between customer and the business entities. Schmitt (1999) explored how companies create experiential marketing by having customers sense, feel, think act and relate to a company and its brands. In addition, to provide the customer with satisfactory experience, retailers need to instrumentality concentrate all the clues that the customer detect in the buying process (Berry, Carbone, and Haeckel, 2002). These clues will help the retailers in order to improve their store image either external or internal of the store including retail atmosphere, product assortments, price and alternative channels that will bring a great experience to the customer while they are shopping in the store. Furthermore, (Moore 2003) suggested that, two most important drivers in customer experience of IBM Institute of Business value are face-to-face experience that exceeds customer expectation such as the interaction between a customer with staff and store experience that includes the arrangement of chairs and tables. In this study, retailers need to ensure the arrangement of their product assortments; atmosphere, price and alternative channels will meet and exceed the expectations of their customers. Hence, this is the need for customer experience management strategies that were created by the retailers.

A part from that, the customer experience management strategies have direct and indirect relationship with customer loyalty through service quality and customer satisfaction. It is one of the strategies to optimize interactions from customer's perspective, which as a result, will foster customer satisfaction. The satisfaction of customer is determined by their overall experiences as a customer of a particular retail store. Besides that, with a superior customer experience management strategies, it will confirm and enable large and complex organization like Tesco, Jusco, Giant, AeonBig and many more to deliver a financially, optimal customer experience, resulting in increased customer satisfaction and hence superior growth and financial performance. According to Nwokah (2013) customer experience management strategies is a systematic analysis of the factors with the customer experience and the organization itself to provide the basis of rethinking the current management practices in providing positive customer experience. It concerns primarily as to what the customer's desires during all the touch point between customers and retailers.

Regardless of that, providing a superior customer experience can be quite expensive and as a customer they are not willing to pay more for an enriched experience. Following Mittal et al. (2005) one might argue that customer experience based strategies in retailing will provide superior performance only when they are combined with efficient and effectiveness process. It can be explained when the retailers know and follow exactly the needs and wants of their customers. For instance, the temperature, music, scents and design in the store will create accordingly to the customer's preferences. Besides, retailers will also be providing a variety of product assortments and different alternatives channels such as online shopping for customer in order for them to save cost. Thus, superior customer experience will be created by the retailers when they combined this process with the customer experience management strategies.

3. METHODOLOGY

Research design is the process and procedure to collect data for the purpose of answering the research objectives. In addition, it specifies the details or procedures necessary for obtaining the information needed to structure and solve marketing research problem (Malhotra, 1999). After clearly defining the research problem, the researchers use a descriptive method. Malhotra (1999) defined descriptive research as a type of conclusive research which has its major objective such as the description of something which is usually market characteristics or

function. Besides that, according to Sekaran (2007), a descriptive study is undertaken in order to ascertain and be able to describe the characteristic of the variables of interest in a situation. Thus, by using the descriptive method the relationship between dependent variable and independent variables can be analyzed. Furthermore, the researchers extensively focus on a single unit which is individual. The individual is the hypermarket customers who are referred to as people who are buying and consuming the products from retail industry within the northern region of Peninsular Malaysia particularly Kedah and Penang. The researchers have used 500 questionnaires in order to collect the data that were distributed to the respondents by using probability sampling technique in which simple random sampling was selected because every element in the population has a known and equal chance of being selected as a subject (Sekaran, 2007). Hence, the people or customers who are frequently visiting the hypermarket were randomly selected.

Moreover, the measurement use is interval scale. The interval scale allows researchers to perform certain arithmetical operations on the data collected from the respondents. Under this interval scale, the researchers measure the variables by tapping on five-point scale through the Likert scale. Likert scale is designed to identify how strongly agree, agree, neutral, disagree or strongly disagree the respondents with the statements stated in the questionnaires. In this research, the questionnaires were personally administered. A questionnaire is a reformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. Questionnaires are an efficient data collection mechanism when the researchers know exactly what is required and how to measure the variables of interest (Sekaran, 2007).

3.1 Correlation

Pearson correlation will indicate the direction, strength, and significance of the bivariate relationships among all the variables that were measured by an interval and ratio level. The correlation is derived by assessing the variations in one variable as another variable also varies. Theoretically, there could be a perfect positive correlation between two variables, which is represented by 1.0 (plus 1), or a perfect negative correlation which would be -1.0 (minus 1). The researchers need to know if any correlation found between two variables is significant or not. Significant is when p=0.05 is the generally accepted conventional level in social science research. This indicates that 95 times out of 100, is significant correlation between the two variables (Sekaran, 2009).

3.2 Multiple Regressions

Multiple regressions is a statistical tool that allows the researchers to examine how multiple independent variables are related or have influence to a dependent variable. The researchers can take information about all of the independent variables and use them to make much more powerful and accurate predictions about why things are and the way they are.

4.0 FINDINGS

Table 1: Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.941
Bartlett's Test of Sphericity	Approx. Chi-Square	2250.759
	Df	136
	Sig.	0.000

Table 1 indicates that the Kaiser-Meyer-Oikin measure of sampling adequacy is range above 0.8 which means meritorious and Bartlett's test of sphericity is significant with $p < 0.05$.

Table 2: Correlation Analysis

Correlations				
	Social environment	Service interface	Retail atmosphere	Customer experience
Social environment	1	.820**	.753**	.697**
Service interface		1	.784**	.754**
Retail atmosphere			1	.863**
Customer experience				1
**. Correlation is significant at the 0.01 level (2-tailed).				

From Table 2, the finding shows that all variables have significant relationship between the drivers and the customer experience management strategies. The significant relationship between these two variables is more than 0.05. Social environment and the customer experience considered as moderate relationship with the value 0.697 whereas service interface and retail atmosphere are considered as high relationship towards customer experience management strategies because both values have fallen in the range of 0.71- 0.90 based on the rule of thumb.

Table 3: Regression Analysis

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.896[a]	.803	.796	.46602	1.863
Predictors: (Constant), retail atmosphere, social environment, service interface					
Dependent Variable: customer experience					

Table 3 illustrates the coefficient of determination (R2) is 0.8 which is 80 percent. It explains that 80 percent of the changes in the dependent variable that is explained by the independent variable. The remaining 20 percent cannot be explained by the regression analysis. Based on the rule of thumb, the higher the value of R2 is, the higher the explanatory power of the estimated equation. From the result, it shows that the explanatory power is higher because the value is more than 50 percent. Furthermore, the standard error estimate is 0.47 which is below than 0.5 which means that there is not much error in the analysis and the Durbin-Watson Statistic for this regression model is 1.86 ≈ 2.00 which is equal to 2. Hence, it indicates that the drivers and the customer experience management strategies are significant.

Table 4: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	83.073	3	27.691	127.507	.000[b]
	Residual	20.414	94	.217		
	Total	103.488	97			
Dependent Variable: customer experience						
Predictors: (Constant), retail atmosphere, social environment, service interface						

According to the table above, the results show that F value is 127.507, which is over than 100. This value also explained there is a high significant relationship between the drivers and the customer experience management strategies. The researchers have used the F value in this study because F-test is a statistic test of the equality of the variance of two populations whereby these populations represent from Penang and Kedah.

5.0 DISCUSSION AND CONCLUSION

Based on the findings, it can be illustrated that customer experience management strategies in the retail industry can be developed through the drivers that are mentioned in the conceptual model (social environment, service interface, retail atmosphere) adapted from Verhoef et al. (2009). This is prior to the result that have been discussed which all the drivers have positive significance and have contributed high significant level towards the creation of the customer experience in the retailing activities. According to Verhoef at al (2009), social environment can be classified as the reviews made by consumers, reference group and service personnel. In his study, it was stated that customer experience is impacted by social environment because in the store there are often multiple customers and the experience of each customer can impact that of others. Other scholars stated that, while most of the focus of existing literature has been on the interaction between the company, or its employees, with the customer (Tsiros and Parasuraman 2006), marketers and researchers should also be aware that interactions among customers can have profound effects on the service experience (Baron, Harris, and Davies 1996; Martin 1996; Martin and Pranter 1989).

In addition, considerations which have done by the retailers towards service interface also give positive results for this research in order to create the best experience to consumers. This situation has been supported in Verhoef et al (2009) in their study which stated that the use of self-service technology (e.g., self-checkout and price scanner machines mounted on a shopping cart) can influence the consumer shopping experience (Verhoef et al. 2009).

Furthermore, retail atmosphere is also considered as a vital factor to enhance the shopping experience. Baker,Grewal, and Levy (1992); Mehrabian and Russell (1974) agreed that retail environmental factors, such as social features, design, and ambience, can result in enhanced pleasure and arousal which then will contribute to a great experience.

Thus, retailers need to be very serious to ensure they can provide a high class experience to all consumers in the present day while shopping in their store because consumers in the modern age always hope and have high expectation towards the service in their daily transactions. With a great experience consumers' gain from the retailers, then it will contribute to the customers' loyalty towards the firms.

REFERENCES

Baker, Julie, A. Parasuraman, Dhruv Grewal and Glenn B. Voss (2002), "The Influence of Multiple Store Environment Cues on Perceived Merchandise Value and Patronage Intentions," Journal of Marketing, 66 (2), 120–41.

Berry, Leonard L., Lewis P. Carbone and Stephan H. Haeckel (2002), "Managing the Total Customer Experience," Sloan Management Review, 43 (Spring), 85–9.

Dhruv Grewal, Michael Levy, V. Kumar (2009), "Customer Experience Management in Retailing: An Organizing Framework", Journal of Retailing 85 (1, 2009) 1–14

Haytko, Diana L. and Julie Baker (2004), "It's All at the Mall: Exploring Adolescent Girls' Experiences," Journal of Retailing, 80 (1), 67–83.

Luo, Xueming (2005), "How Does Shopping With Other Influence Impulsive Purchasing?," Journal of Consumer Psychology, 15 (4), 288–94.

Mittal,Vikas, PankajKumar and Michael Tsiros (1999), "Attribute Performance, Satisfaction, and Behavioral Intentions Over Time: A Consumption System Approach," Journal of Marketing, 63 (2), 88–101.

Nancy M. Puccinelli, Ronald C. Goodstein , Dhruv Grewal ,Robert Price , Priya Raghubir, David Stewart (2009), "Customer Experience Management in Retailing: Understanding the Buying Process", Journal of Retailing 85 (1, 2009) 15–30

Peter C. Verhoef, Katherine N. Lemon, A. Parasuraman , Anne Roggeveen , Michael Tsiros , Leonard A. Schlesinger (2009), " Customer Experience Creation: Determinants, Dynamics and Management Strategies", Journal of Retailing 85 (1, 2009) 31–41

Verhoef, Peter C., Scott A. Neslin and Björn Vroomen (2007a), "Multi- Channel Customer Management: Understanding the Research Shopper Phenomenon," International Journal of Research in Marketing, 24 (2), 129–48.

White, Katherine and DarrenW. Dahl (2006), "To Be or Not Be? The Influence of Dissociative Reference Groups on Consumer Preferences," Journal of Consumer Psychology, 16 (4), 404–1.

Wakefield, Kirk and Julie Baker (1998), "Excitement at the Mall: Determinants and Effects on Shopping Response," Journal of Retailing, 74 (4), 515–39.

Determining Gender Differences among Customer towards Satisfaction in Retail Industry

Ibhrahim Zakaria[1], Mohammad Zaim Mohd Salleh[2], Ainunnazlee Mohd Ali[2]
[1]Universiti Teknologi MARA Cawangan KelantanBukit Ilmu, 18500 Machang, Kelantan
[2]Faculty of Business Management, Universiti Teknologi MARA Puncak Alam, 42300 Bandar Puncak Alam, Selangor, Malaysia

ABSTRACT

Companies are competing with each other to capture the market share, therefore most business such as retail business aimed to satisfy their customer in order to develop loyalty in the long run. Higher economic returns are expected for companies that have more satisfied customers. Therefore this study aimed to seek the differences between male and female customers towards satisfaction in the retail industry in Taman Setiawangsa, Kuala Lumpur. Data were collected through questionnaire distributed to the total of 360 respondents in Taman Setiawangsa, Kuala Lumpur. The findings indicate that there is no significance differences between male and female customers toward dissatisfaction in retail industry.

Keywords: Gender, Customer Satisfaction, Retail Industry, Satisfied, Delight

1. INTRODUCTION

The aim of every company is to satisfy their customers and to gain profit thus delivering a quality service is very important. Quality services usually lead to satisfaction. The impact of consumer satisfaction and quality perception on long-term performance of service firms is supported not only by theory but also by empirical studies (Duque & Lado, 2010). Most businesses such as retail business aimed to satisfy their customer in order to develop customer loyalty in the long run. Customer satisfaction is related to customers' expectation and perception. If perceptions meet or exceed expectations, the customer is generally satisfied (Kotler & Armstrong, 1991) and as customer satisfaction rises, so does customer repurchase intention (Buttle, 2006). Satisfaction increases because customer insight allows companies to understand their customers better, and create improved customer value propositions (Buttle, 2006).

2. LITERATURE REVIEW

Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing his or her perception and expectation (Kotler, 2000). In other dimension, Boselie, Hesselink and Wiele (2002) stated that satisfaction is a positive and affective behavior portrayed by a party resulting from the appraisal of all aspects of other party's working relationship. Meanwhile, in business dimension, as the organization maintains a positive relationship with their customers, several desirable outcomes are likely in expectations (Kotler, 2000). Customer's satisfaction also can be defined as the customer's overall feelings of contentment with a customer's interaction (Harris, 2006). In contrast, Neal (1999) define customer satisfaction as an attitude resulting from what customers think should happen (expectation) interacting with what customer think did happen (performance perceptions).

Customer satisfaction is increasingly becoming a corporate aim as more and more companies attempt for quality in their products and services (Ahmad & Kamal, 2002). Customer satisfaction is the main result of marketing activity whereby it serves as a link between the different stages of consumer buying behavior (Ahmad & Kamal, 2002). At the same time, customer satisfaction is widely known as a key power in the formation of customers' future purchase intentions (Sureshchandar et al., 2002). Therefore, customer satisfaction is the feeling or attitude of customer towards a product or service after it has been used (Parasuraman et al., 1985). For instance, if customers are satisfied with a particular service offering after its use, they are likely to engage in repeat purchase and prolong the relationship (Wang & Lo, 2002). Satisfied customers are also likely to tell others about their favorable experiences and thus engage in positive word of mouth advertising (Sureshchandar et al., 2002). Furthermore, behaviors such as repeat purchase and word of mouth strictly influence the business performance by increasing sales and market shares, providing chances for cross-selling, improving customer relations and thus enhancing the corporate image (Arasli et al., 2005). Therefore, it can be concluded that highly satisfied customers are less price-sensitive, they also buy additional products and stay loyal longer and less interested to change to other competitors in the market (Zineldin, 2000). Not just that, customer's satisfaction also increases customer's retention (Stauss, Decker & Hoffman, 2001) and customer's trust (Singh & Sirdeshmukh, 2000 and Bauer, Grether & Leach, 2002)

According to Doel, Lancaster and Lowe (2005) in their book Understanding and Managing Customer, customer expects satisfaction and in doing so they distinguish between satisfaction and dissatisfaction. They mentioned in their book that dissatisfaction occurs when the level of quality provided by the service supplier falls below the basic level that the customers expect. Customer has come to expect a basic level of product quality and service from any supplier as a right. Customer will be satisfied when an organization understands exactly what customers are looking for, what their responses to product and services offered are and understanding exactly why customer behave the way they do. They mentioned that if the supplier delivers a basic level of product quality and service it does not guarantee that customer will be satisfied because competitors may be offering additional value. They also add another satisfaction level which is delighted customer which is defined as when he or she is offered better service than what was expected.

A customer can be satisfied with the service encounter and with the employee but overall dissatisfied with the price, selection or quality of merchandise available (Fogli, 2006). A satisfied customer may reinforce quality perceptions but not directly (Bitner & Hubbert, 1994). Buttle (2006) has identified that satisfaction is a pleasurable fulfillment response while dissatisfaction is unpleasurable fulfillment response.

Past research that has been done in the past has shown that women report greater overall satisfaction than men (Bryant et al, 1996; Mittal et al, 2001). The reason for this is that women may be more experience shoppers with more skill at making attribute comparisons (Anderson, Pearo and Widener, 2008). The experience enable women to identify items that best fits their personal needs and leads to higher overall satisfaction then men (Bryant et al, 1996).

Mittal et al (2001) added that women are less likely to tell the truth about negative experiences then men. Past research also identified that the difference in relative weights that men and women assign to the service concepts components that are often attributable to the differences in leadership style (Eagly, Makhijani and Klonsky, 1992).

Iacobucci and Ostrom (1993) mentioned that there are finding that suggest that women focus more on the interpersonal components of a service interaction. Zeithaml (1985) added, in general buying behavior, past research has shown that women's purchases are influenced more heavily by their evaluations of personal interactions. Gilbert and Warren (1995) also stated that women's purchase behavior is influence by the sales personnel consolations than men's purchases.

Therefore, based on the discussion regarding gender and customer satisfaction, it was found out that women will be more satisfied than men. This will lead to the idea that men are more dissatisfied than women.

3. METHODOLOGY

This is a cross sectional study. Data were collected by using questionnaires, which had earlier been developed and validated by a group of experts from the faculty of Office Management and Technology, Universiti Teknologi MARA, Puncak Alam. All items were answered by the respondents using five points (5) Likert scale. 360 sets of questionnaire had been distributed to JCARD members of JUSCO AEON AU2 Taman Setiawangsa, Kuala Lumpur. The process of questionnaires distribution and collection took approximately seven days. However, only 350 sets of questionnaires were returned and 10 sets of questionnaires were missing. Therefore, the survey return rate was 97.2% (n=350).

4. RESULTS AND DISCUSSIONS

Most of the respondents were female which represent 205 or 58.6% of the respondents. Most of the respondents or 146 (41.7%) aged between 21 – 30 years old with Malays as the majority of the respondents which represent 222 respondents or 63.4%. The respondents in this study were mostly married with 205 respondents or 58.6%. 200 respondents or 57.1% had a Bachelor Degree while 172 respondents or 49.1% worked in the private sector. The monthly salary of most respondents was between RM3001 – RM5000 or 38.6%. Majority of the respondents or 147 (42%) spent an average of RM101 – RM300 per visit. Most of the respondents (167 or 47.7%) shopped at JUSCO AEON 1 – 2 times in a month. 151 respondents or 43.1% had become JCARD members within 1 – 2 years.significant different exist.

Table 3: Independent Sample T-Test for Income

Gender	-.636	260.635	.525

The mean difference is not significant at the 0.05 level.

The result showed that there is no significant differences between male and female customers towards dissatisfaction in retail industry (p= 0.525, >0.05). This finding was contradict with the previous study that showed that male and female are different in satisfaction. Bryant et al, (1996) and Mittal et al (2010) report that women report greater overall satisfaction then men.

5. CONCLUSION AND IMPLICATIONS

The finding has showed that there is no significant differences between male and female customers towards satisfaction in retail industry. However, there few studies has shown that female report greater satisfaction than male which give the ideas of female are more satisfied that male. Therefore, although this study do not showed any significant differences, the role of gender should not be put aside in determining the customer satisfaction.

6. LIMITATIONS

The study was conducted at a retail company in Taman Setiawangsa, Kuala Lumpur. The main constraint is the limited scope of investigation due to the limited manpower and time constraint to conduct the research. It is suggested that in order to generalize the findings, future researchers should take similar effort but with a larger scope to cover the larger states in Malaysia, including Sabah and Sarawak. By focusing on larger area the findings might be different and varied as a result of the emergence of certain elements such as lifestyle, income level, education and cult

7. REFERENCES

Ahmad, J., & Kamal, N. (2002). Customer satisfaction and retail banking: An assessment of some of the key antecedents of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 20(4), 146-160.

Arasli, H., Katircioglu, S. T., & Smadi, S. M. (2005). A comparison of service quality in the banking industry: Some evidence from Turkish and Greek speaking areas in Cyprus. International Journal of Bank Marketing, 23(7), 508-526.

Bauer, H., Grether, M., & Leach, M. (2002). Building Customer Relations Over the Internet, *Industrial Marketing Management*, 31(2), 155-163.

Bitner, M. J., & Hubbert, A. R. (1994). *Encounter Satisfaction versus Overall Satisfaction versus Quality: The Customer's Voice.* In Rust, R.T., & Oliver, R.L. (Eds.). *Service Quality: New Directions in Theory and Practice*. Thousand Oaks, CA: Sage, 72-94.

Bryant, B.E. and Cha, J. (1996). Crossing the Threshold. Marketing Research. 8(4): 20-28

Buttle, F. (2006). *Customer Relationship Management: Concept and Tools.* Oxford: Elsevier Butterworth-Heinemann.

Doel, I., Lancaster, P., & Lowe, R. (2005). *Understanding and Managing Customer*. Prentice Hall.

Duque, L.C. and Lado, N. (2010). Cross-cultural comparisons of consumer satisfaction rating: A perspectives from Albert Hirschman's theory. International Marketing Review. 27(6): 676-693.

Eagly, A.H., Makhijani, M.G. and Klosnky, B.G. (1992). Gender and the evaluation of leasers: A meta-analysis. Psychological Bulletin. 111: 3-2.

Fogli, L. (2006). *Customer Service Delivery: Research and Best Practices*. San Francisco: Jossey-Bass.

Gilbert, F.W. and Warren, W.E. (1995). Psychographic constructs and demographic segments. Psychology and Marketing. 12(3): 223-337.

Harris, E. K. (2007). *Customer service: A Practical Approach*. Upper Saddle River, N.J: Prentice Hall.

Iacobucci, D. and Ostrom, A. (1993) Gender differences in the impact of core and relational aspects of services evaluation of service encounters. Journal of Consumer Psychology. 2 (3): 257-286.

Kotler, P., (2000), *Marketing Management*. *(10th Edition),* New Jersey, Prentice-Hall.

Kotler, P., & Armstrong, G. (1991). *Principles of Marketing*. Upper Saddle River, NJ: Prentice Hall.

Neal, W. D. (1999). Satisfaction is Nice, but Value Drives Loyalty. *Marketing Research*, 11(1), 20-23.

Parasuraman, A., Zeithaml, V. and Berry, L.L. (1985). "A Conceptual Model of Service Quality and tts Implications for Further Research", *Journal of Marketing*, 49, Fall, 41-50.

Singh, J. & Sirdeshmukh, D. (2000). Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty Judgment, *Journal of Academy of Marketing Science*, 28(1), 150-168.

Stauss, B., Chojnacki, K., Decker, A. And Hoffman, F. (2001), Retention Effects of a Customer Club, *International Journal of Service Industry Management*, 12(1), pp.7-19.

Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The Relationship between Service Quality and Customer Satisfaction - A factor Specific Approach. *Journal of Services Marketing*, 16(4), 363-379.

Zeithaml, V.A. (1985). The new demographic and market fragmentation. Journal of Marketing. 49, 64-75

Zineldin, M. (2000), *TRM Total Relationship Management*, Studentlitteratur, Lund.

E-Business Adoption among Homestay Business: Sarawak Experience

Muhammad Omar[1], Jati Kasuma[2], Roystance Asit[3], Pauline Achan[4] and Dean Nelson Mojolou[5]

1 Faculty of Business & Management, UiTM Sarawak, muhammad@sarawak.uitm.edu.my
2 Faculty of Business & Management, UiTM Sarawak, jati@sarawak.uitm.edu.my
3 Faculty of Business & Management UiTM Sarawak, roystance6755@sarawak.uitm.edu.my
4 Faculty of Business & Management UiTM Sarawak, paulineachan@sarawak.uitm.edu.my
5 Faculty of Business & Management UiTM Sarawak, dean5575@sarawak.uitm.edu.my

ABSTRACT

Today information technology (IT) is universally deemed by business organizations as an essential tool that they use to run their business activities and processes. With the escalation of internet penetration in Sarawak, it has augmented new opportunities to the small medium enterprises (SMEs) to adopt e-business toward sustaining their businesses. The objectives of this study are to identify factors that influence e-business adoption among the homestays in Kuching, Sarawak and to determine which factor has the most significant influence on its adoption. For the purpose of this study, the reviewed IT adoption model used is the technology-organization-environment (TOE) framework (Tornatzky and Fleischer 1990). This framework identifies three elements that drive the adoption of technology: technology, organizational, and environmental. A total of 150 homestay business within Kuching City were chosen to participate in the survey. Data was analysed using a correlational analysis and multiple regression analysis. The findings indicated that organization is the factor that has the most significant influence on e-business adoption among the homestays in Kuching, Sarawak.

Key Words: *E-Business, Homestay, SMEs, adoption*.

1. INTRODUCTION

Today information and communication technologies (ICT) have become an extremely important part of our daily lives. In Sarawak, the escalation of internet penetration has augmented new opportunities to the small medium enterprises (SMEs) for sustaining their businesses over a prolonged period of time (Borneo, 2011). As the world witnesses an alarmingly rapid growth in its population, the internet technology (IT) makes it easy to access most of the people. As a result, businesses have found this to be beneficial, especially at the early stage of their business venture, as it allows them to explore every possible angle effectively in order to reach the potential customers. With the availability of high-speed internet, many organizations have opted to incorporate technology in running their businesses, popularly known as e-business. Nevertheless, literature has postulated that there seems to be inconsistencies in opinions concerning the success and failure of e-business. So why do businesses opt to use the internet to manage their businesses? Do they regard the internet as just another IT tool? Is e-business a better option for a more lucrative business venture or should the business organizations go back to the traditional method of running business? The internet undoubtedly has created a digital environment and it acts as a tool for information and communication technologies (ICT). The internet helps to facilitate the basic business activities and processes such financial transactions, customer service, internal communications and operations, marketing strategy, and business sustainability. Studies have found that the internet-based e-business systems have the most significant result among the various ICT applications for managing business activities and processes (Sulaiman, Shariff, & Ahmad, 2008). Currently, the adoption of e-business is extensively implemented by SMEs in Malaysia (Kurniaet al, 2015; Poorangi et al, 2013; Nezakati et al, 2012; Alam et al, 2011). As such it is safe to consider e-business as a contemporary strategy used to transform how businesses are

managed, a dramatic shift from the old and traditional buying and selling processes to online-based processes.

With the development of new theories, factors that influence the adoption of e-business among the SMEs were identified (Parker & Castleman, 2009) and for the purpose of this study the IT adoption model used is the technology-organization-environment (TOE) framework (Tornatzky and Fleischer 1990). This framework identifies three elements that drive the adoption of technology: technology, organizational, and environmental. The focus of this research is the adoption of e-business among the homestays in Kuching, Sarawak and factors that influence its adoption is gauged using the TOE framework.

The focus of this study is tourism sector and it is the second largest industry in Malaysia (Ibrahim and Razzaq, 2014). Homestay is one aspect of tourism. Lanier and Berman (1993) explain the concept of homestay as "private homes in which unused rooms are rented for the purposes of supplem enting income and meeting people". A Homestay experience in Sarawak range from an overall family experience to just renting rooms and thus the main intention of a homestay is for the tourists to embroil themselves in their host's culture (Oliveira and Martins, 2010). This study, however, seeks to address the gap in the already and currently limited topic of exploring e-business adoption among homestay businesses in Kuching, Sarawak. The objectives of this study are to identify factors that influence on the adoption of e-business among the homestay in Kuching, and to determine which factor has the most significant influence.

2. LITERATURE REVIEW

e-Business adoption

This study aims to investigate the factors influencing the adoption of E-business among Sarawak homestay business. e-Business can be defined as the use of ICT resources to support all business activities in the organization. E-Business emphasizes on customer values and maximize organization's profit with the benefit of technology (Kalakota & Robinson, 1997). Adoption of e-Business in SME had increase competitive environment among modern firm. Based in this situation, the capabilities of organization and technological innovation are foremost challenges and essential to firm to be success (Tornatzky, Fleischer, & Chakrabarti, 1990; Veliyath & Fitzgerald, 2000). According to Damaskopoulos and Evgeniou (2003), they stated e-business system will be successful when a key concept for technological innovation and investment is being recognized. Moodley (2003) defined e-business as a platform of information interchange or administrative transaction makes available at the remote sites known as internet. It has contributed for a several benefits. Some of the major benefits of adopting e-business in the organization such as follows; accurate information for decision making, improve coordination and communication with business partners, improve customer service, and assisting decrease administrative costs (Zhuang & Lederer, 2003). Although e-business systems have technical components, management issues must be addressed regarding changes in organizational processes and interaction both within a firm and among firms (Ash & Burn, 2003).

TOE model

TOE model is based on adoption factors such as technological, organizational and environmental. Technological factor includes perceived relative advantage, perceived compatibility, and perceived complexity (Pexin, 2012). Organizational factor includes organization attributes such as its size, centralization, formalization, quality of human resources, amount of slack resources available internally and complexity of the organization's managerial structure (Shen et al., 2004). Environmental context looks into buyer or supplier pressure, competitive pressure and supporting industries (Pexin, 2012). Even for studies that have focused on SMEs' adoption of technologies such as EDI (Kuan & Chau, 2001; Iacovou et al., 1995), e- commerce (Mirchandani & Motwani, 2000; Scupola, 2003; Fillis et al., 2004), web sites (Raymond, 2001) have found that these adoption factors can be summarized into technology, organization and environment factors.

Technological factors
Technological factors refer to all of these aspects such as perceived relative advantage, perceived compatibility and perceived complexity.

Perceived relative advantage

Rodgers (2003) defines the "relative advantage" of an innovation as "the degree to which the innovation is perceived as being better than the idea it supersedes". Organization especially in SME sector should realize that the adoption of technology innovation will either solve the current problem or brings new opportunities like improving process efficiency and increased productivity (Zhu & Kraemer, 2005). This will lead to the decision making among entrepreneur to evaluate the potential advantages of the new technology for their business. Tornazkty and Klien (1982) stated that the organization consider to adopt a technology when they realize need for technology, increase competitive advantage and increase internal operation performance.

Perceived compatibility

Rodgers (2003) defines compatibility as "the degree to which a technological innovation is perceived as being consistent with existing operating practices, beliefs, values, past experiences and needs". The useful of a technology can have in different viewpoint from the organization. For instance, the adoption of effectiveness of e-procurement technology (EPT) may be high risk because of their lack of compatibility with their current technology. For example, a centralized controlled organization might have greater or poorer awareness of adoption of EPT effects on its performance. Azadegan & Teich (2010) summarized decision-making style may be unfair towards innovation, therefore adoption would be eliminated. Lee and Kim (2007) see compatibility as a key factor of the e-business adoption because organization want to avoid the compatibility issues become a drawback when implementing technology.

Perceived complexity

Rogers (2003) defines complexity as "the degree to which an innovation is perceived as relatively difficult to understand and use." Murilo (2004) states perceived complexity is the highly related to adopt technology in the organization. For some, in the earlier stage of experiencing in technology, complexity has become negatively correlated with IT adoption and any evolution of technology will be rejected (Lin & Lin, 2008). It is also supported by the previous research on the negatively correlate with the complexity (Thong, 1999; Frambach et al., 1998). Therefore, it can be concluded that if the technology is ease to use, it seem to be positively adopted by the organization.

Organizational Factors
Organizational factors refer to those aspects such as size of firm and organizational readiness.

Size of firm

The organizational factors refer to the characteristics of the organization influence the adoption of e-business. Mole et al (2004) stated the importance of firm size is significant because it is part of the source and strength of the organization equal to both financial and human resources. The bigger size of business nature means the greater ability to provide certain resources and therefore the tendency to adopt e-business is considering high due to its contribution. A study done by Premkumar and Roberts (1999) found that the bigger organization have the intention to adopt communication technology compare to small organization. Likewise, larger business in SME tend to adopt more advanced since they have extra resources in their organization (Thong, 1999)

Organizational readiness

Readiness is a key principle of an organization's internal operation capability in accepting to use a new technology (Iacovou et al., 1995; Mehrtens et al., 2001). A study done by Chwelos et al. (2001) see availability of these resources; capital and human resource can also impact organizational readiness. Capital funding will be used for purchasing new equipment, prepare budgeting for training and operational funding for recruit manpower needs may be consideration to adopt new technology.

Top management support

Top management support has found strong empirical support as a factor affecting the adoption of innovations. Similarly, Bruque and Moyano, (2007) found that top management support was among the factors that significantly affected the speed of adoption of information technology in SMEs. Similar results were found in many other empirical innovation adoption studies (Bharati & Chaudhury, 2006; Beatty, Shim, & Jones, 2001; Premkumar & Roberts, 1999). Interestingly, Toe and Pian (2003), in their study on the factors affecting firm's level of adoption of the web represented in five levels ranging from simple email adoption to using the web to transform business operations, found that top management support does not affect the level of adoption of the web. They explain that by saying there is little difference in top management support among different levels of adoption. According to them, one possible reason is that management is already aware of the importance of the web as it has already been adopted in the first place.

Environmental factors

Environmental factors refer to buyer or supplier pressure, competitive pressure, and supporting industry

Buyer/Supplier pressure

Several researcher beliefs that the adoption of e-business will lead to a ridiculous purchasing process and therefore will give customer a unique consuming experience. According to Ching and Ellis (2004), Lee and Kim (2007) and Ure (2002) studies stated that firms' behaviour of e-commerce adoption are based from the view of customer pressure. However, Santosa and Peffers, 1998 argued this study and found that the customers are slow to accept e-commerce and the benefits of early adoption have not been realized. Besides, Davila et al.'s (2003) agreed that supplier's adoption decision will also affect whether one firm takes e-commerce or not

Competitive pressure

Based on the view of the level of competitiveness in the market, Gibbs and Kraemer (2004), Forman (2005) and To and Ngai (2006) have proved that the more competitive the external market is and the higher the likelihood of e-commerce adoption will take place. The researchers have believed that and for those who do not adopt e-commerce will find themselves at a disadvantage situation. This matter supported by Hsu et al. (2006) and Rodrı´guez-Ardura and Meseguer-Artola, (2010) stated that competitive environment disincentives e-commerce adoption happen because those who face excessive competitive pressure do not have enough resources left to try new things.

Supporting industry

Molla and Licker, 2005 believe that lack of support-giving industries such as well-developed financial sector and distribution facilities, also hinders firm's e-commerce adoption and It will give impact to nation's economic *structure whereby e-commerce will less* attractive for traditional economic sectors (Kshetri, 2007). Thus, the result showed that the sectors with the highest level of

adoption were transport and equipment, and textiles and healthcare were the lowest. Hence, the purpose of this study is to determine the factors that influencing e-business adoption among home stay employee in Kuching, Sarawak. This study will also determine the factors that influence the home stay to do the business using e-business. The factor of this e-business adoption can create the awareness that the home stay can do more advertising that can help generate more income. The findings of this study could provide the useful insights for the home stay on how to promote their home stay and the effect and finally it will provide the recommendations on the solution of some.

Table 1: Summary of recent studies on e-business adoption among SME in Malaysia

Authors	Review Topic	Methodology	Key findings
Hashim (2007)	ICT Adoption Among SME Owners In Malaysia	Survey of 383 SME owners using survey instrument, establishes the relationship	The findings of this study show that SME owners in Malaysia possess below-average ICT skills
(Zailani, Dahlan, & Jallalu, 2009)	E-Business Adoption Among SME In Malaysia	A survey of 200 Malaysian SME using survey instrument, factor analysis and regression using survey data	The modified framework was applied after factor analysis have resulted five new variables
(Alam, Ali, & Jani, 2011)	An empirical study of factors affecting Electronic commerce adoption Among SMEs in Malaysia	Sample of 200 Malaysian SME and test seven hypotheses on the factors that influence e-commerce adoption	Only five variables have a significant impact towards the e-commerce adoption
(Nezakati, Jofreh, Leong, Liong, & Asgari, 2012)	Assessing E-Commerce Adoption by Small and Medium Enterprises in Malaysia, Singapore and Thailand	This study has a geographical coverage of the center region of South East Asia covering Thailand, Malaysia and Singapore.	Technical knowledge related to e-commerce is not significantly different between the countries
(Marimuthu, Ramayah, Omar, & Mohamad, 2013)	Readiness To Adopt E-Business Among SME In Malaysia	Sample of 177 SME were analyzed using questionnaire	TOE influence e-business adoption and that the adoption of e-business has a direct influence on the business performance of the SMEs
(Poorangi, Khin, Nikoonejad, & Kardevani, 2013)	E-Commerce Adoption In Malaysian Small And Medium Enterprises Practitioner Firms	A questionnaire was distributed to 1,200 managers and employees	Perceived Relative advantages influence the adoption of e-commerce

(Ahmad, Bakar, Faziharudean, & Zaki, 2015)	An Empirical Study Of Factors Affecting E-Commerce Adoption Among Small- And Medium-Sized Enterprises In A Developing Country: Evidence From Malaysia	survey instruments: an online questionnaire-based survey, mailed survey and questionnaire collected in-person from a sample of 307 SMEs in malaysia.	E-commerce adoption within malaysian smes is affected by perceived relative advantage, perceived compatibility, managers/owner's knowledge and expertise, management characteristics

3. METHODOLOGY

The research was designed as an empirical quantitative study using primary data. The process study framework, which was "A strategic framework for determining e-commerce adoption" were used to investigate the research objectives. The research sampling frame consists of homestay business that are based in Kuching, Sarawak and the sample of respondents consisted of 150 branch personnel including managers and floor employees. Cluster sampling technique was chosen because the target population is made up of heterogeneous groups. The data collected were entered and analyzed using the Statistical Program for Social Sciences (SPSS) V.20 software and Descriptive Statistic, Pearson Correlation and Multiple Regression Analysis to analyse data. Three hypotheses were tested to indicate the relationship between variables.

4. FINDINGS AND ANALYSIS

Demographic of the respondents

Descriptive analysis was used to indicate the level of frequencies and the percentages involved among the demographic questions forwarded to the respondents. Majority of the respondents were female (60%) and male (40%). The malays represented the highest number of percentage of respondents (38.7%) and followed by the Chinese (30.7%), the Indian (6.0%) and others such as Iban (24.7%). Among the 150 respondents, approximately 77 (51.3%) of the respondents were around the ages of 21 – 29 years old. Meanwhile, 63 (42%) were those of the ages between 30-39 years and below, 6 (4%) of the respondents were between the ages of 40 – 49 years old, and 2 (1.3%) were respondents between the ages of 50-60 years and older. The respondents who were employees at the homestay were with different educational level and 4.7% were those with PMR, followed by 50.7% with SPM, 26% with professional qualifications, 8% with bachelor degree, and 10.7% with master’s degree and above. A total of 52% of the respondents were single, 48% were married. With regards to the length of time the respondents had been involved with business operation, 62% of them had been involved above 3 years, 4.7% below 1 year, 6.7% between 1-2 years, and 26.7% between 2-3 years. The size of the homestay business firm that were surveyed, 40% consist of 1-9 employees, 48% had 10-25 employees, 9.3% had 26-100 employees while 2.7% had 101-200 employees. The use of e-commerce technology by the homestay business with highly interactive web presence was 37.3%, those connected to the internet with e-mail but no website was 35%, and static web without any interactivity was 22.7% while transitive web that allows online purchasing selling and purchasing of products and services was 6%.

Correlation Analysis:

Pearson Product-Moment Correlation Coefficient was used to assess the relationship among variables (Independent and Dependent Variables). Table 1 describes the correlation test between the independent and dependent variables. Overall, technology, organizational and environmental shows a significant impact towards the e-business adoption among the homestay business in Kuching, Sarawak.

Table 2: Correlation Analysis

		DV	IV 1	IV 2	IV 3
E-Business Adoption (DV)	R	1			
	Sig. (2-tailed)	.000			
	N	150			
Technological (IV 1)	R	.614**	1		
	Sig. (2-tailed)	.000			
	N	150	150		
Organizational (IV 2)	R	.768**		1	
	Sig. (2-tailed)	.000			
	N	150		150	
Environmental (IV 3)	R	.638**			1
	Sig. (2-tailed)	.000			
	N	150			150

As shown in table 2, the strongest relationship is organizational factor (r=.768, p=<.05). The other two factors are technological (r=.614, p=<.05) and environmental (r=0.638, p=<.05) that also have a relationship with e-business adoption among the homestay business in Kuching, Sarawak.

Regression and Multiple Regression Results:

Table 3 below explains the factor that has the most influence in the adoption of e-business among homestay business in Kuching, Sarawak**.**

Table 3: Regressions between independent variables and the E-Business adoption

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741[a]	.549	.540	1.904
a. Predictors: (Constant), TT1,TO1,TE1				

As depicted in table 3, the coefficient of determination (R^2) is 0.741, representing that 74.1% of the respondent's perception are explain by the three independent variables in the TOE framework while 25.9% are explain by other factors. The R square will let us know what percentage of variability in the dependent variable is accounted for by all of the independent variables together. According to Draper and Smith (1998), an R square of 1 shows that the regression line perfectly fits the data.

Table 4: The coefficient of the model of E-Business Adoption

Variables	R Square	Standard Coefficient Beta
Technological	0.417	0.737
Organizational	0.713	0.769
Environmental	0.609	0.759

Organizational factor has the highest beta coefficient (0.769). This means that Organizational gives a greater effect toward the dependent variable and followed by Environmental and Technological. The values in Beta coefficient indicate how much the independent variables give impact towards dependent variables. Thus, it indicates that organizational is the factor that has the highest influence on e-business adoption among the homestay business in Kuching, Sarawak.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

It is concluded that all the three elements (TOE) have a significant relationships with e-business adoption. This shows that the independent variables (technological, organizational and environmental) influence the dependent variable (e-business adoption). All the hypotheses that were tested and accepted indicate that organizational factor has the highest influence on e-business adoption among the homestay business in Kuching, Sarawak. This findings is supported by Mole et. al (2004) that stated the organizational factor is also significant. However, the findings for this study contrast with that of Ahmad et. al (2015) in which it was found that technological factor has the highest influence in e-business adoption.

Recommendations for Homestay Business

The researchers recommend that the homestay business should be concerned more with the size of the firm, organizational readiness, and top management support to improve the internal and external business operations.

Recommendations for Future Research

Recommendations for future research are numerous. Technically, the scope of this study should be expanded with other SME's business operation and the result may show different findings and discussions. In depth analysis will be possible with a bigger sample size of respondents. It is also appropriate if comparison is done between the various states in Malaysia and this may provide more interesting results. Lastly, since this study was essentially quantitative, future studies can focus on qualitative techniques in order to improve the knowledge based in e-business adoption among the homestay business.

REFERENCES

Agency, M. N. (2008). *MENA Region Offers Vast Investment Opportunities: Fund Manager.* Kuala Lumpur: Bernama.

Ahmad, S. Z., Bakar, A. R., Faziharudean, T. M., & Zaki, K. A. (2015). An Empirical Study of Factors Affecting e-Commerce Adoption among Small- and Medium-Sized Enterprises in a Developing Country: Evidence from Malaysia. *Information Technology for Development*, 555-572.

Alam, S. S., Ali, M. Y., & Jani, M. F. (2011). An Empirical Study Of Factors Affecting. *Journal of Business Economics and Management*, 375–399.

Al-Qirim, N. (2003). E-commerce in the aerial mapping industry: A New Zealand case study. *Journal of Systems and Information Technology*, 67-92.

Al-Somali, S. A., Gholami, R., & Clegg, B. (2004). A stage-oriented model (SOM) for e-commerce adoption: a study of Saudi Arabian organisations. *International Journal of Agile Management Systems*, 2-35.

Ash, C., & Burn, J. (2003). A strategic framework for the management of ERP enabled e-business change. *European Journal of Operational Research*, 374–387.

Azadegan, A., & Teich, J. (2010). Effective benchmarking of innovation adoptions: A theoretical framework for e-procurement technologies. *Benchmarking: An International Journal*, 472 - 490.

Beatty, R. C., Shim, J. P., & Jones, M. C. (2001). Factors Influencing Corporate Web Site Adoption: A Time-Based Assessment. *Information & Management*, 337-354.

Bharati, P., & Chaudhury, A. (2006). Technology Assimilation Across the Value Chain: An Empirical Study of Small and Medium-Sized Enterprises. *Information Resources Management Journal*, 38-60.

Bruque, S., & Moyano, J. (2007). Organisational determinants of information technology adoption and implementation in SMEs: The case of family and cooperative firms. *Technovation* , 241-253.

Consultancy.uk. (2015). *Consulting Magazine: Top 25 management consultants*. Retrieved Jun 11, 2015, from Consultancy.uk Online Platform for the consultancy industry: http://www.consultancy.uk/news/1994/consulting-magazine-top-25-management-consultants

Damanpour, F., & Damanpour, J. A. (2001). E-business e-commerce evolution: perspective and strategy. *Managerial Finance*.

Damaskopoulos, P., & Evgeniou, T. (2003). Adoption of New Economy Practices by SMEs in Eastern Europe. *European Management Journal*, 133-145.

Frambach, R. T., Barkema, H. G., & Nooteboom, B. (1998). Adoption of Service Innovation in the Business Market: An Empirical Test of Supply-Side Variables. *Journal of Business Research*, 161-174.

Hashim, J. (2007, December). Information Communication Technology (ICT) Adoption Among SME Owners in Malaysia.

Ibrahim, Y., & Razzaq, A. R. (2013). Homestay Program and Rural Community Development in Malaysia.

Marimuthu, M., Ramayah, T., Omar, A., & Mohamad, O. (2013). Readiness to Adopt E-Business Among SMEs in Malaysia: Antecedents and Consequence.

Martin, L. M., & Matlay, H. (2003). Innovative use of the Internet in established small firms: the impact of knowledge management and organisational learning in accessing new opportunities. *Qualitative Market Research: An International Journal*.

Molla, A., & Licker, P. S. (2005). eCommerce adoption in developing countries: a model and instrument. *Journal of Information and Management*, 877-899.

Moodley, S. (2003). The potential of internet-based business-to-business electronic commerce for a 'technology follower': the case of the South African apparel sector. *Int. J. Electronic Business*.

Morrison, A., & Teixeira, R. (2004). Small Business Performance: A Tourism Sector Focus. *Journal of Small Business and Enterprise Development*, 166-173.

Nezakati, H., Jofreh, M., Leong, G., Liong, W., & Asgari, O. (2012). Assessing E-Commerce Adoption by Small and Medium Enterprises in Malaysia, Singapore and Thailand. *World Applied Sciences Journal*, 1406-1411.

Oliveira, T, and Martins, M, F. (2010) "Firms Patterns of e-Business Adoption: Evidence for the European Union- 27" The Electronic Journal Information Systems Evaluation Volume 13 Issue 1 2010, (pp47 - 56)

Parker, C. M., & Castleman, T. (2009). Small firm eBusiness adoption: a critical analysis of theory. *Journal of Enterprise Information Management*.

Post, B. (2011, May 28). Look into huge potential of e-business. Sibu, Sarawak, Malaysia.

Poorangi, M. M., Khin, E. W., Nikoonejad, S., & Kardevani, A. (2013, April). E-commerce adoption in Malaysian Small and Medium Enterprises Practitioner Firms: A revisit on Rogers' model.

Premkumar, G., & Roberts, M. (1999). Adoption of new information technologies in rural small business. *The International Journal of Management Science*, 467 - 484.

Rao, S. S. (2000). E-commerce: the medium is the mart. *New Library World, 101*(2), 53-59.

Raymond, L., Bergeron, F. O., & Blili, S. (2005). The Assimilation of E-business in Manufacturing SMEs: Determinants and Effects on Growth and Internationalization. *Special Section: 'Smes And E-Business*, 108-118.

Richardson, K. (2004). Homestay: Opening a World of Opportunity. *18th IDP Australian International Education Conference.* Sydney.

Rogers, E. M. (2003). *Diffusions of Innovation.*

Takeuchi, H., & Nonaka, I. (1995). *The Knowledge Creating Company.*

Talty, A. (2013, November 18). *Find The Perfect Homestay*. Retrieved June 20, 2015, from Forbes/Personal Finance: http://www.forbes.com/sites/alexandratalty/2013/11/18/the-south-american-experience-how-to-find-the-perfect-homestay/

Thong, J. Y. (1999). An Integrated Model of Information Systems Adoption in Small Businesses. *Journal of Management Information Systems*, 187-214.

Tornatzky, L. G., Fleischer, M., & Chakrabarti, A. K. (1990). *The processes of technological innovation.* Business & Economics.

Veliyath, R., & Fitzgerald, E. (2000). Firm Capabilities, Business Strategies, Customer Preferences, And Hypercompetitive Arenas: The Sustainability Of Competitive Advantages With Implications For Firm Competitiveness. *Competitiveness Review: An International Business Journal*, 56-82.

Zailani, S., Dahlan, N., & Jallalu, Y. H. (2009). E-business adoption among SMEs in Malaysia: investigation from the. *Problems and Perspectives in Management*.

Zhuang, Y., & Lederer, A. L. (2003). An Instrument for Measuring the Business Benefits of E-Commerce Retailing. *International Journal of Electronic Commerce*, 65-99 .

Exploring the Determinant Factors Affecting Online Shopping Intention Using Social Media

Azmi Mat[1], Mohammad Zaim Mohd Salleh[2], Nur Liana Kori[3], Ainunnazlee Mohd Ali[4] and Zarina Abdul Munir[5]

1 Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, azmimat@puncakalam.uitm.edu.my

2 Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, zaim3085@puncakalam.uitm.edu.my

3 Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, nurliana2057@puncakalam.uitm.edu.my

4 Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, ainunnazlee3098@puncakalam.uitm.edu.my

5 Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam Campus, zarin453@salam.uitm.edu.my

ABSTRACT

Online shopping is one of the most popular activities among internet users. Previously, the internet users purchase their desired items from the web or from e-commerce shop. Nowadays, the evolution of social media has brought to the new dimension of online shopping activities. Social media that characterized by user generated content are found to be more flexible than traditional marketing communication channel, in influencing the attitudes and behaviour of the users. This is because, there is a higher level of efficiency of social media as compare to the traditional communication channels. However, there are limited studies been conducted in Malaysia, to identify the factors affecting online purchase intention via social media. Most of the previous studies focused on the online shopping via internet as a whole. Therefore, this paper aims to explore the determinant factors affecting customer online purchase intention as these two theories were prominently used by the previous studies.

Key Words: Online shopping; Social Media; TAM

1. INTRODUCTION

Internet is a technology that has grown rapidly since 1970s that acts as an important medium to people for various purposes such as information seeking, education learning, online business etc. The internet development gives an idea to people for e-commerce activities such as online shopping businesses. Online shopping is one of the most popular activities among internet users which the internet and web offer many opportunity because it increase the efficiency of online shopping by improving the availability of product information, enabling direct multi attribute comparison and reducing buyer search cost (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, and Wood, 2001).

E-commerce or online shopping businesses conception has evolved since mid-1990s. Online shops let consumers save time while fulfilling their fundamental needs, provide a variety range of a products and services in short time and avoid traditional shopping costs as mention by Selim Aren., Mevludiye Guzel, Ebru Kabadayi and Lutfihak Alpkan (2013). Consumer not only can purchase through website. The evolution of social media has brought new dimension of online shopping activities. In addition, social media that characterized by user generated content are found to be more flexible than traditional marketing communication in influencing the attitudes and behavior of the users because there is a higher level of efficiency of social media compare to other

traditional communication channels according Farzana Parveen., Noor Ismawati Jaafar and Sulaiman Ainin (2014).

According to On Device research, Malaysia reported has 140% mobile penetration with more than 10 million of smartphone users from the 30 million of Malaysian population in 2014. It shows Malaysia is leading in the smartphone penetration which follows by Indonesia, Thailand and United States. Meanwhile, the recent survey that revealed by The Nielson Global Survey of E-Commerce shows Malaysia ranked among the world's most avid online shoppers. It found that at least 6 out of 10 Malaysians are most inclined to purchase items online compared to other country. So, this statistics would be the main reason of Malaysian consumer to engage in online shopping. As the numbers of smartphone users increase, it is expected that the number of customer engage in social media also will increase.

In order to investigate online shopping intention via social media, the researcher will employed Technology Acceptances Model and Theory Planned Behavior as these two theories explain customer online buying intention. Based on these theories, researcher has come out with several factors such as trust, usefulness, enjoyment, ease of use and perceived risk.

2. PROBLEM STATEMENT

Online shopping helps consumers to manage their time wisely. In particular is no time constraint of online shopping, consumer can order for any product whenever they want. In addition, the product information and specification are more details from various sites. Consumers love to purchase through online shopping due to variety of the product as they can compare and choose their favourite product. Online shopping in Malaysia is a new technology breakthrough since it has just begun to assault the Malaysia retailing sector with online shopping service (Haque, 2006). It promotes consumer's right, freedom of choice to choose or freedom to obtain information. Due to the technological advancement and increasing the number of internet users, Malaysian consumers' are interested to perform online shopping. Indeed, the numbers of smartphone users are increasing and encourage the higher demand towards the online shopping services as the existence of online shop increase. A survey has been conducted by global information and insights company, Nielsen, and it was found that the Philippines (62%), Indonesia (61%), Vietnam (58%) and Thailand (58%) rank in the top 10 markets globally for use of a mobile phone to shop online followed by Singapore (48%) and Malaysia (47%). Understanding consumer online shopping and buying intention when shopping online should be given priority.

However, there is limited studies been conducted to identify factors affecting the online shopping and buying intention via social media. Most of the previous studies focused in the online shopping via internet as a whole. According to the research conducted by Nielsen it was found that more than half Malaysian consumer are cautious when it comes to paying online by credit card, whereby 52 percent do not trust giving their credit card information online. Filipinos are the most cautious 67 percent, followed by Thais 62 percent, Indonesians 60 percent, Vietnamese 55 percent and Singaporeans 41 percent compared to 49 percent of consumers globally. The consumers feel cautious and afraid to purchase online by credit card or online banking payment. This main problem occurs due to the security and trust issues. These issues are not only happen for Malaysian consumers but also users from western countries. Thus, regardless of the reason, security and trust issues have been creating fears for many businesses and consumers. In fact, very limited studies measure finding of the implement factors. This study will reduce the gap exist by measuring the trust factor in predicting online shopping intention among consumer via social media. This is very important because the trustworthiness of the online business is the most prominent issues discussed related to consumer right in online business.

3. BACKGROUND LITERATURE

The Internet is therefore a set of interconnected networks, which may themselves contain other networks, or just computers around the world (Stephen Todd, 1999). Nowadays, internet is one of the most important parts of our daily life. There are large numbers of things that can be done by using the social media. Today social media is used for different purposes depending upon the requirement. There are several uses of internet which is:

1. Communication. At the moment the easiest thing that can be done using the Internet is that we can communicate with people even though they live so far away from us.

2. Research. In order to do a research, you need to go through hundreds of books as well as references and that was one of the most difficult jobs ever. Since the internet came into life, everything is available just a click away.

3. Education. Education is one of the best things that the internet can provide. There are so much book, reference books, online help center, expert's views and other study oriented material on the Internet that can make the learning process easier.

4. Financial Transaction. Financial transaction is the term which is used when there is exchange of money. Our work became easier with the use of the internet.

5. Real Time Updates. This is regarding to the news and other happenings that may be on-going in different parts of the world but with the use of internet we know about it easily and without any difficulty.

3.1. PURCHASE INTENTION

Generally, According to Ajzen (1991, p.181) "intentions are assumed to capture the motivational factors that influence a behavior, they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior". Buying intention is a kind of decision-making that studies the reason to buy a particular brand by consumer (Shah, 2012). In addition, buying intention defined as a situation where consumer tends to buy a certain product in certain condition (Morinez, 2007). Added by Samin (2012, p.206) that "intention is the person's motivation in the sense of his or her intention to perform behavior. Further definition for purchase intention is "what we think we will buy" (Park, as cited in Samin et al., 2012, p.206).

Currently, buying intention are determined his or her attitude to perform certain behavior. Buying intention also reflected the predictable of consumers buying intention behavior and attitude for future buying decision. Furthermore, Long and Ching also conclude that "purchase intention stands for what we would like to buy in future" (Long and Ching, 2010, p.20). Hence, a person's behavioral intention is determined by the two basis components which are attitude toward behavior and subjective norm. These two factors will directly affect an individual's behavioral intention and then consequently affect his or her behavior. In short, the buying intention is reflected an attitude of consumer patters for future purchase.

3.2. UNDERLYING THEORIES OF ONLINE PURCHASE INTENTION

3.2.1. Theory of Technology Acceptance Model (TAM)

The researcher shall make an analysis based on the Theory of Technology Acceptance Model (TAM). Davis (1993) introduced TAM to explain acceptance of Information Technology (IT). TAM represents an adaptation of the theory of reasoned action (TRA), tailored to users acceptance of information systems which depends on two salient beliefs, namely perceived usefulness and ease

of use. The development of TAM is to understand the popularity of online shopping. TAM is an evidence system concept that represents how the consumers start using new information technology (IT). In fact, TAM broadly used to explain individual's intention and real use of IT. The main advantage for customers to buy products and services online is the network, a form of IT.Among all theories and models, TAM has been viewed the commonly used and the most prominent model for understanding the electronic commerce from a customer oriented view. Many researches in the field of online shopping use the TAM (Burner and Kumar, 2005). Consumer attitude is affected by an individual's beliefs related to perceived usefulness and perceived ease of use of that system. Perceived usefulness is defined as the degree to which the consumer or improve functional performance of transactions. According to Bhattacherjee (2001), a person is more expected to intend to carry out the continuous use where such use is perceived to be valuable. Perceived ease of use analyzes customer knowledge that consumption of this technology is free of effort. Ease of use refers to the degree to which the consumer trusts that the online shopping will be painless. Technology Acceptance Model was further developed by adding expected enjoyment as an intrinsic motivation.

3.2.2. Theory of Planned Behavior (TPB)

The researcher used the Theory of Planned Behavior (TPB) to execute the behavior. This theory of planned behavior is determined by individual intention to execute the behavior as it has been introduced by (Ajzen, 1991). The intention is proposed to explain factors that influencing behavior. That is to indicate, how people will try, about many efforts to plan in using, in executing behavior (Ajzen, 1991). Furthermore, the perception of control such as attitude towards the behavior and subjective norm can have an important impact on an individual's behavioral motivation (Ajzen, 1991). TPB have also been the basis for several studies of Internet purchasing behavior.According to TPB, an individual's performance of a certain behavior is determined by his or her intent to perform that behavior. Consumer performance can be known by attitudes toward the behavior, subjective norms and perceptions about the individual will be able to successfully engage in the target behavior or not (George, 2002). According to Azjen (1991), an attitude toward a behavior is a positive or negative evaluation of performing by that individual's.

3.3. FACTOR AFFECTING CONSUMERS ONLINE PURCHASE INTENTION VIA SOCIAL MEDIA.

3.3.1. Trust

Trust is referring as a confidence and dependence on the reliability, integrity and truth of another party (Kini and Choobineh, 1998). Trust also has been recognized as a critical antecedent for electronic commerce due to its tendency for insufficient information (information asymmetry) and the impersonal nature of the online environment (uncertainty) (Ba, 2001). According Yahoo! Inc. (2006), they found that most consumers use trusted websites when purchasing online. Kim et al (2008) found that customer's intention to purchase products online was also influenced by trust in the web vendor because online merchants continuously improve website quality and update website services to enhance buyers' trust. All the studies suggest that trust is central to interpersonal and commerce relationships and is also widely applied in organizations (Yen-Ting Chen et al, 2012).In e-commerce, trust has long been regarded as playing an essential role in affecting consumers' online purchasing behavior (Pavlou and Fygenson, 2006).

Mayer et al, (1995) claim trust refers to the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. Trust in the web site reflects the willingness of the customer to behaviorally depend on the web site to carry out a transaction (Lu et al., 2010). According to Grabner-Kraeuter, (2002), online shopping inherently involves higher levels of uncertainty than visiting a physical shop because online transactions lack the physical assurances of traditional shopping experiences. In Malaysia context, all online shop

must register thier business with SSM. They must publicly publish their business registration number.

3.3.2. Usefulness

Usefulness is defined as the individual's perception that using the new technology will enhance or improve her or his performance (Davis, 1989; 1993). Applying this definition to this research context, as the new technology that classify shopping on the Internet, and as the individual's performance the outcome of the online shopping experience. Then, usefulness refers to consumers' perception that using the Internet as a shopping medium enhances the outcome of their shopping experience. These perceptions influence consumers' attitude toward online shopping and their intention to shop on the Internet. TAM posits a weak direct link between usefulness and attitude, and a strong direct link between "usefulness" and intention (Davis et al., 1989). This was explained as originating from consumers intending to use a technology because it was useful, even though they did not have a positive affect toward using. Apart from this, usefulness is also linked with ease of use to determine consumers' attitude toward online shopping.According to TAM, usefulness is influenced by ease of use, because the easier a technology is to use, the more useful it can be (Venkatesh, 2000; Dabholkar, 1996; Davis et al, 1989).

3.3.3 Ease of Use (EOU)

Ease of use is defined as the individual's perception that using the new technology will be free of effort (Davis, 1989, 1993). Applying this to this research context, ease of use is the consumer's perception that shopping on the Internet will involve a minimum of effort. Whereas usefulness referred to consumers' perceptions regarding the outcome of the online shopping experience, ease of use refers to their perceptions regarding the process leading to the final online shopping outcome. In a simplified manner, it can be stated that usefulness is how effective shopping on the Internet is in helping consumers to accomplish their task, and ease of use is how easy the Internet as a shopping medium is to use.

According to TAM, ease of use has a dual effect, direct as well as indirect, on consumers' intention to shop online. The indirect effect on intention is through usefulness, as already explained in the previous section. The direct effect is explained by the fact that in behavioral decision making consumers attempt to minimize effort in their behaviors, as is also the case with consumers' perceptions regarding the ease of use: the perception that Internet shopping will be free of effort (Venkatesh, 2000). The easier and more effortless a technology is, the more likely consumers intend to use this technology.

3.3.4. Enjoyment

Enjoyment is derives from the appreciation of an experience for its own sake, apart from any other consequences that may result (Holbrook, 1994). According to the Tonita Perea et al, (2004), enjoyment is a result from the fun and playfulness of the online shopping experience, rather than from shopping task completion. It is because the purchase of goods may be incidental to the experience of online shopping. Hence, enjoyment reflects consumers perceptions regarding the potential entertainment of Internet shopping. Childers (2001) have found enjoyment to be a consistent and strong predictor of attitude toward online shopping. It bring the meaning if consumers enjoy their online shopping experience, their attitude toward online shopping are becoming positively and they will continuously adopt the Internet as a medium to purchase a products and services.

3.3.5. Perceived Risk

Perceived risk refers to a trustors belief concerning the likelihood of gains and losses without considering the relationships with particular trustees (Jarvenpaa et al., 2000). From the online

perspective, Forsythe and Shi (2003) believe perceived risk is regarded as a barrier to successful transactions due to the fact that customers consciously and unconsciously perceive risk when judging products and services online. According to Evans and Berman, (2005) there are six types of perceived risk such as functional, physical, financial, social, psychological, and time that have been identified in the consumer behavior literature.

Perceived risk plays a critical role in consumer decision-making and behaviors (Mitchell, 1999). The statement is valid because with the Internet purchases, which involve activities that are not only technology-intensive but also of an impersonal nature (Bart et al., 2005; Hsu and Wang, 2008; Yang et al., 2006; Zhou et al., 2007). Prior research has indicated that the probability of consumers' choosing an online marketing channel increases significantly if their confidence in that channel is high and the perceived risk is low (Bhatnagar et al., 2000; Black et al., 2002). Perceived risk is the nature and amount of risk perveived by a consumer in contemplating a particular purchase decision (Cox and Rick, 1964)

3.4 PROPOSED RESEARCH FRAMEWORK

Below is the framework that describes the factors that affect the online buying intention via social media. In this study, the dependent variable is buying intention which influenced by the independent variables. Independent variable is the variable that influenced the dependent variables whereas factors that affect the dependent variable in this study are ease of use, usefulness, enjoyment, trust and perceived risk.

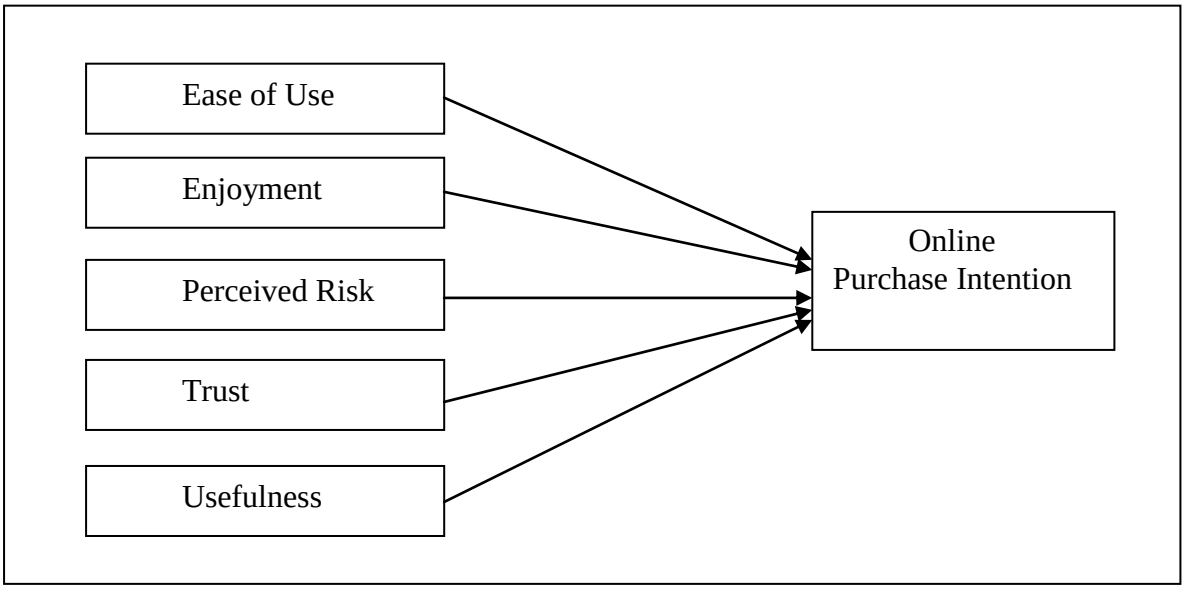


Figure 1: *Conceptual framework for factors affecting customer online shopping and buying intention via internet (Adapted from Davis 1989 Model, and Ajzen 1988 and 1991)*

4.0 CONCLUSION

In general, this study aims to explore the determinant factors affecting online purchase intention via social media. This paper has offered better understanding and useful insights on the factors affecting online purchase intention via social media. In order to be successful in today's business highly competitive business environment, it is very important for the businesses to ensure that customer satisfaction is achieved. As discussed earlier in the literature, customer's online purchase intention was influenced by trust, ease of use, enjoyment, perceived risk and usefulness.

Therefore, the online seller shall focus on all these determinant factors in order to enhance customer's experience.

REFERENCES

Alba, J., Lynch J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. Journal of Marketing, 61 (3), 38–53.

Azjen, I. (1991), "The Theory of Planned Behavior", Organizational Behavior and Human Decision Processes, Vol. 50, pp. 179-211.

Bhattacherjee, A. (2001), "An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance", Decision Support Systems, Vol. 32 No. 2, pp. 201-214.

Bhattacherjee, A. (2001), "Understanding Information Systems Continuance: An Expectation-Confirmation Model", MIS Quarterly, Vol. 25 No. 3, pp. 351-370.

Burner, G.C. and Kumar, A., (2005), "Explaining consumer acceptance of handheld Internet Devices", Journal of Business Research, 58(5), 553-568.

Chen, Y., & Chou, T. (2012). Exploring the continuance intentions of consumers for B2C online shopping. *Online Information Review*, 104-125.

Childers, T.L., Carr, C.L., Peck, J. and Carson, S., (2001), "Hedonic and Utilitarian Motivations for Online Retail Shopping Behavior", Journal of Retailing, Vol. 77 No. 4, pp. 511-35.

Cox, D.F., & Rich, S. J. (1964). Perceived Risk and Consumer Decision – Making: The case of Telephone Shopping. Journal of Marketing Research, I(4), 32-39. http://dx.doi.org/10.2307/3150375

Dabholkar, P.A. (1996), "Consumer evaluations of new technology-based self-service options", International Journal of Research in Marketing, Vol. 13 No. 1, pp. 29-51.

Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", MIS Quarterly, Vol. 13 No. 3, pp. 319-40.

Davis, F. D. (1993). "User Acceptance of Information Technology: System Characteristics, User Perceptions and Behavioral Impacts", International Journal of Man-Machine Studies, 38 (3), 982–1003.

George, J.F. (2002), "Influences on the Intent to make Internet Purchases", Internet Research, Vol. 12 No. 2, pp. 165-80.

Haque A, Khatibi A, (2006), "The Study of the Behavior of Malaysia Consumer towards Online Shopping", Asian Journal of Information Technology, 5, pp. 12-19.

Holbrook, M.B. (1994), "The Nature of Customer Value: An Axiology of Services in the Consumption Experience", Service Quality: New Directions in Theory and Practice, Sage, Thousand Oaks, CA, pp. 21-71.

Hsu, M., Chuang, L., C. (2014). Understanding online shopping intention: The roles of four types of trust and their antecedents. *Internet Research*. 332-352.

Kim, S., & Jones, C. (2009). Online shopping and moderating role of offline brand trust. *Direct Marketing: An Intl Jnl Direct Marketing: An International Journal*, 282-300.

Kini, A., & Choobineh, J. (1998). Trust in electronic commerce: Definition and theoretical considerations. *Proceedings of the Thirty-First Hawaii International Conference on System Sciences.*

Nielsen, (2014), "Malaysia among World's Top Online Shopper", Marketing magazine.com.my, Retrieved from http://www.marketingmagazine.com.my/index.php/categories/breaking-news/10409-malaysian-among-world-s-top-online-shoppers, April (2015).

Parveen, F., Jaafar, N., & Ainin, S. (2015). Social media usage and organizational performance: Reflections of Malaysian social media managers. *Telematics and Informatics, 67-78.*

Samin, R., Goodarz, J. D., Muhammad, S. R., Firoozeh, F., Mahsa, H. and Sanaz, E. (2012), "A Conceptual Study on the Country of Origin Effect on Consumer Purchase Intention", Canadian Center of Science and Education, Vol. 8, pp. 205–215.

Shah, H., Aziz, A., Jaffari, A. R., Waris, S., Ejaz, W., Fatima, M. and Sherazi., K.(2012), "The Impact of Brands on Consumer Purchase Intentions", Asian Journal of Business Management, pp. 105-110.

Toñita Perea y Monsuwé, Benedict G.C. Dellaert, Ko de Ruyter, (2004) "What drives consumers to shop online? A literature review", International Journal of Service Industry Management, Vol. 15 Iss: 1, pp.102 121.

Venkatesh, V. (2000), "Veterminants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model", Information Systems Research, Vol. 4 No. 4, pp.342-65.

Exploring the Influence of Behavioral Components on Market Orientation in a Government Link Company

Thahira Bibi bt TKM Thangal[1,2*], Dr. Noor Hanim bt Rahmat
[1]Faculty of Business Management, Universiti Teknologi MARA, Johor, Malaysia
[2] Academy of Language Studies, Universiti Teknologi MARA, Johor, Malaysia

ABSTRACT

The increasing number of studies regarding Market Orientation (MO) in business industry may lead to positive performance. Indeed, market orientation is an aspect of organization culture. The influence on behavioural components in market orientation allows firm to attain a stronger positional advantage. This quantitative research explores the influence of behavioural components such as information generation and inter-functional coordination on market orientation in a government link company. A questionnaire is used to collect data from participating company.

Key Words: Marketing orientation, Behavioural components, Information generation, Inter-functional coordination.

1.0 INTRODUCTION

Marketing orientation will define the business performance. The marketing strategy used by organizations will vary depending on their systematic planning. Each strategy has its own consequences and implications. A strong market orientation is required to enable the company to maximize customer satisfaction relative to competitors. This marketing mechanism will facilitate adaptive learning (Baker and Sinkular, 1996) useful for the success of the company. The marketing strategy used by organizations will vary depending on their systematic planning. Each strategy has its own consequences and implications. A strong market orientation is required to enable the company to maximize customer satisfaction relative to competitors. This marketing mechanism will facilitate adaptive learning (Baker and Sinkular, 1996) useful for the success of the company.

This research examines the extent to which Malaysian government-linked company (GLC) driven by their marketing orientation to achieve their business performance. The aim of this study is to investigate the market orientation in a government-link company. Y. W. Lau and C.Q. Tong (2008) examined the Government Link Companies are controlled by the Malaysian government, however the effects of government intervention on companies' performance have been empirically assessed in prior studies primarily by comparing performance of companies with versus without government intervention.

Thus, this study only focus the influence of the behavioural components on market orientation driven by the employees in this particular company (GLC).Specifically, this research explores the influence of information generation and inter-functional coordination on market orientation. This research is done to answer the following questions:

- In what ways does information generation influence market orientation?
- In what ways does inter-functional coordination influence marker orientation?

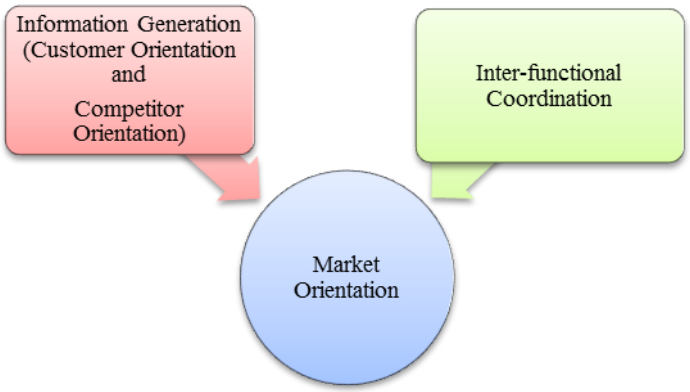


Figure 1.1 - Theoretical Framework of the Study

Figure 1.1 depicts the theoretical framework of the research. Market orientation is influenced by three behavioural components and they are customer and competitor orientation and also inter functional coordination. Customer and competitor orientation include all activities involved in obtaining information about the buyers and competitors and therefore can be further categorized into a big category of information generation.

2.0 LITERATURE REVIEW

2.1 Market Orientation (MO)

Although the marketing concept is a keystone of the marketing discipline, very little attention has been given to its implementation. According to Kohli and Jaworski, (1990), the preliminary point of a market orientation is market intelligence which consists of intelligence generation and intelligence dissemination. Salavou (2002) reported that market orientation should be able to enhance financial performance and operational performance. Market orientation philosophy is basically to understand the organization's 'atmosphere' and the changes occurring in it. This is done so that the strategies and activities can be adapted in order to achieve its organizational mission. Kohli and Jaworski, (1990),also argued that market orientation may have a strong or a weak effect on its business performance by depending on internal and external environmental conditions.

Shoham, et al. (2005) came with positive findings, by stating that "market orientation helps firm to track and respond to changing customer needs hence high- market orientation firms should outperform low- market orientation". In other words, they support the market orientation philosophy by Kohli and Jaworski in 1990. Farell (2000) supports the use of an emergent approach to change management. This approach can lead to positive changes in management lead to high level of market orientation. He also stated that the higher level of planned approach to change the management, the lower the level of a market orientation. Market orientation can be seen from two main channels and they are information generation and inter-functional coordination.

Organizations pursuing a differentiation strategy will be more market oriented than organizations pursuing a cost leadership strategy (Kamalesh etal, 2001). There will be significant differences in the relative emphasis placed on different components of market orientation between organizations pursuing a differentiation strategy and organizations pursuing cost leadership strategy. This study will be focusing on the information generation by the organization and the inter-functional coordination within the organization. Market orientation will have more positive impact on the performance of organizations. The contributions of different components of market orientation to performance will be different for organizations pursuing a differentiation strategy.

The behavioural components represent the implementation of marketing orientation even though some scholars will define differently. Farell (2000) supports the use of an emergent

approach to change management. This approach can lead to positive changes in management lead to high level of market orientation. He also stated that the higher level of planned approach to change the management, the lower the level of a market orientation. Market orientation can be seen from two main channels and they are information generation and inter-functional coordination.

2.1.1 Information Generation

This sub dimension acquires the direction of information flows among the customers and competitors. According to Eris and Ozmen (2012), one of the main behavioural component to market orientation is information generation. This refers to the activities involved in acquiring information about the buyers and competitors in the target market. This includes components like customer and competitor orientation.

2.1.2 Inter-functional Coordination

The other sub dimension in marketing orientation is inter-functional coordination. This will justify the systematic and planning on the management implementation towards achieving business goals. Frank,etal (2012) explained another behavioural component in marketing orientation is inter-functional coordination. These involve the customer and competitor information and consist of the business's coordinated efforts. This involves more than the marketing department so as to create superior values by the customers.

2.2 Past Research

The study by Hassan et al (2012) investigated on how successful acquisition of knowledge can help the organization understand the needs of the customers and ultimately improve their performance. This quantitative method contains 30 questions. The population consist of all employees and management of active companies of Iran's communications industry and found to be 93% valid. The findings showed that market orientation is positively significantly related to learning orientation. According to E.D Eris and O.N.T Ozmen (2012) they stated that "In respect to market orientation, organizations have to bear the learning ability in order to gather market information, to be used and share it. However, they continue to justify that " Since market orientation sometimes may causes a tendency towards merely satisfying the existing requirements of customers, it may lead to myopia, and in this aspect, may reduce innovativeness".

Another research by Langerak, et al (2004), analyses the influence of market orientation and product performance. This mixed quantitative and qualitative study used 475 samples from Dutch firms with independent R&D, production and sales & marketing departments in the primary metal fabricated metal machinery, machinery equipment and transportation equipment. Qualitative methods such as interviews were also done on the academics and research and design managers and three marketing managers. Data was analysed based on means, reliability coefficient, average variance, as well correlations. Findings suggested that Market orientation has positive significant relationship with product advantage. Market orientation is also related positively to the proficiency in market testing, launch budgeting, launch strategy and launch tactics. In addition to that, product advantage has a positive and significant relationship with new product performance. Finally, the proficiency has a significant and positive relationship with new product performance.

However, Baker and Sinkular (1999) came with a research study in USA for Small and Big Sized Enterprises, argued that market orientation has more impact on performance with the mediation of learning organization due to an escalate of the market share. Moreover, according to Farrell (2000), organizations that are able to change appreciate the value of time and pertinent information (market-oriented) will already be intelligent sufficient to dispute existing suppositions about the way or the market will be operated. However, Farrell M. and E. Oczkowski (2002)

clearly stated that market orientation is more dominant than looking at the other perspective such as organizational culture.

3.0 METHODOLOGY

3.1 RESEARCH DESIGN & SUBJECTS

This quantitative research is done on Purposive Sampling where the respondents comprise of employees of a government link company.

3.2 RELIABILITY TEST

According to George and Mallery (2003), reliability test is important due to two reasons. Firstly, reliability provides a measure of the extent of which examinee's score reflects random measurement error, which may cause by certain factors (such as examinee's fatigue, boredom, ambiguous, poor directions, and carelessness). Secondly, is validity. If test scores cannot be assigned consistently, it is impossible to conclude that the scores accurately measure the domain of interest.

Table 2.1 : Reliability Result for Marketing Orientation.

Dependent Variables	No of Items	Cronbach's Alpha
Market Orientation	16	0.609

The dependent variables in table 2 for this research was found to found to have reliability coefficients of 0.609, which is greater than 0.60 and it is acceptable.

3.3 Data Collection Method

A Questionnaire is designed to be used in this research. The questionnaire has two main sections-Section A and Section B. Section A: Demographic and personal Information. Section B (i): Market Orientation (Intelligence Dissemination) and Section B (ii): Market Orientation (Inter-functional Coordination).

This questionnaire used the 5 point Likert Scale method with the purpose to examine whether respondents agree or disagree by following the researcher instructions. For this research, the researcher use SPSS software to analyze data. The researcher used the reliability test, frequency distribution and descriptive analysis

4.0 RESEARCH ANALYSIS AND INTERPRETATION

In order to gather and summarize the demographic information of the respondents, the frequency distribution analysis is used. 34 respondents obtained for this research. All data summarized in the table is the demographic and personal information constructed.

Table 4.1 : Demographic Analysis

Respondent Background	Frequency	Percent (%)
Gender		
Male	21	61.8
Female	13	38.2

Frequency of Age		
18-30 years old	13	38.2
31-40 years old	18	52.9
41-50 years old	2	5.9
50 and above	1	2.9
Frequency of Education		
SPM or equivalent	1	2.9
STPM or Diploma	7	20.6
Bachelor's degree	21	61.8
Master's Degree	4	11.8
Professional Degree	1	2.9
Working Experience		
0-2 years	11	32.4
2-4 years	17	50.0
More than 4 years	6	17.6

Based on table 4.1, the frequency distribution for gender indicates that from 34 respondents, 21 respondents are male which represented of 61.8% while 13 respondents are female which represented 38.2%. Secondly, table 3 above shows the result of frequency distribution analysis towards the age among the respondents. It indicates that, 18 respondents from the range age between 31-40 years old represented as the highest recruit among the divisions tested with 52.9%. This is followed by 13 respondents who came from the range age between 18-30 years old with percentage of 38.2%. Thirdly, 2 respondents came in the range age of 41-50 years old with 5.9% and finally 1 respondent came from the range age of 50 and above with 2.9%.

Thirdly, the frequency distribution analysis for education indicates that the highest frequency came with a group of 21 respondents and 61.8%, the Bachelor's Degree holder. Followed by, STPM or Diploma holder with 7 respondents which represents 20.6%. Thirdly, 4 respondents came with the background of Master's Degree holder, which represented by 11.8%. Finally, the Professional Degree and SPM holder came with the lowest respondent of only 1 respondent each and represented by 2.9%.

Finally, from table 4.1 above, it shows the frequency of working experience of this firm. The table indicates that 17 respondents were the highest group for 2-4 years and represented with 50.0%. Followed by 11 respondents with less than two years' experience and represent by 32.4%. Finally, 6 respondents with more than 4 years working experience and represented by 17.6%.

Table 4.2: Level of Marketing Orientation

	N	Range	Min	Max	Mean	Std. Deviation
MO	34	25.0	46.0	71.0	58.4	5.1

From the table 4.2 above, the researcher enables to identify the level of Market Orientation (MO) by interpreting the data from the range, maximum, minimum and the means.

Low	**46-53**
Medium	54-61

High	62-71

Figure 4.1: The range level of Marketing Orientation

From the table 4.2, the researcher indicates that the level of Market Orientation in this firm is medium due to it is mean results with 58.4. The means result shows that the number is in the range of medium level. This finding supported the case of M.A Farrell in year 2000, by indicating that the higher the level of market orientation, the higher the organization will achieve their profits.

Research Question 1: In what ways does information generation influence market orientation?	**Strongly disagree (%)**	**Disagree (%)**	**Neutral (%)**	**Agree (%)**	**Strongly Agree (%)**
In this company, we meet with stakeholder at least once a year to find out their future needs	8.8	2.9	14.7	61.8	11.8
We respond to stakeholder's inquiries as soon as we get the inquiries and share the information among the division in-charge			5.9	64.7	29.4
We communicate information about our successful and unsuccessful stakeholder experiences across all divisions.	2.9		14.7	70.6	11.8
We conduct surveys to determine the stakeholder's satisfaction and future needs.		2.9	8.8	61.8	26.5
We measure the stakeholder's satisfaction frequently and systematically.		2.9	8.8	79.4	8.8
We encourage our stakeholder to make comment and even complaint about our organization, as this will help us to accomplish our labour better.			14.7	67.6	17.6
We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation).	23.5	38.2	17.6	17.6	2.9
We obtain ideas from our stakeholder to improve our activities.		2.9	8.8	67.6	20.6

Table 4.3 shows the percentage of frequency for individual variables for information generation. Results for "agree" will be used to describe individual responses. 70.6% AGREED that they needed to communicate information about their stakeholder experiences across all divisions. 67.6% AGREED that they needed to obtain ideas from the stakeholder to improve their activities. This finding is in accordance with the research by Hassan et al (2012) who also felt that information generation can help to improve the company's performance.

Table 4.4- Percentage of Frequency for Inter functional Coordination

Research Question 2: In what ways does inter-functional coordination influence marketing orientation?	**Strongly disagree (%)**	**Disagree (%)**	**Neutral (%)**	**Agree (%)**	**Strongly Agree (%)**
In our company we have interdepartmental meetings at least once a month to discuss any upcoming event or any trends and development			11.8	67.6	20.6
Data on stakeholder's satisfaction are disseminated at all levels in this company on a regular basis.		2.9	23.5	70.6	2.9
When one division finds out something important about competitor's, it is slow to alert other divisions.	17.6	32.4	11.8	35.3	2.9
If anything important thing happens to a major stakeholder or market, the whole company knows about it in a short period.	2.9	2.9	20.6	81.8	11.8
Stakeholder complaints fall on deaf ear in this company.	20.6	44.1	8.8	20.6	5.9
Reports are frequently distributed to the different departments on the environment's future tendencies.	2.9	2.9	23.5	58.8	11.8
There is rapid exchange of opinions among the organization's division to decide how to respond to new strategies.	2.9	2.9	17.6	67.6	8.8
In our company, we spend time discussing stakeholder future needs with other functional departments	5.9	2.9	8.8	64.7	17.6

Table 4.4 reveals the findings for inter-functional coordination. Similarly, the results for "Agree" would be used as a base for discussion. 70.6% of the respondents AGREED that data on stakeholder's satisfaction were disseminated at all levels in the company on regular basis. Next, 70.6% of them AGREED that (a) their company had monthly inter-departmental meetings and (b) they spent time discussing stakeholder future needs. The study by to Frank, etal (2012) also found that inter-functional coordination of different departments an important factor in market orientation. The departments need to be aware of the needs of their customer and competitor and gaining this information need to be the business's coordinated efforts in various departments.

5.0 FINDINGS AND RECOMMENDATION

By using descriptive analysis, this study also provides the evidence showing that the level of Market Orientation (MO) in this government link company is medium. Based on the finding, the level of Market Orientation (MO) is medium, which is moderate. In order to increase the level of Market Orientation (MO) in this company, they need to work as a team, which is team spirit lead to positive to firm performance. This statement is supported by A.K Kohli and B.J Jaworski (1990), by stating that, the greater interdepartmental connectedness, the greater the Market Orientation (MO). When there is interdepartmental conflict, the lower the market orientation of the organization. This also will lead to create a harmonious organizational culture (Eris etal, 2012). As noted earlier, inter-

functional and information generation will have impacts on the marketing orientation, this suggests that organization should response positively to the needs of customers and competitors. Kohli and Jaworski (1990) reported market orientation will benefit employees. This statement was clearly opposite with the results research question 2, especially item no 3, 35.3% agrees on the lacking sense of sharing vital information on competitors among the employees. However, this suggests that inter-functional coordination is contributing on the impact of marketing orientation.

Market-oriented companies should foster both intelligence generation and dissemination (D.J Jimenez and J.G.C Navarro, 2007). In other words, this indicates that manager should invest on market research, in order to analyse the effects of shift in the business environment. This research focuses on the way of organization process the information and should take precedence over that focusing on information use. It is the relationship between the information processing and coordinating of inter-functional coordination. Organization should realize a well-established marketing orientation can be the platform for the employees to initiate their commitment indirectly. Consequently, organization must aware and realize the customer needs and the competition exists. In this study, the inter-functional coordination clearly shows it is significant in influencing marketing orientation. This is because the employees need to be guide and feeling connected to the organization. The dissemination of information (information generation) is linked together to ensure the organizational goals achieved.

Moreover, by defining market orientation and ensuring the employees acknowledgement, it will help the organization to track and respond to the customer and competitor needs. It is not easy to achieve a high market orientation due to changes of environment, internally or even externally. However, once it can be carried out, it is easier in order to achieve competitive advantage. According to S.F Slater and J.C Narver (1995), critics that a “narrow construction of Market Orientation (MO) could lead to learning only within the boundaries”. In broader scope, as a result of this study, this organization needs a robust marketing orientation. That means, the organization should learn to improve their knowledge in coordinating the business processes. This study contributes the obligation of having strong and driven marketing orientation. The organization should avoid the conflict of interests on sharing vital information and ensuring the information acknowledged by all the employees and systematically coordinated.

Therefore, a market-oriented organization will establish a culture consists of behaviours and systematic values that allow all the employees aware with the implementation. Thus, it is confirmed the establishment of market orientation will lead to more success of organization. The information generation and inter-functional coordination will not only influence the market orientation but will also allow in obtaining the customer responsiveness and competitors capability.

REFERENCES

Armstrong, A., & Foley, P. (2003). Foundations for a Learning Organization : Organization Learning. 74-82.

Baker, W. E., & Sinkula, J. M. (1999a). Learning Orientation, Market Orientation, and Innovation :Intergrating and Extending Models of Organizational Performance. *Journal of Market-Focused Management 4* , 295-308.

Crawford, I. (1997). *Marketing Research and Information System.* FAO Corporate Document Repository.

Day, G. (1994). ” The Capabilities of Market Driven Organizations,”.*Journal of Marketing 58* , 37-52.

Eris, E., &Ozmen, O. (2012). The Effect of Market Orientation and Innovativeness in Firm Performance : A Research from Turkish Logistics Sector.

Farrel, M. (2000). Developing a market oriented Learning Organization. *Australian Journal Management* .

Farrel, M., &Oczkowski , E. (2002). Are Market Orientation and Learning Orientation Necessary For Superior Organizational Performance. *Journal of Market-Focused Management 5 (3)* , 197-21

Freeman. (1994). Business Ethics Quarterly. *4* (4), 409-421.

Frank, H., Kessler, A., Mitterer, G., &Wesmeier, D. (2012). Learning Orientation of SMEs and its Impact on Firm Performance. *Journal of Marketing Development and Competativeness , 6(3)*.

George D. Mallery P.., (2003). SPSS for Widows step by step : A Simple Guidance reference..

Hassan,G. Afsaneh, S. and FatemahAlsadat,M. (2012). An Empirical Investigation of the Determinants Innovativeness From view of point of learning orientation. The Case of Iran's Communications Industry.Interdislinary Journal of Contemporary Research in Business, Vol. (3) No.10.

Hult, G., &Ketchen , D. (2001). Does Market Orientation Matter? : A test of relationship between Positional Advantage and Performance. *Strategic management Journal 22* , 899-906.

Jaworski, B. J. (1990). Market Orientation : The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing , 54*, 1-18.

Jaworski, Bernard, J., &Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing 57 (July)* , 53-70.

Jimenez, D., & Navarro, J. (2007). The Performance Effect of Organizational Learning. *Industrial Marketing Management 36* , 694-708.

Kamalesh, K., Ram, S., & Karen, S. (2001). Market Organization and Performance : Does organizational Strategy Matter? *Jurnal applied Business Research , 18*.

Kohli, A., &Jaworski , B. (1990). Market Orientation : The Construct Research Propositions, and Managerial Implications. . *The Journal of Marketing 54(2)* ,1-18.

Langerak, F., Hutlink, E., &Robben, H. (2004). The Impact of Market Orientation, Product Advantage, and Launch Proficiency on new Product Performance and Organizational Performance. *Journal of product Innovation Management* , 79-94.

Maudeu-Olivers , Albert,Lado,Nora.2003. Market orientation and business economic performance: A mediated model . International journal of service Industry management . 14,3:284-309

Sanzo-Perez, M., Santos-Vijande, M., Alvarez-Gonzalez, L., & Vazquez- Casiellas, R. (2005). Organizational learning and Market Orientation : interface and effects performance. *Industrial Marketing Management 34* , 187-202.

Salavou Helen. (2002). Profitability in Profit Oriented SMEs: Does Product Innovation Matter? *European Journal of Management Innovation.*Vol 5. No.3

Slater, S. F., &Narver, C. J. (1995). Market Orientation and Learning Organization. *Journal of Marketing , 59*, 63-74.

Shoham, A. R., &Kropp, F. (2005). Market Orientation and Performance : Meta-Analysis. *The Emerald , 23*, 435-454.

Y.W. Lau & C. Q. Tong (2008). Are Malaysian Government Linked Companies (GLCs) Creating Values. *Journal of Applied Economics & Management Letters*. 1, 9-12.

Zebal, M. (2003). A synthesis Model of Market Orientation for a Developing Country- The Case of Bangladesh

---

*Email Address: thahira881@johor.uitm.edu.my

Impact of Strategic Entrepreneurship on Firm Performance among SME Firms in Malaysia

Najihah Shukor[1] and Amran Awang[2]

1 Faculty of Business Management, Universiti Teknologi MARA (UiTM), 02600 Arau, Perlis.
E-mail:najihahshukor89@gmail.com
2 Faculty of Business Management, Universiti Teknologi MARA (UiTM), 02600 Arau, Perlis
E-mail:amranawang@yahoo.com

ABSTRACT

Small and Medium Enterprises (SMEs) in Malaysia are facing serious issues to stay as competitive enterprises in the market since more than half of SMEs have collapsed within a short period of operation. In order to achieve Vision 2020 and to be a fully developed and industrialized nation, the development of SMEs seems to be mainly concentrated as a future progress and growth. It is vital for entrepreneurs to have a strategy to achieve business goal and stay for long term survival and sustainability. Thus, strategic entrepreneurship plays an important role in establishing of SME firms. This paper will examined the influence of four dimensions in strategic entrepreneurship to firm performance of SMEs mediated by resource leveraging. Those dimensions are (1) entrepreneur mindset, (2) entrepreneur culture and leadership, (3) strategic resources and (4) creative and innovative. This research on strategic entrepreneurship objectives are to examine the background and challenge faced by SMEs, assist SMEs to reduce the failure and increase chances of their firms' success.

Key Words: Strategic entrepreneurship, SMEs, firm performance, resource leveraging.

1. INTRODUCTION

Small and Medium Enterprises (SMEs) play a vital role on contribution towards development of economies in Malaysia (Haron, Said, Jayaraman and Ismail, 2013). Due to the significant contribution of SMEs towards the country, various agencies, especially government and private sector, have given a lot of assistance for the growth of SMEs (Khalique, Isa, Shaari and Ageel, 2011). Okpara (2009) found that small firms are characterized by innovativeness, efficiency, dynamism, flexibility which enables quicker decision making. In many countries, small firms are seen as strategic to industrial development and competitiveness (Hallberg, 2000; Kazeem and Van der Heijden, 2006). However, many small firms as well as large ones operate in rapidly changing environments, faced with increased globalization and changing customer demands and opportunities (Gosselin and Bauwen, 2006; Moller, Rajala and Svahn*,* 2005).

Since large firms are more endowed in terms of resources, therefore, they have more competences compared the small and medium firms (Ketchen, Ireland and Snow, 2007). From the previous research, scholars and practitioners of many small firms remain focused on studying and understanding how small firms operate in a dynamic competitive environment to achieve and sustain competitive advantage. This study aims to highlight how small firms can survive with the challenges in the competitive environment through the strategic (advantage-seeking) as well as entrepreneurial alignment of resources to create and sustain competitive

advantages. Bani-Hani and Al Hawary (2009) stated that competitive advantage is at the heart of the firm's performance.

1.2 Background of study

In Malaysia, rapid growing economy provides opportunities for small to large entrepreneurs in various sectors. However, there are many challenges of developing competitive strength in small and medium firms. Smaller firms in competitive markets have to build new strategic assets at a faster pace to avoid devastating competition and earn superior rents (Zahra, Nielsen and Bogner, 1999).

On a relative basis, small entrepreneurial ventures are effective in identifying opportunities but are less successful in developing competitive advantages needed to the appropriate value of those opportunities (Ireland, Hitt and Simon, 2003). Strategic entrepreneurship (SE) is the crucial formula for a good business which merges strategic management and entrepreneurship (Lamadrid, Heene and Gellynck, 2008). The goal of strategic entrepreneurship is to continuously create competitive advantages that lead to the maximum wealth creation (Nakyejwe, 2011). The aim of this study is to investigate the moderating variable that affect variable on SE and firm performance among SMEs firms.

1.3 Problem statement

In current global market, there are many challenges of small and medium sized enterprise firms to develop into a competitive market. According to available resource, more than half of SMEs firms are collapse within first five years of operation. Portal Komuniti (2006) reported that the failure rate is estimated to be approximately 60%. According to Ahmad and Seet (2009), more than half of SMEs firms have failed within their first five years of operation. It shows that SMEs in Malaysia are facing serious issues to stay as competitive enterprises in the market (Khalique et al., 2011).

In the preface of the Tenth Malaysia Plan 2011-2015, Dato' Sri Mohd Najib Tun Abdul Razak, the Malaysian Primer said, " the Tenth Malaysia Plan houses the aspirations of both the Government Transformation Programs and the New Economic Model, premised on high income, inclusiveness and sustainability. It charts the development of the nation for the next five years, anchored on delivering the desired outcomes for all Malaysians. The Tenth Plan sets the stage for a major structural transformation that a high-income economy requires. The Plan contains new policy directions, strategies and programs that enable the country to emerge as a high income nation" to achieve the 2020 vision (Economy Planning unit, 2014).

In order to achieve vision 2020 and to be a fully developed and industrialized nation, the development of SMEs seems to be mainly concentrated as a future progress. It is vital for entrepreneurs to have a strategy to achieve business goal and stay for long term survival and sustainability. Therefore, SE plays an important role in establishing SMEs firms. In this research, firm performance will act as a dependent variable and viewed on financial performance. The financial performance of SMEs firms will be measured by annual sales growth and profitability. Hence, the relationship between SE and firm performance will be investigated and act as a key to economic growth in Malaysia.

1.4 Research objectives and research questions

This paper is intended:

1. To examine the relationship between four dimensions of strategic entrepreneurship (SE) and firm performance of SME in Malaysia. The four dimensions are:

   i. Entrepreneurial mindset
   ii. Entrepreneurial culture and leadership
   iii. Strategic resources
   iv. Creative and innovative

2. To investigate the mediating role of resource leveraging of the relationship between SE and firm performance.
   The research questions for this paper are:
   i. Is there any relationship between four dimensions of SE and firm performance of SMEs in Malaysia?
   ii. Does resource leveraging play the role of mediator?

1.5 Significance of study

This paper is significant because it explores four dimensions of SE that affect the firm performance among SMEs in Malaysia. This study will examine those dimensions and make recommendations about SE for future research. Besides, this finding can encourage awareness to new and existing entrepreneurs to emphasize the importance of strategic entrepreneurship in their firm in order to improve their performances. In addition, this finding can be used as reference by other researchers and readers for about relationship between strategic entrepreneurship and firm performance moderate by resource leveraging.

2. LITERATURE REVIEW

2.1 SME

Small and medium enterprise (SME) is backbone of economy growth in driving industrial development (Peters and Waterman, 1982; Amini, 2004). Referring to Department of Statistic Malaysia (2005), 77% of total SMEs in Malaysia in 2010 were microenterprises. Small-size accounted for 20%, while medium-sized SMEs comprise 3%. There was an increase of 14.1% of microenterprises; 28% of small firms and 56.4% of medium sized firms. Malaysia has been optimistic in changing the commodity-based economy to an industrialized economy, with manufacturing activities steadily becoming the top growth sector which the percentage of the manufacturing sector to GDP increased from 22.1% in 1978 to 31.6% in 2005 (Department of Statistic, 2007).

2.2 SMEs in Malaysia

In Malaysia, the number of SMEs has been noticed increase from time to time. In this country, SMEs can be established for any kind of business activities in urban or rural area

(Khalique et al. 2011). SMEs play a significant contribution in economic development, social uplifting and political stability of every country since it is considered as the backbone of the economy in the Malaysian economy (Radam, Abu and Abdullah, 2008).

Theoretically, SME in Malaysia can be defined mainly based on annual sales turnover not exceeding RM25 million and the total number of full time employee not exceeding 150 employees (SMIDEC, 2002). Hashim (2000) stated that SME in Malaysia can be divided into three main sectors such as general business, manufacturing and agriculture.

According to Small and Medium Enterprises Corporation Malaysia (SMECORP, 2008), enterprises that employ between 50 to 150 full time employees are considered as medium enterprises while those that employ between 5 to 50 employees are called small enterprises and less than 5 employees are considered as micro-enterprises.

2.3 Strategic Entrepreneurship

Strategic entrepreneurship (SE) and strategic management (SM) are concerned with growth and wealth creation (Amit and Zott, 2001). In general, entrepreneurship contributes to a firm's effort to create value and wealth primarily by identifying opportunities that can be exploited in a marketplace while SM contributes to value and wealth creation efforts primarily by forming the competitive advantages that are the foundation on which a firm competes in a marketplace (Hitt, Ireland, Sirmon and Trahms, 2011). Entrepreneurship increasingly is viewed as a stimulus to wealth creation in emerging, developing and developed economies as a result of the actions of individual firms (Zahra, Ireland, Gutierrez and Hitt, 2000). Effective growth is expected to help firms create wealth by building economies of scale as well as market power. These outcomes provide additional resources and contribute to achieve competitive advantage (Ireland et al., 2003).

SE is concerned with advantage-seeking and opportunity-seeking behavior resulting in value for individuals, organizations and/or society (Hitt, *et al*., 2011). Ireland et al., (2003) developed an initial model of strategic entrepreneurship with four keys dimensions: (1) *the entrepreneur mindset, culture and leadership, (2) the strategic management of organizational resources, (3) application of creativity and (4) development of innovation.* Based on additional research of SE construct, Kyrgidou and Hughes (2010) claimed that this model lack of robustness required capturing the gestalt of SE. To support this assertion, recent evidence suggest that SE is broader in scope, multilevel, and more dynamic than as originally conceptualized (Rindova, Barry and Ketchen, 2009).

SE is the integration of entrepreneurial reacts towards business concepts that give great value creation and at the same time reduction of competitive threats (Hitt, Ireland, Camp and Sexton, 2001). SE implies not minor adjustments to establish business concepts but creation of entirely new business models that give superior rents in long term of firm performance (Hitt, Ireland, Camp and Sexton, 2002). According to Meyer and Heppard (2000), they stated that SE provides guidelines for interaction between competitive strategies and the allocation of resources, where acquisition and bundling of resources into unique, cost efficient and highlight valuable patterns.

2.4 Entrepreneurial mindset

The first dimension of SE is an entrepreneur mindset and it consists of four key components which *are (1) entrepreneurial opportunities, (2) entrepreneurial alertness, (3) real option and (4) entrepreneurial framework.* An entrepreneurial mindset is required to successfully engage in SE (Ireland *et al*., 2003). According to McGrath and MacMillan (2000), they stated that the successful future strategists will exploit an entrepreneur mindset, integrating the best of what older models have to tell us with the ability to rapidly sense, act and mobilize even under highly uncertain conditions.

The first component of entrepreneur mindset is *recognizing entrepreneurial opportunities* which found in market in term of new goods, raw materials, services, and organizing methods can be introduced and sold at a price more than the cost of their production (Shane and Ventakaraman, 2000). Other conditions that may create entrepreneurial opportunities are social change, demographics change, changes in governmental regulations and emergence of new market segments (Morris, 1998).

Second component is *entrepreneur alertness*, which Kirzner (1997) viewed as "flashes of superior insight" (Alvarez and Barney, 2002). Those posses entrepreneur alertness when they have ability to identify new goods or services become feasible or when existing goods or services become unexpectedly valuable to consumers (Hitt and Ireland, 2000). Entrepreneurial alertness informs the pursuit of entrepreneurial opportunities as well as stimulates development of an entrepreneurial culture and entrepreneurial leadership in a firm. Hence, the component influenced the search for markets in which the insight can be applied through new goods or new services (Ireland et al., 2003).

The third component is *real options logic* in which commonly in terms of financial assets, an option is the right, but not the obligation, to buy or sell a particular asset at a predetermined price on a predetermined date. Real options entail the same conditions as financial options but are written in terms of "real" assets (human, organizational, and physical capital of the firm uses to select and implement its strategies) rather than financial assets (Barney, 2002).

The last component of entrepreneur mindset is *entrepreneurial framework* which includes actions such as setting goals, establish an opportunity register and determine the timing associated with launching the strategy required to exploit an entrepreneurial opportunity (Ireland et al*.,* 2003). The entrepreneurial framework should be consistently used across projects and time to ensure common treatment as the firm evaluates alternatives for resource allocations. The framing of expected outcomes allows parties to understand the process and outcome goals they should strive to achieve when pursuing entrepreneurial opportunities.

2.5 Entrepreneurial culture and leadership

The second dimension of SE is *entrepreneurial culture* and *entrepreneurial leadership* that act as vital aspect of SE. An effective entrepreneurial culture is characterized by multiple expectations and facilitates firm's effort to manage resource strategically (Ireland et al., 2003). The culture is one in which new ideas and creativity are expected, risk taking are encouraged, failure is tolerated, learning is promoted, product, process and administrative innovations are champions and continuous change is viewed as a conveyor of opportunities. Thus, an entrepreneur culture fosters and supports the continuous search for entrepreneurial opportunities that can be exploited with sustainable competitive advantages for develop in an organization where the leaders employ an entrepreneurial mindset (McGrath and MacMillan, 2000). Hence, entrepreneurial culture and entrepreneurial mindset are inextricably interwoven

(Ireland, et al., 2003). Leaders are responsible for develop and instill an entrepreneur culture for wealth creation.

Effective leadership is a way to of all sizes and types of firm become success (Daily, McDougall, Covin and Dalton, 2002). A specific type of relationship, entrepreneurial leadership is the ability to influence others to manage resources strategically in order to emphasize both opportunity-seeking and advantage-seeking behaviors (Covin and Slevin, 2002). Covin and Slevin (2002) argued that entrepreneurial leadership is characterized by six imperatives which are (*1) nourish an entrepreneurial capability, (2) protect innovations threatening the current business model, (3) make sense of opportunities, (4) question the dominant logic, (5) revisit the "deceptively simple questions" and link entrepreneurship and strategic management.* They said that effective entrepreneurial leaders firms must be "strategically entrepreneurial". This desired end state is achieved when leaders' entrepreneurial mindsets help to believe that to create the most value, they should develop a culture in which resources are managed strategically (i.e., advantage-seeking behavior), and entrepreneurially (i.e., opportunity-seeking behavior) (Ireland et al., 2003).

2.6 Strategic resources

The third dimension is strategic resources, where *managing organizational resources strategically* provides foundation for the firm's opportunity-seeking and advantage-seeking behaviors. RBV theory has two frequently cited assumptions: (1) resource heterogeneity, meaning that competing firms may own or control different bundles of resources and (2) resource immobility, meaning that the differences in the resource bundles owned by separate firms may persist (Barney and Arikan, 2001). Based on the work of several scholars, Barney and Arikan (2001) defined resources as the tangible and intangible assets a firm uses to choose and implement its strategies. Resources that are rare and valuable can yield a competitive advantage. When resources are also simultaneously imperfectly imitable and nonsubstitutable, they can lead to a sustainable competitive advantage (Barney, 1991).

From a strategic perspective, RBV suggest that competitive advantage is a function of firm's resource develops to implement its product market strategy (Wernerfelt, 1984). Research has shown that resources are the basis of firm differential performances in term of wealth creation (Ireland et al., 2003). The evidence shows that firm's use of idiosyncratic resources has a stronger influence on performance than do industry characteristics although the relative size of firm effects can vary by industry (Barney and Arikan, 2001). According to Brush & Artz (1999), they found that firm-specific resources required by industry affected performance and can be used to protect competitive advantage. Miller and Shamsie (1996) discovered that different types of resources explained performance in separate types of environments.

The strategic management of resources involves a comprehensive set of action which are *(1) structuring the resource portfolio,(2) bundling resources in the portfolio into capabilities and (3) leveraging of multiple capabilities* needed to recognize opportunities and develop competitive advantages in order to exploit them successfully. More specifically, structuring includes acquiring, accumulating and divesting resources; bundling involves stabilizing existing capabilities, enriching current capabilities and pioneering new capabilities. Leveraging requires a sequence of actions including mobilizing capabilities to form requisite capability configurations, coordinating the integrated capability configurations and deploying these configurations with resource advantage strategy and market opportunity. The most important

resources involved are financial capital, human capital and social capital with effective resource management (Sirmon and Hitt, 2003).

2.7 Creative and innovative

The fourth dimension of SE is concerned with *applying creativity* and *developing innovation* which are critical outcomes of an entrepreneurial mindset, practices as well as strategic management of the firm's resources. Schumpter's classic work (1942) highlighted the importance of creativity and innovation within the context of market dynamics. Creativity is increasingly important especially for companies operating in markets with multiple opportunities to differentiate goods and services (Barney and Arikan, 2001). It defined as an approach to works that leads to generation of novel and appropriate ideas, processes or solutions (Perry-Smith and Shalley, 2003).

Creativity is a continuous process rather than the outcome of single acts. Creativity is the basis for innovations and is supported when resources are managed strategically (Ireland et al., 2003). According to Schumpeter's view (1934), innovativeness stimulates economic development and is the engine of corporate growth and wealth creation. Schumpeter (1934) pointed out that new combinations of production factors are critical to firms' wealth-creating efforts. Innovation is linked to successful performance for firms in both the industrial and service sectors as well as to entire economies (Kluge, Meffert and Stein, 2000). Effective innovations create new value for customers (Mizik and Jacobson, 2003) and firms must be creative to develop innovation (Ireland *et al.,* 2003).

2.8 Firm performance

SMEs play important role in job creation (Carrer and Klomp, 1996). Thus, the understanding of determinants of firm performance is significant from a policy perspective (Zhou and Wit, 2009). Performance is an organizational outcome results from the combination of firm specific resources, capabilities and routines (Nelson and Winter, 1982). A firm's performance opportunities are highly related to its current organizational production activities (Coad, 2009). For small firms, the performance is influenced by personal ambition of an entrepreneur for instance, not all entrepreneurs aim to grow their business (Zhou and Wit, 2009). Mosselman, Frederiks and Meijaard (2002) observed only 16% of the small business owners in the Netherlands aim to grow.

In the study, the effect of each dimension of SE will be investigated on firm performance. Performance measurement can either be in financial or non financial perspective (Nakyejwe, 2011). The financial perspective includes sales growth, market share and profitability while non financial perspective may include geographical expansion, introduction of new services and stakeholder satisfaction. For this study, financial performance of SMEs firms will be measured by annual sales growth and profitability.

2.9 Theoretical framework

Theoretical framework of this research is designed based on Hitt et al., (2011) model. **Figure 1** poses the considered model of four dimensions of SE that affect firm performance mediated by resource leveraging.

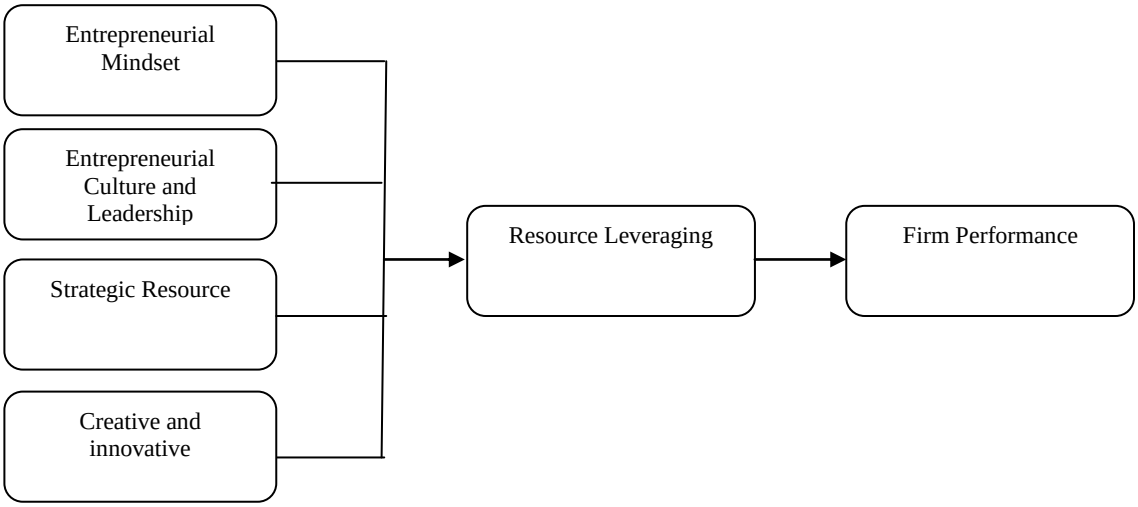


Figure 1 The model of dimensions of strategic entrepreneurship with mediating variable

2.9.1 Relationship between entrepreneurial mindset and firm performance

An entrepreneurial mindset is important to individual entrepreneurs as well as to managers and employees in established firms to think and act entrepreneurially (Covin & Slevin, 2002). McGrath and MacMillan (2000) view an entrepreneurial mindset as a way of thinking about business that focuses on and captures benefit of uncertainty. Uncertainty derived from an ability to assign probabilities to future events, largely because lack of information about cause or effect relationship (Hoskisson & Busenitz, 2002). Therefore, entrepreneurs must have entrepreneurial mindset to develop firm for better performance.

Hypothesis 1: Entrepreneurial mindset has positive relationship to firm performance.

2.9.2 Relationship between entrepreneurial culture and leadership and firm performance

An effective entrepreneurial culture is characterized by multiple expectations and facilitates firm's effort to manage resource strategically (Ireland et al., 2003). An entrepreneur culture fosters and supports the continuous search for entrepreneurial opportunities that can be exploited with sustainable competitive advantages for better firm performance (McGrath and MacMillan, 2000). Futhermore, Covin and Slevin (2002) stated that effective entrepreneurial leaders firms must be "strategically entrepreneurial" to create the most value and develop a culture in strategic resources.

Hypothesis 2: Entrepreneurial culture and leadership have positive relationship to firm performance.

2.9.3 Relationship between strategic resources and firm performance

Research has shown that resources are the basis of firm differential performances in term of wealth creation (Ireland et al., 2003). The evidence shows that firm's use of idiosyncratic resources has a stronger influence on performance than do industry characteristics although the relative size of firm effects can vary by industry (Barney & Arikan, 2001). According to Brush and Artz (1999), they found that firm-specific resources required by industry affected performance and can be used to protect competitive advantage. According to Brush and Artz (1999) also, they found that firm-specific resources required by industry affected performance and can be used to protect competitive advantage. Miller and Shamsie (1996) discovered that different types of resources explained performance in separate types of environments.

Hypothesis 3: Strategic resource has positive relationship to firm performance.

2.9.4 Relationship between creative and innovative and firm performance

Previous research showed that innovation is linked to successful performance for firms in both industrial and service sectors as well as to entire economies (Kluge et al., 2000). For creativity, it's increasingly important, especially for companies that operate in markets with multiple opportunities to differentiate goods and services (Barney and Arikan, 2001). Thus, both creative and innovative are significant for better firm performance.

Hypothesis 4: Creative and innovative have positive relationship to firm performance.

2.9.5 Resource leveraging as a mediating variable

Resource leveraging will be used as mediating variable in this study. According to Awang, Kassim and Noor (2014), resource leveraging was the partial mediator of entrepreneurial mindset-value creation relationship and entrepreneurial culture-value creation relationship. These results indicated that resource leveraging significantly mediated the relation between entrepreneurial mindset-value creation relationship and entrepreneurial culture-value creation relationship while both resource structuring and bundling were not significant.
The resource-based view (RBV) of the firm predicts that certain types of resources owned and controlled by firms have potential to enhance competitive advantage, which eventually leads to superior organizational performance (Wernerfelt, 1995). Previous research showed that resources are the basis of firm differential performances in term of wealth creation (Nakyejwe, 2011). Barney and Arikan, (2001) proved that firms' use of particular resources has a stronger influence on performance than industry characteristics, even though the relative size of firm effects can vary by industry.

Leveraging actions stimulate the firm from the potential of value creating to realize value by deploying the capabilities in order to achieve competitive advantages. Leaders mobilize, coordinate and deploy specific capabilities in particular market contexts by choosing and implementing a particular strategy (Hitt et al., 2011). Recent empirical work demonstrates that resource investment deviating from industry norms negatively affects performance, unless that deviation is synchronized with an appropriate leveraging strategy (Sirmon and Hitt, 2009).

Strategic entrepreneurship plays a vital role in a highly turbulent environment (Nakyewje, 2011). The goal of strategic entrepreneurship is to continuously create competitive advantages that lead to maximize wealth creation. An entrepreneurial mindset, an entrepreneurial culture, entrepreneurial leadership, strategic management of resources and applying creativity to develop innovations are important dimensions of strategic entrepreneurship that explain the different levels of performance of SMEs firms (Ireland et al., 2003).

3. CONCLUSIONS

The paper discusses on the relationship between four dimensions of SE and firm performance, measured by annual sales growth and profitability. Based on literature, resources structuring has been agreed to be used as mediating variable between dimensions of SE and SMEs' firm performance. The study will be implemented in Malaysia and focus on the manufacturing sector.

Acknowledgement

I would like to thank to my supervisor, Prof Madya Dr Amran Awang for his valuable guidance, the insightful comments and patient throughout the research that have been done. Special thanks to people who are help me a lot and give support for making this paper possible. Thank you.

REFERENCES

Amini, A. (2004). The distributional role of small business in development. *International Journal of Social Economics*, 31 (4).

Alvarez, S. A., & Barney, J. B. (2002). Resource-based theory and the entrepreneurial firm. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), Strategic entrepreneurship: Creating a new mindset: 89–105. Oxford: Blackwell Publishers.

Amit, R., & Zott, C. (2001). Value creation in e-business. *Strategic Management Journal*, 22 (Special Issue): 493-520.

Bani-Hani, J. S., and AL-Hawary, F. (2009). The Impact of Core Competences on Competitive Advantage: Strategic Challenge. *International Bulletin of Business Administration*, 6, 93-104.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99–120.

Barney, J. B. (2002). *Gaining and sustaining competitive advantage*: 2nd ed., 314–315. Upper Saddle River, NJ:Prentice-Hall.

Barney, J. B., & Arikan, A. M. (2001). The resource-based view: Origins and implications. In M. A. Hitt, R. F. Freeman, & J. S. Harrison (Eds.), Handbook of strategic management: 124–188. Oxford: Blackwell Publishers.

Carrer, M., & Klomp, L. (1996). Small business and job creation: a comment. *Small Business Economics*, 8(4), 317-322.

Coad, A. (2009). The Growth of Firms: A Survey of Theories and Empirical Evidence Northampton, Northampton, MA: Edward Elgar.

Covin, J. G., & Slevin, D. P. (2002). The entrepreneurial imperatives of strategic leadership. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), Strategic entrepreneurship: *Creating a new mindset* (pp. 309-327). Oxford, UK: Blackwell Publishers.

Daily, C. M., McDougall, P. P., Covin, J. G., & Dalton, D. R. (2002). Governance and strategic leadership in entrepreneurial firms. *Journal of Managements*, 28, 387-412.

Department of Statistic Malaysia (2005), Journal of Department of Statistic, Malaysia. Available:http://statistics.gov.my/portal/download_journals/files/2005/Volume1/Editorial_Board_%20Foreword.pdf

Department of Statistic Malaysia (2007), Journal of Department of Statistic, Malaysia. Available:http://statistics.gov.my/portal/download_journals/files/2007/Volume1/Editorial_Board_%20Foreword.pdf

Economic Planning Unit (2014). Tenth Malaysian Plan 2011 –2015, Available: http://www.epu.gov.my/en/tenth-malaysia-plan-10th-mp-

Gosselin, D. P., & Bauwen, G. A. (2006). Strategic Account Management: Customer Value Creation Through Customer Alignment, Journal of Business & Industrial Marketing, 21(6): 376-385.

Hallberg, K. (2000). A market Oriented Strategy for Small and Medium-Scale Enterprises. IFC Discussion Paper 40. http//: www.ifc.org accessed 17 June, 2009.

Haron, H., Said, S., Jayaraman, K. & Ismail, I. (2013). Factors Influencing Small Medium Enterprises (SMEs) in Obtaining Loan.*International Journal of Business and Social Science*, 4 (15), 182-185.

Hashim, M. K. (2000). A proposed strategic Framework for SMEs success*. Malaysian Management Review*, 35 (2), 32-43.

Hashim, M. K and Abdullah, S.M. (2000). In the Malaysian Manufacturing Sector: A Proposal for Redefining SMEs. A Study on the Firm Characteristic Performance Relationships.

Hitt, M. A., & Ireland, R. D. (1986). Relationships among corporate level distinctive competencies, diversification strategy, corporate strategy and performance. *Journal of Management Studies*, 23: 401–416.

Hitt, M. A., and Ireland, R. D. (2000). *The intersection of entrepreneurship and strategic management research.* In D. L. Sexton & H. Landstrom (Eds.), Handbook of entrepreneurship: 45–63. Oxford: Blackwell Publishers.

Hitt, M.A., Ireland, R.D., Camp, S.M. & Sexton, D.L. (2002). Strategic entrepreneurship. Creating new mindset. Blackwell Publishers, Oxford.

Hitt, M. A., Ireland, R. D., Camp, S.M., & Sexton, D.L. (2001). Strategic entrepreneurship: Strategies for wealth creation. *Strategic Management Journal*, 22 (34), 479-491.

Hitt, M. A., & Ireland, R. D. (2002). The essence of strategic leadership: Managing human and social capital. *Journal of Leadership and Organization Studies*, 9(1), 3-14.

Hitt, M. A., Ireland, R. D., Sirmon, D. G., & Trahms, C. A. (2011). Strategic Entrepreneurship: Creating Value for Individuals, Organizations and Society. *Academy of Management Perspectives*, 57-75.

Ireland, R. D., Hitt, M. A., and Simon, D.G. (2003). A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management*, 963-989.

Kazeem, A and Van der Heijden, B (2006). Exporting Firms' Strategic Choices: The Case of Egyptian SMEs in the Food Industry, SAM Advanced Management Journal, 71 (3), 21-33.

Ketchen, D. J., Ireland, R. D., and Snow, C. C. (2007). Strategic entrepreneurship, collaborative innovation, and wealth creation. *Strategic Entrepreneurship Journal*, 1 (3-4), 371-385.

Khalique, M., Isa, A. H. M., Shaari, J. A. N. & Ageel, A. (2011). Challenges Faced by the Small and Medium Enterprises (SMEs) in Malaysia: An Intellectual Capital Perspective. *International Journal of Current Research*, 3 (6), 398-401.

Kirzner, I. (1997). How markets work: Disequilibrium, entrepreneurship and discovery. Great Britain: The Institute of Economic Affairs.

Kluge, J., Meffert, J., & Stein, L. (2000).The German road to innovation. The McKinsey Quarterly, 2, 99-105.

Kyrgidou, L. P & Hughes, M. (2010) "Strategic entrepreneurship: origins, core elements and research directions", *European Business Review*, 22 (1), 43 – 63.

Lamadrid, R., Heene, A., & Gellynck, X. (2008). Rewiring Business Firms through an Entrepreneurial-Oriented Strategy Making.

McGrath, R. G. & MacMillan, I. (2000). The entrepreneurial mindset. Harvard Business School Press, Boston.

Meyer, G. D. & Heppard, K. A. (2000). Entrepreneurship strategies: The dominant logic of entrepreneurship. In G. D. Meyer & K. A Heppard (Eds.), Entrepreneurial as strategy: Competing on the entrepreneurial edge: 1-22. Thousand Oaks, CA: Saga Publications.

Miller, D. & Shamsie, J. (1996). The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1956. *Academy of Management Journal*, 44, 513-531.

Mizik, N. & Jacobson, R. (2003). Trading off between value creation and value appropriation: The financial implications of shifts in strategic emphasis. Journal *of Marketing*, 67 , 63-76.

Moller, K Rajala, A and Svahn, S (2005). Strategic Business Nets- Their type and management. *Journal of Business Research*, 58,1274-1284.

Morris, M. H. 1998. Entrepreneurial intensity: Sustainable advantages for individuals, organizations, and societies.Westport, CT: Quorum Books.

Mosselman, M., Frederiks, K. C., & Meijaard, J. 2002. Organisatietypen in het MKB, EIM SCALES. Zoetermeer: EIM.

Nakyejwe, S. K. L. (2011). Strategic Entrepreneurship and Performance of Selected Private Secondary Schools in Wakiso District. *Makerere University Business School*.

Nelson, R. R., & Winter, S. G. 1982. An evolutionary theory of economic change. Cambridge, MA: Belknap Press of Harvard University Press.

Okpara, J. O (2009). Entrepreneurial Orientation and Export Performance: Evidence from an Emerging Economy. *International Review of Business Research Papers*: 5 (6). 195-211

Perry-Smith, J. E.,& Shalley, C.E.(2003). The social side of creativity: A static and dynamic social network perspective. Academy of Management Review, 28, 89-106.

Peters, T.J. & Waterman, R. 1982. In Search of Excellence, Harper & Row, New York, NY.

Portal Komuniti KTAK (2006). Keusahawanan: PUNB Perkenal Skim Usahawan Pemborong. [Online] Available: http:// www.idesa.net.my/modules/news/article.php?

Radam, A., Abu, M. L., & Abdullah, A. M. (2008). Technical Efficiency of Small and Medium Enterprise in Malaysia: A Stochastic Frontier Production Model. *International Journal of Economics and Management*, 2 (2), 395-408.

Rindova, V., Barry, D., & Ketchen, D. J. (2009). Entrepreneuring as emancipation. *Academy of Management Review*, 34 (3), 477-491.

Schumpeter, J. A. (1934). The theory of economic development. Cambridge, MA: Harvard University Press.

Schumpeter, J.A. (1942). Capitalism, socialism and democracy. New York: Harper & Row.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217–236.

Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management and wealth creation in family firms. Entrepreneurship Theory and Practice, 27(4), 339–358.

SMECORP, (2008). SMECORP Malaysia. [Online]. Available: http://www.smecorp.gov.my/vn2/node/40

SMIDEC. (2002). SMI Development Plan (2001-2005) SMIDP. Kuala Lumpur, Malaysia: Percetakan Nasional Malaysia Berhad.

Wernerfelt, B.(1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.

Zahra, S. A., Ireland, R. D., Gutierrez, I., & Hitt, M. A. (2000). Privatization and entrepreneurial transformation: Emerging issues and a future research agenda. *Academy of Management Review*, 25, 509-524.

Zahra, S. A., Nielsen, A. P. & Bogner, C. (1999). Corporate entrepreneurship, knowledge, and competence development. *Entrepreneurship Theory and Practice*, 23(3), 169-189.

Zhou, H. & Wit,G.D (2009). Determinants and dimensions of firm growth. *Scientofic Analysis of Entrepreneurship and SMEs.*

Individual Entrepreneurial Orientation (IEO) of University Students

Wei-Loon Koe[1]
1 Universiti Teknologi MARA, Kampus Bandaraya Melaka, 110, Off Jalan Hang Tuah, 75300 Melaka.
koeweiloon@yahoo.com

ABSTRACT

Higher education institutions (HEIs) in Malaysia are expected to produce entrepreneurial graduates and graduate entrepreneurs. However, university students are showing low interest in entrepreneurship. Individual entrepreneurial orientation (IEO) is a crucial competency in becoming a successful entrepreneur, but only few studies have scrutinized the issue. Therefore, this paper provided some basic insights on IEO among university students. Based on the questionnaire survey conducted on 157 undergraduates, this paper found that overall students scored highest for innovativeness but lowest for risk-taking. Furthermore, business students scored higher in overall IEO, risk-taking, innovativeness and proactiveness than non-business students. However, it only found significant differences in risk-taking and innovativeness between business students and non-business students. This paper concluded that university students were quite innovative and risk-averse. The paper proposed that developing entrepreneurial competency is a crucial strategy in producing entrepreneurial graduates. Specifically, entrepreneurial education or training has to be carefully designed to suit the needs of students from different areas of studies and to equip them with the required competencies.

Key Words: Entrepreneurial orientation, Entrepreneurship, Students, University.

1. INTRODUCTION

It is undeniable that entrepreneurship is an important agenda in developing a nation. Malaysian government has clearly stated its aspiration to be an entrepreneurial nation in the New Economic Model (NEM). In the effort of transforming Malaysia into a high income country, the government is not lacking behind the torrent of entrepreneurship development. For instance, Malaysian government has initiated Malaysian Global Innovation Creativity Center (MaGIC), 1 Malaysia Entrepreneur (1MET) program and National Entrepreneurship Institute (INSKEN) to support entrepreneurial individuals. Despite the effort being put forth so far, the number of entrepreneurs in Malaysia is still less embracing.

Higher education institutions (HEIs) in Malaysia are playing a crucial role in producing entrepreneurial graduates (i.e.: graduates who have entrepreneurial mindset, capabilities and attributes) and graduate entrepreneurs (Hamidon, 2012). Recently, The Malaysia Education Blueprint 2015-2025 has also clearly delineated the crucial role of HEIs in developing competitive entrepreneurial graduates (Mazlan, 2015). However, university graduates are still having the mindsets of being employed rather than starting own businesses. The entrepreneurial culture still needs to be strengthened. Furthermore, HEIs are continuously facing challenges such as lack of interest in becoming entrepreneurs among university graduates and lack of engagement with non-business disciplines (Hamidon, 2012).

Entrepreneurial orientation (EO) is an imporant competency in becoming an entrepreneur and managing a firm's performance. For instance, positive relationship was found between EO and entrepreneurial intention (Bolton & Lane, 2012; Ekpe & Mat, 2012; Ibrahim & Lucky, 2014); elements in EO such as risk-taking and innovativeness (Robinson & Stubberud, 2014), pro-activeness and risk-taking (Kropp, Lindsay, & Shoham, 2008) have also proven to affect business

start-up intention. In addition, EO also positively affected firm's performance (e.g.: Gupta & Batra, 2015; Koe, 2013). It is important to note that EO can be measured at two different levels, i.e.: firm's level and individual's level (Elenurm, 2012). However, there is a paucity of studies investigating EO at individual level because most extant literatures investigated and measured EO at firm level. In fact, EO should be examined at the individual level because it is related to individual's decisions that influence a firm's performance. Unfortunately, there is a dearth of studies about EO as an individual-level construct (Goktan & Gupta, 2015) and studies that addressed individual entrepreneurial orientation (IEO) are still scant (Bolton, 2012; Kollmann, Christofor, & Kuckertz, 2007; Lee, Lim, & Pathak, 2011).

Since students of HEIs from varying field of studies reacted differently to entrepreneurship (Koe, 2012; Peprah, Afoakwah, & Koomson, 2015); there is a need to know how entrepreneurial those students are. Furthermore, it is also important to develop EO among students to encourage innovativeness and boost future economy (Lee et al., 2011). Although researchers such as Ekpe and Mat (2012), Elenurm (2012) and Goktan and Gupta (2015) have discussed the IEO of business students in their papers, nothing much is known in regards to non-business students. Furthermore, existing IEO studies are mostly conducted in countries other than Malaysia, several issues require further investigations in the local context. For instance, are university students entrepreneurial enough? Are students from different fields of studies possessed different IEO? As such, this paper attempts to investigate the IEO of business students and non-business university students in Malaysia.

2. LITERATURE REVIEW

2.1. Entrepreneurial Orientations (EO): An Individual Perspective

The concept of EO was originated from Miller (1983), which consists of three dimensions known as innovativeness, pro-activeness and risk-taking. Covin and Slevin (1989) then categorized these three dimensions as a unidimensional construct called entrepreneurial strategic posture (ESP), which they found that ESP was particularly essential for small firms to maintain their performance in hostile environments. The EO concept was then further discussed by Lumpkin and Dess (1996), whereby they refined EO as a multi-dimensional construct that consisted of five independent salient dimensions, namely autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness. They further suggested the relationship between EO and organizational performance. According to them, innovativeness is related to new ideas engagement that may result in new products, services or processes. Pro-activeness is related to forward-looking perspective that actively looks for business opportunities. While risk-taking is characterized by behavior of making large commitment to obtain high returns.

No doubt, EO is an essential attribute of high performing enterprises. Over the years, various studies have supported the positive relationship between EO and firm performance. For instance, Gupta and Batra (2015) maintained that EO recorded a strong positive linkage with performance of small and medium enterprises (SMEs) in India. Reijonen, Hirvonen, Nagy, Laukkanen, & Gabrielsson (2015) used brand performance and market performance as the indicator of firm performance and found that both of them were positively affected by EO. Although Rodríguez-Gutiérrez, Moreno and Tejada (2015) did not really examine components of EO in their study, they found that elements such as introduction of innovation and actively seeking for new markets did affect the competitive success (e.g.: employment growth, turnover and investment) of a company. Similarly, many of the extant studies have also confirmed the EO-performance relationship (e.g.: (Grimmer, Miles, & Grimmer, 2015; Gupta & Gupta, 2015; Koe, 2013; Oly Ndubisi & Agarwal, 2014; Vidic, 2013).

Although a great number of EO studies are focusing on enterprise level, it is important to note that EO is not only measured at the enterprise level and it does not only influence the performance of firms. Elenurm (2012) expressed that EO is a concept that can be studied at two levels, such as enterprise and individual. No doubt, EO has long been treated as a firm-level construct because it is considered a strategic construct in enterprise (Goktan & Gupta, 2015). However, the individual-level EO also requires much attention because only few studies addressed

EO at the individual level (Kollmann et al., 2007) and there are ample rooms for analyzing EO at a new way (Ferreira, Marques, Bento, Ferreira and Jalali, 2015). Lately, several studies have taken the initiatives to investigate EO at the individual level and its relationship with firm's performance. Chien (2014) examined the EO of convenience store franchisees in Taiwan and confirmed that franchisees' EO would lead to better performance. Bolton (2012) validated a set of items in studying IEO-business success relationship. The results showed that dimensions such as risk-taking and pro-activeness, but not innovativeness were positively correlated to business success.

Entrepreneurship is a three-phase process that requires the entrepreneurs to be competence in business opportunity identification, business development and, implementation and exploitation (Elenurm, 2012). Thus, EO can be considered as important competencies that need to be acquired by potential and practicing entrepreneurs. University students could be considered as potential entrepreneurs because they would enter the working world after graduation. They are encouraged to embark on entrepreneurship because entrepreneurship is important to a nation. The very first requirement in becoming a competitive entrepreneur is that potential entrepreneur has to be entrepreneurial. Thus, it is crucial to examine the entrepreneurial orientation of students.

Due to the increasing awareness of IEO, many researchers have attempted to study students' IEO in recent years. Treating IEO as a holistic construct, Goktan and Gupta (2015) found that male undergraduate business students from United States, Hong Kong, India and Turkey scored higher IEO than their female counterparts. Unlike the previous, Robinson and Stubberud (2014) studied multiple dimensions of IEO of Norwegian students. They found that overall students showed higher risk-taking, innovation, proactivessnes and entrepreneurial intent after the completion of an entrepreneurship course. However, students rated risk-taking at the lowest, the authors argued risk-taking was indeed a problem for some potential entrepreneurs. Taatila and Down (2012) researched the Finnish university students and found that students with entrepreneurial experience scored higher for all elements of EO than non-entrepreneurial experience students. They also identified that male students were more risk-taking and pro-active than females and students with working experience were more innovative and pro-active than students without working experience. Other researchers who have investigated students' IEO are such as Ekpe and Mat (2012), Pradhan and Nath (2012) and Elenurm (2012). The above studies were conducted in foreign countries, as national culture and education system vary across countries, the findings from the above studies may not be applicable to the Malaysian context.

Although IEO has attracted the attention of researchers in recent years, studies in regard to IEO of Malaysian are still scarce. One of the studies conducted by Ismail, Anuar, Omar, Aziz, Seohod and Akhtar (2013) showed that university students' EO was positively related to commercialization; unfortunately, their study did not reveal much information about ratings of EO among the students. In another study, Lee, Lim and Pathak (2011) adopted a four-dimension EO model and researched university students from four countries. They found that Malaysian students scored highest for "competitive aggresiveness", followed by "innovativeness", "autonomy" and "Risk-taking". The above studies did provide some preliminary information of Malaysian students' IEO; however, there are ample rooms for further research. One of the obvious shortcomings of the above studies is that they failed to disclose information pertaining to students majoring in different principles. It is a fact that past studies have shown consistent results in regards to academic programs and entrepreneurship. For instance, Koe (2012) found that business students were showing higher intention towards entrepreneurship and peceived having higher feasibility in entrepreneurship than non-business students. Similarly, Peprah *et al.* (2015) supported that business students were more likely to start own business than science students.

Based on the above discussion, since students from differing academic programs reacted differently to entrepreneurship differently, it can be said they may also possess different level of IEO. Thus, the following hypotheses are suggested:

H1: There is a significant difference in IEO between business students and non-business students.

H1a: There is a significant difference in risk-taking between business students and non-business students.

H1b: There is a significant difference in innovativeness between business students and non-business students.

H1c: There is a significant difference in proactiveness between business students and non-business students.

3. METHODOLOGY

The population of this study was the final semester undergraduate students from a local university with “entrepreneurial university” status. In selecting the sample, this study employed proportionate stratified sampling to ensure that sufficient subjects were selected from each faculty. It is important to note that data collection was still going on at the time this paper was written. A total of 82 students were chosen from Faculty of Business and Management, they were further categorized as “business students”. Furthermore, 32 students were selected from Faculty of Art and Design and 43 students were selected from Faculty of Hotel and Tourism Management, they were then collectively grouped as “non-business students”. They were then surveyed through self-administered questionnaire. The questionnaires were distributed to them before the lecture with the helps from faculty members.

Some researchers measured EO as a single construct (e.g.: Chien, 2014; Goktan & Gupta, 2015; Gupta & Batra, 2015). However, this paper did not treat EO as a unidimensional holistic construct because single EO construct does not address some important entrepreneurial dimensions for business success (Elenurm, 2012). Therefore, following Lumpkin and Dess (1996) and Wales, Gupta and Mousa (2011), this paper employed a multidimension construct of EO. The three dimensions were “risk-taking”, “innovativeness” and “proactiveness”. The items used in this study were developed and validated by Bolton and Lane (2012) and Bolton (2012). There were ten Likert-type rating questions used in measuring the three dimensions of IEO and the reliability analysis found that the scales had acceptable internal consistency (α>0.7) (Table 1).

Table 1: Reliability of Items

Variables	No of Items	Cronbach’s Alpha	
		Current Study	Bolton (2012)
Risk-taking	3	0.756	0.765
Innovativeness	4	0.825	0.800
Proactiveness	3	0.746	0.767

4. FINDINGS

4.1. Results of Analyses

The respondents of this study were 157 final semester undergraduate students. There were 55 (35.03%) male students and 102 (64.97%) female students. In terms of their program of study, 82 (52.22%) were from Faculty of Business and Management, 32 (20.38%) were from Faculty of Art and Design and 43 (27.39%) were from Faculty of Hotel and Tourism Management. It is also worth mentioning that majority of them did not have any experience in starting a venture (n=124; 78.98%). However, more than half of them were interested in starting a new business in future (n=97; 61.78%).

Table 2 depicts the results of descriptive analysis and independent t-test analysis. The results revealed that IEO of all students were 3.898 (SD=0.520). In terms of rating of each dimension in IEO, the students scored highest for innovativeness (M=4.013; SD=0.660), followed by proactiveness (M=3.977; SD=0.601) and lowest for risk-taking (M=3.667; SD=0.716). It was also found that business students scored slightly higher than non-business students in IEO and all of its three dimensions.

As explained by Pallant (2011), independent sample t-test is appropriate for comparing mean score on continuous variables of two different groups. Thus, this paper conducted independent sample t-test to examine the four hypotheses. In determining the homogeneity of variance for the two groups, Levene’s test results were insignificant (i.e.: significance value fell between 0.251 and 0.469). The first hypothesis (H1) proposed that IEO between business and non-business students

differed significantly. The analysis revealed that no significant differences was found in IEO between the two groups of respondents (t=1.833; sig.=0.072). Meanwhile, H1a, H1b and H1c suggested that risk-taking, innovativeness and proactiveness between business and non-business student would be different significantly. The results showed that risk-taking (t=2.064; sig.=0.044), and innovativeness (t=2.130; sig.=0.038) were significantly different between business and non-business students. However, proactiveness (t=0.125; sig.=0.901) showed no significant difference between the two groups of students. In addition, this study also determined the effect size of risk-taking and innovativeness through eta-squared (η^2). As proposed by Cohen (1988), since the η^2 values of risk-taking (η^2=0.072) and innovativeness (η^2=0.076) were well above 0.06, the magnitude of difference was considered moderate. The results also showed the variance in risk-taking and innovativeness explained by program of study was 7.2% and 7.6% respectively. Therefore, H1a and H1b were supported. Meanwhile, H1 and H1c were not supported.

Table 2: Mean, Standard Deviation and Independent t-test Results

Variables	**Groups**	**Mean**	**Std. Dev.**	**Independent t-test**		**η^2**
				t	**Sig.**	
IEO	All-group	3.898	0.520	-	-	-
	Business	4.000	0.498	1.833	0.072	0.052
	Non-business	3.748	0.526			
Risk-taking	All-group	3.667	0.716	-	-	-
	Business	4.108	0.561	2.064	0.044	0.072
	Non-business	3.783	0.616			
Innovativeness	All-group	4.013	0.660	-	-	-
	Business	4.162	0.651	2.130	0.038	0.076
	Non-business	3.794	0.625			
Proactiveness	All-group	3.977	0.601	-	-	-
	Business	3.677	0.802	0.125	0.901	<0.010
	Non-business	3.652	0.582			

4.2. Discussion

The descriptive results found that among the three dimensions of IEO, all students rated highest for “innovativeness”. The finding was rather congruent to Lee *et al.,* (2011) because they also found that Malaysian students placed “innovativessness” at the second place right after “competitive agressiveness”. Innovativeness is considered an important attribute in becoming a successful entrepreneur. Entrepreneurs who are innovative enough would be able to make changes to products, services or processes (Hisrich, Peters & Shepherd, 2013). Moreover, innovativeness also helps entrepreneurs to react to changes in their business environment. It was rather encouraging that students in this study scored highest for this dimension. Meanwhile, risk-taking is an important attribute for a person in becoming an entrepreneur. An individual who likes risks and is willing to take risks has greater potential to become an entrepreneur (Yurtkoru, Acar, & Teraman, 2014). Unfortunately, this study found that overall students scored lowest for “risk-taking”. Similarly, Norwegian students also showed low risk-taking orientation (Robinson & Stubberud, 2014). To most students, starting a business is indeed a risky decisions and actions. Thus, it is not surprised that students rated lowest for risk-taking because becoming an entrepreneur involves both monetary and non-monetary risks. As students were having scarce resources, they agreed that becoming an entrepreneur is a risky decision and action.

Entrepreneurship is a complex process which involves various activities (Hisrich *et al*., 2013). It is therefore not suitable to look at it holistically. This paper found that business students scored higher for risk taking and innovativeness than non-business students. Since business students were better exposed to business education and business environment, they possessed better knowledge about starting and maintaining a business entity. It could be said that they understood the risk with regards to entrepreneurial activities and that was the reason of why they rated

themselves as risk-takers. In addition, being innovative is an important requirement for entrepreneurship survival because successful entrepreneurs need to create newness in the market. As mentioned by Elenurm (2012), entrepreneurship training could develop entrepreneurial creativity and innovativeness. Therefore, the various entrepreneurship training and courses that business students have attended could help them to develop innovativeness.

5. CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This study was conducted to identify the IEO of university students from different fields of study. Overall, the results confirmed that university students were rather innovative but they were quite risk-averse. In terms of differences, business and non-business students also demonstrated different level of risk-taking and innovativeness. However, their level of proactiveness remain indifferent.

No doubt, the results of this paper have shed some light on Malaysian university students' IEO. This paper has also highlighted the importance of indentifying students' IEO. Based on the findings, it suggested that HEIs in Malaysia are required to play a more pro-active role in developing entrepreneurial graduates. It is not easy for HEIs to develop students with high entrepreneurial traits. As suggested by Bell (2015), HEIs could consider "learning by doing" through blending the traditional approach and experiential approach in developing students' entrepreneurial skills. Entrepreneurship education should not focus only on classroom teaching method. Students should be provided with hands-on training on venture set-up and management. Developing a conducive working environment and culture as well as a well-designed entrepreneurship curriculum is important in developing higher EO (Lee *et al.,* 2011). In additional, emotional intelligence is also not to be forgotten in developing entrepreneurial orientation (Pradhan & Nath, 2012).

This paper is not without any limitations. Measuring IEO is relatively new in entrepreneurship study and there remains limitations in the measuring approach (Ferreira et al., 2015). As such, future researchers are required to employ a more updated and reliable measurement. Furthermore, the sample in this study only comprised of students from an public university. Future studies are recommended to include students from various universities and extent to non-student population.

REFERENCES

Bell, R. (2015). Developing the next generation of entrepreneurs: Giving students the opportunity to gain experience and thrive. *International Journal of Management Education*, *13*(1), 37–47. http://doi.org/10.1016/j.ijme.2014.12.002

Bolton, D. L. (2012). Individual entrepreneurial orientation: Further investigation of a measurement instrument. *Academy of Entrepreneurship Journal*, *18*(1), 91–98.

Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: development of a measurement instrument. *Education + Training*, *54*(2/3), 219–233. http://doi.org/10.1108/00400911211210314

Chien, S. Y. (2014). Franchisor resources, spousal resources, entrepreneurial orientation, and performance in a couple-owned franchise outlet. *Management Decision*, *52*(5), 916–933. http://doi.org/10.1108/MD-07-2013-0368

Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal,* 10, 75-87.

Ekpe, I., & Mat, N. (2012). The moderating effect of social environment on the relationship between entrepreneurial orientation and entrepreneurial intentions of female students at nigerian universities. *International Journal of Management Sciences and Business Research*, *1*(4), 1–16.

Elenurm, T. (2012). Entrepreneurial orientations of business students and entrepreneurs. *Baltic Journal of Management*, *7*(2), 217–231. http://doi.org/10.1108/17465261211219822

Ferreira, F. A. F., Marques, C. S. E., Bento, P., Ferreira, J. J. M., & Jalali, M. S. (2015). Operationalizing and measuring individual entrepreneurial orientation using cognitive mapping and MCDA techniques. *Journal of Business Research*. http://doi.org/10.1016/j.jbusres.2015.04.002

Goktan, A. B., & Gupta, V. K. (2015). Sex, gender, and individual entrepreneurial orientation: evidence from four countries. *International Entrepreneurship and Management Journal*, *11*(1), 95–112. http://doi.org/10.1007/s11365-013-0278-z

Grimmer, L., Miles, M. P., & Grimmer, M. (2015). A research note on the effect of entrepreneurial orientation on small retailer performance: a resource-advantage perspective. *International Entrepreneurship and Management Journal*, *11*(2), 409–424. http://doi.org/10.1007/s11365-013-0279-y

Gupta, V. K., & Batra, S. (2015). Entrepreneurial orientation and firm performance in Indian SMEs: Universal and contingency perspectives. *International Small Business Journal*, 1-23. http://doi.org/10.1177/0266242615577708

Gupta, V. K., & Gupta, A. (2015). Relationship between entrepreneurial orientation and firm performance in large organizations over time. *Journal of International Entrepreneurship*, *13*(1), 7–27. http://doi.org/10.1007/s10843-014-0138-0

Hamidon, S. (2012, June). *Entrepreneurship development in Malaysian higher education: Challenges, opportunities and way forward*. Paper presented at the *UNESCO-APEID*, Hangzhou, China.

Hisrich, R.D., Peters, M.P., & Shepherd, D.A. (2013). *Entrepreneurship* (9th ed.). New York, NY: McGraw Hill.

Ibrahim, N. A., & Lucky, E. O. (2014). Relationship between entrepreneurial orientation , entrepreneurial skills, environmental factor and entrepreneurial intention among Nigerian students in UUM, *4*(November), 203–213.

Ismail, K., Anuar, M. A., Omar, W. Z. W., Aziz, A. A., Soehod, K., & Akhtar, C. S. (2013, November). *Entrepreneurial intention , entrepreneurial orientation of faculty and students towards commercialization*. Paper presented at the 3rd International Conference on Leadership, Technology and Innovation Management, Istanbul, Turkey.

Koe, W. L. (2012, October). *Entrepreneurial intentions: Differences between business and non-business bumiputra undergraduates*. Paper presented at the AKEPT 2ND Global Annual Young Researchers Conference & Exhibition, Melaka, Malaysia.

Koe, W. L. (2013). Entrepreneurial orientation (EO) and performance of government-linked companies (GLCs). *Journal of Entrepreneurship, Management and Innovation*, *9*(3), 21–41.

Kollmann, T., Christofor, J., & Kuckertz, A. (2007). Explaining individual entrepreneurial orientation: conceptualisation of a cross-cultural research framework. *International Journal of*

Entrepreneurship and Small Business, *4*(3), 325-340. http://doi.org/10.1504/IJESB.2007.013255

Kropp, F., Lindsay, N. J., & Shoham, A. (2008). Entrepreneurial orientation and international entrepreneurial business venture startup. *International Journal of Entrepreneurial Behaviour & Research*, *14*(2), 102–117. http://doi.org/10.1108/13552550810863080

Lee, S. M., Lim, S. B., & Pathak, R. D. (2011). Culture and entrepreneurial orientation: A multi-country study. *International Entrepreneurship and Management Journal*, *7*(1), 1–15. http://doi.org/10.1007/s11365-009-0117-4

Lumpkin, G. T., & Dess, G. G. (1996). The entrepreneurial clarifying it construct and linking orientation. *Academy of Management Review*, *21*(1), 135–172. http://doi.org/10.2307/258632

Mazlan, M. (2015, April 15). Business unusual in education. *New Straits Time Online*. Retrieved from http://www.nst.com.my

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, *29*, 770-791.

Oly Ndubisi, N., & Agarwal, J. (2014). Quality performance of SMEs in a developing economy: direct and indirect effects of service innovation and entrepreneurial orientation. *Journal of Business & Industrial Marketing*, *29*(6), 454–468. http://doi.org/10.1108/JBIM-07-2013-0146

Pallant, J. (2011). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS* (4th ed.). Australia, NSW: Allen & Unwin.

Peprah, J. A., Afoakwah, C., & Koomson, I. (2015). Savings, entrepreneurial trait and self-employment: evidence from selected Ghanaian Universities. *Journal of Global Entrepreneurship Research*, *5*(1), 1–17. http://doi.org/10.1186/s40497-015-0017-8

Pradhan, R. K., & Nath, P. (2012). Perception of entrepreneurial orientation and emotional intelligence: A study on India's future techno-managers. *Global Business Review*, *13*(1), 89–108. http://doi.org/10.1177/097215091101300106

Reijonen, H., Hirvonen, S., Nagy, G., Laukkanen, T., & Gabrielsson, M. (2015). The impact of entrepreneurial orientation on B2B branding and business growth in emerging markets. *Industrial Marketing Management*. http://doi.org/10.1016/j.indmarman.2015.04.016

Robinson, S., & Stubberud, H. A. (2014). Elements of Entrepreneurial Orientation and Their Relationship to Entrepreneurial Intent. *Journal of Entrepreneurship Education*, *17*(2), 1–12.

Rodríguez-Gutiérrez, M. J., Moreno, P., & Tejada, P. (2015). Entrepreneurial orientation and performance of SMEs in the services industry. *Journal of Organizational Change Management*, *28*(2), 194–212.

Taatila, V., & Down, S. (2012). Measuring entrepreneurial orientation of university students. *Education + Training*, *54*(8), 744–760. http://doi.org/10.1108/00400911211274864

Vidic, F. (2013). Entrepreneurial orientation (EO) and knowledge creation (KC). *International Journal of Economic Sciences and Applied Research*, *6*(2), 103–124.

Wales, W. J., Gupta, V. K., & Mousa, F. T. (2011). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal*, *31*(4), 357-383. http://doi.org/10.1177/0266242611418261

Yurtkoru, E. S., Acar, P., & Teraman, B. S. (2014). Willingness to take risk and entrepreneurial intention of university students: An empirical study comparing private and state universities. *Procedia - Social and Behavioral Sciences*, *150*, 834–840. http://doi.org/10.1016/j.sbspro.2014.09.092

Knowledge and Attitude towards Consumers' Patronize Halal Store

Noor Liyana Binti Karim[1], Noor Haninah Binti Hasri, Nur Arifah Binti Muhamad Ihwal, Nur Zalekha Binti Azizan, Muhammad Azraai Bin Abdullah Sani, Mohammad Nasir Bin Abdullah

Corresponding address: ***noorliyanakarim@yahoo.com***

Department of Statistics, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA (Perak), Tapah Campus, 35400 Tapah Road, Perak.

ABSTRACT

Halal comes from an Arabic word which means allowable and permitted. The concept of halal is an absolute key in Muslim majority countries such as Malaysia and every issue of halal in Malaysia has becoming the consumers' concern especially for the Muslims. Halal store is the store that already been certified by JAKIM. This study is to determine whether level of knowledge and attitude influence consumers' towards patronize halal store. We have use direct questionnaire in our study. We had distributed 165 questionnaires to the respondent. For sampling technique we have use convenience sampling for our research. To measure our objective we use one way ANOVA and Mann Whitney test. Based on our finding, we had discovered that level of knowledge with race is significantly different but for level of attitude with gender, there is no significant different. As a conclusion, there are Muslims and non-Muslims that did not get any exposure about halal and they also do not take seriously on halal. The attitude is the biggest contributor when consumers want to purchase some goods in halal store.

Keyword: ANOVA; Attitude; Consumer; Halal; Knowledge,

1. INTRODUCTION

Halal comes from an Arabic word which means allowable and permitted. Usually halal is related towards Muslims as Muslims are strictly required to follow religious requirement. Even though halal are related to Muslim, non-Muslim also do consume product that are halal although they are not bounded by any religious requirement.

In Malaysia, the total population of Muslims are 24,385,858 with the total percentage of 60.4% **Error! Reference source not found.**. Malaysia is generally a Muslim country but its participation in the halal industry is still limited when compared to Thailand, which is fast emerging as a halal hub. **Error! Reference source not found.**.

During purchasing some products, there are a few factors that influence consumer's decision.. According to Yuhanis and Chok (2012), the concept of halal is an absolute key in Muslim majority countries such as Malaysia and every issue of halal in Malaysia has becoming the consumers' concern especially for the Muslims. In Islam, definition of halal is a lawful, permitted or recognized by law which is originates from an Arabic phrase **Error! Reference source not found.**. Foods that do not come from lawful or clean sources are forbidden to Muslims. **Error! Reference source not found.**

"O mankind, eat from whatever is on earth [that is] lawful and good and do not follow

the footsteps of Satan. Indeed, he is to you a clear enemy"
(Surah Al-Baqarah, 2:168)

JAKIM is an organization that confirms the status of halal on consumers' food products and goods in the country. The role of JAKIM is they will do some inspections from all aspects of operation which are the documents, processes, handling, tools, storage, cleanliness, packaging or labeling. The halal industry is considered as one of the fastest growing industries and is estimated to accelerate further in the world market. In Malaysia, Halal Master Plan that being introduced in 2008 supported highly towards halal market so that it meet halal integrity in process, implementation consumption and services **Error! Reference source not found.**.

Actually halal is not only focused on the food but also focus on other aspect which are finances, cosmetics, and pharmaceutical. As said by Hanzaee & Ramezani (2011), the realm of halal may extend to all consumables such as toiletries, pharmaceuticals, cosmetics and services including finance. The Muslims have to follow the every single Islamic law and one of it is the Muslims have to take halal food. There is a hadith on eating halal food.

"Halal (the Lawful & Permissible) is clear and Haram (the Unlawful & Impermissible) is clear. Between halal and haram lays some doubtful things. Many people do not know whether it is permissible or not. Whoever leaves out these doubtful things in order to protect his religion and honor, and then he is safe. Whoever indulges in these doubtful things/matters it is very possible that he will fall into haram, similar to a person who grazes his animals near the royal pasture it is very possible that one day he will graze in the royal pasture. Behold! Every king has a royal pasture and the royal pasture of Allah is those things which have been made impermissible." (Tirmidhi 1205)

Halal values can also be popularized among non-Muslim consumers if in general the society made an awareness of issues concerning health, hygiene, safety, the environment, social justice and animal welfare that comes along with the Halal **Error! Reference source not found.**. The purpose for this study is to determine knowledge and attitude towards patronize halal store.

2. METHODOLOGY

The reference population is all consumers that went to halal store in Ipoh which is the capital city in Perak and Manjung. The target sample was all consumers that go to halal store in Ipoh Parade, Aeon Manjung and Tapah. Ipoh Parade is very popular among students that live near Ipoh. It is because of the cinemas and a lot of stores that open in that mall. Same goes for Aeon Manjung. We have chosen Aeon Manjung because we also seek some respondents that age more than 18 years old. The reason is, in our study we have focused consumers' towards patronize halal store. As for our sample, we have calculated the number of our sample size by taking mean different 0.248 and standard deviation 0.730 from (Dali, Sulaiman, A.Samad, Ismail, & Alwi, 2007) and get 165 respondents where they are more Malay respondents by 59.4%, followed by Chinese respondents with 23.6%, Indian respondents with 17.0%. The study design for this research was cross sectional. The data was collected at one point in time. Our study has been done by conducting a public opinion survey. This study involves the analysis of different group of people which is by ages at one point in time. We have collected our data by using direct questionnaire. We have conducted our pilot study together with our actual survey in Perak. All customers that go to Aeon Manjung, Ipoh Parade, and Tapah were selected as our target sample. Our direct questionnaires were distributed to 165 respondents. In Ipoh, we have distributed 77 questionnaires to the people that go to Ipoh Parade, while in Tapah we distributed 60 questionnaire and in Aeon Manjung we had

distributed 28 questionnaire. The sampling techniques used for this study were convenience. For our inclusion criteria was set for all consumers that go to halal store which is in age 18 years and above. For our exclusion criteria was set for foreigners that come to Malaysia. The instrumental tools that we used in this study are questionnaire. The questionnaire consists of three parts. Part A is about respondents' background such as gender, age, race, religion, marital status, education level. In part B, it consist of true false question to measure knowledge of the consumers' towards patronize halal store. For part C, it is about consumers' attitude towards patronize halal store. Our questionnaire structure is based on three type of respondent technique that are selections based, true – false based and rating based. Our rating based question consists of 6 Likert scale which is extremely disagree, strongly disagree, disagree, agree, strongly agree, extremely agree. The statistical method use in this study was One Way ANOVA and Mann Whitney test for non-normally distributed data.

3. RESULTS

We have distributed 165 questionnaire and found that from 165 respondents, 89 (53.9 %) are male and 76 (46.1) are female. Our respondent consists of many type of races which are Malay with 98 (59.4%) respondents, Chinese with 39 (23.6%) respondents and Indian with 28 (17.0%) respondents. The religion of our respondents are Muslim, Christian, Hindu and Buddhist. Majority of our respondents are Muslim with 98 total of respondents and 59.4 percent. The least religion of our respondents are Christian which only 17 respondents and 10.3 percent. For Hindu and Buddhist the respondents are 24 (14.5%) and 26 (15.8%) respectively. In addition, we also found the marital status of our respondents. There are 109 (66.1%) respondents with single status and 56 (33.9%) respondents are already married. Besides, we also can conclude that most of our respondents have Diploma level of education with 77 (46.7%) respondents. Our respondents who have SPM, Degree, Master and others as their level of education are 38 (23.0%), 45 (27.3%), 2 (1.2%) and 3 (1.8%). This can see on table 1.

Table 1: Descriptive Statistics showing Customers Patronizing Halal Store in Perak

Variable	n (%)	Mean(SD[a])
Age		27.61 (9.570)
Gender		
Male	89 (53.9)	
Female	76 (46.1)	
Race		
Malay	98 (59.4)	
Chinese	39 (23.6)	
Indian	28 (17.0)	
Religion		
Muslim	98 (59.4)	
Christian	17 (10.3)	
Hindu	24 (14.5)	
Buddhist	26 (15.8)	
Marital Status		
Single	109 (66.1)	
Married	56 (33.9)	
Education Level		
SPM	38 (23.0)	
Diploma	77 (46.7)	
Degree	45 (27.3)	
Master	2 (1.2)	
Others	3 (1.8)	

[a]Standard Deviation

3.1 One Way ANOVA

To test difference on knowledge between races, we use One Way ANOVA. We did check the normality assumption for each group of race and found that for all group of race which are Malay, Chinese and Indian was normally distributed. For the test equality of variance by using Levene's test found that the variance of all group of race were not equal since the p-value <0.001 < significant level = 0.05. Based on the table 2 below, we found that at least one group of races has statistically significant difference since the p-value = <0.001 < significant level = 0.05. We also found that the mean of total sum of knowledge for Malay (Mean (SD): 9.12 (0.777)) were significantly higher compared to Chinese (Mean (SD): 7.79 (1.031)) and Indian (Mean (SD): 6.18 (1.634)).

Table 2: Effect of mean Total Sum of Knowledge for Malay, Chinese and Indian Race.

Groups	n	Mean (SD)[c]	F-statistic (df1,df2)	p-value[a,b]
Malay	98	9.12 (0.777)	95.800	<0.001
Chinese	39	7.79 (1.031)		
Indian	28	6.18 (1.634)		

[a]One-Way ANOVA
[b]normality assumption were checked, variance test was done and found to be violated.
[c]Standard Deviation

Since the p < 0.001 < significant level = 0.05, we proceed with Bonferroni Post Hoc Test. Based on the test, we found that the mean difference of Malay between Chinese and Malay between Indian is 1.328 and 2.944 respectively. Whereas the mean difference for Chinese between Indian is 1.616. The result from this test shown that all group of race were significantly difference since the significant level < 0.001 less than 0.05.

3.2 Mann Whitney Test

To test difference attitude between genders, Mann Whitney test were used. Before proceed with test of the difference on mean of total sum of attitude between male and female group, we did check some assumptions required for the test. Firstly, we sure that the variable was randomly selected using probabilistic sampling techniques. Next, we did check for normality assumption for male and female and found that both group were not normally distributed. Since each group tested to be not normally distributed, we decide to use Mann-Whitney test to find the difference on median of total sum of attitude between male and female. Based on table 3, we found that there were no significant difference on median total sum of attitude between male and female since the p-value was more than alpha (p-value = 0.828 > alpha = 0.05). Furthermore, we can conclude that the median total sum of attitude on female [median (IQR): 51.50 (27)] was slightly larger compared to median total sum of attitude on male [median (IQR): 51.00 (27)] but for both male and female, they have same interquartile range that are 27. The percentage attitude for male is higher compare to female with 53.9 percent whereas female is 46.1 percent. Therefore, we accept the null hypothesis.

Table 3: Comparison on median total sum of attitude between male and female (n=165)

Variable	n (%)		Median (IQR)		Z-stats[a]	p-value
	Male	Female	Male	Female		
Total Score of Attitude	89 (53.9)	76 (46.1)	51.00 (27)	51.50 (27)	-0.218	0.828

[a]Mann-Whitney Statistics test

4. CONCLUSION

The finding of our study was to investigate the knowledge and attitude towards patronize halal store. The structural relationships between all variables in the study were tested using data obtain from our questionnaire which is answered by the respondent. We have tested our hypothesis and we had found out that out of three hypotheses, the first and the third hypotheses are significant.

Based on our study, the first hypothesis that gives significant to the study is level of knowledge between races. This means that the knowledge according to race Malay, Chinese, Indian and others are not the same. It is because there are Muslim and non-Muslims do not get any exposure about halal and they also do not take seriously on halal.

Next, the third hypothesis which includes all the two variables, attitude is the only factor that influence consumers towards patronize halal store. Therefore, attitude is the biggest contributor when consumers want to purchase some goods in halal store.

For the second hypothesis the result show that it is not significant which means for our second hypothesis male and female did not give any effect on their attitude when purchasing some product.

5. Acknowledgement

We would like to acknowledge the Universiti Teknologi MARA (Perak) Tapah Campus for giving opportunities to us to carry out this research.

REFERENCES

10 Countries with the largest muslim population,2010 and 2050. (2015). Retrieved 20 July, 2015, from http://www.pewresearch.org

About Jakim (2015, 13 September 2015). Retrieved 20 July, 2015, from http://www.islam.gov.my/en/about-jakim

Afendi, N. A., Azizan, F. L., & Darami, A. I. (2014). Determinants of Halal Purchase Intention: Case in Perlis.

Alam, S. S., & Sayuti, N. M. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. *International Journal of Commerce and Management, 21*(1).

Ali, M. A. (2015). Muslim Population Statistics. Retrieved 20 July, 2015, from http://www.ilaam.net/intl/popstats.html

Aziz, Y. A., & Chok, N. V. (2012). The Role of Halal Awareness, Halal Certification, and Marketing Components in Determining Halal Purchase Intention Among Non-Muslims in Malaysia: A Structural Equation Modeling Approach. *Journal of International Food & Agribusiness Marketing*. doi: 10.1080/08974438.2013.723997

Dali, N. R. S. M., Sulaiman, S., A.Samad, A., Ismail, N., & Alwi, S. H. (2007). Halal Products From The Consumers Perception. An Online Survey.

Fauzi, W. I. M., Muhamad@Hashim, N., & Mokhtar, S. S. M. (2012). The Influence Of Religion On Patronage Behavior In Islamic Base Retail Store. *4*(1).

Golnaz, R., Mohamed, Z., & Shamsudin, M. N. (2015). Non-Muslim consumers' understanding of Halal principles in Malaysia.

Hanzaee, K. H., & Ramezani, M. R. (2011). Intention To Halal Products In The World Markets. *Journal of Research in Business, 1*(5).

IBM SPSS Statistics, *IBM SPSS Statistics 21.0 for Windows*, 2012, IBM : Chicago.

Khalek, A. A., & Ismail, S. H. S. (2015). Why Are We Eating Halal – Using the Theory of Planned Behavior in Predicting Halal Food Consumption among Generation Y in Malaysia. *International Journal of Social Science and Humanity, 5*(7). doi: 10.7763/IJSSH

Khalek, A. A., Ismail, S. H. S., & Ibrahim, H. M. (2015). A Study On The Factors Influencing Young Muslims' Behavioral Intention In Consuming Halal Food In Malaysia. *Shariah Journal, 23*(1), 79-102.

Khaleka, A. A. (2013). Young consumers' attitude towards halal food outlets and JAKIM's halal certification in Malaysia. *Procedia - Social and Behavioral Sciences*. doi: 10.1016/j.sbspro.2014.01.1105

Marzukia, S. Z. S., Hall, C. M., & Ballantineb, P. W. (2013). Measurement of Restaurant Manager Expectations toward Halal Certification Using Factor and Cluster Analysis. *Procedia - Social and Behavioral Sciences*.

Mukhtar, A., & Butt, M. M. (2012). Intention to choose Halal products: the role of religiosity. *Journal of Islamic Marketing, 3*(2).

Rahman, A. H. A., Ahmad, W. I. W., Mohamad, M. Y., & Ismail, Z. (2011). Knowledge on Halal Food amongst Food Industry Entrepreneurs in Malaysia. *Asian Social Science, 7*(12). doi: 10.5539/ass.v7n12p216

Razak, M. I. M., Alias, Z., Samad, I. H. A., Naseri, R. N. N., Ahmad, N. Z. A., &

Baharuddin, F. N. (2015). Overview Of Halal Products And Services In Malaysia And Global Market. *International Journal of Economics, Commerce and Management, 3*(3).

Saabar, S. S., & Ibrahim, S. B. (2014). The Knowledge of Halal and Advertising Influence on Young Muslims Awareness. *Journal of Media & Mass Communication, 1*(1).

Saida, M., Hassan, F., Musa, R., Rahman, & N.A. (2014). Assessing Consumers' Perception, Knowledge and Religiosity on Malaysia's Halal Food Products. *Procedia - Social and Behavioral Sciences*. doi: 10.1016/j.sbspro.2014.04.015

Secret Recipe Loses Jakim Halal Cert Over Cleanliness. (2015). Retrieved 20 July, 2015, from http://www.themalaysianinsider.com/malaysia/article/secret-recipe-loses-jakim-halal-cert-over-cleanliness

Yazam, M., Nurin, S. S., Ishak, M. S., & Abdul Hamid, N. (2011). *The Relationship between Advertising and Muslim Students' Intention to Visit Kopitiams.* Paper presented at the International Conference on Media and Communication (MENTION 2011).

Recognition of Sustainable Development Opportunities among SMEs Entrepreneurs in Malaysia

Shazwani Amran[1] and Sarina Muhamad Noor[2]
1 Universiti Teknologi MARA, shazwani.amran@gmail.com
2 Universiti Teknologi MARA, sarina@perlis.uitm.edu.my

ABSTRACT

Sustainable development entrepreneurs recognize new opportunities to sustain the natural and communal environments and develop economic, environmental and social gain for societies. This study will highlight how knowledge and motivation are crucial in recognizing the opportunities for sustainable development. The model used in this study suggests that entrepreneurs are more likely to discover sustainable development opportunities if their knowledge of natural and communal environments increased. Subsequently, they perceive that the natural and communal environment in which they live is threatened and the higher their altruism toward others becomes. Based on previous study, this paper attempts to integrate few variables with absorptive capacity in explaining the concept of sustainable entrepreneurship.

Key Words: Sustainable development, Opportunity recognition, Motivation, Absorptive capacity

1. INTRODUCTION

Sustainable development in Malaysia has been promoted through several ways. Since the Third Malaysia plan (1976-1980), there was interplay between environment and development that lead into consideration for future planning. This is to prevent impairment of the country's land and forest resources, pollutions from industries and environmental degradation from urban development. As defined by United Nations Commissions on sustainable development (2001), sustainable development refers to "development that meets the need of the present without compromising the ability of future generations to meet their own needs". In the Tenth Malaysia Plan (2011-2015) Malaysian government has introduced a new economic model with three pillars namely sustainability, inclusivity and high income. These pillars reflect the government commitment in ensuring a better environment for the future.

There were reports of ozone depletion, climate change and destruction of biodiversity that demonstrate the negative and potentially deadly consequences these processes have for living species (Brundtly, 1987, IPCC, 2007, and United Nations,2004). Yet, there are scholars who expressed that entrepreneurial action can preserve ecosystems, counteract climate change, reduce environmental degradation and deforestation through improving agricultural practices and freshwater supply and maintain biodiversity (Cohen and Winn, 2007, Dean and McMullen, 2007). Wheeler, McKague, Thomson, Davies, Medayle, and Prada (2005) also claimed that entrepreneurial action is able to enhance education systems, productivity, socio-economics status, physical health and self-reliance of individuals and societies. In addition, gains for investors, entrepreneurs and economies can be created by sustainable entrepreneurial actions (Easterly, 2006 and Hart, 2005).

From an economic perspective, entrepreneurial opportunities are gained from changes in business environment which is change in supply (Shane, 2000) and change in demand (Dew, Sarasvathy & Venkataraman, 2004). In recognizing opportunities, it is important to have personal economic gain or financial profit for entrepreneur. On the other hand, entrepreneurs who recognize opportunities that promote sustainable development prefer to attend to different aspects of

environment. Parris & Kates (2003) discussed that these individuals are more likely to recognize changes in that environment and then form opportunity beliefs that preserve it than individuals whose attention is more focused on the business environment. Likewise for the individual who appear to be on communal environment, they are more preferred to recognize changes in that environment (Shepherd & Patzelt, 2010).

There should be reasons why entrepreneurs focus their attention on the natural environment or communal environment. A model proposed by Shepherd & Patzelt (2010) will be applied in this study to explain the variance across entrepreneurs in their ability to recognize sustainable development opportunities. In this model, sustainable development opportunities is defined as opportunities that sustain the natural and/or communal environment as well as providing development gain for others which means economic gain, environmental gain and social gain. (Elkington, 1994, Leiserowitz, Kates & Parris, 2006 and National Research Council, 1999).

2. ISSUES AND MODEL DEVELOPMENT

Report of pollution, environmental degradation, destruction of biodiversity and climate change has become normal things and most of them are the outcomes from entrepreneurs' activities (Brundtland, 1987; IPCC, 2007; United Nations, 2004). Moreover, entrepreneurs are more likely to recognize opportunities that can only give them financial profit while neglecting social and environmental aspects.

However, Cohen & Winn (2007) and Dean & McMullen (2007) claimed that entrepreneurial action can also preserve ecosystems, counteract climate change, reduce environmental degradation and deforestation, improve agricultural practices and freshwater supply and maintain biodiversity. There are numerous examples of how sustainable entrepreneurial action creates gain for investors, entrepreneurs and economies (Easterly, 2006, Hart, 2005).

Entrepreneurs have to believe that there exists an entrepreneurial opportunity for someone which is termed as third person opportunity belief. Subsequently, the entrepreneurs will determine which opportunity they want to pursue. This is called first person opportunity belief (McMullen & Shepherd, 2006; Shepherd, McMullen & Jennings, 2008). These opportunities rise from changes in the business environment such as change in supply and change in demand (Shane, 2000).

A model of entrepreneurial action was introduced by McMullen & Shepherd (2006). The model attempts to make distinction and provide a deeper understanding of the recognition of third person opportunities for sustainable development. McMullen & Shepherd (2006) proposed this framework to lead into more discussions regarding the important of entrepreneurial concept of opportunity (Brown, Davidsson & Wiklund, 2001; Shane & Venkataraman, 2000; Stevenson & Gumpert, 1985). There are two stages in this model. Under stage 1, the model explains on the interaction between prior knowledge and personal strategy which influence the third person opportunities. In other words, there is an entrepreneurial opportunities for those who have existing knowledge and are strongly motivated to pursue the goal towards sustainable environment. From stage 1, the entrepreneurs will make a further assessment before they undertake the opportunity to engage in entrepreneurial opportunities. In other words, only entrepreneurs that believe in stage 1 will engage with stage II. The model is showed in Figure 1.0.

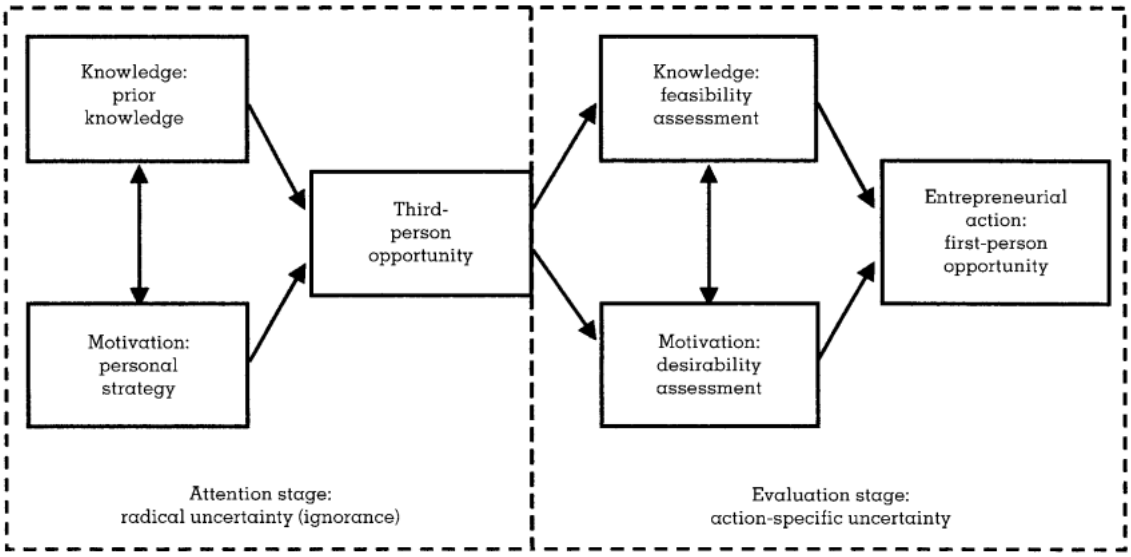


Figure 1.0 Model of Entrepreneurial Action (McMullen & Shepherd, 2006)

Shepherd & Patzelt (2010) attempt to elaborate the first stage of entrepreneurial action model by offering a model to explain variance across entrepreneurs in their ability to recognize third person sustainable development opportunities. This model illustrated that the likelihood of recognizing entrepreneurial sustainable development opportunities increases with individuals' prior knowledge of natural and communal environment, their motivation for personal gains, and their motivation to develop gain for others. These relationships are strengthened when the individuals possess prior entrepreneurial knowledge which is related to knowledge of markets, ways to serve markets and customers' problems (Shane, 2000).

In this model, motivation is divided into two which are perception of threat and altruism. In addition, entrepreneurs' motivation is one of important determinant of opportunity recognition (Baron & Ensley, 2006; Kirzner, 1976; McMullen & Shepherd, 2006). Whenever an individual notice that their physical and psychological well-being is threatened, motivation will play its roles to direct attention of the individual toward sustaining the natural and communal environment. For an example, pollutions may threatens the lives of many peoples, thus, individuals who live in a highly polluted areas are vitally interested in opportunities to reduce it. Ryan & Deci (2000) mentioned about Self Determination Theory to explain the psychological processes that encourage optimal functioning and health. Thus, Ryan & Deci (2000) proposed three aspects of life that can satisfy individuals' psychological needs which are needs for competence, relatedness and autonomy. So, when those aspects of life are threatened, individual psychological well-being is threatened. Therefore, this study will also look on perception of threat as one of the independent variables.

Every individual is different in their motivation in directing attention towards development of economic, environmental and social gains for others. Shepherd & Patzelt (2010) proposed altruism is one of motivation factors in sustaining the natural and communal environment. Penner, Dovidio, Piliavin, & Schroede (2005) defined altruism as individual motivation to improve the welfare of another person. An altruistic motivation arises when individuals experience empathy and sympathy for others (Batson, 1991; Davis, 1996). Altruistic action always involves some sacrifice to oneself and an intention to develop benefits for others. To enhance the likelihood of opportunity recognition for sustainable development, Shepherd & Patzelt (2011) has suggested altruism as one of the factors. Dees (2012) has emphasized that role of altruistic values is important to drive entrepreneurs' attention towards solving societal problems and at the same time avoiding focus on personal gain. An individual who give more attention to altruism may put more priority on social and sustainable value potential. Meanwhile, an individual with extrinsic reward values may focus on economic value potential. These are illustrated under Figure 2.

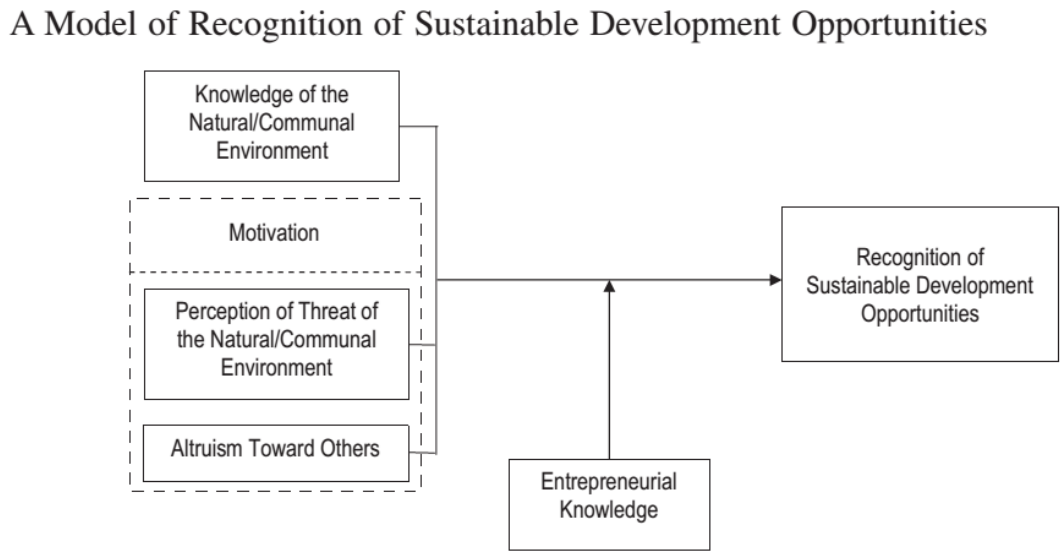


Figure 2.0 Model of Recognition of Sustainable Development Opportunities (Shepherd & Patzelt, 2010)

Accordingly, Higgins & Kruglanski (2000) also suggest that an entrepreneur action must involve knowledge and motivation. In prior knowledge element, differences in prior knowledge such as natural and social environment could show variance in entrepreneurs' direction of their attention and also their recognition of sustainable development opportunities (Shepherd et. al, 2008). Zahra & George (2002) proposed a concept of absorptive capacity to explain the capability of creating knowledge and utilizing it which may enhance a firm's ability to gain and sustain a competitive advantage. Most of the researchers applied absorptive capacity construct to explain organizational phenomena that span multiple levels of analysis by referring to organizational learning (Huber, 1991; Kim, 1998), industrial economics (Cockburn & Henderson, 1998), resource based (Lane & Lubatkin, 1998) and dynamic capabilities (Mowery, Oxley, and Silverman, 1996) perspectives. Past research mentioned role and outcomes of absorptive capacity as a set of firm abilities to manage knowledge. However the definitions and construct vary widely. Thus, this study will propose absorptive capacity as one of important elements in this model.

Therefore, a model on sustainable development opportunity recognition is proposed in Figure 3.0. Each of the variables is further explained under section on literature review.

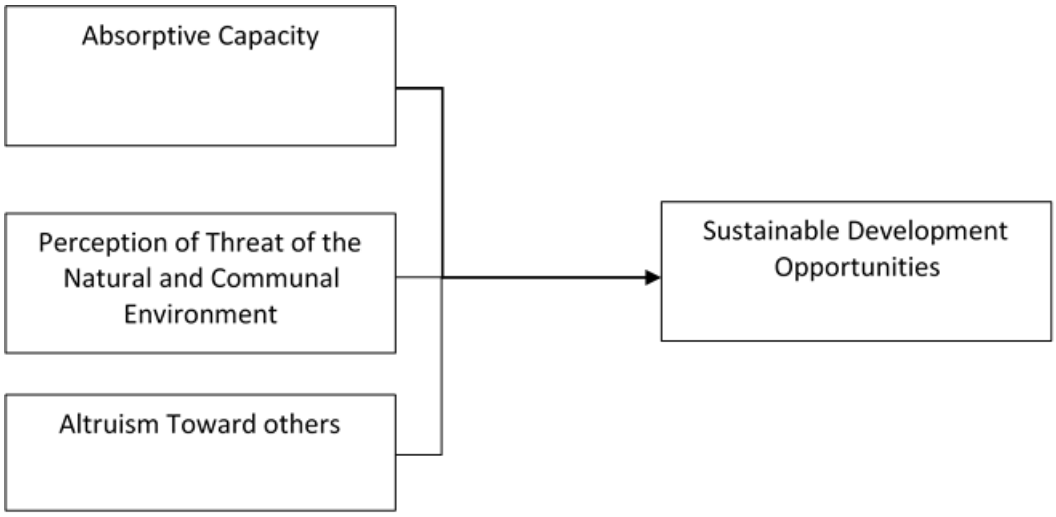


Figure 3.0 Proposed theoretical framework

3. LITERATURE REVIEWS

3.1 Sustainable Development

Sustainable development has three principle components which are economic growth, social equity and environment protection (Kasalis & Kasale, 2014). The Brundtland Report (1987) defined sustainable development as development that meets the needs of the present without compromising the ability of future generation to meet theirs. The Brundtland report focused more on sustainable development and gave its most well-known definition. They acknowledge that there was a widespread poverty and environmental degradation in the countries of the periphery and proposed an agenda to solve them (Castro, 2004). Basically, global economic growth can be revitalized if large parts of the developing world are to prevent economic, social and economic catastrophes. This means that more rapid economic growth in both industrial and developing countries, freer market access for the products of developing countries, lower interest rates, greater technological transfer and significantly larger capital flows, both concessional and commercial (World Commission on Environment and Development, 1987).

3.2 Opportunity Recognition

Entrepreneur can be defined as the owner of a firm whom takes risks and initiative to get and increase their benefit (Eravia, Handayani & Julina, 2015). Henry, Hill and Leitch (2005) agreed that an entrepreneur is a person who combine resources and identify and examine business opportunities before they finally initiate required action to make it success. Similarly, Nicolaou, Shane, Cherkas & Spector, 2009 suggest that the most important ability to become an entrepreneur is identifying an opportunity for a new business, thus making the opportunity recognition as an important part in entrepreneurship process. SMEs have developed a few of ways to face today's hyper-competition. Thus, opportunity recognition has become most important initiatives for SMEs to face those competitions (Shin & Lee, 2013). In addition, opportunities can be divided into innovative and arbitrage opportunities. Arbitrage opportunities are opened by market inefficiencies while innovative opportunities are created by the introduction of new means ends or means end relationship (Shin & Lee, 2013).

3.3 Absorptive Capacity

The first independent variable that will be look over in this research is absorptive capacity. Pinkse (2010) described absorptive capacity as a complementary capability to other capabilities a firm has. The capabilities stated is about recognizing new external knowledge depends on a firm's prior knowledge base which enables knowledge absorption. Eisenhart & Martin (2000) pointed out that firms must develop organizational capabilities for integration and utilization of the newly acquired knowledge. In 2002, Zahra & George have re-conceptualized absorptive capacity as a set of organizational routines and process by which firms acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capability. They argued that firms can acquire and assimilate knowledge however might not able to transform and exploit the knowledge for profit generation. Thus, Zahra & George (2002) labeled acquire and assimilate knowledge as potential absorptive capacity dimensions whereby transform and exploit knowledge as realized absorptive

capacity dimensions. A few of researchers treat the specific routines that constitute a firm's absorptive capacity as a "black box". This treatment becomes particularly obvious in empirical research, which is dominated by quantitative studies. In addition, even though Cohen & Levinthal (1989) discussed the three dimensions of absorptive capacity, there are no clarity or consensus was achieved about how these three aspects are configured in firms and more importantly, absorptive capacity was mainly a black box with its antecedents and consequents. Zahra & George (2002) stated the definition of absorptive capacity as a dynamic capability embedded in a firm's routines and processes, making it possible to analyse the stocks and flows of a firm's knowledge and posited that absorptive capacity contributes to the creation and sustainability of competitive advantage. Absorptive capacity are referred into four capabilities of acquisition, referring to a firm's capability to identify and acquire externally generated knowledge that is critical to its operations; assimilation, referring to the firm's routines and processes that allow it to analyse, process, interpret and understand the information obtained from external sources; transformation, referring to a firm's capability to develop and refine the routines that facilitate combining existing knowledge and the newly acquired and assimilated knowledge; and exploitation referring to the routines that allow firms to refine, extend, and leverage existing competencies or to create new ones by incorporating acquired and transformed knowledge into its operations.

3.4 Perception of Threat of the Natural and Communal Environment

The second independent variable is perception of threat of the natural and communal environment. Motivation is one of aspect which is main factor of opportunity recognition (Baron & Ensley, 2006, Kirzner, 1979, McMullen & Shepherd, 2006). When an individual perceive that their physical and psychological well-being is threatened, the motivation will direct their attention toward sustaining the natural and communal environment. Pollution has given huge number natural environment destructions which threaten the lives of any people and individuals staying in highly polluted areas are vitally absorbed in opportunities to reduce the pollution. Ryan & Deci (2000) discussed that aspect of life that satisfies individuals' psychological needs for competence, relatedness and autonomy increase psychological well-being.

Threats to needs for competence mean appear competent to themselves and others. It is when individuals perceive that nature is declining; this may show to them that they as a public in the area they live are not competent to manage their natural environment in a way that guarantees adequate living conditions for future generations (Shepherd & Patzelt, 2010). The effect of climate change and ozone layer depletion will be more severe for future generations and the extinction of animal species and loss of some natural habitats can never be fully repaired (Dentener, 2006). When and individual attributes these effects to their own society inability to sustain the natural and communal environment, their sensitivity to recognize opportunities for sustainable development will be greater. The deterioration of natural and communal environments also able to ruin the entrepreneurs' needs for relatedness. Needs for relatedness means the tendency of an individual to connect with others (Ryan & Deci, 2000). Bad condition of environments that mostly harm future generations will make it more difficult for entrepreneurs' to make relationship to those generations. For example, future generation may accuse their parents for being selfish and egocentric way of life that exploited and destroyed the nature and as a result they have to suffer. Then, global warming, overfishing and so on may effect to industrial activities and consumption in developed countries but most of the consequences and cost are imposed on developing countries (Srinivasan, 2008). This may hurt the building of interpersonal relationships across societies by accused developed countries for being selfish and reckless. On the other hand, important social relationship may be disrupted by the deterioration of communal environment for example relationship in a family. There will be lots of conflicts and these conditions will make the individual to pay attention on opportunities to sustain the natural and communal environment and prevent harm to future generations and others.

Lastly, with worsen environmental conditions and the number of option decreases, experiencing autonomy requires that individuals have a set of options available (Ryan & Deci, 2000). For example, the number of attractive holiday destinations getting lesser because of the

death of coral reef as a result from global warming (Tourtellot, 2007). In some regions, the climate change that occur was destroy the opportunities to grow crops which effect on the amount of food available (IPCC, 2007). To conclude, individual threat perception of competence, relatedness and autonomy will motivate individuals to gain improved psychological well-being by attending to opportunities that sustain the natural ad communal environment (Shepherd & Patzelt, 2010).

3.5 Altruism toward Others

The third independent variable is altruism toward others. Emotion can provide a motivating force that explains when and for whom human beings care and help (Batson, 1990). Weinstein and Ryan (2010) believe that helping others can take out people from negative mood, sustain a positive mood and normally improve subject well-being. However, the fact that people often feel good after give a hand creates into question the true motivation of their behavior. To relate, altruism is the individual motivation to improve the welfare of another person (Dovidio, Penner, Piliavin & Schroeder, 2005).

There also existed an empirical supports demonstrating that individuals will incur a significant cost to the self in order to help others (Batson, 1991, Camerer & Thaler, 1995). The logic of altruism recommends that an individual's intentions for engaging in prosocial behavior should be discounted when actors are motivated by the benefits that result from the behavior (Barasch, Levine, Berman & Small, 2014).

A lot of explanations conclude that individuals act altruistically because it is in their self-interest in contrast to developing purely personal gain and always include some sacrifice to oneself and an intention to develop benefits for others (Penner, Dovidio, Piliavin & Schroeder, 2005). Batson (1991) & Davis (1996) believe that an altruistic motivation arises when individuals experience empathy and sympathy for others. Empathy is a kind of emotion which when and individuals is empathizing, they are able to think, feel and experience for themselves similar emotions to those experienced by others (Eisenberg, 2000). Individuals able to empathize with people in poor societies can themselves experience other people's sadness.

The individuals with this emotion are motivated to find sustainable development opportunities that change the poor people's situation because by doing that they will be able to improve their own emotional state. On the other hand, sympathizing individuals can think and feel themselves into others but experience emotions different to the others' emotions (Eisenberg, 2010). Dijker (2001) explained that pity is and altruistic emotion that motivates individuals to relieve others' sadness even though it is costly. When individual sympathy to others, that will motivate them to lend a hand and attend to opportunities that improve their situation. There are few of examples where altruistic behavior focuses individual attention toward difficulties of others and then initiating the recognition of sustainable development opportunities.

Anita Roddick, the founder of Body Shop, a firm that concentrated on the production and commercialization of environmentally sustainable cosmetics. Almost all Body Shop's manufacturing locations are located in poor rural areas in order to improve the poor community living conditions: Roddick (2002) said that "my job and commitment to these farmers therefore is to look at economic alternatives, to see how we can put the crops they grow such as sugar, soy and sweet potato in our products". Wieder (2003) also make a conclusion that he think if a food manufacturer is environmentally responsible, they really have no choice but to come out with an organic alternative for their customers.

5. CONCLUSION AND RECOMMENDATION

In conclusion, previous research has outlined several aspects in sustainable entrepreneurship. As authors have suggested that prior knowledge is important, this research will highlight on absorptive capacity together with motivation in recognizing the opportunities for sustainable development. This research suggest that the higher an entrepreneurs' absorptive capacity and

their motivation in perceiving threat and altruism, the entrepreneurs' will be more likely to recognize sustainable development opportunities. Further, data will be collected among the small medium enterprise to ascertain their relationship. It is expected that the study will enhance our understanding on sustainable entrepreneurs.

REFERENCES

Baron, R.A. & Ensley, M.D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*. *52*, 1331–1344.

Batson, C.D. (1991). *The altruism question: Toward a social psychological answer*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Bhave, M. (1994). A process model of entrepreneurial venture creation. *J. Bus. Venturing*, *9*(2), 223–242.

Brundtland, G. H. (1987). *Our Common Future.* Oxford: Oxford University Press.

Brown, T. E., Davidsson,P., & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opprtunity-based firm behaviour. *Strategic Management Journal. 22,* 953-968.

Bryman, A., & Bell, E. (2003). *Business Research Methods*. New York: Oxford University Press Inc.

Buzenitz, L. (1996). Research on entrepreneurial alertness. *J. Small Bus. Manage*. *34*(4), 35–44.

Caracelli, V. & Greene, J. (1997). Crafting mixed-method evaluation designs. *New Dir. Eval*. *74*, 19–32.

Cardozo, R.N. (1986). Product classification in marketing: an appraisal and proposal. *White paper*, Carlson School of Management, University of Minnesota, Minneapolis.

Casson, M. (1982). *The entrepreneur.* Totowa, NJ: Barnes and Noble Books.

Christensen, P.S., Madsen, O.O. & Peterson, R. (1989). Opportunity Identification: The Contribution of Entrepreneurship to Strategic Management. Aarhus University Institute of Management, Denmark.

Cockburn, Iain M. & Rebecca, M. Henderson (1998). Absorptive capacity, co-authoring behaviour, and the organization of research in drug discovery. *Journal of Industrial Economics, 46,* 157-82.

Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of business venturing*, 29-49.

Cole, D. (2004). Exploring the sustainability of mining heritage tourism. *Journal of sustainable tourism*, 480-494.

Conway, H.A. & McGuinness, A. (1986). Idea generation in technology-based firms. J*. Prod. Innovation Manage*. *4*(3), 276–291.

Cooper, D. R., & Schindler, P. S. (2006). *Business research methods* (9th ed.). Boston: McGraw Hill.

Costanza, R., D'Arge, R., Groot, R.D., Farber, S., Grasso, M. & Hannon, B. (1997). The value of the world's ecosystems services and natural capital. *Nature*, *387*, 253–260.

Crowson, H.M., Debacker, T.K., & Thoma, S.J. (2006). The role of authoritarianism, perceived threat, and need for closure or structure in predicting post-9/11 attitudes and beliefs. *Journal of Social Psychology*, *146*, 733–750.

Daily, G. (1997). Nature's services: Societal dependence on natural ecosystems. Washington, DC: Island.

Davidsson, P. (In Press). Entrepreneurial opportunities and the entrepreneurship nexus: A reconceptualization. *Journal of Business Venturing*.

Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, *18*, 301–331.

Davidsson, P. & Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology*, *18*, 179–199.

Davis, M.H. (1996). *Empathy: A social psychological approach*. Jackson, TN: Westview Press.

Dean, T.J. & McMullen, J.S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*. *22*, 50–76.

De Koning, A. (1999). Conceptualizing Opportunity Recognition as a Socio-Cognitive Process. Centre for Advanced Studies in Leadership, Stockholm.

Dew, N., Sarasvathy, S. D., & Venkataraman, S. (2004). The economic implications of exaptation. *Journal of Evolutionary Economics, 14*, 69-84.

Drucker, P.F. (1985). *Innovation and Entrepreneurship: Practice and Principles*. New York: Harper & Row.

Easterly, W. (2006). *The White man's burden. Why the West's efforts to aid the rest have done so much ill and so little good.* New York: The Penguin Press.

Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development*. California Management Review*.

Eravia, D., Handayani, T. & Julina. (2015). The Opportunities and threat of smal and medium enterprises in Pekanbaru: Comparison between SMEs in food and restaurant industries. *The 6th Indonesia International Conference on Innovation, Entrepreneurship and Small Business, 169*, 88-97.

Etzioni, A. (1996). *The golden rule*. New York: Basic Books.

Foley, D. (2003). An examination of indigenous Australian entrepreneurs. *Journal of Developmental Entrepreneurship*, *8*, 133–151.

Folkman, S. & Lazarus, R.S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, *48*, 150–170.

Folkman, S. & Moskowitz, J.T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, *55*, 745–774.

Forste, R. & Heaton, T.B. (2004). The divorce generation: Well-being, family attitudes, and socioeconomic consequences of marital disruption. *Journal of Divorce and Remarriage, 41*, 95–114.

Geneste, L. (2005). Hong Kong Dolphinwatch: The evolution of an eco-preneurial business venture.

Hair, J. F., Bush, R. P., & Ortinu, D. J. (2003). *Marketing research: Within a changing information environment* (2nd ed.). New York, USA: McGraw Hill Irwin.

Hart, S. L. (2005). *Capitalism at the crossroads.* Upper Saddle River, NJ: Wharton School Publishing.

Higgins, E. T., & Kruglanski, A. W. (2000). Motivational science: Social and personality perspectives. Philadelphia: Psychology Press.

Huber, George P. (1991(. Organizational learning: The contribution processes and the literatures. *Organizations Studies 2,* 88-115.

IPCC. (2007). *Climate Change 2007: The Physical Science Basis; Summary for Policy Makers. Fourth Assessment Report.* Geneva: Intergovernmental Panel on Climate Change.

Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005). What is Sustainable Development? Goals, Indicators, Values and Practice. *Environment, Science and Policy for Sustainable Development, 47*, 8-21.

Kim, Linsu (1998), Crisis construction and organizational learning: Capability building in catching up at Hyundai Motor. *Organization Science,* 9, 506–21.

Kirzner, I. (1979). *Perception, opportunity and profit*. Chicago: University of Chicago Press.

Kirzner, I. (1997). Entrepreneurial discovery and the competitive process. *Journal of Economic Literature*, 60-85.

Korsgaard, S. (2010). Sustainability and Entrepreneurial Action. *ISBE Conference.* London.

Lane, Peter J. & Michael Lubatkin (1998), Relative absorptive capacity and inter-organizational learning, *Strategic Management Journal.* 19, 461–77.

Leiserowitz, A.A., Kates, R.W., & Parris, T.M. (2006). Sustainability values, attitudes, and behaviors: A review of multinational and global trends. *Annual Review of Environment and Resources*. *31*, 413–444.

Maine, E., Soh, P.H. & Santos, N.D. (In Press). The role of entrepreneurial decision making in opportunity creation and recognition. *Technovation*.

Max, B. (1994). The case for an environmental technology act. *EPA Journal*, 37-39.
McMullen, J.S. & Shepherd, D.A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*. *31*, 132–152.
Mowery, David C., Joanne E. Oxley & Brian S. Silverman (1996), Strategic alliances and interfirm knowledge transfer. *Strategic Management Journal.* 17, 77–91.
National Research Council. (1999). *Our Common Journal. A transition toward sustainability*. Washington,
DC: National Academy Press.
Neuman, W. L. (1997). *Social research methods. Qual itative and quatitative approaches* (3rd ed.). MA: Allyn & Bacon.
Nicolaou, N., Shane, S., Cherkas, L. & Spector, T. D. (2009). Opportunity recognition and th etnedency to be an entreprneur: A bivariate genetics perspective. *Organizational Behaviour and Human Decision Processes, 110*, 108-117.
Parris, T. M. & Kates, R. W. (2003). Characterizing and measuring sustainable development. *Annual Reviews Environment Resources, 28*, 13.1-13.28.
Patzelt, H. & Shepherd, D. A. (2010). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice, 35*(4), 631-652.
Penner, L.A., Dovidio, J.F., Piliavin, J.A., & Schroeder, D.A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*. *56*, 365–392.
Prahalad, C. K. (2010). *The fortune at the bottom of the pyramid.* Upper Saddle River, NJ: Wharton School Publishing.
Redclift, M. (1992). The meaning of sustainable development. *Geoforum*, *23*, 395–403.
Rensink, R.A. (2002). Change detection. *Annual Review of Psychology*, *53*, 245–277.
Rey, L. (2011). *Sustainable Entrepreneurship and its viability.* Rotterdam: Erasmus School of economics.
Roberts, E.B. (1991). The technological base of the new enterprise. Research Policy, 20, 283–298.
Robinson, J. (2005). Navigating social and institutional barriers to markets: How social entrepreneurs identify and evaluate opportunities. In Mair, J., Robinson, J. & Hockerts, K. (Eds.), *Social entrepreneurship* (pp.95–120). New York: Palgrave MacMillan.
Roddick, A. (2002). Revitalizing communities through partnerships. *Community Development Journal, 37*,188–193.
Ruiz, B.J., Rodríguez, V. & Bermann, C. (2007). Analysis and perspectives of the government programs to promote the renewable electricity generation in Brazil. *Energy Policy*, *35*, 2989–2994.
Ryan, R.M. & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*. American Psychologist*, *55*, 68–78.
Schaper, M. (Ed.). (2005). Making ecopreneurs: Developing sustainable entrepreneurship. Bodmin, U.K.:MPG Books.
Schumpeter, J. (1934). Capitalism, Socialism, and Democracy. Harper & Row, New York.
Schwartz, R. & Teach, R. (1999). A model of opportunity recognition and exploitation: an empirical study of incubator firms. Presented at the 13th UIC/AMA Symposium on Marketing and Entrepreneurship Interface, Nice, June.
Sekaran, U., & Bougie, R. (2010). Research Methods for Business*: A Skill Building Approach*. NY: John Wiley & Sons Inc.
Shane, S. (1996). Explaining rates of variation in entrepreneurship in the United States: 1899–1988. *Journal of Management*, *22*, 747–781.
Shane, S. (1999). Prior knowledge and the discovery of entrepreneurial opportunities. *Organ. Sci. 11* (4), 448–469.
Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science, 11*, 448-469.
Shane, S. & Nicolaou, N. (In Press). Creative personality, opportunity recognition and the tendency to start businesses: A study of their genetic predispositions. *Journal of Business Venturing*.
Shane, S., & Ventakataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 25,* 217-226.
Shapero, A. (1975). The displaced, uncomfortable entrepreneur. *Psychol*. Today *11*(9), 83–88.

Shaver, K.G., Scott, L.R. (1991). Person, process, choice: the psychology of new venture creation. *Entrepreneurship Theory and Practice 16* (2), 23–45.

Shepherd, D.A., McMullen, J.S., & Jennings, P.D. (2008). The formation of opportunity beliefs: Overcoming ignorance and reducing doubt. *Strategic Entrepreneurship Journal*. *1*, 75–95.

Sigrist, B. (1999). Entrepreneurial opportunity recognition. *A presentation at the Annual UIC/AMA symposium at Marketing/Entrepreneurship Interface*, Sofia-Antipolis, France.

Singh, R., Hills, H., Lumpkin, G.T. (1999). Examining the role of self-perceived entrepreneurial alertness in the opportunity recognition process. *Presented at the 13th UIC/AMA Symposium on Marketing and Entrepreneurship Interface*, Nice, June.

Stevenson, H. H., & Gumpert, D. (1985). The heart of entrepreneurship *Harvard Business Review. 63(*2), 85-94.

United Nations. (2004). *UNEP 2004 Annual Report.* Nairobi, Kenya: United Nations Environment Programme.

Wheeler, D., McKague, K., Thomson, J., Davies, R., Medalye, J. & Prada, M. (2005). Creating sustainable local entreprise networks. *MIT Sloan Management Review, 47*(1), 33-40.

Zahra, Shaker A. & Gerard George (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review.* 27, 185–203.

Selective system dis-integration improves supply chain efficiency & organizational performance

Sarit Maitra, Student
Computer and Information Sciences Department
Universiti Teknologi PETRONAS
Perak, Malaysia
Sarit.maitra@gmail.com

Dr. P D D Dominic, Associate Professor
Computer and Information Sciences Department
Universiti Teknologi PETRONAS
Perak, Malaysia
pdddominic@yahoo.com

***Abstract*- Supply chain (SC) is a complex and dynamic supply and demand network that persists from manufacturing point to user and sometimes vice versa. Information related to different activity flows at different stage which makes it indispensable to manage supply chain. System integration (SI) involving information technology (IT) plays crucial role for supply network to perform. SI is an enterprise wide activity and there are several factors related to SI are involved that influence supply chain performance. Despite promise, significant problems are associated with the integrated supply network. This research will examine SI in oil & gas (OG) downstream SC to identify variables which are integrated and SC performance criteria. Through a SC life cycle model, author will examine and demonstrate that the some selective variables which can be disintegrated from SC for better performance of supply network. Roles of SI in various stages of supply chain will be examined to accomplish research objective. An analytical framework as experimental model will be designed and tested using structural equation modeling (SEM) to support research goal. OG is a traditional vertical industry and >90 % of the supply chain is done between business to business (B2B)**.

Key words: Supply chain, Oil & Gas, Information Technology, system integration, Structural equation modeling.

I. INTRODUTION

SI is often believed essential for successful SC for B2B [14]. Objective of SI is to link various business process with the help of IT so that a unified business process is formed through business system integration (BSI). Most large firms across many industries view SI as a required competitive criterion, as well as a must-have for supply chain management (SCM). SC strategy includes directions of integration: vertically, between Web front- and back-end systems; laterally, between a company and its customers, business partners, suppliers or intermediaries; horizontally, among e-commerce, enterprise resource planning (ERP), customer relationship management (CRM), knowledge management and SCM systems; and downward through the enterprise, for integration of new technologies with radically redesigned business processes. However, existing studies indicate mixed success regarding SI. Although many organizations believe that SI can increase market competitiveness and provide other advantages [15]; [10]; [26], differences in organizational culture, organizational structure, business practice and the flow path of enterprise operations have resulted in mixed success in terms of the final outcomes and the quality or degree of success, as well as increased risk and integration complexity issues for many enterprises.

A. Objective & goal of this research

Objective of this research is to prove that selective system disintegration improve SC performance in OG. In order to do so, author may approach either of the below. SC in OG is totally integrated which is a hypothetical assumption will be made here.

1. *Identify required variables needed to integrate and necessary to achieve key performance index (KPI). Rest of the variables can be dis-integrated.*
2. *Identify variables which can be dis-integrated to achieve required KPI.*

B. Scope of the research

There has been little effort noticed to identify specific SC members, key processes that require integration, or what management must do to successfully manage SC. In typical SC scenario different business processes are tightly integrated with the help of IT for information flow. The scope of this work is to identify if some of this variables can be disintegrated to improve SC performance. Successful as-is study will help to identify variables integrated with SC.

C. *Background of research*

SI in supply chain is one of the most complicated field in the software creation arena involving the connection of heterogeneous systems, which are not primarily designed to communicate with each other. The integration of these systems supposed to create a homogenous, harmonious, complex structure, which interconnect in the background to share information. Author in this research will examine & identify the interdependencies and links between activities in terms of variables.

D. Contribution

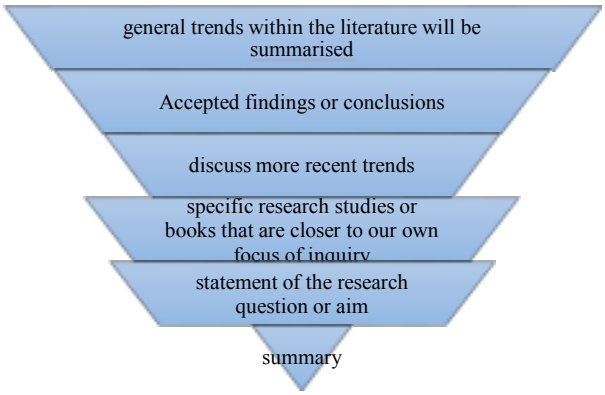
This work will expand the current understanding of SI within the context of SC and will provide a critique of empirical work to offer research agendas that can stimulate future researchers to carefully explore the topic. Results from this study are expected to provide useful guidelines for companies towards adopting an effective lean and agile SC through effective BSI. Moreover, pragmatic investigation on benefits of selective disintegration will provide new dimensions to the key decision makers.

Not many studies conducted to date on the system dis-integration and little have been written that deals with the degree of integration required for effective SCM which is the primary motivation of this research. Based on findings from literature

review (LR), a conceptual framework will be designed and test using SEM.

II. LITERATURE REVIEW

Since the research is a combine effect of SC and SI, a comprehensive and structured literature study required in both areas. SCM refers to corporate business processes integration from end users through suppliers that provides information, goods, and services [16]. This review will investigate relevant articles published in the scientific publishing portals including Elsevier, Wiley, Taylor& Francis, or Emerald. Below Figure 1.0 depicts LR pattern which is self-explanatory. Research design is exploratory at this stage and tends to tackle new problems on which little or no previous research has been done [6]. Exploratory will turn into explanatory during hypotheses test about cause-and-effect relationships. The objective is to determine which variable might be causing a certain behavior, i.e. whether there is a cause and effect relationship between variables [29]. The research will end with confirmatory factor analysis. Only articles published within the last 15 years will be utilized due to changes in concept of SI the available technologies used in SI.



Upside down triangle 1

Fig 1.0 LR pattern

In this effort present study will test whether the variables mentioned different literatures are the principal variables that have significant impact on the B2B SCM and performance. Literature review and related discussions on published work in related field are summarized in below table 1.0.

TABLE 1.0 REVIEW AND DISCUSSIONS

Authors	**Discussions**
Yanping Ding 2014 [33]	Made an attempt to investigate the main factors affecting the integration and performance of the B2B e-commerce supply chain. Investigated the main factors affecting the integration and performance of the B2B e-commerce and addressed key variable for improvement; but left the discussions open to explore the potential managerial implications for future research.
Dong Young Kim (2013) [7]	Discussed that there is empirical evidence on the positive effect of supplier integration on performance, but findings on benefit through customer integration is conflicting.
Gouscos et al. (2007) [15]	Discussed that most integration and interoperation efforts face serious challenges and limitations; information exchange and services are fragmented and complex, plagued by technical and organizational problems, but not examined integration issues.
Zhao Huang, Morad Benyouce (2013) [34]	Examined in their study that e-commerce in SC is undergoing an evolution through the adoption and integration of Web 2.0 capabilities to achieve greater economic value but this has not proven yet.
Ayesha Binlootah & Balan Sundarakani (2012) [2]	Discussed about benefits of Vendor Managed Inventory in Oil and Gas Industry. In an integrated SC environment, this raises questions on the extent of information flow to the vendor (s).
Assey Mbang Janvier-James (2012) [1]	Discussed that Dependability/reliability is generally more crucial than speed in SC and thus important to temperate global "velocity" with the need for dependability but failed to explain dependable factors.
Niels A.H. Agatz, Moritz Fleischmann, Jo A.E.E. van Nunen (2007) [23]	Addressed SCM issues specific to Internet fulfillment in a multi-channel environment. We see a gap here addressing integration issue in their study.
Nathalie Fabbe-Costes & Christine Roussat (2011) [10]	Discussed that integration of SC to be of strategic and operational importance but the role(s) of logistics service providers in SC integration remain(s) unclear.
Fawcett & Magnan (2002) [14], Naslund & Steven (2008) [22], Bask & Juga (2001)[4], Jahre & Fabbe-Costes (2008) [12]	Have discussed an interesting conclusions on: the dominant rhetoric dimension of supply chain integration, the indubitable difficulty to operationalize and measure SC integration and the need to differentiate integration. But none specified the technical reason behind this and left the discussions open.
Lew Sook, Ong Puay & Uchenna (2013) [20]	Discussed about IT applications in achieving advantages. They commented in their work that organization today are facing difficulties to obtain the appropriate IT applications due to confronting IT issues and unique challenges related to the conditions operating.
Bask, A. H., & Juga, I. (2001) [4]	Discussed about semi-integrated supply chains towards the new era of supply chain management, but did not provide any empirical analysis.
Sambasivan, Siew-Phaik, Mohamed, & Leong (2011) [28]	Reported that 70% of supply chain relationship tend to fail. This in turn has contributed to a negative implication of SCI on firm's operational performance in terms of flexibility, delivery, cost and quality
Bask & Juga (2001) [4],	number of authors who disagree with the notion that SCI will always have positive

Power (2005) [25], Pagell (2004) [24]	impact on firms performance either from the aspect of tangible or non-tangible performance and the potential benefits that associated with SCI were ambiguous
P K Bagchi and T Skjoett-Larsen (2002) [3]	Proposed a contingency approach to supply chain integration, arguing that factors such as dominance versus balanced power in the supply chain, the degree of competition in the industry, the maturity of the industry, and the nature of the products – functional versus innovative products – might determine the desired level of integration in a supply chain
Becerra-Fernandez, Gonzalez, & Sabherwal (2004) [5]	Discussed that IT capabilities can impact overall organizational performance either directly or indirectly but left the discussion open on relationship on the direct impacts, such as revenues or cost linking to organizational vision and strategy. Also types of IT applications are not clearly mentioned.

A better formal conceptual definitions" on SC and SI will help both researchers and managers [17]. Literature will be reviewed to identify valid measures for related constructs and adapt existing scales to measure integration [26] and SC performance [32]. When there are no reliable or valid existing measures, will develop new measures based on my understanding of constructs and observation during interviews. Below figure 2.0 shows research design & development principles.

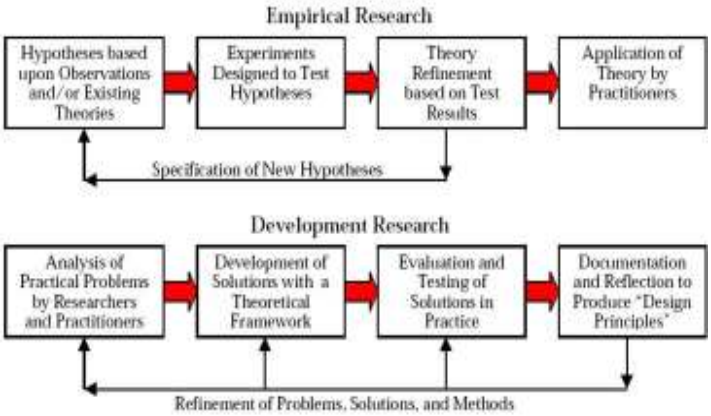


Fig 2.0 Research design & development

III. RESEARCH FRAMEWORK

Theoretical framework is developed (Figure 3.0) based on KPI of SC. Definition of each construct will be explained. Measures of each construct will be taken from LR and in discussions with experts in the field. Based on framework, the following hypotheses are proposed.

H1- SC integrated with selected e-commerce software for selected function would reduce the demand uncertainty (better inventory visibility and information sharing) and significantly lead to overall organizational performance through better competitive advantage.

Inventory management is related to the planning, monitoring and control of stocks, which are used throughout the order-fulfillment process. Inventories are used to bridge the gap between the lead times of the order-fulfillment process and the lead time required by the customers.

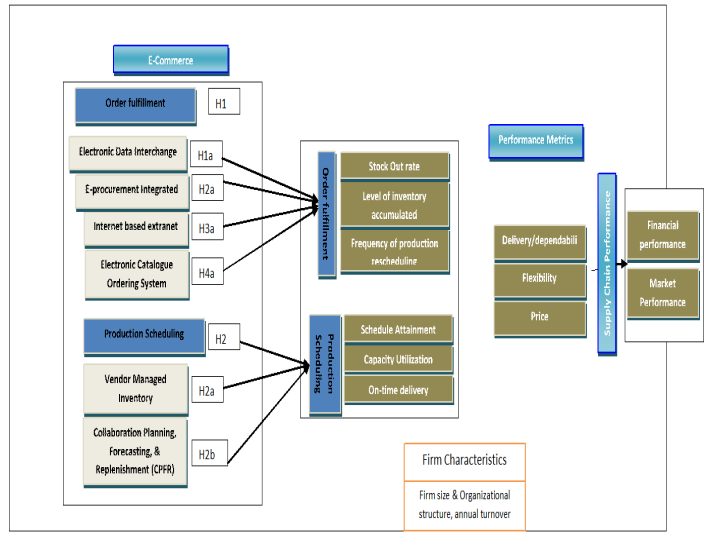


Fig 3.0 Conceptual framework

Traditional ERP, systems are used to track inventory and since it is an enterprise-bound, they are not able to deliver accurate inventory visibility regarding sites beyond the enterprise boundary. This has negative consequences for the short-term (re) ordering behavior. Wrong decisions might lead to mis-dimensioned supply flows [19]. However, Electronic Data Interchange (EDI) is well known as a prominent outcome of recent initiates active information sharing and supports coordination among supply chain partners. Therefore, below hypotheses are proposed.

H1a- SC with EDP integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage.

H1b- SC with E-procurement integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage.

H1c- SC with Internet based extranet integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage.

H1d- SC with Electronic Catalogue ordering system integrated with only order fulfillment but disintegrated from distributed management would reduce the demand uncertainty (better inventory visibility) and significantly lead to overall organizational performance through better competitive advantage

H2- SC integrated with selected e-commerce software for selected function would increases the Collaboration on forecast and

production scheduling and significantly leads to overall organizational performance through better competitive advantage.

The globalization of the supply chain has spurred the growth of VMI. VMI is beneficial to both vendor and customer as long as the VMI contract specifies rewards compensating the supplier's loss due to the expanded burden of inventory management [7]. Implementing a VMI therefore discards one echelon of forecasting demand and ordering, dampening the bullwhip effect and eliminating disruptions in the supply chain decision making.

The goal of CPFR is first to establish collaboration in forecasting efforts between a manufacturer and a retailer so that each party can easily exchange forecasts and future sales with each other [31] focuses on the forecasting aspect of CPFR and examines the impact of CPFR on business processes and system performance. Based on the above studies, the following hypotheses are framed:

H2a- SC with Vendor Managed Inventory (VMI) integrated with only production scheduling and replenishment but disintegrated from Order fulfillment would reduce the undistorted forwarding of the demand signal and therefore significantly lead to overall organizational performance through better competitive advantage.

H2b- SC with Collaborate Planning, Forecasting and Replenishment (CPFR) with only production scheduling and replenishment but disintegrated from Order fulfillment would reduce the undistorted forwarding of the demand signal and therefore significantly lead to overall organizational performance through better competitive advantage.

IV. METHODOLOGY

At this early stage of the theory development process, a variety of acceptable approaches to observation exist. In-depth interviews are the primary method that will be used for data collection. Initially, interview questions will be purposefully broad to keep them flexible. As the research study will progress, they will became more focused, eventually leading to theoretical sampling. During theoretical sampling, interviews will be driven by concepts derived from the evolving theory and based on the intention of making comparisons in order to maximize opportunities to discover variations. Each question will refer to the personal opinion of the respondent measured through 7 point Likert scale. Each respondent will have to give an opinion for each given assertion from "totally disagree" to "totally agree". An extra 'I don't know' box will be added to avoid non-answer or aberrant answers. The questionnaire will be tested by experts in the field. A cross-sectional survey will be conducted, with a target population for sample and data collection. The validity of the research constructs will be assessed from a separate estimation and specification of the measurement model by confirmatory factor analysis. In summary, this work will develop an approach which will include formulating a theoretical framework, analytical models, research questions, hypothesis and identifying characteristics or factors that can influence research design. This process will be guided by discussions with management and industry experts, case studies and simulations, analysis of secondary data.

Research methodology will comprise of below sections -

1. Research instrument/ questionnaire design
2. Development & purification of data collection instrument
   a. Validity –Content validity /Construct validity which includes
   b. composite reliability & convergent validity
   c. uni-dimensionality and discriminate validity
3. Reliability test (cronbach alpha test for reliability)
   a. Checking assumptions (multivariate data analysis assumptions), a. Normality, and b. homogeneity
4. Research tools and software package will be used (SPSS, AMOS, SAS/STATA, MS Excel-professional version etc.)
   a. overall CFA (confirmatory factor analysis) or measurement model
   b. Degrees of freedom & Assessing Model Fit
   c. Comparative fit indices
   d. Variance-accounting indices & Parameter-based indices
   e. Goodness of fit test for CFA analysis & measurement of model fit
   f. Absolute Fit Measures, Incremental Fit Measures, Parsimonious Fit Measures
   g. Structural model or path analysis will be employed to estimate the strength of the casual relationship among unobserved or latent variables of dependent and independent variables.
   h. Hypothesis testing results.

CONCLUSION

Viewed over a sufficiently long term prospect, and looking at the broader perspective of one large enterprise (and not just one organization within the enterprise), this research suggests that SI is perhaps best described as a cycle: as a cycle of integration, and selective disintegration. Positive impact of selective dis-integration towards supply chain performance are supported in this study. Research will contribute on the degree of BSI in the context of SC in oil & gas or relevant process industries and help in developing lean and agile SC linking organization vision and strategy. Limitation of studying complex phenomena with factors data collection, relevant experts who has expertise on entire value chain (mostly focused on their own work and ignore broader picture throughout the supply chain) can be experienced; act like terrorism, black market etc. could disrupt supply chain flow. The study also limited to one particular flow (downstream). A future study combing all these factors may be useful for next generation supply chain in oil & gas for the entire value chain. This study will provide a critique of empirical work and offer research agendas that can stimulate future researchers to carefully explore the topic.

REFERENCES

[1] Assey M and Javier J (2012): A New Introduction to Supply Chains and Supply Chain Management: Definitions and Theories Perspective, International Business Research Vol. 5, No. 1.

[2] Ayesha B & Balan S (2012): "Vendor Managed Inventory Application in Oil and Gas Industry", International Conference on Industrial Engineering and Operations Management

[3] Bagchi P. K. and Skjoett-Larsen T (2002), Organizational Integration in Supply Chains: A Contingency Approach, Global Journal of Flexible Systems Management 3(1), 1-10; P. K. Bagchi and T. Skjoett-Larsen, Integration of Information Technology and Organizations in a Supply Chain Network, International Journal of Logistics Management 14(1), 89-108 (2003).
[4] Bask A H and Juga I (2001), "Semi integrated supply chain, towards new era of supply chain management", International journal of logistics research and application, 3 (1), 5-23
[5] Becerra-Fernandez, I., Gonzalez, A. & Sabherwal, R. (2004). 'Knowledge Management: Challenges, Solutions, and Technologies,' New Jersey, Pearson Education, Inc.
[6] Brown R B (2006), Doing Your Dissertation in Business and Management: The Reality of Research and Writing, Sage Publications.
[7] Dong Y and Xu K (2002), A supply chain model of vendor managed inventory, Transportation Research Part E: Logistics and Transportation Review, Science Direct, 88/2 p 75-95
[8] Dong Y K, 2013, "Relationship between supply chain integration and performance", Springer Science, Business Media New York.
[9] Douglas M, Martha C, Janus D (2010), Supply chain Management, implementation issues and research opportunities, Ohio state University, International journal of Management, V9/2.
[10] Fabbe-Costes N & Christine R (2011): "Supply Chain Integration: Views from a Logistics Service Provider", Supply Chain Forum- An International Journal
[11] Fabbe-Costes, N & Jahre, M. (2007), "Supply chain integration gives better performance - The emperor's new suit?" International Journal of Physical Distribution & Logistics Management.
[12] Fabbe-Costes, N., & Jahre, M. (2008), "Supply chain integration and performance - A review of the evidence". International Journal of Logistics Management.
[13] Fawcett S E., Gregory M. M, and Matthew W. M (2008), "A Three-Stage Implementation Model for Supply Chain Collaboration," Journal of Business Logistics.
[14] Fawcett S. E., & Magnan G. M. (2002), "The rhetoric and reality of supply chain integration". International Journal of Physical Distribution and Logistics Management.
[15] Gouscos, D. Kalikakis, M. Legal, M. and Papadopoulou, S. (2007): A general model of performance and quality for one-stop e-Government service offerings, Government Information Quarterly, Istanbul, Turkey.
[16] Grant, D., Lambert, D., Stock, J., & Ellram, L. (2006). Fundamentals of Logistics Management, European Edn. Berkshire: McGraw-Hill Book Co.
[17] John G W (2004): A theory of formal conceptual definitions: developing theory-building measurement instruments Department of Management, College of Business, Arizona State University, Tempe, AZ, USA.
[18] Kosanke K, Jochem R, James G N, Angel O B(2002), Enterprise Inter-And Intra- Organizational Integration, Building International Consensus, Kluwer Academic
[19] Kotzab, H & Otto, A (2004): 'General process-oriented management principles to manage supply chains: Theoretical identification and discussion' Business Process Management Journal, vol 10, no. 3, pp. 336-349.
[20] Lew Sook Ling, Ong Puay Tee, Uchenna Cyril Eze (2013): The Effects of Information Technology Applications on Collaborating Capability in Achieving Organisational Competitive Advantages in Malaysia: International Journal of Business and Management, vol 8, no. 13.
[21] Moberg C R., Thomas W. S, and Thomas L. F (2003): "SCM: Making the Vision a Reality," Supply Chain Management Review, (September/October).
[22] Naslund D W, Steven A (2008): Supply Chain Integration: Barriers and Driving Forces in an Action Research-Based Industry Intervention; Supply Chain Forum: an International Journal, Volume 9, Number 1, 2008, pp. 70-80(11)
[23] Niels A.H, Moritz F, Jo A.E.E. (2007), "E-fulfillment and multi-channel distribution – A review", European Journal of Operational Research.
[24] Pagell, M. (2004). Understanding the factors that enable and inhibit the integration of operations, purchasing and logistics. Journal of Operations Management, 22(5), 459–487.
[25] Power, D. (2005). Supply chain management integration and implementation: a literature review. Supply Chain Management: An International Journal, 10(4), 252–263.
[26] Ram N, Soo W Kim (2002), Effect of supply chain integration on the relationship between diversification and performance: evidence from Japanese and Korean firms; Journal of Operations Management Volume 20, Issue 3, June 2002, Pages 303–323.
[27] Rodrigues A. M., Stank T. P., & Lynch D. F. (2004). Linking strategy, structure, process, and performance in integrated logistics. Journal of Business Logistics, 25(2), 65-94.
[28] Sambasivan, M., Siew-Phaik, L., Mohamed, Z. A., & Leong, Y. C. (2011). Impact of interdependence between supply chain partners on strategic alliance outcomes: Role of relational capital as a mediating construct. Management Decision, 49(4), 548–569
[29] Singh K (2007), Quantitative Social Research Methods, SAGE Publications
[30] Sunil C, Manmohan S S (2004), "Managing risk to avoid supply chain breakdowns", MIT Sloan management review.
[31] Tonya B and Ram G (2011): Sustainable Supply Chain Management: Models, Methods and Policy Implications (with), Springer Publishers.
[32] Vickery, S.K., Jayaram, J., Droge, C., Calantone, R. (2003). The effects of an integrative supply chain strategy on customer service and financial performance: an analysis of direct versus indirect relationships. Journal of Operations Management 21,523–539.
[33] Yanping D, (2014), "The Main Affecting Factors of the B2B E-Commerce Supply Chain Integration and Performance", International Journal of u- and e- Service, Science and Technology
[34] Zhao H, Morad B (2013), "From e-commerce to social commerce: A close look at design features", Science Direct.

The Impact of Customer Satisfaction on Purchase Intention in Malaysian Takaful Industry

Lailatul Faizah Abu Hassan[1], Wan Jamaliah Wan Jusoh[2] and Zarinah Hamid[3]
1 Faculty of Business and Management, Universiti Teknologi MARA
laila@salam.uitm.edu.my
2 Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia
wjamaliah@iium.edu.my
3 Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia
inahumkc@iium.edu.my

ABSTRACT

To date the study of customer satisfaction and purchase intention have dominated the services literature. This study is aimed to investigate the impact of customer satisfaction on purchase intention among Takaful participants in Malaysia. A self-administered questionnaire is distributed to eight Takaful companies in Malaysia as a study setting for this study. Out of the total 600 distributed questionnaires 390 were finally selected for data analyses. It is expected that findings from this study will contribute to the existing literature to both theoretical and managerial approaches in order to better understand the pattern of customer satisfaction and purchase intention in Takaful industry settings

Key Words: customer satisfaction, purchase intention,Takaful industry

1. INTRODUCTION

In the new global economy, service providers are competing to develop and retain customers through increased satisfaction and loyalty. Customers who have a strong relationship with a service provider represent a major source of profit. Thus, in order to improve strategies in maintaining the customers, we have to understand their behaviours, investigate their needs and wants (Peppers & Rogers, 2004). Recently, Jamil & Aryaty (2010) highlights service provider's utilized relationship marketing as a strategy to maintain long term relationship with current and also potential customers.

Malaysia is the only country with a specific Takaful Law and the demand for Takaful products, both life and non-life has been huge (Patel, 2008). In general, Takaful services are not fully accepted and subscribed by the Islamic community themselves due to lack of awareness of Takaful roles in their lives and their economy. One of the contributory determinants to this absence of awareness among Muslims is the lack of understanding of Islamic product and services (Mohd Razif, 2011).

So far, there is limited research on customer relationship management and its impact on customer loyalty and to the best of the author's knowledge no study has investigated an outcome in an Islamic insurance environment from a relationship marketing perspective. There may be a tendency for customers to switch from conventional insurance to Islamic insurance or vice versa due to their past relationship with their service providers or when the customers perceive that there are no other alternatives available to them.

The main objective of the research is to empirically test the impact of customer satisfaction on purchase intention. For this purpose extensive review of literature was undertaken on the same. Further, this research also intends to test the proposed model in the Takaful industry in Malaysia.

1.1. Takaful Industry

It is a generally accepted view that Islamic insurance was first established in the early second century of Islamic era when Muslim Arabs started to expand their trade to India, the Malay Archipelago and other countries in Asia. Due to travel / long voyage, they often had to suffer heavy losses as mishaps and misfortunes or robberies along the way. Based on Islamic principles of mutual help and cooperation in good and noble action, all the dealers agreed to contribute to a fund before they begin their journey. These funds were used to pro-vide compensation to anyone in the group that suffered losses through any mishap. This was later copied by Europeans who later used to develop the concept of marine insurance.

Takaful is an Islamic insurance concept which is based on Islam muamalat (banking transactions), to comply with the rules and regulations of Islamic law. This concept has been practiced in various forms for over 1400 years. It comes from the Arabic word Kafalah, meaning "the guarantee of each other" or "joint guarantee" against certain losses.

Basically, there are two types of takaful, that is family takaful and general takaful. Several critical factors namely, agency system (al-wakalah), reputation of takaful operators, products and services, marketing and advertising of takaful products, are found to be the main determinants for family takaful demand (Arifin, Yazid, & Sulong, 2013).

1.2. Evolution of the Malaysian Takaful industry

As the Malaysian authorities became comfortable with the growth and regulation of the Islamic market, the Government introduced further legislation to allow other conventional banks to offer Islamic products through their designated premises.

According to Fisher (1999), Takaful is the second most important social institution in the Islamic community to counter poverty and deprivation. The Takaful is operated as an enterprise providing services on a self sustaining model rather than as a charity.

According to Yon Bahiah, Siti Zaleha and Norshahidah (2009), although the Malays are aware of Takaful, they are not convinced that it is what they need for financial planning. On future Takaful needs, Takaful operators may need to look for innovative products for protection, education and investment purposes (Yon Bahiah et al., 2009).

As a caring and customer oriented organisation, Takaful companies are continually upgrading their products and services via new channels to attract customers (Mohd Razif, 2011). However, the issue such as lack of awareness and understanding of Takaful roles in the economy and people lives en-tail the Islamic community themselves not fully accepting and subscribing to Takaful products and services (Koid, 2007; Mohd Razif, 2011).

A clear understanding of customers' needs is important to help the Takaful industry to be proactive in providing customers with reliable products and services.

Based on the research background and motivations that explore if relationships exist between customer satisfaction and purchase intention based on the Takaful participant's viewpoint.

2. LITERATURE REVIEW

According to Oliver (2009), satisfaction is the consumer's fulfilment response, the degree to which the level offulfilment is pleasant or unpleasant. Purchase intention is defined as the expectance and probability of buying a new product given a reference price in a time-specific frame (Mittal & Kamakura, 2001).

2.1. Customer Satisfaction

Satisfaction is operationalised as a customer's reaction to the state of satisfaction, and customer's judgment of satisfaction level. Previous research on satisfaction and service quality has shown that customers' past experience with a firm can influence their affective and behavioural responses to the present encounter. For example, many researchers have shown that

past satisfaction has a significant influence on current satisfaction. Similarly, overall quality) have a direct impact on current customer attitudes (i.e., overall quality) (Nikbin et al., Bolton and Drew found that prior attitudes (i.e., prior 2011).

According to Hoyer and MacInnis (2004), customer satisfaction is “the practice of working to satisfy customers with the intention of developing long-term relationships with them”. Zineldin and Jonsson (2000) said that retention derived from satisfaction can be defined as “a commitment to continue to do business or exchange with a particular company on an ongoing basis”.

Customer satisfaction, quality and retention are global issues that affect all organizations, be it large or small, profit or non-profit, global or local. Quality and customer satisfaction have long been recognized as playing a crucial role for success and survival in today’s competitive market. Notably, the quality and satisfaction concepts have been linked to customer behavioural intentions like purchase and loyalty intention, willingness to spread positive word of mouth, referral, and complaint intention as reported by many researchers (Olsen, 2002; Kang, Nobuyuki & Herbert, 2004; Söderlund & Öhman, 2005).

2.2. Purchase Intention

McDonald (1996) and Kim and Cha (2002) agreed that purchase intention is a decision plan to buy a particular product or brand created through a choice/decision process. This idea is also supported by Zeithaml, Berry and Parasuraman (1996). Purchase intentions positively correlated to service providers’ capabilities to have their customers say positive things, to recommend the services to others, to remain loyal to service providers, to spend more with the vendors, and to pay premium prices. A study by Cronin, Brady, and Huly (2000) used the nine-point Likert scale to measure purchase intentions by the following three statements: (1) to use the service again, (2) to recommend the service to others, and (3) to make the same choice if had to do it again.

Given that the cost of retaining an existing customer is less expensive than prospecting for a new customer (Spreng, Harrell & Mackoy 1995), purchase intention is a very important consideration for marketers. Purchase intentions also directly influenced customer satisfaction (LaBarbera & Mazursky, 1983). Some researchers suggested that satisfaction is more influential in forming one’s purchase intentions than service quality (Cronin & Taylor, 1994). Yi (1990) found a positive relationship between satisfaction and purchase intentions and that firms can recover from almost any failure and preserve a customer’s intent to repurchase from the firm in the future (Goodwin & Ross, 1992; Kelley, Hoffman & Davis, 1993).

A study by Hairul (2004) explores current and potential customers’ channel preferences in buying Takaful coverage in order to determine which strategy is favoured. Understanding customers’ (policyholders’) buying behavior is an important aspect of marketing-based companies, such as Takaful companies. Successful organizations continually monitor both present and potential customers’ buying patterns (David, 2001). According to the theory of reasoned action (TRA), purchase intention is the surrogate measure of the actual purchase (Ajzen, 1991 as cited in Summers and Belleau, 2006).

3. RESEARCH FRAMEWORK AND HYPOTHESIS

The research framework of this study is depicted in Figure 1. There are two main variables in aforementioned model, namely, customer satisfaction and purchase intention. Customer satisfaction is an independent variable of this study, whereas, purchase intention is the ultimate dependent variable. These variables are extracted from the review of extant literature, while their priori relationship has also been envisaged. A positive association between satisfaction and purchase intention is well established in the literature (Kassim & Abdullah, 2010; Johnson, Herrmann & Huber, 2006; Mazursky & Geva, 1989; Szymanski & Henard, 2001; Walsh, Evanschitzky & Wunderlich, 2008). Consequently, the following hypothesis is suggested:

H1: Customer Satisfaction has a direct positive effect on purchase intention

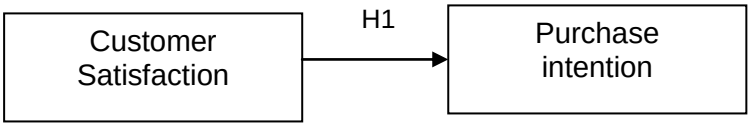


Figure 1 Research Framework

4. METHODOLOGY

4.1. Research Design and Instrument

For this study we used primary data by means of a questionnaire for collection of data. Questionnaires were distributed personally to selected respondents and it took 20 minutes to answer. The items were adapted from previous studies with appropriate changes to make the items more relevant to the present study.

In addition, the question items were designed according to theory and literature, and examined and corrected by experts. Their constructive comments provided a basis for refinement to the construct measures. Responses to these items were made on a seven-point Likert scale which ranged from 1 = “strongly disagree” to 7 = “strongly agree” as illustrated in Table 1.

Table 1 Measurement of study variables

Construct	No of items	Source
Customer Satisfaction	7	Ndubisi (2006); Sanchez-Garcia et al. (2007); Whitten and Green (2007); Wu and Li (2011)
Purchase Intention	7	McDonald (1996); Kim and Cha (2002); Wu and Li (2011)

4.2. Selecting Sample

The sample for this study was selected from the eight Takaful companies in Malaysia. These Takaful operators are Syarikat Takaful Malaysia Berhad, Etiqa Takaful Berhad, Takaful Ikhlas Sdn. Bhd., CIMB Aviva Takaful Berhad, Prudential BSN Takaful Berhad, HSBC Amanah Takaful (Malaysia) Sdn. Bhd., MAA Takaful Berhad and Hong Leong MSIG Takaful Bhd. Anderson et al. (1998) suggested that the sample size of 100-200 is adequate for the structural equation modelling. The target population of this study is participant who has obtained any Takaful products or services from Malaysian Takaful companies more than two years.

5. RESULTS AND FINDINGS

5.1 Demographic Profile of the Respondents

Overall a total of 600 questionnaires were distributed and 390 usable questionnaires were returned, yielding a response rate of 65%. There are more female (60%) than male respondents (40%). Out of this group of respondents, the majority of them were aged between 36 – 45 years old (54%). Obviously, 78% are married and 52% of the respondents worked in the government sector. The remaining 35%, 10% and 3% of the respondents worked in private sector, non-governmental sector and self-employed respectively. The majority monthly income of the respondents were between RM4,001 – RM5,000 (25%) and investment and saving based on Shariah compliance was the main concern of taking Takaful policy (56%). The demographic profile of respondents is presented in Table 2.

Table 2 Demographic profile of respondents

Demographic Information		%
Gender	Male	40
	Female	60
Age Group	<25 years	1
	26-35 years	35
	36-45 years	54
	46-55 years	10
Marital Status	Single	20
	Married	78
	Divorced	1
	Widowed	1
Income Group	Less than RM2,000	8
	RM2,001 – RM3,000	17
	RM3,001 – RM4,000	12
	RM4,001 – RM5,000	25
	RM5,001 – RM6,000	13
	RM6,001 – RM7,000	7
	RM7,001 – RM8,000	8
	RM8,001 – RM9,000	3
	RM9,001 – RM10,000	3
	More than RM10,000	4
Occupation sector	• Government	52
	• Private sector	35
	• Non-government sector	3
	• Self-employed	10
Takaful company	• Etiqa Takful Berhad	57
	• Syarikat Takaful Malaysia Berhad	13
	• Takaful Ikhlas Sdn Bhd	7
	• Prudential BSN Takaful	12
	• MAA Takaful	5
	• CIMB Aviva Takaful	4
	• Hong Leong Takaful	1
	• HSBC Amanah Takaful	1
Reason for Takaful products/services	• Tax benefit	3
	• Investment based on Shariah compliance	5
	• Investment and saving based on Shariah compliance	56
	• Security based on Shariah compliance	30
	• Saving based on Shariah compliance	6

Table 3 Reliability of constructs

Construct	Items	Loading	AVE	α
Customer Satisfaction	SAT1	0.911	**0.817**	**0.964**
	SAT2	0.897		
	SAT3	0.905		
	SAT4	0.921		
	SAT6	0.927		
	SAT7	0.860		
Purchase Intention	PIN1	0.833	**0.685**	**0.938**
	PIN2	0.861		
	PIN3	0.859		
	PIN4	0.816		
	PIN5	0.815		
	PIN6	0.820		
	PIN7	0.787		

Cronbach's Alpha is used to measure the internal consistency of the items used in the study. Table 3 reported that the detail of measurement of the variables of the hypothesized model. the results showed that Cronbach's ˛ of each factor or dimension ranged from 0.938 to 0.964, which meets the requirement of 0.7 or greater. This means that the reliability of each measurement factor is high and reliable for further analysis (Nunnally, 1978).

Table 4 Correlation coefficient between customer satisfaction and purchase intention

		Purchase Intention
Customer Satisfaction	Pearson Correlation	.654**
	Sig. (2-tailed)	.000
	N	390

**. Correlation is significant at the 0.01 level (2-tailed).

The results indicated that there is a positive relationship between customer satisfaction and purchase intention among Takaful participants in Malaysia. As illustrated in Table 4, it can be seen the correlation between customer satisfaction and purchase intention ($r=0.654$, $n=390$, $p<0.05$) which indicates that there is positive, large and significant relationship between these constructs.

Purchase intentions positively correlated to service providers' capabilities to have their customers say positive things, to recommend the services to others, to remain loyal to service providers, to spend more with the vendors, and to pay premium prices (Cronin, Brady, and Huly, 2000).

6. CONCLUSION

Undoubtedly, no business can exist without customers. In order to maintain the participants, the Takaful operators needs to ensure that the right products and services, supported by the right promotion and making it available at the right time for the participants. This study endeavors

to make both theoretical and practical contribution to the literature, and it also provides several implications for future research. Findings from this study will assist policymakers, marketing practitioners, planners and government to change, as needed, in strategies, rules and procedures, and to improve the provision of customer relationship management in this country.

Nevertheless, this study has several limitations and requires further examination and additional research. First, this study has focused on participants with experience in local ownership Takaful companies. Further research is needed to compare participants from local and foreign ownership Takaful organizations for more rigorous result. Second, since this study only considered local ownership Takaful companies, it is unclear whether the analytical results can be generalized to both local and foreign ownership Takaful operators in Malaysia. Finally, since the sample of this study was collected in Malaysia, generalization to other countries might be limited due to cultural differences in managing customer relationship management issues related to Takaful participants' satisfaction and purchase intention.

7. SUGGESTIONS FOR FUTURE RESEARCH

Although the study had met its objectives of interest, the study however has several limitations. Future studies are recommended to compare participants from local and foreign ownership Takaful organizations for more rigorous result. Further research also should be conducted between cities in Malaysia or other countries due to cultural differences in managing customer loyalty in Islamic insurance industry. Coverage on a wider geographical area or city could also be considered for future study in order to enhance the generalization of the findings and to further investigate potential differences in customer satisfaction and loyalty between these areas, especially in Islamic insurance industry.

REFERENCES

Abu Bakar Abdul Majeed, & Shaikh Mohd Saifudden Shaikh Mohd Salleh. (1998). Islam and development in Asia. Kuala Lumpur: Institut Kefahaman Islam Malaysia (IKIM).

Andreassen, T.W., & Lindestand, B. (1998). Customer loyalty and complex services: the impact of customer image on quality, customer satisfaction and loyalty for customers with varying degrees of service expertise. International Journal of Service Industry Management, 9(1), 7-23.

Arifin, J., Yazid, A.S., & Sulong, Z. (2013). A Conceptual Model of Literature Review for Family Takaful (Islamic Life Insurance) Demand in Malaysia.. International Business Research, 6(3), 210-216.

Billah, M. (1996). Comment on Shaikh Al-Azhar's Fatwa against life insurance. New Horizon, 58, 3–6.

Blosch, M. (2000). Customer Knowledge. Journal of Knowledge and Process Management, 7(4), 265 - 268.

Davenport, T. H., De Long, D.W., & Beers, M. C. (1998). Successful knowledge management projects. Sloan Management Review, 39(2), 43–59.

Dekimpe, M. G., Steenkamp, Jan-Benedict E.M. , Mellens, M., & Abeel, P. V. (1997). Decline and Variability in Brand Loyalty. International Journal of Research in Marketing, 14(5), 405-420.

Dick, A.S., & Basu, K. (1994). A Customer Loyalty: Toward An Integrated Conceptual Framework. Journal of Academy of Marketing Science, 22(2), 99-113.

Ehigie, B. O. (2006). Correlates of customer loyalty to their bank: a case study in Nigeria. International Journal of Bank Marketing, 24(7), 494-508.

Fisher, O. C. 1999. Awakening of a Sleeping Giant – Rediscovery of Takaful Worldwide. Directory of Islamic Insurance (Takaful) 2000, Institute of Islamic Banking & Insurance.

Garcia-Murillo, M., & Annabi, H. (2002). Customer Knowledge Management. Journal of the Operational Research Society , (53), 875 – 884.

Gebert, H., Geib, M., Kolbe, L. M., & Brenner, W. (2003). Knowledge Enabled Customer Relationship Management, Journal of Knowledge Management, 7(5), 107-123.

Gibbert, M., Leibold, M., & Probst, G. (2002). Five Styles of Customer Knowledge Management, and How Smart Companies Use Them to Create Value. European Management Journal, 20(5), 459-469.

Haque, A., & Khatibi, Ali. (2007). The Impact Of Internet Marketing On Customer Satisfaction. A Study Malaysian Perspective. Journal of Mobile Communication, 1(1), 29-35.

Homburg, C., & Giering. (2001). A. Personal Characteristics As Moderators Of The Relationship Between Customer Satisfaction And Loyalty-An Empirical Analysis. Psychology and Marketing, 18(1), 43-66.

Jamil Bojie, & Aryaty Alwie. (2010). The Influence of Relationship Quality on Loyalty in Service Sector. International Journal of Economics and Management, 4(1), 81-100.

Johnson, M.D., Herrmann, A. & Huber, F. (2006). The evolution of loyalty intention. Journal of Marketing, 70(2), 122-132.

Kassim, N. & Abdullah, N.A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: a cross cultural analysis. Asia Pacific Journal of Marketing and Logistics, 22(3), 351-371.

Kerin, R.A., Hartley, S.W., & Rudelius, W. (2009). Marketing (9th ed.). Boston: McGraw-Hill Irwin.

Kim, W.G., & Cha, Y. (2002). Antecedents and consequences of relationship quality in hotel industry. Hospitality Management, 21(4), 321–338.

Kim, J., Suh, E., & Hwang, H. (2003). A model for evaluating the effectiveness of CRM using the balanced scorecard. Journal of Interactive Marketing, 17(2), 5–19.

Koid, Swee Lian. Keynote Address. 2007. Presented at the Malaysian Insurance and Takaful Brokers Association (MITBA) 1st CEO Conference at Equatorial Hotel, Bangi. (November,2007).

Kotler, P., & Keller, K.L. (2006). Marketing Management. (12th ed.). Upper Saddle River, NJ: Prentice Hall.

Maysami, R.C., & Williams, J.J. (2011). Evidence on the relationship between Takaful insurance and fundamental perception of Islamic principles. Applied Financial Economics Letter 2(4): 229-232, accessed Mac 10, 2011, http://dx.doi.org/10.1080/17446540500461778.

Mazursky, D. & Geva, A. (1989). Temporal decay in satisfaction-purchase intention relationship. Psychology & Marketing, 6(3), 211-226.

McDonald, M., (1996). Service Quality and Customer Lifetime Value in Professional Sport Franchises. University of Massachusetts. Unpublished dissertation.

Mittal, V. & Kamakura, W.A. (2001). Satisfaction, repurchase intent, and repurchase behavior: investigating the moderating effect of customer characteristics. Journal of Marketing Research, 38(1), 131-142.

Mohd Razif Abd Kadir. (2011). Promoting the Takaful industry in Malaysia. Speech presented at the Launch of ING Public Takaful Ehsan, Kuala Lumpur.

Ndubisi, N.O., (2006). A Structural Equation Modeling Of The Antecedents Of Relationship Quality In The Malaysia Banking Sector. Journal of Financial Services Marketing, 11(2), 131–141.

Nunnally, J.C., (1978). Psychometric Theory (2nd ed.). New york: McGraw-Hill.

Oliver, R. L. (1999). Whence Customer Loyalty. Journal of Marketing, 63, 33–44.

Patel, S. (2008). The Missing Link in Takaful. Middle East Insurance Review, 56-57.

Reichheld, F.F. (1996). Learning from Customer Defections. Harvard Business Review (March/April 1996), 56-69.

Reichheld, F., & Sasser, W. (1990). Zero defects: quality comes to services. Harvard Business Review (Sept/Oct), 105–111.

Szymanski, D.M. & Henard, D.H. (2001). Customer satisfaction: a meta-analysis of the empirical evidence. Journal of the Academy of Marketing Science, 29(1), 16-35.

Walsh, G., Evanschitzky, H. & Wunderlich, M. (2008). Identification and analysis of moderator variables: investigating the customer satisfaction-loyalty link. European Journal of Marketing, 42(9/10), 977-1004.

Yon Bahiah Wan Aris, Siti Zaleha Sahak & Norshahida Shaadan. (2009). A Relook into Awareness, Perceptions, Barriers and Future Insurance Needs: A Case Study of Takaful and the Malays. *International Journal of Arts and* Sciences*, 1(19),* 10 – 21.

The Implementation of Halalan-Toyyiban Supply Chain Management Standards on the Performance of the Malaysia Hypermarket Grocery Retailers: A Preliminary Study

Anizah Zainuddin[1] and Sariwati Shariff[2]

1 Centre for Postgraduate & Professional Studies (CPPS), Malaysia Institute of Transport (MITRANS)
Faculty of Business & Management, Universiti Teknologi MARA (UiTM) Shah Alam 40450 Malaysia
niz@salam.uitm.edu.my

2 Centre for Postgraduate & Professional Studies (CPPS), Malaysia Institute of Transport (MITRANS)
Faculty of Business & Management, Universiti Teknologi MARA (UiTM) Shah Alam 40450 Malaysia
sariwati.m.shariff@salam.uitm.edu.my

Abstract

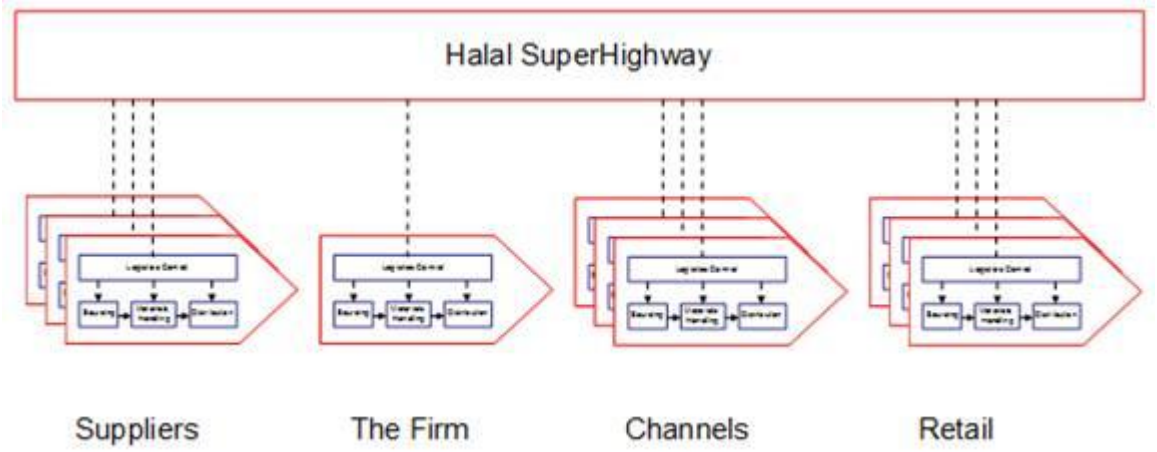
One of the aspects that the grocery retailer needs to take into considerations while be able to serve its customers appropriately is by looking at the effectiveness of their store operations. Grocery shoppers in Malaysia generally, expect low prices, great selection, fresh produce as well as products need to be Halal. This, show that, the grocery retailers have a lot of work to do when it comes to delivering what their customers want and expect. Operations are a primary activity for any Hypermarket retail business. As such, Hypermarket retail business that wants to be successful needs to have a leading operating model. Previous studies on Hypermarket operations utilised models and theories that come under the umbrella of lean management, such as Just-In-Time (JIT), Total Quality Management (TQM) and Customer Service Management (CSM) but none focusing in the utilization of Halalan-Toyyiban Supply Chain Management Standards (MS2400 standards). It was observed that, the Halalan-toyyiban concept is no longer confined to food only, but also covers the process of handling, packaging, storage, transporting and delivery. Helping grocery retailers specifically, Hypermarket to meet with their consumer's requirements and expectations will expand their marketplace and increase their sales and revenue. The current study seeks to explore the consequence of Halalan-toyyiban Supply Chain Management (MS2400) Standards on the performance of Malaysia Hypermarket grocery retailers of four prominent hypermarkets in Malaysia. The study will further suggest appropriate management strategies for grocery retailers that can assist in enhancing their Halalan-toyyiban Supply Chain Management Assurance Standards; thus providing ideas for future researchers of hypermarkets in Malaysia specifically to the study of the MS2400.

Keywords: Halalan-Toyyiban Supply Chain Management Standards (MS2400), Performance, and Malaysia Hypermarket Grocery Retailers

1.0 Introduction

Retail involves the sale of goods from a single point (malls, supermarkets, department stores etc) directly to the consumer in small quantities for his end use. In a layman's language, retailing is nothing but transaction of goods between the seller and the end user as a single unit (piece) or in small quantities to satisfy the needs of the individual and for his direct consumption. From where do you think the retailer purchased all the products? Here the manufacturers and the wholesalers come into the picture. The retailers purchase goods in bulk quantities (huge numbers) to be sold to the end-users either directly from the manufacturers or through a wholesaler (See Table 1).

Table 1: Retail Supply Chain



A retail store which generally sells food products and household items, properly placed and arranged in specific departments is called a supermarket. A supermarket is an advanced form of the small grocery stores and caters to the household needs of the consumer. The various food products (meat, vegetables, dairy products, juices etc) are all properly displayed at their respective departments to catch the attention of the customers and for them to pick any merchandise depending on their choice and need. What about hypermarkets? Hypermarkets are vast self-service warehouse-cum-retail outlet that combines the features of a supermarket, department store, discount store, and specialty store in one location. Retail operations in the hypermarkets are composed of a processes; a designed to add value by transforming inputs into useful outputs. Inputs may be materials, labor, energy, and capital equipment. Outputs may be a physical product (possibly used as an input to another process) or a service. Processes can have a significant impact on the performance of a retail business, and process improvement can therefore improve retail's competitiveness. The retail store is the place where the customers take a decision on the purchase of the products offered by the retailer. The store influences the perception that customers form in their minds about the store, the products, services and staff. From the management's point of view, operations of the store are a major element of the cost. As a consequence, the store itself becomes a critical asset of the retail business and it is imperative that the operations are managed well to achieve and sustain customer satisfaction and be cost effective at the same time. Managing store operations for a small retail business of any size or complexity from the the neighbourhood grocer to the national retail chain is a challenging task. It requires integration among various functions within the

store. When all the functions are performed in an integration manner, the store operations run smoothly.

Hypermarkets, which collectively refer to the group of mass retailers that include superstores, discount retailers and warehouse clubs are increasingly popular among Malaysian consumers. These stores can be defined as very large retail outlets, which cover 4,000–30,000 sq metres (see Table 2). While supermarkets focus on food and housekeeping products, hypermarkets attempt to cover just about every need that average customers may have, and this format is now driving the consumer retail revolution. Foreign retailers started their businesses with what then seemed brave experiments by European veterans in the sector, such as Tesco, as it was argued that Malaysian consumers never shopped in large quantities and that glitzy foreign-brand shops were immediately associated with high prices. These factors would preclude most consumers from visiting and shopping at the large food stores and/or from cash and carry centres. However, two things made hypermarkets an overnight success in Malaysia; '*convenience or comfort'* and '*low prices'* (News Strait Times Special Report, 2002). They made shopping easier and more pleasant by offering a full range of consumer goods (fresh produce and groceries) under one roof, in a clean, air-conditioned superstore. More importantly, they offered low prices by keeping procurement and warehousing costs down.

Table 2
General Information on Hypermarket Chain

Sales area (sq.m.)	4,000 — 30,000
Storage area (sq.m.)	Up to 4500
Number of cash terminals	25 — 60
Number of items in the range (thousands)	25 — 50
Price level in the market	Special pricing policy
Number of purchases per day	Up to 10000
Turnover per month (min US dollars)	2 — 7
Number of employees	900
Own production sites	Numerous

Source: Researcher's compilation from various books, Internet and news papers

2.0 Retail Supply Chains Operations vs. Halalan-Toyyiban Retail Supply Chain Operations

Supply chain refers to the core activity, through the control of information flow, logistics, capital flow, starting from the procurement of raw materials, made of intermediate products and final products and sales network will deliver products to consumers in the hands of suppliers, manufacturing suppliers, distributors, retailers, and until the end-users together into a whole network structure. Generally, mainstream hypermarket or retail supply chain management operation involved planning and managing all activities involved in sourcing and procurement, conversion, warehouse, and all logistics management activities. Importantly, it includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers (Table 3).

Table 3: Traditional Retail Supply Chain Management

Mainstream hypermarket or retail supply chain management integrates supply and demand management within and across companies. For instance, the task of allocating the merchandise to the various stores usually rests with the merchandise management team or the category manager. The store staff then, manages this inventory in their individual store. To enable them to work efficiently, the complete procedure for the handling of merchandise at the store level needs to be documented. Responsibility with respect to merchandise at the store level involve receiving and in warding the goods. Once the merchandise is received at the store level, the quantity and other details like style and sizes have to be checked with the document accompanying the goods, to detect any discrepancies (Zailani, S., et *al*.,2010). In the case of hypermarkets, using a hand held scanner, the merchandise is scanned and the system updated for the stocks received. Proper documentation is needed to be done when returning goods to the various locations as and when required. Halalan-Toyyiban Supply Chain Management is a set of interrelated elements consisting of inputs with *syariah compliance, processes which are halal with added-values, outputs or services with halalness compliances, and controls deploying both syariah-technical requirements*. All these four elements need to be integrated with compliances to the syariah principles (Tieman, 2006; 2010). At the same time, halal integrity must be incorporated into the halal supply chain operations with assurance and preventive system from any possible contaminations or any contaminants such as najs, and causing potential precursors (Zulfakar & Talib, 2014; Jaafar, et *al*., 2011). The halal supply chain operations include activities, movements and handling in transportation, transport modes, transport conditions and transport chain by the organization and its appointed agents. Hence, the halal supply chain operations system can be described as follows;

2.1 Halal inputs

Inputs for halal supply chain operations are categorized as the 8 Ms: namely, *man (workers, people), machines (equipment, machines and appliances), materials (raw materials, inventories), methods (procedures), management (employers and staff), management information system (operating system and ICT), money (funding and financial support), and management of environment and technology* (Mohd Shariff et *all*., 2010). For halal supply chain operations, the inputs must therefore be halal and syariah compliance. The MS2400 standard, Part 1 has explicitly outline mandatory clauses as follows: Clause 3.1

– Requirements related to syariah; Clause 3.2 – Management responsibility; and Clause 3.3 – Halalan Toyyiban system requirements Clauses 3 specify the mandatory requirements for halal supply chain and halal supply chain organizations to comply with all syariah requirements and/or syariah practices. It also outlines the management aspects in planning, leading, organizing towards the setting up of the halal supply chain system. It is the duties of the organization (manufacturers, logistics service providers and suppliers) to ***first, adhere with the provisions of halal inputs; secondly, formulate documented halal policy statements and halalan-toyyiban (HT) objectives for the business; provide adequate resources such as halal and syariah trainings and competencies to the workers; set up halal committees and halal team leaders, define jobs descriptions that fulfil the syariah requirements, and finally, provide communication processes on the effectiveness of the halalan-toyyiban processes*** (Department of Standards Malaysia, 2010). To operationalise these requirements, one of the mechanisms is through developing a HalalanToyyiban Assurance Manual that provides full description on the halalan-toyyiban system deployment and its implementation of the system in fulfilling the standard requirements; and companywide trainings to all levels of staff in the organization.

2.2 Halal processes

Apart from the manufacturing, processes must be halal and halal-certified, the supply chain processes too; must be syariah compliances and halal adherence with added values activities for business and economic gains (Aziz & Chok, 2013). Halal supply chain processes encompass all inbound and outbound transportation services, inclusive of the nature and description of containers and equipment; modes of transportation; placement, stacking and storage conditions; dispatch, receiving, handling and distribution activities with clear process flow diagrams for tracking and traceability on halal movements as specified in the standard MS2400: 2010. Additionally, the formulation of detailed halalan-toyyiban risk management plan is part of the processes that must be carried out to identify all possible risks of contaminations in each of the logistics process in order to substantiate the processes as halal compliances (Department of Standards Malaysia, 2010). The halal processes are also required to be documented through written standard operating procedures (SOPs), process flows and detailed descriptions of the tasks. These must be supported with objective evidences of records to ensure halal integrity, quality assurance, audits and traceability purposes. The requirements for halal supply chain processes are stated in: Clause 3.3 Halalan-toyyiban system requirements; Clause 4.0 Preliminary steps to enable risk management process; and Clause 6.0 Requirements for premise, infrastructure, facilities and personnel. The halalan-toyyiban processes are to described clearly and to be implemented (manage) physically right from the sources; simultaneously identifying all possible risks and contaminants in the process flows; and managing changes in the operations, packaging and equipment that may affect the integrity of the whole halal processes; and last but not the least identifying and implementing appropriate control measures for each process. One effective way to ensure halal processes implementation is to establish a documented master list of management procedures and operating procedures for all the processes; and to conduct periodic management review or operations review meetings for monitoring purposes.

2.3 Controls for Halal

Controls for halal supply chain operations (inclusive manufacturers and suppliers) need to formulated and implemented from both syariah and technical aspects as dictated in the MS2400 Part 1 requirements (Department of Standards Malaysia, 2010). The syariah-based controls are to assure halalness aspects as in the Islamic laws; while the technical controls are to assure the integrity and technicalities (toyyiban) aspects of managing the logistics processes and activities. Likewise, halal and non-halal products must be segregated to prevent contamination (Riaz & Chaudry, 2004). The control mechanisms as specified in the MS2400 are stated in: Clause 3.1 Requirements related to syariah; Clause3.3.3. Validation for procedures of the halalan-toyyiban system requirements; Clause 3.3.3. 4 Halalan-toyyiban risk management plan; Clause 3.3.4.7 Documentation system and management of records; Clause 4.0 Preliminary steps in doing risk management process; Clause 5.0 Operations of the halalan-toyyiban risk management plan; Clause 5.3 Control of non-conformity; Clause 5.4 Isolation and notification; Clause 5.6 Traceability; and Clause 5.7 Control of monitoring and measuring equipment Controls for halal are mainly aimed at risks mitigation on all possible contacts with contaminants or najs that may cause the halal products to become non-halal during the delivery, distribution and logistics processes (Bahrudin et *all*., 2011). The integrity of halal food products must be protected by all means; and necessary controls must be taken by all the parties involved in the supply chain to avoid cross contamination (Zulfakar & Talib, 2014). To operationalise these syariah-based and business-operations controls, strategies can be deployed using the ISO9001 Quality management system and process quality-problem solving tools and innovations approach; the MS1722 Occupational safety and health management system requirements and hazard identification, risk analysis and controls techniques (HIRAC), and applicable strategic management tools such SWOT (Strength, Weakness, Opportunities, Threats); PESTEL (Political, Economical, Social, Technological, Environmental and Legal), VCP (Value Chain Proposition), to mention a few (Malaysian Standards MS ISO9001: 2008 & Malaysian Standards MS 1722).

2.4 Halal Outputs

Supply chain and logistics businesses are mainly dealing with provision of services namely, transportation, receiving, storage, packaging, distribution and delivery services deploying manpower, transport modes and vehicles, and documentations. Since halal supply chain incorporates syariah requirements, the rendering of halal outputs or services must adhere to syariah requirements. Thus, the services must be halal with integrity to ensure wholesomeness with mitigation measures on contaminations with any contaminants or najs. The halal outputs in the supply chain and logistics services are rest assured in halalness and toyyibaness when the halal inputs, halal processes, halal controls are in-placed; with objective documented evidences and demonstrated compliances through syariah-based work practices by the management and the workers in the organization. To remain competitiveness and sustainability in business, halal supply chain certification is a way forward to escalate the image and trustworthiness as halal supply chain organization offering halal syariah-based services (Department of Standards Malaysia, 2010).

The objectives of the study therefore;

- to explore the state of retail supply chain operation and how has it been affected by the emergence of halalan-toyyiban supply chain management standards (MS2400);
- to identify what ways does the mainstream retail supply chain operations' differ in their retail process as compared to halalan-toyyiban supply chain management standards (MS2400);
- to investigate how is the management responding to the MS2400 standards and requirements and
- to find out how Jakim (the authority) response to the performance of MS2400 standards and requirements from the grocery retailers.

3.0 Methodology

The aim of the study is therefore, to understand to what extent the implementation of halalan-toyyiban supply chain management standards (MS2400) play a vital role in the performance of the Malaysia hypermarket grocery retailers and challenges to the country's retailing activity. This study analysed in-depth how and why this halalan-toyyiban supply chain management standards (MS2400) is so different and vital to the Malaysian retailing activity. Questions such as; *what is the nature of retail supply chain operation and how has it been affected by the emergence of halalan-toyyiban supply chain management standards (MS2400)?, in what ways does the mainstream retail supply chain operations' differ in their retail process as compared to halalan-toyyiban supply chain management standards (MS2400)?, how is the management responding to the MS2400 standards and requirements? And how is the authority (Jakim) responding to the performance of MS2400 standards and requirements from grocery retailers*, were investigate during the study. It was also observed that to date, no studies have been published on examining in detail, the role of halalan-toyyiban supply chain management standards (MS2400) on the performance of the Malaysia hypermarket grocery retailers and how they challenge the mainstream hypermarket or retail supply chain management operation drawing on the perspectives of those involved in reporting and observing it.

3.1 Interviews, Observation and Focus Group

The methodologies applied in this study are qualitative in nature. Interviews were conducted in order to understand grocery retailers' views on the implementation of halalan-toyyiban supply chain management standards (MS2400) on the performance of the Malaysia hypermarket. This approach develops an understanding of retailers' subjective experiences (Fossey et al. 2002) by analysing the subjective realities of their experiences in relation. This brings to the investigation of socio-cultural experiences (Polit & Beck 2006) a deeper understanding of how grocery retailers understand subjective meanings, actions and social contexts. Methods such as participant interviews, observation and focus group somehow allow an analysis of documents, texts, and the researcher's impressions and reactions towards the study (Wilson et al. 2010). The process involves not only providing the staffs with guidelines when asking the questions, but also systematically recording and documenting their responses. Using interviews, observations and focus group allows the researcher to probe more deeply to obtain information leading to further questions on the topic. The interviews and focus group has been recorded by a digital voice recorder and

transcribed and translated. Observations, in another hand help researchers to fully understand the whole process of the halal supply chain operations in the selected hypermarkets.

3.2 Setting (who, where, when)

In this study, purposive sampling was necessary to establish two categories of research respondents: firstly, the hypermarket's staffs and management; and secondly, the observers which is the authority; Jakim. In the first stage, two main staffs that are responsible on the operations of the hypermarkets were identified and interviewed in the hypermarkets. Structured questionnaires were used in order to obtain the comment structure of each hypermarket halal supply chain operations condition. Next, a small focus group consists of four staffs and management were performed in each hypermarket in order to support and confirm the findings from the first stage actions. In the final stage, an interview with the Jakim authority was carried out as to approve and endorse to the findings of the study. Altogether, it took seven months to cover all the data collections activities, which has been started during the second week of January 2015.

Data from the study was analysed using thematic analysis, which means coding with the latest Nvivo software; it is essential for managing a large amount of data (Garry W. Auld, et *al*., 2007) This software helps to classify, sort and arrange the information according to themes, and further examine the relationships by shaping selected themes. Thematic analysis helps to produce a recurring pattern that cuts across the large amount of data (Taylor & Bogdan 1984). Themes are concepts indicated by the data and construction of themes and their application should be subjected to the situational demands of a given study. Thus, structure the themes and further subcategorise them according to the roles played by the retailers has been documented. Some interviews need to be translated from English into the Malay language because some respondents preferred to use their mother tongue.

4.0 Results

Although the study was conducted about seven month ago, in reality permission and consent from individual hypermarket for data collection per-purpose were very hard to obtain resulting in an adequate of information gained for the study. Nevertheless, with help from reliable staffs, some information's were managed to acquire. Table 4 displays the findings from the study.

Table 4: Findings of Study

Issues	HG	HT	HA	HM
The state of retail supply chain operation	Good	Good	Good	Good
Affected by the emergence of halalan-toyyiban supply chain management standards (MS2400)	No	No	No	No
Differ in retail supply chain process as compared to halalan-toyyiban supply chain management standards (MS2400) Differ From: ✓ **Halal Inputs** ○ Adhere with the provisions of halal inputs; ○ Formulate documented halal policy statements and halalan-toyyiban objectives for the business;	Yes / -	Yes / -	Yes / -	Yes / -

○ Provide adequate resources such as halal and syariah trainings and competencies to the workers;	-	-	-	-
○ Set up halal committees and halal team leaders;	-	-	-	-
○ Define jobs descriptions that fulfil the syariah requirements;	-	-	-	-
○ Provide communication processes on the effectiveness of the halalan-toyyiban processes.	-	-	-	-
✓ **Halal Process**				
▪ Manufacturing processes must be halal and halal-certified;	/	/	/	/
▪ The supply chain processes must be syariah compliances and halal;	/	/	/	-
▪ Halal supply chain processes encompass all inbound and outbound transportation services, inclusive of the nature and description of containers and equipment;	-	-	-	-
▪ Modes of transportation; placement, stacking and storage conditions must be Halal;	-	-	-	-
▪ Dispatch, receiving, handling and distribution activities with clear process flow diagrams for tracking and traceability on halal movements as specified in the standard MS2400: 2010 was observed;	-	-	-	-
▪ Formulation of detailed halalan-toyyiban risk management plan to identify all possible risks of contaminations in each of the logistics process in order to substantiate the processes as halal compliances;	-	-	-	-
▪ The halal processes are documented through written standard operating procedures (SOPs), process flows and detailed descriptions of the tasks;	Partial	Partial	Partial	Partial
▪ Must be supported with objective evidences of records to ensure halal integrity, quality assurance, audits and traceability purposes.	-	-	-	/
✓ **Controls for Halal (inclusive manufacturers and suppliers)**				
➢ Formulated and implemented from both syariah and technical aspects as dictated in the MS2400 Part 1 requirements. The syariah-based controls are to assure halalness aspects as in the Islamic laws;	-	-	-	/
➢ The technical controls are to assure the integrity and technicalities (toyyiban) aspects of managing the logistics processes and activities.	/	/	/	-
➢ Halal and non-halal products must be segregated to prevent contamination	-	-	-	-
➢ Validation for procedures of the halalan-toyyiban system requirements;	/	/	/	-
➢ Documentation system and management of records;	-	-	-	-
➢ Preliminary steps in doing risk management process;	-	-	-	-
➢ Operations of the halalan-toyyiban risk management plan;	-	-	-	-
➢ Control of monitoring and measuring equipment;	-	-	-	-

➢ ISO9001 Quality management system; ➢ The MS1722 Occupational safety and health management system requirements and hazard identification; ➢ Risk analysis and controls techniques (HIRAC). ✓ **Halal Outputs** ❖ The halal outputs in the supply chain and logistics services are rest assured in halalness and toyyibaness when the halal inputs, halal processes, halal controls are in-placed; ❖ Documented evidences and demonstrated compliances through syariah-based work practices by the management and the workers in the organization; ❖ Image and trustworthiness as halal supply chain organization offering halal syariah-based services.	- - / / / /	- - / / / /	- - / / / /	- - / / / /
Management response to MS2400 standards and requirements	Can be improve	Can be improve	Can be improve	Can be improve
Jakim response to the performance of the MS2400 standards in the grocery stores	Can be improve	Can be improve	Can be improve	Can be improve

5.0 Discussion and Conclusion

Current study exposed that the hypermarket industry need to become increasingly more efficient and serious in implementing and adhering to the MS2400 standards and requirements. The consumption of Halal (or lawful) and the avoidance of Haram (or unlawful) specifically for grocery (food and drink) seem to be very vital to the Malaysian's consumers particularly to the Muslim. The successfully of the implementation of MS2400 standard and requirements means that a product's contents and manufacture has been endorsed by an appropriate authority (Jakim) as meeting the Shariah compliance and requirements relating to food and drinks. Findings however, revealed that generally all hypermarkets or grocery retailers agreed that their state of retail supply chain operation are good and were not directly affected by the implementations of halalan-toyyiban supply chain management standards (MS2400). This may be due to the fact that generally, supply chain operations in the hypermarkets are standardize in nature. Most hypermarkets are specialize in it operation and management activities. In addition, the organization and personnel of the hypermarkets are usually standardize and modern as to achieve the economies of scale. Hypermarket chains carry out a low price, low-margin, and high-turnover business and adapt to mass consumption, mass marketing, mass flow of retail distribution means (Yiting, 2012).

Grocery retailers somehow agreed that the mainstream retail supply chain operations' actually; differ in their retail process as compared to halalan-toyyiban supply chain management standards (MS2400). The results indicated that Halal inputs, Halal process and Halal control were among the challenging parts to be complied. Obviously, this is appropriate as the distribution operating system of hypermarket is imperfect and efficiency of distribution is low. A number of hypermarket chains establish their own distribution centres based on their own circumstances, but mostly the transformation was completed on the basis of the original warehouse, the scale of self-distribution is small and not complete, so the uniform distribution is low, most activities unified distribution rate, resulting in idle, transport equipment cannot be taken full advantage of, thus cause the high cost of supply

chain (Yao, 2004). And a relatively low level of computer applications in distribution centres, mostly done manually. Supply chain technology and equipment, as well as the information processing technology are so backward. It has not formed a perfect supply chain operating system yet.

Nevertheless, the management determined that the MS2400 standards and requirements can someday be fully implemented so much so will guaranty the successful of the MS2400 standard and requirements in the future; and this was back up by Jakim (the authority). In order to understand the fundamental issues of the implementation of MS2400 standards and requirements specifically to the grocery retailers, follow-up studies must be carried out. This is due to the fact that the performance of MS2400 standard and requirements of each hypermarket involved in this study were considered low. This is not surprising, according to the authority; MS2400 standard and requirements is not compulsory for any retailer to stick to. It is however, an added value to improve the performance of the hypermarkets especially in terms of sales and profits.

6.0 Managerial Implications and Future Research

The MS2400 documents first need to be understood by all level of staffs and management not solely to those involve in the operations of the hypermarket as to ensure the effectiveness of it implementations. This can be achieve by properly outlining an appropriate in-house training as to expose thus enhancing staff knowledge on MS2400. Next, commitment from the management of the hypermarket plays a vital role to the advances of it operations that can be seen as an added value or becoming a forte to the retail industry. Finally, both hypermarkets and the authority such as Jakim should work closely as to ensure the implementations of MS2400 can be effectively run smoothly. It is argue that the present study has somehow act as an avenue for researchers to prolong this study as to explore the issue of Halalan-Toyyiban Supply Chain Management Standards (MS2400) and how it effect on the Performance of the Malaysia Hypermarket Grocery Retailers in general.

References

Aziz, Y. A., & Chok, N. V. (2013). The Role Of Halal Awareness, Halal Certification, And Marketing Components In Determining Halal Purchase Intention Among Non-Muslims In Malaysia: A Structural Equation Modeling Approach. Journal of International Food & Agribusiness Marketing, 25(1), 1-23.

Bahrudin, SSM, Illyas, MI & Desa, MI (2011). Tracking And Tracing Technology For Halal Product Integrity Over The Supply Chain. Bandung.

Department of Standards Malaysia (2010). MS 2400-1:2010 (P): Halalan-Toyyiban Assurance Pipeline – Part 1: Management system requirements for transportation of goods and/or cargo chain services, Malaysia.

Department of Standards Malaysia (2010). MS 2400-2:2010 (P): Halalan-Toyyiban Assurance Pipeline – Part 2: Management system requirements warehouse and related activities, Malaysia.

Department of Standards Malaysia (2010). MS 2400-3:2010 (P): Halalan-Toyyiban Assurance Pipeline – Part 3: Management System Requirements for Retailing, Malaysia

Garry W. Auld, et al., Development of a Decision Tree to Determine Appropriateness of NVivo in Analyzing Qualitative Data Sets. Journal of Nutrition Education and Behavior, 2007. 39 (1): p. 37-47.

Jaafar, et al. Innovation in logistics services (halal logistic). in Proceedings of the 16th International Symposium on Logistics (ISL), Berlin, Germany (2011): . 2011.

Yao. K, "Heritage, Zou Wei Supermarket Business Management Practices," Science and Technology Press, Liaoning, 2004.

Malaysian Standards MS 1722: Occupational Safety and Health Management System Requirements. Department of Standards Malaysia.

Malaysian Standards MS ISO9001: 2008 Quality Management System Requirements. Department of Standards Malaysia.

Mohd Shariff, S., Saad, S., Mohamed Esa, M., Ibrahim, I. & Abdul Rahman, N. (2010). Operations Management: A Simplifed OBE Approach, UiTM Press. Malaysia.

Riaz, M.N. & and Chaudry,M.M. (2004). Halal Food Production. Florida, CRC Press LLC.

Tieman, M., The Future of Halal Logistics Solutions, in The Halal Journal. 2006, KasehDia Sdn Bhd.

Tierman, M. (2010) Halal Logistics -Logistics Insight Asia, 1/1/2010. Logistics Insight Asia.

Yiting Gao Jinling, Status and Optimization Strategies Based Supermarket Chain of the Supply Chain and Distribution Mode —Distribution Center Suguo Maqun as an Example Fangtao Jiang, iBusiness, 2012, 4, 335-340.

Zailani, S., et al., Halal Traceabiliy and Halal Tracking System in Strengthening Halal food Supply Chain for Food Industry in Malaysia (A Review). Journal of Food Technology, 2010. 8(3): p. 74-81.

Zulfakar, M.H., Anuar M.M. & Talib, M.S.A. (2014). Conceptual Framework On Halal Food Supply Chain Integrity Enhancement. Procedia- Social and Behavioral Sciences. 121. 58-67.

The Relationship between Servicescape and Customer Satisfaction in Higher Learning Institution

Mohammad Zaim Mohd Salleh[1], Ainunnazlee Mohd Ali[2], Azmi Mat[3], and Nor Sara Nadia Muhammad Yunus[4]

1 Faculty of Business and Management, Universiti Teknologi MARA, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor, zaim3085@puncakalam.uitm.edu.my

2 Faculty of Business and Management, Universiti Teknologi MARA, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor, ainunnazlee3098@puncakalam.uitm.edu.my

3 Faculty of Business and Management, Universiti Teknologi MARA, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor, azmimat@puncakalam.uitm.edu.my

4 Faculty of Business and Management, Universiti Teknologi MARA, Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor, norsara2711@salam.uitm.edu.my

ABSTRACT

Customer satisfaction is the important aspects in any organization in any organization especially in service industry. The physical environment is very important since it directly affects customer satisfaction. Servicescape is all physical elements in venues of service provides such as lighting, textures, material, upholstery, color, music, fragrances, and temperature of the environment contribute to creating the servicescape. The company's physical environment is designed for the needs of employees and customers will be more satisfying to its customers than companies that do not consider the needs of employees and customers. This indicates that the customers will try to maximize their satisfaction by choosing a bank that provides servicescape suitable to their needs.

Key Words: Servicescape, Customer Satisfaction

1. INTRODUCTION

Customer satisfaction is the important aspects in any organization in any organization especially in service industry. Customer satisfaction has a positive effect on an organization's profitability. Much of empirical evidence shows also shows positive connection between customer satisfaction, loyalty and retention. This is because, nowadays all the companies are realizing the significance of delivering and managing service quality which leads to customer satisfaction (Angelova & Zekiri, 2011). Customer satisfaction can be defined as "satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire" (Hansemark & Albinson, 2004). Customer satisfaction also can be referring to an affective state that is the emotional reaction to an experience or a sequence of experiences with seller (Ram, Bhargani & Prabhakar, 2011). So, the levels of customer satisfaction play an important role to develop organization policies and objectives as well as business strategies to increase customer satisfaction through providing quality products and service to the customers. So, any of firm can get the level of customer satisfaction at the end of the last visit in the organization.

Servicescape has significant influence on customer satisfaction. Servicescape is all physical elements in venues of service provides such as lighting, textures, material, upholstery, color, music, fragrances, and temperature of the environment contribute to creating the

servicescape (Namasivayam & Lin, 2008). A servicescape can be defined as "the physical environment and service staff qualities that characterise the context which houses the service encounter, which elicits internal reactions from consumers leading to the display of approach or avoidance behaviours" (Harris & Ezeh, 2008). In addition, Zeithmal, Bitner & Gremler, (2009) said that servicescape is the environment in which a service is delivered and in which the firm and the customer interact, and any tangible commodities that facilitate performance or communication of the services. So that, including customer in the servicescape important mainly because many service are performed in the presence of other customers and because the customers attracted in the service delivery space are an attraction for other customers (Dragomir & Cuita, 2013).

Ambience condition can be considered to be intangible aspects of the slot environment capable of affecting the five senses such as temperature, sound, lighting, air quality and others. Ambient condition can influence customer satisfaction and employee performance. Based on Lovelock & Wirtz, (2007), ambient condition can be referring to those characteristics of the environment that affects the five senses. All design elements and details must be compatible in order to create the desired service environment (Berglund & Halvarsson, 2008). Ambience condition also can create desired behavioral responses among customers and employees. In addition, it also can influence how customer believe the products and service they will receive inside the building (Russel & Snodgrass, 1987), they also can influence the level of pleasure and they can have tangible impact upon customers physical comfort and discomfort. It has already been proved that ambience condition may have impact on customers.

As we know, signs, symbol and artifacts is a clue for visitor if they visit to one place or another. Signs displayed on the exterior and interior of a structure are examples of explicit communication. Other than that, signage is and other non-human element, it is a part of communication tools used from manager or employees to customers to facilitate customers progression through the servicescape (Ferrera, 2015). Signs, symbol and artifacts can be used as labels such as name of company, name of department and others, for the directional is entrance, exit and to communicate rules of behavior is no smoking, no food and drinks and others (Bitner, 1992). Furthermore, signs, symbol and artifacts refers to physical signals that manager employ in servicescape to communicate general meaning about the place to consumers (Rosenbaum & Massiah, 2011). So, signs, symbol and artifacts are particularly important in forming first impression, for communicating the service concept and it is highly competitive industries where customer are looking for cues to differentiate the organization.

Spatial layout refers to the way in which objects such as machinery, equipment and furnishings are arranged within the environment. Spatial layout make people feel constricted may have a direct effect on customer quality perception, excitement levels, and indirectly on their desire to return (Ryu, 2011). Design also include in spatial layout which is color, furnishings and others. If the layout is design with beauty and the decoration are interesting, it will create positive environment and the level of customer satisfaction also will increase. Other than that, space also can influence of the physical machines, equipment, furnishing and design on the approach avoidance decision and the exchange process within a service (Rasembaum & Massiah, 2011). Managing the space and layout should be one of the main priorities of company because it can illustrate the company function.

2. LITERATURE REVIEW

The physical environment is very important since it directly affects customer satisfaction. This is consistent with the opinion of Bitner (1992) saying that physical environment affects customer satisfaction for services provided. For services, the use of creative physical design can support the placement and the segmentation strategies and strengthen the specific goals of marketing such as customer satisfaction and attention. This means that customer satisfaction can be maximized

using a physical design in the form of servicescape as a marketing strategy of the service provider. The same opinion is expressed by Hightower (2003) that the company's physical environment is designed for the needs of employees and customers will be more satisfying to its customers than companies that do not consider the needs of employees and customers. This indicates that the customers will try to maximize their satisfaction by choosing a bank that provides servicescape suitable to their needs.

Ambience Conditions

Wakefeild and Baker (1998) said that there are previous research studies that have suggested that the ambience conditions is a service organization is an important determinant of patron's behavior. Alternatively, Aubert Gatmet and Cova (1999) said that the ambience conditions itself is considered as instrumental in customers assessment of the quality and level of service they can expect and, consequently, in customer satisfaction with service business. The ambience condition of international arrival may influence customer's emotional state and thereby have important effect on their behavioral responses and patronage. Ambience conditions as a factor that affects perceptions of human responses to the environment includes background characteristics of the environment such as temperature, noise, music, scent, and lighting (Wohlfarth, 1984; Baker, 1987; Russel & Snodgrass, 1987; Kim 1998). As a general rule, ambient conditions affects the five senses, though sometimes such dimensions may be totally imperceptible, yet it may have profound effects particularly on employees who spend long hours in their work environment (Russel & Snodgrass, 1987).

Several studies propose that ambience, such as music and social, such as employees are the most influential factors within a servicescape. Regarding music to customers, the research show that it affects customer behavior. This is because music has been observed as a powerful stimulus in shaping the retail experience because music are used for attention, identification, association and remembrance in many more settings than just retailing. Other than that, different of music also will effect customer's mood and emotion. For example, music ameliorated the emotional evaluation of the environment for consumers waiting for a service (Hui, Dube & Chebat, 1997).

Another example of ambience condition also scent. Scent also might influence customer behavior in a positive or negative ways. For example is pleasant scents promote a favorable perception of the service environment (Morrin & Ratneshwar, 2003) and have a positive effect on mood (Spangenberg, Crowley & Henderson, 1996), on the amount of time consumers spend in stores (Donovan, Rossiter, Marcoolyn & Nesdale, 1994; & Spangerbeg, Crowley & Henderson, 1996), and on overall expenditure and the number of brands purchased (Bone & Ellen, 1999). Furthermore, based on (Mattila & Wirtz, 2001), ambient scents and music are congruent with each other in relation to their arousing qualities, consumers make a significantly more positive evaluation of the service environment, exhibit a higher propensity for approach and impulse buying behavior and are more satisfied than when these cues do not fit with each other.

The importance of ambient condition has also been recognized in any of the organization whether in service industry or others industry. This is because it can affect employee job performance in the organization as well as customer satisfaction who purchase the product and service from the organization. In addition, for example, research also supports ambient scent affecting performance in the workplace. When exposed to a pleasant scent people are more creative in problem solving versus when they are exposed to an unpleasant scent (Herz, 2002).A growing body of literature shows that prosocial behavior and productivity are enhanced in the presence of pleasant ambient scents (Baron, 1997 & Herz, 2002). People who work in the presence of a pleasant scent also

reported higher self-efficacy, set higher goals, and were more likely to employ efficient work strategies than participants who worked in a no-scent condition (Herz, 2002).

Signs symbols and artifact

Signs, symbols and artifacts as visual communication tool in the service organization consist of graphics and theatrical effects that are used to assist in the discharge of service, providing service product or information and product recommendations or special purchases. It serves as explicit or implicit signals that communicate about the place to its users (Becker, 1981). The explicit communicators are examples of those signs displayed on the exterior and interior of a structure which may be used as labels for inscription of company name: and department or any other, for directional purpose, (example, egress and ingress) and to communicate rules of behavior (example, no smoking, restrictions on age). It may also contain communications of symbolic meaning and create an aesthetic impression of quality of materials used in artwork, construction, presence of certificate and photographs on walls, floor coverings and personal objects (Levy & Weitz, 2004). Signs and symbols are extremely complex and should be used sparingly as may be intentionally or accidentally conveyed and subject to multiple interpretations of intended and unintended consequences to both the customer and the service provider.

In addition, signs, symbol and artifacts communicate the firm's image. In any of the organization, signs are important because it can let customers know what company it is. To attract or deterring entry, the servicescape can actually influence the degree of success consumers experience in executing their plans once inside (Darley & Gilbert 1985; Russell & Snodgrass 1987). Each individual comes to a particular service organization with a goal or purpose that may be aided or hindered by the setting. For example, assume that a traveler enters an airport and (1) is confused because he or she cannot find signage giving directions to the assigned gate and (2) is emotionally distressed because of crowds, poor acoustics, and high temperature. The traveler is unable to carry out the purpose for entering the environment, at least not very easily. Here the servicescape directly inhibits the accomplishment of the customer's goal. Similarly, physical surroundings and conditions could constrain an employee's ability to do his or her work and thereby detract from the purpose for being in the servicescape.

Spatial Layout and Functionality

Spatial layout refers to the ways in which machinery, equipment and furnishings are arranged, the size and shape of those items, and the spatial relations amongst them, and functionality refers to the ability of those items aforementioned to facilitate performance and also accomplishment of purpose which it's meant for. Previous empirical research in psychology and organizational behavior of spatial layout and functionality dimensions always from the employees point of view (Sundstrum and Sundstrom, 1986). With the exception of some research on service organization layout, congestion, safety, comfort, confidence, and the use of orientation aids (Levine, Marchon, and Hanley 1984). Sense of belonging may also influence the spatial layout of customers within the environment and identification with a service provider. Though, not much has been done about the effects of spatial layout and functionality on customers in service organizational settings.

Based on the study by Wakefeild and Baker (1998), the physical environment includes elements such as layout, interior architecture and decoration, lighting, music, aromas and cleanliness. Namesivayam and Lin (2008) also state that physical settings of the physical environment of an organization consist of elements, such as overall layout, design, and decoration. The physical setting also includes elements of atmospherics, such as temperature, lighting, color, music, and scent (Bitnes, 1992; Namsivayam & Lin, 2008). Physical setting also influences not only

consumers cognitive, emotional, and physiological states but their behavior (Bitner, 1992; Namsivayam & Lin, 2008).

Environmental psychologists suggest that individuals react to places with two general, and opposite, forms, of behavior: approach and avoidance (Mehrabian & Russell 1974). Approach behaviors include all positive behaviours that might be directed at a particular place, such as desire to stay, explore, work, and affiliate (Mehrabian & Russel 1974). The field also encompasses the study of human beings and their relationships with the natural and social environment. What distinguishes environmental psychology from other areas of inquiry is its concern "with the reciprocal and interactive influences that take place between the thinking and behavior of an organism and the environment surrounding that organism" (Darley & Gilbert 1985).

The research tradition in environmental psychology strongly suggests that physical environment can influent behaviors in several ways. Therefore the first step in the purposeful design of the servicescape is to identify desirable customer behavior and the strategic goals that the organization hopes to advance through its physical facility. For example, in designing their corporate headquarters offices, Scandinavian Airline system first identified particular goals that it wanted to achieve, among them teamwork and open and frequent communication among managers. The employee behaviors associated with those goals were identified and architects were commissioned to propose designs that would be conducive to the behaviors and ultimately support the strategic goals. In other cases, perceptions of the servicescape may simply help people to distinguish a firm by influencing how it is categorized. Categorization is the process by which people assign a label to an object; when people see a feathered animal flying through the air. They categorize it as a ‘bird’ and not a ‘fish’ (Loken & Ward 1990: Mervice & Rosch 1981).

3. CONCLUSION

The study is very much important to identify the level of customer satisfaction in assessing the servicescape at their higher learning institution. Furthermore, servicescape can help in bringing good image of the higher institution. The development of servicescape can be considered as vital as it is significantly influence the customer satisfaction.

REFERENCES

Angelova, B. & Zekiri, J. (October 2011). Measuring Customer Satisfaction with Service Quality using American Customer Satisfaction (ACSI Model). International Journal of Academic Research in Business and Social Sciences. 1: 3.

Albert-Gamet, V. & Cover, B. (1999). “Servicescape” from Modern non Places to Post Modern non Places to Post Modern Common Places. Journal Business Research. 44: 37-4.

Anwar, S. A., Sohail, M. S. (2004). Festival tourism in the United Arab Emirates: first vtime versus repeat visitors perceptions. Journal of Vacation Marketing. 10 (2): 161-170.

Cuieford, J.D. (1965). Fundamental statistic in psychology and education. New York, NY: McGraw-Hill

Gatmet, A. &Cova (1999) Servciescape and customer patronage. Journal of International Business Management. 62: 120-137.

Baker, S.M. (1987). Does Employee Dynamics Moderate the Influence of physical settings on Patronage. Journal of Marketing Review. 56: 102-116.

Baker S. M. (2007): How Consumers with Diabetes Perceive Welcome in Retail Servicescapes. A Critical Incident Study, Service Marketing. 21: 160-172.

Becker, F. D. (1977). Housing Messages. Stroudsburg. PA: Dowden, Hutchinson & Ross, Inc.

Berglund, M. & Halvarsson, Y. (2008). A case study of the servicescape's effect on relationships between customers and employees. Managing the Physical Environment in Services Organizations: Lulea of University of Technology.

Bitner, M. J. (April 1992). Servicescape: The Impact of Physical Surroundings on Customers and Employees. Journal of Marketing. 56 (2): 57-71

Bone, P. & P. S. Ellen. (1999). Scents in the marketplace: explaining a fraction ofolfaction. Journal of Retailing. 75 (2): 243-262.

Darley, R. & Snodgrass, J. (1987). "Social Psychological Aspects of Environmental Psychology," in Handbook of Social Psychology, 3 ed., Vol. II, Gardner Lindzey and Elliot Aronson, eds. New York: Random House, Inc., 949-91.

Dobre, C., Dragomir, A. C. & Ciuta, A. M. M. (2013). A Marketing Perspective of the Influences of Waiting Time and Servicescape on Perceived Value. Management & Marketing Challenges for the Knowledge Society. 8(4): 683-698.

Donovan R.J., & Rossiter, J. R. (1982). Store atmosphere: a psychology approach. Journal of Retailing 58 (1): 34.

Donovan R.J., Rossiter, J. R., Marcoolyn, G. & Nesdale, A. (1994). Store atmosphere and purchasing behavior. Journal of Retailing 70 (3): 283.

Ferrera, O. (2015). The customer's perception of servicescape's influence of their behaviours, in the food retail industry. Msc Marketing. 24.

Francis, R.L., & White, J. A. (1992). Facility Layout and Location: An Analytical Approach. Englewood Cliffs, NJ: Prentice Hall

Han, H., & Ryu, K,.(2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the family restaurant industry. Journal of Hospitality and Tourism Research. 33 (4): 487-510.

Hansemark, C. O. & Albinson, M. (2004). Customer Satisfaction and Retention: The Experiences of Individual with Employees. Managing Service Quality. 14: 1.

Harris, L. C. & Ezeh, C. (2008). Servicescape and loyalty intentions: An empirical investigation. European Journal of Marketing. 42: 3-4, 390-422.

Hui, M. K., Dube, L., & Chebat, J. (1997). The impact of music on consumers' reactionsto waiting for services. Journal of Retailing. 73:87-104.

Kermani, Z. Z. (2013). A Study of the Linking Between Job Satisfaction and Customer Satisfaction: A Case Study of Iran Insurance. Journal of Marketing Development and Competitiveness. 7(4): 105.

Kim, W. G., & Moon, Y. J. (2009). Customers' cognitive, emotional and actionable response to the servicescape: a test of moderating effect of the restaurant type. International of Hospitality Management. 28: 144-156.

Levy & Weitz, (2004) Light, Decoration, Arousal, Comfort and Communication; Journal of Environmental Psychology. (8): 177-189.

Levine, M. & Hanley. (1984). Physical environment: the value of customers in service firms. Journal of Marketing. 83: 55-70.

Loken, B. & Ward, J. (1990). Alternative Approaches to Understanding the Determinants of Typicalit. Journal of Consumer Research. 17: 111-26.

Lovelock, C. & Wirtz, J. (2007). Service Marketing. People, Technology, Strategy, Pearson International.

Mattila, A. S. &Wirtz, J. (2001). Congruency of scent and music as a driver of in store evaluations and behavior. Journal of Retailing. 77: 273-289.

Morrin, M. & Ratneshwar, S. (2003). Does it make sense to use scents to enhance brand memory?. Journal of Marketing Research. 40(1): 10-25.

Namasivayam, K. & Lin, I. (2008). The servicescape. In Jones, P. (Ed). The Handbook of Hospitality Operation and IT. 43-62. New York: Elsvire Ltd.

Patil, S. (2014). Impact of Retail Servicescape on Buying Behavior. Journal of Management Research. 6: 11-13

Ram, P., Bhargavi G. S., & Prabhakar, G. V. (Nov 2011). Work Environment, Service Climate and Customer Satisfaction: Examining theoretical and Empirical Connections. International Journal of Business and Social Science. 123.

Rosenbaum, M. & Massiah, C. (2011). Does Servicescape Influence Patronage. Journal of Marketing. 58: 120-139.

Rosenbaum, M. & Massiah, C. (2011). An expanded servicescape perspective. Journal of Service Management. 22(4): 4:471-490.

Russel, J. A. & Snodgrass, J. (1987). Servicescape: The Impact of the Physical Environment surroundings on customers and employees. Journal of Marketing. 56: 5-57, 69-82.

Russel, J. A. & Snodgrass, J. (1987). Emotion and the Environment in D.Stokols and I. Altman (Eds). Handbook of Environment Psychology. 1: 245-281.

Ryu.K. (2011). New or repeat customer: How does physical environment influence their restaurant experience. International Journal of Hospitality Management.599-611.

Spangenberg, E. R., Crowley A. E., & Henderson, P. W. (1996). Improving the store environment: do olfactory cues effect evaluations and behaviors? Journal of Marketing. 60: 67-80.

Sulek, J. M., & Hensley, R. L,. (2004). The relative importance of food, atmosphere, and fairness of wait: the case of full service restaurant. Cornel Hotel and Restaurant Administration Quarterly. 45 (3): 235-247.

Sundstrum and Sundstrom, (1986). Organizational Legitimacy and retail Store Patronage. Journal of Business Research, 35: 229-239.

Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: a review of the experimental evidence. Journal of Business Research. 49 (2): 193-211.

Zeithmal, V. A., Bitner, M. J. & Gremler, D. D. (2009). Services Marketing. Integrating Customer Focus across the Firm 5 ed. Bostion: McGrawn Hill

TRACK III

FINANCE AND ECONOMICS

A Study on Capital Structure and Financial Performance of Indian Textile Industry

*Dr K.K.Ramachandran ** Mrs. M.Madhumathy

*****Director, Vice Principal, GRD School of Commerce and International Business, Dr.G.R.Damodaran College of science, Coimbatore.

**Research scholar, GRD School of Commerce and International Business, Dr.G.R.Damodaran College of science, Coimbatore.

Abstract

The Capital structure is one of the most basic and important research fields in theory of corporate finance. Capital structure of an organisation is being affected by many features, and an organisation must try to decide most favorable blend of investment or funding. Even after 57 years of Modigliani and Miller irrelevance theorem, the basic question how firm chooses their capital structure remains unclear. The Indian textile Industry has an overwhelming presence in the economic life of the country. It is the second largest textile industry in the world after China. Apart from providing one of the basic necessities of life the cloth, the textile industry contributes to the country's industrial output and export earnings. In this paper an attempt is made to identify the impact between capital structure and financial performance of the textile industry.

Keywords

Capital structure, Indian Textile industry, Profitability ratio, Financial performance and Correlation

INTRODUCTION

Capital structure is the most significant discipline of company's operations. 'Capital structure' represents the total long-term investment in a business firm. It includes funds raised through ordinary shares, preference shares, bonds, debentures and term loans from financial institutions, etc. Decision regarding the type of capital structure of a company should play a critical role since capital has impacts on profitability and solvency. Small companies often do not plan their capital structure; the capital structure is allowed to develop without any formal planning. These companies may do well in the short run; however,

sooner or later they face considerable difficulties. The unplanned capital structure does not permit a fiscal use of the funds for the company, irrespective of its size. A company should therefore plan its capital structure in such a way that it derives maximum advantage out of it and should easily adjust to the changing conditions. The determination of an optimum capital structure in practice is a formidable task, and has to go beyond the theory. A number of factors influence the capital structure decision of a company. The judgment of the person or group of persons making the capital structure decision plays a crucial role. Two similar companies may have different capital structures, if the decision makers differ in their judgment about the significance of various factors.

The Indian textile industry is one of the largest in the world with a massive raw material and textile manufacturing base. Our economy is largely dependent on the textile manufacturing and trade in addition to other major industries. It is second largest in the world next to China. The Indian textile industry contributes to nearly 12 percent of India's forex earnings. This is the only industry which has been posting growth graph year after year. Though India is self-sufficient in textile industry, the country's share in the world market is a just four percent compared to 35 percent of China. India needs to focus on scaling operation if this scenario has to change. It can be achieved only through investments in the mega Textile Park, which can then be single point manufacturing and disbursing centers for export needs. This can also be a safe revenue model for the country's textile needs. As of India's position in the global textile value chain, the numbers are impressive. India hosts roughly 25 percent of the global spinning capacity. India produces 20 percent of global cotton supply both for domestic use and for export. The country ranks number two in the global textile and apparel exports. Above 27 percent of the foreign exchange earnings are on account of exports of textiles and clothing alone. The textile industry accounts for 21 percent of the total employment generated in the economy.

The textile sector is highly diverse and has hand-spun and hand- woven segments at one end of the spectrum, and capital intensive sophisticated modern mills on the other.

TEXTILE SECTOR REMAINS HIGHLY-FRAGMENTED

The textile segment is highly fragmented and many large textile companies are also conglomerates of medium-sized mills. According to the statistics released by the Ministry of textiles, the entire textile industry is highly fragmented except the spinning sub-segment. The organised sector contributes more than 95 percent of spinning and about 5 percent of weaving

fabric. Small scale industries perform the bulk of weaving and processing operations. The unorganized sector forms the bulk of the industry, comprising handlooms, power looms, hosiery and knitting, readymade garments, khadi and carpet manufacturing units. The organised mill sector consists of spinning mills involved only in spinning activities and composite mills where spinning, weaving and processing activities are carried out under a single roof. These organised units are mostly independent and small scale in nature unlike the composite units that undertake all activities together.

STATEMENT OF THE PROBLEM

In reality, capital structure of a firm is difficult to determine. Financial managers are finding it challenging to determine the optimum capital structure. A firm has to issue various securities in a countless mixture to come across particular combinations that can maximize its overall value. If a wrong mix of finance is employed; the performance and survival of the business enterprise may be seriously affected. Survival and growth needs resources, but financing of these resources has limitation.Therefore, the present study is undertaken to know the impact of capital structure on the financial performance of selected Indian textile companies.

OBJECTIVES OF THE STUDY

- To analyze the financial performance of selected textile companies.
- To study the inter -company variation with regards to resorting to various sources of finance

RESEARCH METHODOLOGY

Source of information

The study is based on secondary data. The main source of data is from Capitaline Plus database; it has detailed financial and non-financial information of about 15,000 listed and unlisted companies, annual reports of the sample unit and to supplement the data different publications, various books, journals and different websites related to textile industry have been used for better reliability.

Period of the study

The study covers a period of ten financial years from 2004-2005 to 2013-2014.

Sampling

Ten textile companies are taken for the study. They are Ambika Cotton Mills Limited, Banswara Syntex Limited, Bannari Amman Spinning Mills, Bombay Rayon Fashion Limited, Century Enka Limited, Kitex Garments Limited, KPR Mill Limited, Mandhana Industries, Nitin Spinners Limited and Page Industries Limited. All ten companies taken for the study are listed in the both Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) with a market capitalisation over 100 Crores.

Tools for Analysis

Percentage analysis and multiple correlation tests are applied to analyse the collected data.

LIMITATIONS OF THE STUDY

1. The study carries all the limitations inherent with the secondary data and financial information.
2. The study restricted to selected companies for the period of ten years only.
3. Various accounting and statistical tool extensively used for the study have their own incidental limitations.

REVIEW OF LITERATURE

Modigliani and Miller Approach (1958) according to them "MM hypothesis is based on the idea that no matter how you divide up the capital structure of a firm among debt, equity, and other claim, there is a conservation of investment value. The total pie does not change as it is divided into debt, equity, and other securities. The sum of the parts must equal the whole; so regardless of financing mix, the total value of the firm stays the same".

Anshu Handoo and Kapil Sharma (2009) conducted a research on "A study on determinants of capital structure in India" they observed that, the trade off a company makes between financial flexibility and fiscal discipline is the most important consideration in determining its capital structure and far outweighs any tax benefits, which are negligible for most large companies unless they have extremely low debt. Hypotheses based on comparing the relationships between short term debt, long term debt, and total debt and 10 explanatory variables that represent profitability, growth, asset tangibility, size, cost of debt, liquidity, financial distress, tax rate debt serving capacity, and age were developed to test which independent variable best explained the capital structure of Indian companies.

Zhenting Lee, Shuting Liang and Anton Miglo (2014) in their study on "Capital structure of internet companies" analysed that large internet companies usually have low debt and small internet companies have high debt. They found that the trade-off theory of capital structure, pecking order theory, market timing theory and other theories cannot individually determine a firm's capital structure and their use of sources of financing accurately, but can complement each other.

Mubeen Mujahid and Kalsoom Akhtar (2014) conducted a study on "Impact of Capital structure on firms financial performance and shareholders wealth: Textile sector of Pakistan" concluded that the Capital structure of the firms have the significant positive impact on the Firms Financial Performance and Shareholders wealth. They have done the regression analysis on 6 years data from 2006 to 2011 of Overall textile sector including 155 firms to analyze the impact of Capital structure on the Firms Financial Performance and Shareholders wealth in Textile sector of Pakistan. They have used Return on Equity (ROE) and Return on Assets (ROA) ratios as Firms performance measures to assess the impact of Capital structure on the Firms financial performance and EPS ratio as shareholders wealth measure to check the affiliation between Capital structure of the firms and their shareholders wealth.

DEBT -EQUITY RATIO

The debt-equity ratio is determined to ascertain the soundness of the long term financial policies of the company. It is also known as 'External-Internal' equity ratio. It can be calculated as the proportion of external equities to internal equities. Debt –Equity ratio indicates the degree of leverage of a company. Higher the ratio indicates less protection for the creditors and depositors of the company.

Table 1 – Debt –Equity ratio over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	1.41	0.78	55.32	0.27	2.51
2. Banswara syntax Limited	3.54	0.42	11.86	3	4.2
3.Bannari Amman Spinning Mills	1.85	0.76	41.08	0.54	2.78
4.Bombay Rayon Fashion Limited	1.15	0.45	39.13	0.59	2
5.Century Enka Limited	0.56	0.25	44.64	0.25	0.96
6.Kitex Garments Limited	2.33	1.49	63.95	0.69	5.14
7.KPR Mill Limited	1.78	2.33	130.79	0.63	8.39
8.Mandhana Industries	2.17	0.74	34.10	1.53	3.81
9.Nitin Spinners Limited	2.57	1.07	41.63	0.92	4.05
10. Page Industries Limited	0.71	0.50	70.42	0.37	1.97
Average	1.81	0.88	53.29	0.91	3.58

Source: Secondary data compiled from Capitaline Plus database.

The table 1 shows that the lower debt-equity ratio in Century Enka Limited and Page Industries Limited provides the greater long term financial safety to its creditors whereas other companies provide less protection to their creditors because of their higher debt -equity ratio. The deviation is less in Century Enka Limited (0.25) which is very good, whereas in KPR Mill Limited (2.33) it is too high. The ratio was more consistent in term of dispersion for Banswara Syntex Limited (CV: 11.86) and less consistent for KPR Mill Limited (CV: 130.79).The minimum debt- equity ratio is maintained by Ambika Cotton Mills Limited and Century Enka limited in the year 2014. The maximum debt -equity is by KPR Mill Limited in the year 2005 and Kitex Garments Limited in 2007.

NET PROFIT MARGIN

Net profit margin also called profit margin is the most basic profitability ratio that measures the percentage of net income of an entity to its net sales.Net profit margin is used to compare profitability of competitors in the same industry. It can also be used to determine the profitability potential of different industries. It depends on the extent of competition, elasticity of demand, production differentiation, etc. of the relevant product or market.

Table 2 – Net Profit Margin over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	10.39	4.06	39.08	5.1	17.87
2. Banswara syntax Limited	2.50	1.64	65.6	1	5.77
3.Bannari Amman Spinning Mills	7.94	7.62	95.97	-3.54	21.17
4.Bombay Rayon Fashion Limited	7.10	7.74	109.01	-14.05	12.94
5.Century Enka Limited	3.16	2.57	81.33	0.53	8.09
6.Kitex Garments Limited	6.81	2.94	43.17	3.27	12.97
7.KPR Mill Limited	7.18	5.36	74.65	0.02	16.96
8.Mandhana Industries	6.70	1.61	24.03	3.91	8.65
9.Nitin Spinners Limited	2.02	3.95	195.54	-5.37	7.11
10. Page Industries Limited	11.45	2.09	18.25	5.79	12.87
Average	6.53	3.96	74.66	-0.33	12.44

Source: Secondary data compiled from Capitaline Plus database.

The table 2 shows that Page Industry Limited (11.45) and Ambika Cotton Mills Limited (10.39) with higher ratio is more effective in cost control. The deviation is low in Mandhana Industries (1.61) and was found very high in Bombay rayon fashion ltd (7.74) and Bannari Amman spinning mills(7.62).The highest coefficient of variation was found in Nitin spinners limited(195.54)proving its less consistency and Page industries limited (18.23)is more consistent. Bombay rayon fashion ltd (-14.05) in the year 2014 has a loss. Six companies out of ten seem to have an above average performance with regard to net profit.

RETURN ON CAPITAL EMPLOYED (ROCE)

It is also known as Return on Investment (ROI) .It indicates the return on the total capital employed in the business. The return on capital employed measures the proposition of adjusted earnings to the amount of capital and debt required for a business to function.

Table 3 –Return on Capital Employed over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	13.46	5.03	37.37	8.2	21.75
2. Banswara syntax Limited	11.94	2.22	18.6	7.52	15.26
3.Bannari Amman Spinning Mills	8.54	5.61	65.69	-0.24	16.5
4.Bombay Rayon Fashion Limited	9.87	4.02	40.73	2.41	16.5
5.Century Enka Limited	9.27	5.80	62.57	3.32	22.24
6.Kitex Garments Limited	22.96	6.10	26.57	15.13	33.65
7.KPR Mill Limited	11.15	6.22	55.78	2.05	20.48
8.Mandhana Industries	15.99	2.39	14.95	12.08	19.82
9.Nitin Spinners Limited	9.69	8.06	83.18	2.47	25.17
10. Page Industries Limited	47.04	14.65	31.14	29.28	73.71
Average	15.99	6.01	43.66	8.22	26.50

Source: Secondary data compiled from Capitaline Plus database.

From the above table it is understood that average ROCE ranges between 8.54 (Bannari Amman Spinning Mills) and 47.04(Page Industries limited) and the overall average value is 15.99. The highest coefficient of variation was found in Nitin spinners limited (83.18).Bannari Amman spinning Mills(-0.24) has the minimum Return on Capital employed in the year 2012 and Page Industries limited (73.71)has a maximum return on investment in the year 2006.

RETURN ON EQUITY (ROE)

Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The amount of net income returned as a percentage of shareholders equity.

Table 4 –Return on Equity over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	15.94	4.90	30.78	7.78	24.58
2. Banswara syntax Limited	14.08	8.38	59.52	5.29	29.31
3.Bannari Amman Spinning Mills	11.24	10.85	96.55	-8.55	34.65
4.Bombay Rayon Fashion Limited	9.23	9.69	104.99	-15.11	20.03
5.Century Enka Limited	6.80	5.28	77.65	1.37	17.92
6.Kitex Garments Limited	30.63	5.49	17.92	24	43.33
7.KPR Mill Limited	12.77	9.63	75.44	0.12	33.63
8.Mandhana Industries	23.89	8.75	36.62	11.31	35.82
9.Nitin Spinners Limited	4.93	12.00	243.55	-19.1	26.43
10. Page Industries Limited	49.43	18.77	37.98	25.14	90.98
AVERAGE	17.89	9.374	78.1	3.22	35.66

Source: Secondary data compiled from Capitaline Plus database.

From the above table it is understood that average ROE ranges between Nitin Spinners limited (4.92) and page Industries limited (49.43) and overall average value is 17.894.The Nitin spinners company is less consistent with the highest coefficient of variation 243.55.Three companies show a negative return on equity and maximum ROE is Page Industries limited (90.98) in the year 2006.

RETURN ON ASSETS (ROA)

Return on Asset is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets

Table 5 – Return on Assets over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	253.90	103.48	40.76	129.01	442.44
2. Banswara syntax Limited	91.46	28.46	31.12	61.46	136.4
3.Bannari Amman Spinning Mills	108.88	28.84	26.49	51.15	154.16
4.Bombay Rayon Fashion Limited	136.52	79.47	58.21	13.81	231.89
5.Century Enka Limited	255.26	42.18	16.52	191.67	316.13
6.Kitex Garments Limited	15.17	10.70	70.53	2.81	36.67
7.KPR Mill Limited	143.52	33.31	23.21	83.02	201.68
8.Mandhana Industries	92.96	45.15	46.57	25.87	158.04
9.Nitin Spinners Limited	20.60	3.45	16.75	17.19	28.7
10. Page Industries Limited	179.50	140.57	78.31	60.72	514.13
AVERAGE	129.77	51.56	40.84	63.67	222.02

Source: Secondary data compiled from Capitaline Plus database.

The table 5 shows that Century Enka Ltd (255.26) has higher return on assets when compared to Kitex Garments Limited (15.17) which indicates inefficient use of company assets .The coefficient of variation is more consistent in Century Enka Limited (16.52) .Kitex Garments Limited is showing a minimum ROA of 2.81 and Page Industries limited with maximum ROA of 514.13 in the year 2006.

EARNINGS PER SHARE (EPS)

Earnings per share also called net income per share, the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability.

Table 6 –Earnings per Share over the period of 2004 -2005 to 2013-2014

COMPANY NAME	MEAN	SD	CV	MIN	MAX
1. Ambika Cotton Mills Limited	40.60	22.03	54.26	16.04	81.94
2. Banswara syntax Limited	13.05	8.80	67.43	3.34	31.77
3.Bannari Amman Spinning Mills	11.18	9.80	87.66	-10.39	24.63
4.Bombay Rayon Fashion Limited	8.76	15.19	173.39	-30.45	21.49
5.Century Enka Limited	17.76	14.96	84.23	4.02	48.04
6.Kitex Garments Limited	4.46	3.25	72.86	0.93	12.08
7.KPR Mill Limited	25.35	23.99	94.64	0.1	78.39
8.Mandhana Industries	19.66	7.86	39.98	6.1	32.27
9.Nitin Spinners Limited	1.26	2.87	227.78	-3.46	7.59
10. Page Industries Limited	111.36	135.71	121.87	15.27	467.25
AVERAGE	25.34	24.44	102.41	0.15	80.54

Source: Secondary data compiled from Capital online database.

The table 6 shows that Page Industries Limited (111.36) has highest Earning per share, but the deviation is more in Page Industries Limited (135.71).The Coefficient of variation is less consistent in Nitin spinners limited (227.78) ,Bombay Rayon Fashion Ltd(173.39)and Page Industries limited (121.87) .The highest EPS was from Page Industries limited(467.25) in the year 2006.

Table 7 - Correlation Analysis of Variables associated with Capital Structure

Variables	Correlations - R	r^2
Net Profit Margin	-0.142*	0.0201
Return on Capital Employed	-0.324*	0.1040
Return on net worth	-0.144*	0.0210
Return on Asset	-0.441*	0.1940
Earnings Per share	-0.205*	0.0420

***Significant at five per cent level**

The table 7 shows that the five variables net profit margin, return on capital employed, return on net worth, return on Assets and earnings per share are negatively correlated and significant at five percent level. The coefficient of variation explains 19.4 percent variation in Debt-Equity ratio is due to Return on asset

FINDINGS

It can be observed from the analysis that Century Enka Limited and Page Industries Limited provides a margin of safety to the creditors when compare to Nitin Spinners Limited and Kitex Garments Limited. Page Industries Limited and Ambika Cotton Mills Limited are efficient in managing the business affairs resulting in a good net profit margin. The yield on capital, return on equity and earnings per share is high with Page Industries Limited, when compare to all other companies. Century Enka and Ambika Cotton Limited have efficiently managed its assets in generating the companies earning. Net profit margin, return on capital employed, return on equity, return on asset and earnings per share are negatively correlated.

SUGGESTION

The Indian textile industry should use more of internal source of financing to meet their long term investment decision. If the company is being financed by its creditors rather than from its own financial sources it might be a dangerous trend. It is suggested that the financial analysts and managers should emphasize on the optimum level of capital structure and efficient utilization and allocation of resources in order to increase the company's financial performance based on capital structure.

CONCLUSION

The best measure of a company is its profitability, for without it, it cannot grow, and if it doesn't grow, then its stock will trend downward. Increasing profits are the best indication that a company can pay dividends and that the share price will trend upward. Creditors will loan money at a cheaper rate to a profitable company than to an unprofitable one; consequently, profitable companies can use leverage to increase stockholders' equity even more.

A company considered too highly leveraged (too much debt versus equity) may find its freedom of action restricted by its creditors and/or may have its profitability hurt as a result of paying high interest costs. Of course, the worst-case scenario would be having trouble meeting operating and debt liabilities during periods of adverse economic conditions. A company in a highly competitive business, if hobbled by high debt, may find its competitors taking advantage of its problems to grab more market share. Unfortunately, there is no magic proportion of debt that a company can take on. A company's reasonable, proportional use of debt and equity to support its assets is a key indicator of balance sheet strength. A healthy capital structure that reflects a low level of debt and a corresponding high level of equity is a very positive sign of investment quality.

References:-

1. InderSekhar Yadav, Panindra Goyari and Naresh Kumar Sharma, "Determinants of Capital Structure of Corporate Firms; Panel data Evidence from India," Asian Economic Review, Vol.52 (2), pp.331-355, (2010).

2. Mohan Raj, "Determinants capital structure decision in India manufacturing industries: An empirical analysis," International journal of research in computer application and management, vol.1 (8), pp.139-142, (2011).

3. Amsaveni.R and Gomathi.S, "Determinants of capital structure; A study of the pharmaceutical industry in India," Indian journal of finance, vol.6 (3), (2012).

4. Mubeen Mujahid and Kalsomine Akhtar, Impact of Capital Structure on Firms Financial Performance and Shareholders Wealth: Textile Sector of Pakistan International Journal of Learning & Development ISSN 2164-4063, Vol. 4, page No. 2,(2014)

5. Zhenting lee, shuting Liang and Anton Miglo, Capital Structure of Internet Companies: Case Study, Journal of Internet Commerce, vol. 13 ,page no 253-281, (2014)

6. Anshu Handoo and Kapil Sharma, "A study on determinants of capital structure in India.IIMB management Review, vol 26, page no 170-182, (2014)

7. Capitaline Plus database.

8. www.moneycontrol.com.

9. www.economictimes.com

Analyzing the impact of Globalization on Malaysia Labor Market using Multivariate Cointegration Analysis.

Adibah Hussin[1], Azniza Ahmad Zaini[2], Mohd Elfee Ab Rashid[3] and Nik Azma Wail[4]

1 Faculty of Business Management, Universiti Teknologi MARA Pahang, Malaysia, dibah575@pahang.uitm.edu.my

2 Faculty of Business Management, Universiti Teknologi MARA Pahang, Malaysia, nizazaini@pahang.uitm.edu.my

3 Faculty of Business Management, Universiti Teknologi MARA Seremban 3, Malaysia, mohdelfee@ns.uitm.edu.my

4 Faculty of Business Management, Universiti Teknologi MARA Kelantan, Malaysia, nikazma@kelantan.uitm.edu.my

ABSTRACT

Globalization is a world without border where people can easily access any information from other countries without any constraint and barrier. Nevertheless, this situation may give some advantages or disadvantages to certain countries. Thus, in this paper the researcher address a key issue on the effect of globalization on Malaysia, focusing on its employment. The researcher used the trade openness, financial openness and industrial output as the proxies of globalization. While in order to measure the employment, the researcher used total employment in Malaysia. The researcher also adopted regression method using EVIEWS and conducted the test for stationary, cointegration, and Error Correction Model. The regression results indicate that, increased ratio of export and import over GDP and increase in FDI has deteriorated the number of employment. While for industrial output, it is positively related with employment.

Key Words: Cointegration; globalization; labor market; Malaysia

1. INTRODUCTION

Today, the word globalization is well known by almost everyone worldwide since in the mid-1980s. It is not just the internationalization of world economy but also a process of increasing interconnectedness of individuals, groups, companies and countries. Globalization was driven by three factors that are the technological, economic and political factors. All these three factors have brought people closer together and have also generated serious concerns over the terms of that integration. Nevertheless, this globalization may bring positive or negative impact to particular countries, especially to developing countries since they need to compete with developed countries.

Since Malaysia is a developing country, hence this study was carried out to look at the implications of the emerging global economy on employment in Malaysia. We can see that the trend is increasing over years. For example in 1970, 1980, 1990, 2000 and 2010, the employments were 3339.5, 5075, 6685, 9321.7 and 11129.4 respectively. There is much effort that has been done in order to identify the effects of globalization on employment. In addition, there are many proxies of globalization that have been used. Thus, in this paper, the factors such as trade openness, financial openness and industrial production were analyzed in order to see whether those factors are contributing or not contributing to the employment. The data of this study were taken from 1970 to 2012.

2. LITERATURE REVIEW

Globalization is centered on the integration of international markets for goods, services, finance and to some extent labor and it was driven by three factors. These three factors are the technological factors, economic factors and political factors and all these factors have brought people closer together and also generated serious concerns over the terms of that integration. Some will argue, the best price is the international price, thus, liberal trade is the best strategy for small open economy. However, this argument may not applicable for certain countries. The questions are whether Malaysia could benefit from globalization, particularly an employment acquires a thorough studies.

Past studies have shown that the most used economic variable as a proxy of globalization is trade openness (Pradhan, 2002, Santarelli and Figini, 2002, Jenkins, 2002, Lall, 2002). It is measured by how much it exports and imports in relation to its GDP. Some authors take both sum of exports and imports over GDP. In a study done by Lall (2002), openness and trade liberalization were used as measures of globalization. Lall concluded that the globalization benefited employment in developing countries since the transportation cost will be lower, information will be easier to get, technology easier to access and capital easier to rise.

In addition, a study conducted by Yasmin and Khan (2011) attempts to investigate the trade-labor market linkages in Pakistan. This study tested the hypothesis that trade liberalization leads to an increase in labor demand elasticity using a panel data approach for the period 1970 until 2001 for 22 selected manufacturing industries in Pakistan. They used ordinary least squares to estimate models in levels and first differences, in addition to a fixed effects model. Overall, the findings suggest weak evidence of increased labor demand elasticity as a result of trade liberalization in Pakistan's manufacturing sector. Nor does the study find support for a positive labor market and trade linkage from an employment point of view. This may be due to increased capital intensity in the manufacturing sector by time, and the infusion of new technology. It could also be attributed to labor market imperfections preventing trade liberalization from favorably influencing employment conditions in Pakistan.

In globalization, government also plays an important role in terms of political factors. Most study found that positive effects between government role and employment rate. According to Rashid and Sara (2010), government roles in economy can increase the private investment, job opportunities, human capital through education, and health expenditure reduces poverty even though increase in public expenditure causes fiscal deficit which distort economy. Nworji, Okwu, Obiwuru and Nworji (2012), support that there is positive impact between political factors and employment. As large government expenditure to be spent in the circulation, it will increase investment, employment and reduce tax averseness but it has some obvious economic consequences whereby it encourages unhealthy competition with the private sectors for the same materials and labor services. Further study by Lima and Grimaccia (2013), it appears that government role particularly in education investment has a positive effect on employment rate irrespective of countries' economic wealth. Furthermore, that positive relationship could be even stronger for economies which are in their early phase of development.

On the other hand, the other most practical proxy of globalization is financial openness that is Foreign Direct Investment(FDI). Study by Selvam (2013) was done among the India youth where he tried to investigate whether FDI do contribute to the employment opportunities for India youth or not. The author used primary data which was collected on convenient sampling through questionnaire, conducted interview method and taking secondary data from various journals. The author found that FDI does help in boosting out employment opportunities for India's youth. Ekhande (2012) which only conducted a descriptive study also supported the positive effect of FDI towards employment in India. FDI in India directly and indirectly creates job and employ more workers. Besides, it also improves the wages systems, brings technological advancement and lots of other improvements in business sector.

Alternatively, research done by Liu (2012) has found various conclusions. Liu has done a study on FDI and employment by industry in China. He is looking at the effects of FDI on employment in all primary, secondary and tertiary industry. He concluded that in secondary and tertiary industry, FDI would promote employment in long run especially in tertiary sector. While the impact of FDI on primary sector is not statistically significant. It may be due to the lower technological quality of labor force in the industry.

Nevertheless, Potrafke (2010) founds different results. He found that globalization did neither influence the unemployment replacement rate, the unemployment benefit length, public expenditures on active labor market expenditures (ALMP), the tax wedge, union density nor overall employment protection. In contrast, protection of regular employment contracts was diminished when globalization was proceeding rapidly.

The result is then supported by Selamah Abdullah Yusof (2008) who investigates the link between globalization and individual labor markets of Malaysia, Thailand and Indonesia by applying time-series techniques to the analysis. Specifically, globalization is examined in the contex of economic integration and the variables of interest are inflow of foreign direct investment (FDI) and total trade, while the labor variables are employment and productivity. The study finds that FDI has no impact on employment and productivity. In fact, for Thailand, labor variables are influencing the inflow of FDI. The result also suggests that trade adjusts to changes in labor variables for the case of Indonesia. Only for Malaysia there is a two-way link between trade and productivity

Besides, past study also measure globalization using other proxies. In a study by Sen (2003), he used factor content, growth accounting and regression approaches for estimating the effects of increased openness on employment in Bangladesh and Kenya. To capture the indirect effects of trade, he estimated constant-output labor demand equations at the industry level, augmented by variables that measure the extent of integration of the industry with the world market. In conclusion part, he concluded that increased international trade has led to an increase in employment in Bangladesh's manufacturing sector while for Kenya, globalization has no effect on employment either through increased export orientation or greater import penetration.

Besides taking the trade openness, Jenkins (2002) also takes the industrial output to capture directs effects of exports and imports. He concludes that, industrial output will raise employment in Vietnam.

However, the study by Ogunrinola, Oluranti, Osabuohienand Evans S.C (2010), shows that several employment and globalization related variables are positively related in the Nigerian manufacturing. The study used time series data from the period 1990-2006 to examine the employment effect of globalization in the Nigerian manufacturing. Positive relationship was found between employment in the manufacturing sector and globalization as measured by trade openness (OPN), and custom and excise duty (CEXD). However, it was equally found that there was a variation in the level of significance between the two proxies used; custom and excise duties and trade openness. A proper and appropriate custom and excise duties, which will have influence on how competitive a country would be, as well as the employment level in the manufacturing sector in Nigeria. This is because the sector depends on imported inputs and as a result, policies that can enhance the input cost would increase output as well as employment level.

The uniform outlook will help the reader to follow the proceedings. This can be obtained most easily if authors use this template file to construct their papers. Please note the following details: this template is an A4 format. All text paragraphs should be single spaced, with first line intended by 10 mm (0.4 inch). Double spacing should only be used before and after headings and subheadings as shown in this example. Position and style of headings and subheadings should follow this example. No spaces should be placed between paragraphs.

3. MODEL AND METHODOLOGY

3.1. Model

Globalization has different dimensions with different impacts and can be looked at with different perspectives. James (2002) analysed the causes of globalization in terms of transaction costs and focuses on information and communication technologies; and technical change and foreign investment deriving globalization and their application to developing problems in Africa. On the other hand, Bhagwati (2000) focuses on the trade and foreign direct investment. The most common used of measurement of globalization is the degree of trade openness. However, The United Nations Conference on Trade and Development (UNCTAD) argue that a country may display a higher trade over GDP ratio but this may occur in an environment where both trade and GDP grow at a slow rate. This implies that there is a marginalization effect. Thus, a new index of marginalization was introduced, which in this new index of marginalization, it weights the country's

trade for total international trade (Santarelli and Figini, 2002). The other writer measures the trade openness by using import penetration ratio and the export output ratio (Kunal Sen, 2003).

On the other hand, globalization is not solely openness to international trade. Although international trade maybe the important feature, it also depends on financial openness. The liberalization of financial markets has raised the capital flows, where mostly in the form of Foreign Direct Investment (FDI). Then, the third measurement of globalization is privatization. For this aspect, we took privatization index over GDP. Generally, globalization is in the form of;

$$GLOBALIZATION = TRADE + FDI + PRIVATE \quad (1)$$

For this study we would like to see the impact of globalization on employment in the case of Malaysia. Employment is referring to those who are employed in labor force. For this study, we used the total employment in Malaysia since globalization would affect our labor market in all industry.

Hence, in order to see the impact of globalization on employment, we took globalization as independent variable and employment as dependent variable. So, the general model for effect of globalization on employment was written as (Santarelli and Figini 2002);

$$EMP = \beta 0 + \beta 1 TRADE + \beta 2 FDI + \beta 3\ PUBLIC + \varepsilon i \quad (2)$$

The parameters β0, β1, β2 and β3 were estimated to identify the relative contribution of globalization on employment. However, the natural logs were used on some variables in order to generate the differences of scales among the variables. Thus, the above model was rearranged as below;

$$LnEMP\ t = \beta 0 + \beta 1\ TRADE\ t + \beta 2\ lnFDI\ t + \beta 3\ lnPUBLIC\ t + \varepsilon\ t \quad (3)$$

For our model, we did not take the role of government since government intervention is exist in the economy although there is no globalization. In malaysia, there are lots of government interventions in all aspect. Thus, it cannot be applied in our case. However, we chose the industrial output in order to capture the direct effects of export and import (Jenkins, 2002). Since we have globalized our economy, our industrial output would be affected. Hence, we would take industrial output as one of our variables and tried to look at the impact of this variable on employment. Thus, the model was written as;

$$lnEMP\ t = \beta 0 + \beta 1\ TRADE\ t + \beta 2\ lnFDI\ t + \beta 3\ lnINPRO\ t + \varepsilon\ t \quad (4)$$

All the independent variables were expected to be positively related to the employment. This research used time series data for Malaysia. The data were collected from year 1970 to the year 2012. The data were mainly extracted from four main sources; CD ROM International Monetary Fund, International Financial Statistics, United Nations Conference on Trade and Development (UNCTDSTAT) website, Economic Report for Malaysia from year 1970 to 2012 and Malaysia Statistical Department.

3.2. Methodology

For time series data, we need to test using unit root test for the test of stationary in order to avoid spurious results using the Augmented Dickey Fuller test (ADF) and the Phillip Perron Test. The ADF consists the estimating the following regression.

$$\Delta Yt = \beta 1 + \beta 2t + \delta Y\ t\text{-}1 + \alpha i \sum_{i=1}^{m} \Delta Y\ t\text{-}i + \varepsilon t$$

Where Yt is our variable under investigation (lnEMPt, TRADEt, lnFDIt and lnINPROt), Δ is the differencing operator, { β1, β2t, δ, α1, ..., αm} is the set of parameters to be estimated, εt is a random error term and where ΔYt-1 = (ΔYt-1-ΔY t-2), ΔYt-2 = (ΔY t-2 - ΔY t-3) , etc. The number of lagged differences is often determined empirically, the idea being to include enough terms so that the error term in equation above is serially uncorrelated. The null hypothesis is δ = 0, therefore, the null and alternative hypothesis of unit root tests can be written as follows:

H0 : δ = 0 (Yt is nonstationary or there is unit root)
H1 : δ < 0 (Yt is stationary or non unit root)

The unit root hypothesis using the ADF test can be rejected if the t-test statistics are less than the critical value, meaning that the variable to be estimated is stationary. However, if we cannot reject the null hypothesis, this means that the variables are nonstationary and have unit root in levels. However, normally after taking first differences, the variable will be stationary.

On the other hand, the Phillip Perron test (PP) uses the nonparametric statistical method to take care of the serial correlation in the error terms without adding lagged difference terms (Gujarati, 2003). We implement the test in the same manner using ADF test statistics. Thus, in order to guarantee the variables are stationary, both the ADF test and the PP test will be employed in this study.

From the unit root test, if we find that the variables are individually I(1), they have a stochastic trend, thus their linear combination is I(0). As a result, the regression of these variables would be meaningful. Thus, we will say that these variables are cointegrated, so long term equilibrium between variables exists. Although the variables are individually nonstationary, some pairs of nonstationary variables can be expected to wander in such a way that they do not drift too far part.

For this analysis, empirical studies employed the Engle and Granger (1987) and Johansen and Juselius (1990) methods. Johansen and Juselius test, applies the maximum likelihood estimation of the VAR model to determine the number of cointegrating vectors. We will use two test statistics, Trace test statistics and Max Eigen value statistics to determine the number (r) of cointegrating vectors.

For this study, we employ the concept of cointegration to investigate the long run equilibrium between three variables using the maximum likelihood approach of the Johansen and Juselius method. The analysis will be based on following equations.

$$\ln EMP_t = \beta_1 + \beta_2 TRADE_t + \beta_3 \ln FDI_t + \beta_4 \ln INPRO_t + u_t$$

To perform the cointegration test, we create the null hypothesis as there is no cointegration among variables. If trace statistics exceed the critical value, we will reject the null hypothesis. This would mean that, cointegration exists between variables. The result of the cointegration test will be sensitive to the lag chosen. For this cointegration test, we determine the proper lag profile on the basis of the Schwarz Information Criterion (SC) procedure.

4. RESULTS AND DISCUSSION

Firstly, we would have to test on the stationary of the variable so that an ordinary least square (OLS) regression could be conducted since all data were based on time series data,. The most popular test for stationary test is the Unit Root Test. To test the presence of unit roots, we used the Augmented Dickey Fuller (ADF) test and the Phillips Perron (PP) test. The result of the stationary of unit root test using the Augmented Dickey Fuller (ADF) and Phillip Perron(PP) tests are given in table 1;

Table 1: Stationary Test

	ADF		**PP**	
	level	**1st diff**	**level**	**1st diff**
lnemp	-0.92293	-6.45386***	-1.44401	-7.209945***
	0.7706	0.0000	0.5517	0.0000
trade	-1.20016	-5.3658***	-1.218581	-5.3488***
	0.6656	0.0001	0.6576	0.0001
lnfdi	-2.38736	-8.54369***	-2.250231	-8.58585***
	0.1513	0.0000	0.1924	0.0000
lninpro	-1.97199	-6.02982***	-1.971991	-6.044136***
	0.2976	0.0000	0.2976	0.0000

Notes: Where lnemp, lntrade, lnfdi and lninpro are employment, trade openness, financial openness and industrial output. Numbers in the table are the t-statistics for testing the null hypothesis that the variables have a unit root or are non stationary.
*, **, ** *indicate the significance level of 10 %, 5 % and 1 % respectively.

For stationary test, the null hypothesis, Ho = has a unit root test (non-stationary) cannot be rejected at the level of all level of significance. As we refer to the table above, using ADF and PP test at level, both four variables cannot reject the null hypothesis even at 10% significant level. Then, when we move to first different, the ADF and PP test results for the first difference indicate that all variables are I (1). This means that after we have taken the first difference of all variables, there is no evidence of the existence of unit roots in either the ADF or the PP tests.

Hence, since all variables have unit root and both are I (1), the best alternative to use first differences to correct for nonstationarity is cointegration. Cointegration testing is employed to capture the long run co movement or long run equilibrium relationship of the variables. The result for cointegration test is shown in table 2.The table presents the Johansen cointegration test at selected lag levels from the minimum of Akaike information criterion (AIC). We choose minimum AIC which is at lag 6. The null hypotheses of non cointegration are rejected, suggesting that at least one cointegrating vector exists.

Table 2: Johansen Cointegration Result (Trace Statistic and max-Eigen Statistic)

Vector		**(lnEMP, lnTRADE, lnFDI, lnINPRO)**			**5 Percent**	**5 Percent**	**Results**
Ho	**Hi**	**Eigenvalue**	**Trace Statistic**	**Max-Eigen Statistic**	**Critical Value (trace)**	**Critical Value (max-eigen)**	
r = 0	r >0	0.704607	106.6074	43.90018	47.85613	27.58434	Trace test and max eigenvalue test indicate 4 cointegrating equation(s) at the 5% level
r ≤ 1	r >1	0.591076	62.70726	32.19212	29.79707	21.13162	
r ≤ 2	r >2	0.512108	30.51514	25.83583	15.49471	14.2646	
r ≤ 3	r >3	0.121888	4.679307	4.679307	3.841466	3.841466	

Notes: r indicates the number of cointegrating vectors.
Critical values are taken from Johansen & Julius 1990
*(**) denotes rejection of the hypothesis at 5% (1%) significance level.

As we can see in table 2, both the trace statistic and the max-eigen statistic had detected four cointegrating relationships at the 5% significant level when we run the Johansen test. Since the value of Trace and Max-Eigen are greater than their critical value, it is suggested that, these four variables are bound together by long run equilibrium relationships and follow a common long run path. It means that, in the long run, globalization may affect the employment in Malaysia. All these results indicate the long run cointegration regression, thus we would elaborate these results by using the equation in equation (4). So, generally the cointegration equations are represented as follows:

Table 3: Cointegration Equation

LnEMP	=	7.45748	- 0.061052LnFDI	- 0.356978TRADE	+ 0.604488LnINPRO
			(0.02043)	(0.06364)	(0.05093)

Notes: Standard error is in parentheses.

All coefficients are highly significant at 1% significance level. Table 3 shows both LNFDI and TRADE are negatively related to employment. It means that as 1% increase in FDI, the employment will decrease by 0.061052%. In theory, there could be either positive or negative impact of FDI on employment depending on the impact which the presence of foreign firms has on

local enterprises. The evidence presented here suggests that there is negative impact. This is foreign firms import most of their inputs. There is heavy dependence on imported inputs. While the linkages created by foreign firms have been limited, there is some evidence of crowding out of local firms, and of rationalization by state firms in response to foreign competition, both of which tend to reduce employment. For trade ration, as 1 % increase in ratio of import and export over GDP, employment reduce by 0.35678%. As our economy is open to global world, it would give opportunity to the foreign companies to enter our market. Most of this company are established and they will bring their advance technology together. Given that Malaysia are moving toward an export-driven economy spurred on by high technology, knowledge-based and capital-intensive industries, it will worsen the employment rate as the number of unemployment will increase. Since the country is capital intensive, the open economy will bring in the higher technology and more workers will be retrenched. However, there is positive relationship between industrial production and employment, if there is 1 % increase in the production, employment will increase by 0.604488%. This result confirm the finding by Jenkins (2002), industrial output will raised employment in Vietnam.

5. CONCLUSION

5.1. Recommendation

Other than globalization, our government can play their role in improving our employment level. There are several recommendations that our government can adopt such as; the effort of government on restructuring our society should be enlarged. Today, we can still see Malay people in rural areas and they dominate the agriculture sector. If we list out the name of successful Chief Executive Officers (CEOs) who involved in the corporate sectors in Malaysia, mostly were dominated by the Chinese. Thus, more Malay people should come in this sector other than continue staying in the agricultural sector. Besides that, the balanced development of major sectors of the economy must be practiced to increase their mutual complementarities in order to optimize growth. Today we can see that our government is focusing more on agriculture sector. This initiative should be supported by all parties.

Next, we can enhance our human capital. Government has to spend for education since it is the most important asset of a nation and will give huge changes to a country (M.Bakri Musa, 2002). Education remains the biggest item of expenditure in Malaysia. Large portion of Malaysia budget was mostly spend on education. The most exciting benefit from investing in education is its returns are both cumulating and synergistic. The more we invest the more return we will gain. Thus, our government should upgrade the education system in our country. In early 2002, Malaysian newspaper highlighted the plight of nearly 25,000 graduates who still could not find jobs and nearly all of them are Bumiputra and graduated from local universities. Thus, government should enhance them with skills like English proficiency, mathematically competent, familiar with IT, knowledgeable with current issues and many more. Our government should start from primary schools, move to secondary schools and then universities.

Besides, more training and course should be accomplished. Government should enhance their effort in locating the potential people. By inculcating the skills in the heart of people; it will increase their human capital. For example, the training on entrepreneurship will train people to be an entrepreneur. Government should invest in future entrepreneur that can give benefits more than investment in business tycoon. For example, a simple business of selling foods in night market, if they have been taught basic concepts of business enterprise, they could expand their business, diversify it, and at the end, they may end up as a successful owner of restaurant in our country. Thus, it is important for our government to encourage this small medium industry to learn more and give support to them by handling more training, courses and advice.

5.2. Conclusion

In conclusion, the impact of globalization on employment has different impacts. We can see that, FDI and ratio of exports over GDP and ratio of import over GDP will reduce employment while industrial output seems to attract more employment. This conclusion seems to be contradicting

with our first expectation in the introduction section. Before running the model, we expect that all variables are positively related with employment.

Actually, the effects of globalization vary over countries. It depends on the economic situation of that particular country. If the country is labor intensive, globalization may contribute to their employment since more job opportunity wil be created . However, the impact of globalization on employment may not accurate. There are many other factors that can be used as proxies of globalization. Thus, a deep research may be required to determine the impact of globalization on employment in the future.

REFERENCES

Department of Statistics. http://www.statistics.gov.my

Ekhande, K. L. (2012). Foreign Direct Investment: Importance, Growth and Employment Opportinities in India. International Journal of research in Commerce, economics and Management, 3 (9), 107-109.

Engle, R. & Granger, C. W. J. (1987). Cointegration and Error Correction: Representation Estimation and Testing. Econometrica, pp.251-276

Grimaccia, E. and Lima, R. (2013). Public Expenditure on Education Attainment and Employment: A Comparison among European Countries. XXVIII Conference of the Italian Association of Labour Economists (AIEL) Rome.

Gujarati. 2003. Basic Econometrics. Mc Graw Hill Education Hill (Asia). Singapore.p. 818.

Jenkins, R., (2002). Globalization and Employment in Vietnam. Discussion Paper 11. Workshop on Globalization and Poverty in Vietnam.

Johansen, S. and K. Juselius (1990), 'Maximum Likelihood Estimation and Inference on Cointegration– With Applications to the Demand for Money', Oxford Bulletin of Economics and Statistics, pp.52

Kementerian Kewangan Malaysia. Laporan Ekonomi: 1982 hingga 2001. Percetakan Nasional Malaysia Berhad. Kuala Lumpur.

Lall, S. (2002). The Employment Impact of Globalization in Developing Countries. Queen Elizabeth House, Oxford University.

Liu, L. (2012). FDI and Employmeny by Industry: A Cointegration Study. Modern Economy, 3, 16-22. D.O.I: 10.4236/me.2012.31003

Meidani, A. A. N and Zabihi, M, (2012). The Dynamic Effect of Globalization on Unemployment Rate in Iran: A Co integration Analysis. International Business Research, 5 (1), 120-126

Musa, B. M., (2002). Malaysia in the Era of Globalization. Writers Club Press. United States of America.

Nworji, I. D., Okwu, A. T., Obiwuru, T. C. and Nworji, L. O. (2012). Effects of Public Expenditure on Economic Growth in Nigeria: A Disaggregated Time Series Analysis. International Journal of Management Sciences and Business Research, 1(7), 1-15.

Ogunrinola I. O. and Osabuohien E. S. C., (2010). Globalization and Employment in Nigeria's Manufacturing Sector (1990-2006). European Journal of Social Sciences, 12 (4), 581-593.

Potrafke, N., (2010). Labor Market Deregulation and Globalization: Empirical Evidence from OECD Countries. Review of world Economy. 146 (3), 545-571.

Pradhan K, Basantha. (2002). Debating the Effects of Globalisation on Poverty: How Experiment Specificity Determines the Conclusions. National Council of Applied Economic Research. New Delhi.

Rashid, M. and Sara, S. (2010). The Relationship between Government Expenditure and Poverty: A Cointegration Analysis. Romanian Journal of Fiscal Policy (RJFP), 1(1), 29-37.

Santarelli, E. and Figini, P., (2002). “Does Globalization Reduce Poverty? Some Empirical Evidence for the Developing Countries.” International Labor Office Project.

Selvam, V. (2013). FDI in Retailing: Boost Employment Opportunities for India’s Youth. International Journal of research in Commerce, economics and Management, 3 (3), 21-24.

Sen Kunal. (2003). Globalization and Employment in Bangladesh and Kenya. School of Development Studies and Overseas Development Group.

Waldkirch, A., Nunnenkamp, P. and Bremont, J. E. A. (2009). Employmenr Effects of FDI in Mexico’s Non Maquiladora manufacturing. Journal of Development Studies. 45 (7), 1165 – 1183.

Yasmin, B. and Khan, A. H., (2011). Trade Openness: new Evidence for Labor-Demand Elasticity in Pakistan’s Manufacturing Sector. The Lahore Journal of Economics, 16 (2), 55-85.

Yusof, S.A., (2008). Globalization and Labor Markets of Malaysia, Indonesia and Thailand: An Empirical Investigation. Retrieved from http://www.docstoc.com/docs/44746027/Globalization-And-Labor-Markets-Of-Malaysia-Indonesia-And-Thailand.

Does Microfinance Really Help the Poor? A Review of the Existing Literature

Noor Izam bt. Mohd Fadzil[1], Song Saw Imm[2]

1 Faculty of Business Management, Universiti Teknologi MARA, edeeyhj9597@yahoo.com

2 Faculty of Business Development, Universiti Teknologi MARA, songsi@ppinang.uitm.edu.my

ABSTRACT

Microfinance and its objective to alleviate poverty is a continuing debate among academicians. Since its foundation in the late 1970s until recent years, no solid evidence could describe the precise situation on the borrowers whether they have come out of poverty after receiving loans from microfinance or their situations are remain. This paper attempts to explore the positive and negative impact of the microfinance and to find out whether microfinance institutions (MFI) really help borrowers to come out of poverty. A handful of research investigate the positive impact on the borrowers and proved that microfinance has successfully assisted the borrowers. However, some researchers found vice versa. Towards this objective, around 25 research articles have been critically reviewed and recommendations has been put forward.

Keywords: impact of microfinance, proverty alleviation, core poor

1.0 INTRODUCTION

The contribution of microfinance in the development of the world economy is undoubtedly evident. Since the introduction of modern microfinance by Professor Mohd Yunus in the late 1970s, the leading microfinance institution (MFI) has successfully proved that microfinance is able to help poor people in alleviating poverty and improving their social well being. Furthermore, Aghion and Morduch (2000) also show that microfinance institutions have gained profits from this achievement.

Nevertheless, Taylor (2011) argues that microfinance not necessary is beneficial to the poor. Does microfinance really help poor people in uplifting their social economic well being or the institutions have hidden agenda to gain profits? The purpose of this paper is to illustrate the positive and negative impacts of MFI on its borrowers. A positive impact means microfinance is able to help poor people in alleviating poverty. On the other hand, critics cast doubt whether microfinance really helps the poor. Toward this objective, around 30 research articles have been critically reviewed and analyzed to distill the findings of the impacts of microfinance initiatives.

2.0 POSITIVE IMPACTS OF MICROFINANCE

Many scholars believe that accessibility to finance helps the poors in alleviating their social economic well being and is able to combat poverty (Littlefield, Morduch, & Hashemi, 2003; Adjei, Arun, & Hossain, 2009; Banerjee, Duflo, Glennester, & Kinnan, 2013). The positive impacts of microfinance are determined by investigating the standard of livelihood of the borrowers after

microfinancing. The impacts on the borrowers such as their income level, affordable to purchase, children's education, and business expansion will be reviewed in this study.

2.1 Income of borrowers

It is conceived that the loans used to set-up a new business or to flesh out a commercial enterprise will increase the income generated from the business. A study by Adjei et al. (2009) highlighted that financial services from microfinance help borrowers to increase their income compared to the situation before they received the loans. Their research in Ghana with 316 respondents approved this result.

Using data from 2700 households in Bangladesh for the period of 1998 – 2004, Hussain (2008) also proved that the borrower's income has increased after joining the microfinance program. The program was not only success in increasing the borrower's income, but in alleviating poverty as well.

2.2 Children education quality

With the financial assistance from MF, it is believed that the children of the borrowers go to school continuously and no longer dropouts from school. The consciousness about education and school are high among the borrowers when they have adequate money to spend on their children education.

It has been demonstrated by some researchers that microfinance programs increase the access of children to education, more children are being sent to school in developing countries with the help of MF and staying enrolled longer (Morduch, 1998).

Karlan and Zinman (2007) highlighted that from their research in South Africa, 13.7 percent of loans were used for educational expenses and the school attendance among compulsory school-aged children of the borrowers was almost perfect. Even though they did not mention the scenario before received the loans, the percentage on children education is reasonably higher in developing country like Africa.

A group of researchers, Naeem, Khan, Afaq, & Hassan (2014) in their study posit that microfinance programs in District Queeta, Pakistan has a positive impact on the borrowers children education. The borrowers claimed that they could afford on their children schooling expenditure due to the increasing of the income after joining microfinance programs.

2.3 Affordable to purchase

Microfinance helps borrowers in having more purchasing power through the increase of their income. Borrowers are able to purchase more durable and household goods for their family. The increase of the income helps them to purchase things that they did not afford before. Shrestha (1998) claimed that MFI assists women to have more purchasing power on necessary items like groceries. The research

was done in Nepal and found that women borrowers have extra money after joining microfinance and were able to make more purchases.

Cheston and Kuhn (2003) mentioned that in Tanzania, 55 percent of the borrowers' Entrepreneurship Development Trust Fund (WEDTF) used the increased income to purchase household items for their family.

2.4 Business expansion

Loans provided by MF ultimately are for the poor to start-up or to expand their existing business. They can use the money to renovate and modify the store, purchasing more goods or purchasing more raw materials in order to increase the production of the products or anything that related to the business.

A research done by Adjei et al. (2009) stated that one of the MF in Ghana, Sinapi Aba Trust has contributed to business expansion among its borrowers. They surveyed 547 respondents and found that their standard of living improved after joining the MF scheme.

According to Karlan and Valdivia (2006), besides MF's objective of alleviating poverty, the main goal is to teach entrepreneurial skills. The training included basic business practice such as how to treat clients, financial management, marketing and promotion. These improvements should lead to more sales, more staff, and could eventually expanding business. When the business expands, the borrowers are more able to repay their loans and the repayment performance will be increased.

3.0 NEGATIVE IMPACTS ON MICROFINANCE

Not to deny all the positive impacts of MF, but MF still have a dark side stories and negative impacts. According to Hulme (2000), MF has created the myth that the poor always able to repay their loans due to their ability to exploit business opportunities. The poors claim that the loan will be used for business but in reality, they need the loan to pay the school fee, buying medicine and other necessity things.

Taylor (2011) posits that to come out from poverty, there are price that need to be paid. MF and its scheme might result in negative impacts on the borrowers. The poors remain poor, hardly combat poverty due to the policies and systems created by MF itself.

3.1 Multiple borrowing

The definition of multiple borrowing according to Consultative Group to Assist the Poor (CGAP), is an individual household borrowing from more than one MFI for the similar purpose (Faruqee, Khalily, Akhter, and Alam, 2011). Any household with more than one membership is termed as 'membership overlapping'. Membership overlapping developed high concerns and controversy. The overlapping can be described as dinging one hole to cover the previous hole. Faruqee et al, (2011) illustrated this scenario as borrowing from Peter to pay Paul. The circle is never end.

According to these scholars, multiple borrowing might produce unethical competitive practices among MF and without appropriate assessment of the borrowers financial and credit absorption capacities; it will lead borrowers to over indebtedness and defaults. Even though most of the borrowers have successfully moving out from poverty, their socio-economic well-being is always in insecure position and they are still depending on the MFI. Borrowers are allowed to multiple loans even though the previous loan has not been paid off. In fact, MF offers borrowers to continuously use multiple loans especially for group lending approaches (Abbink, Irlenbusch, & Renner, 2006).

Borrowers are motivated to access new loan because of the loan amount increases in the next circle. AIM offered RM2000 for first loan and for the next loan, the amount increased to RM3000 depending on the qualifications of the borrowers (AIM, 2014).

Borrowers aims for the next loan amount which will be higher and keep the good repayment performance in current loan to ensure they could access to the next loan. The continuously repeating loan is like a vicious circle where the borrowers spinning in it at a very long time. This situation merely created a behavior of the borrowers to keep hoping and depending or loans. However, if the borrowers used the loan to upgrade their business, the profit returns from the business will ensure borrowers have money and it will stop them from repeating money lavishly and used money from the business for personal items.

The worse situations is when borrowers taking multiple loans, whether from the same MFI or from multiple sources, it is totally a voluntary decision. The institutions did not have a complete information about the borrower's financial background when they approve the loan since MFI are not listed in Central Credit Reference Information System (CCRIS). Therefore, MFI could not investigate the borrower's financial background as such.

From MFI perspective, multiple borrowing means incremental profits. Even though the institutions did not charged high interest rates similar to other financial institutions, the continuously borrowing from the borrowers guaranteed the high profits to the MFI. At this point, it is doubtful whether their intention is to help the poor.

3.2 Over indebtedness

Multiple borrowing is leading to a serious and dangerous problem to the borrowers; over indebtedness. In fact, it is currently the most critical risk of microfinance (Schicks, 2010). Over indebtedness has a potential to pull borrowers into loan trap and push them further into poverty.

Gonzalez (2008) defined over indebtedness as ' a microfinance customer is over indebtedness if he is continuously struggling to meet repayment deadlines and repeatedly has to make unduly high sacrifices to meet his loan obligations'. The borrowers will always find ways to create a new loan from multiple MFI and before he knows, he is over indebtedness. The issue here is the borrowers did not know when too much is too much. Without wise financial management and lack of education, borrowers always have money shortage and will continuously applying new loan.

Hulme (2000) claimed that many borrowers especially women commit suicide when they have problem repaying their loans. The borrowers might be threatened with physical violence. Committing suicide is one of the dangers of over indebtedness.

3.3 Limited outreach of microfinance

Hermes and Lensink (2011) have doubt whether MF contributed to a substantial reduction in poverty. They stated those microfinance outreaches are limited to only certain people. Simultaneously, microfinance does not reach the poorest of the poor, the co-called core poor (Simanowitz & Walter, 2002).

The core poor are too risk averse to borrow for investment of business. The loan, if they manage to get, will be used for necessity items such as food and medicine. They will not 'waste' the loan for investment. In addition, the core poor are not welcome in group lending programs by other members. They are seen as a bad credit risk.

The interesting part here is microfinance itself prefers to exclude core poor since lending is seen as extremely risky for them (Hulme & Mosley, 1996). It is too risky to loan to the core poor because of their background. This scenario shows that microfinace does not really help the poor to combat poverty.

3.4 Impact on women borrowers

Most of the microfinance has a clear focus on women. The aim is to help women have their own income and they are able to increase their family's well being. However, women borrowers usually hand over the money to the men and unfortunately the men would will use the money for their own purposes (Vonderlack & Schreiner, 2001). This situation does not help women to combat poverty and moreover they have to repay the loan.

Microfinance should have a diverse focus and offer loan also to men. Even though, studies have proved that women's repayment rates are higher than men (Nader, 2008). MFI should offer the chance to men as a borrower. The important thing is microfinance should provide assessment on the borrowers and regularly check up their financial background.

4.0 CONCLUSION

The impact of microfinance on poverty alleviation is a debated issue that will never end. Academicians found this issue has attracted significant interest since its foundation until recent years. Most of the researchers found microfinance has had achieved its goal in combating poverty among its borrowers. They found that microfinance has had a significant effect on the borrowers well being.

However, some of the researchers found that the borrower's well being remained the same even though they had received loans from microfinance. According to these groups, microfinance alone is not a panacea of poverty alleviation. Microfinance can be part of toolbox to alleviate poverty. The government in that country should produce more programs to ensure the poor are able to acquire money through investment and business and not only from microfinance.

It is recommended that MFI should avoid or minimize multiple borrowing. MFI should apply rigid terms and regulations for borrowers before consider giving them new loans. The policy need to

be adjusted for minimum of overlapping. Microfinance may also need to re-engineer its policy and allows core poor to be their clients. The core poor will need a special assessment before microfinancing and after receiving the money; regular check up on their business will be needed. Furthermore, microfinance should provide training and courses to the borrowers before giving loan and while utilizing the loans.

Another recommendation is MFI should have a proper online system to make disbursement more efficient. Last but not least, MFI must have a link to CCRIS. Checking on borrower's financial background is much easier and proficient.

Does microfinance really help the poor? No precise and accurate answer for the question, at least not today unless active intervention from the institutions to help out the poor.

Biblography

Adjei, J. K., Arun, T., & Hossain, F. (2009). The Role of Microfinance in Asset-Building and Poverty Reduction: The Case of Sinapi Aba Trust of Ghana. Retrieved from http://www.bwpi.manchester.ac.uk/medialibrary/publications/working_papers/bwpi-wp-8709.pdf

Cheston, S., & Kuhn, L. (2003). Empowering women through microfinance. *UNIFEM*.

Hussain, A. K. M. G. (2008). A Welfare Economic Analysis of the Impact of Microfinance in Bangladesh, (880).

Karlan, D. S., & Valdivia, M. (2006). Teaching entrepreneurship: impact of business training on microfinance clients and institutions. *Economic Growth Center*, (941).

Karlan, D., & Zinman, J. (2007). *Expanding Credit Access: Using Randomized Supply Decisions to Estimate the Impacts*.

Morduch, J. (1998). Does Microfinance Really Help The Poor? New Evidence From The Flagships Programs In Bangladesh. *Financial Access Initiative*, (June).

Nader, Y. F. (2008). Microcredit and the socio-economic wellbeing of women and their families in Cairo. *The Journal of Socio-Economics*, *37*, 644–656. http://doi.org/10.1016/j.socec.2007.10.008

Naeem, A., Khan, S., Afaq, Q., & Hassan, F. S. (2014). The Social Welfare Impacts of Microfinance on Household at District Quetta , Pakistan. *Interdisciplinary Journal Of Contemporary Research In Business*, *5*(9), 126–144.

Shrestha, M. (1998). NReport on Self-Help Banking Program and Women's Empowerment, 28.

Taylor, M. (2011). " Freedom from Poverty is Not for Free ": Rural Development and the Microfinance Crisis in Andhra Pradesh , India. *Journal of Agrarian Change*, *11*(4), 484–504.

Vonderlack, R. M., & Schreiner, M. (2001). *Women , Microfinance , and Savings: Lessons and Proposals*.

Fundamentals and Country Specific Determinants of FDI: Evidence from United States and Malaysia

Catherine S F Ho[1] and Lena Booth[2]
[1]Arshad Ayub Graduate Business School, Universiti Teknologi MARA, Malaysia,
Email: catherine@salam.uitm.edu.my
[2]Thunderbird School of Global Management, Arizona, U.S.A. Email: Lena.Booth@asu.edu

ABSTRACT

This paper analyses the impact of macroeconomic fundamentals and country specific determinants on Foreign Direct Investment (FDI) in the United States (U.S.) and Malaysia from 1981 to 2013. Increased world integration, liberalization and deregulation reduce trade barriers across all countries allowing vast growth in international trade and investment. In addition, negotiations on regional free trade agreements and the adaptation of favourable policies towards expansion of foreign investment in emerging countries have resulted in tremendous interest on the part of policy makers to compete for FDI which results in prosperity of these host countries. Empirical results conclude that while the rate of growth and domestic credit draw more FDI into the U.S.; changes in total trade and domestic interest rates have significant effect on FDI flows into Malaysia.

Key Words: FDI, international trade, interest rate, domestic credit

1. INTRODUCTION

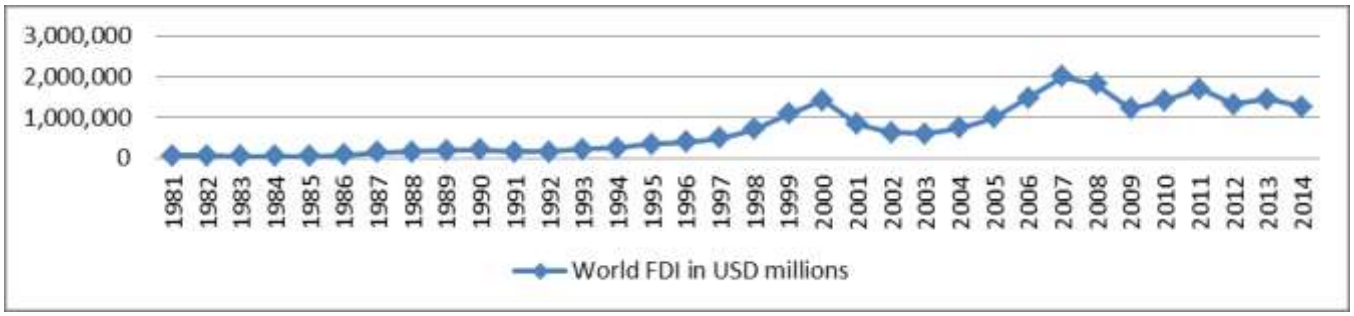
Foreign direct investment (FDI) plays an astonishing role in global business and is considered to be an indicator of global economic health and stability. In the last two decades, the global economy has experienced escalated flow of capital from both direct and portfolio investments. FDI flows are less susceptible to speculative activities relative to portfolio investment and are expected to provide greater contribution to economic growth. FDI can also bridge the savings and investment gap as well as meet foreign exchange requirements of emerging countries. With the current trend of negotiations on regional free trade agreements, there is vast interest in the application of favourable policies toward FDI in emerging countries. Understanding FDI flows is therefore of crucial interest to policymakers and it has also become an integral component of the balance of payments in emerging countries with large growth in international trade through increased global financial linkages. Some large investment flows in smaller economies have significant consequences on macroeconomic fundamentals in the host country. This gives rise to the need to understand the trends and determinants of FDI flows in order to formulate policy decisions and verify their impact on the domestic economy.

FDI may spread capital, technology and management skills, entrepreneurial ability, brands, and access to markets across the globe which provides the crucial ingredients for economic growth and development (Athukorala and Wagle, 2011). FDI is also capable of providing and stimulating economic growth; increasing employment by creating new production capacity and jobs; infrastructure developing; enterprise restructuring; and capital account relief by adding to the stock of capital in the host country as these lead to linkages to the global marketplace. In addition, foreign investors are expected to transfer foreign multinational company's (MNC) intangible assets such as technology and managerial skills to provide a source of new technologies, processes, products, organizational technologies and management skills. This would provide a strong stimulus to economic development of the host country (Wijeweera *et al.*, 2010). On the other aspect, FDI may provide foreign investors with new markets and marketing channels; cheaper production facilities; opportunity for foreign investors to circumvent trade barriers; move from domestic export

sales to a locally-based national sales; capability to increase total production capacity; and opportunities for co-production, joint ventures with local partners as well as joint marketing arrangements and licensing. Furthermore, improvement of the access to international markets would stimulate competition and efficiency in the host country.

The yearly global foreign direct investment flows have increased tremendously from USD26.7billion in 1990 to USD208 billion in 1999. This flow has grown in the last decade to a peak of almost USD2000 billion in 2007 before falling to about USD1300 billion due to economic uncertainty and geopolitical risks in recent years as shown in Figure 1 (UNCTAD, 2015). The six top FDI recipient countries in 2014 are China ($128bil), Hong Kong ($111bil), U.S.($86bil), Singapore ($81bil), Brazil (62bil) and the United Kingdom ($61bil), respectively (UNCTAD, 2015). FDI flows in developing economies remained resilient in 2014, reaching more than US$700 billion, the highest level ever recorded and accounting for 56% of global FDI flows. The increase was mainly driven by developing Asia − the world's largest recipient region (UNCTAD, 2015).

Figure 1: World FDI flows from 1981 to 2014

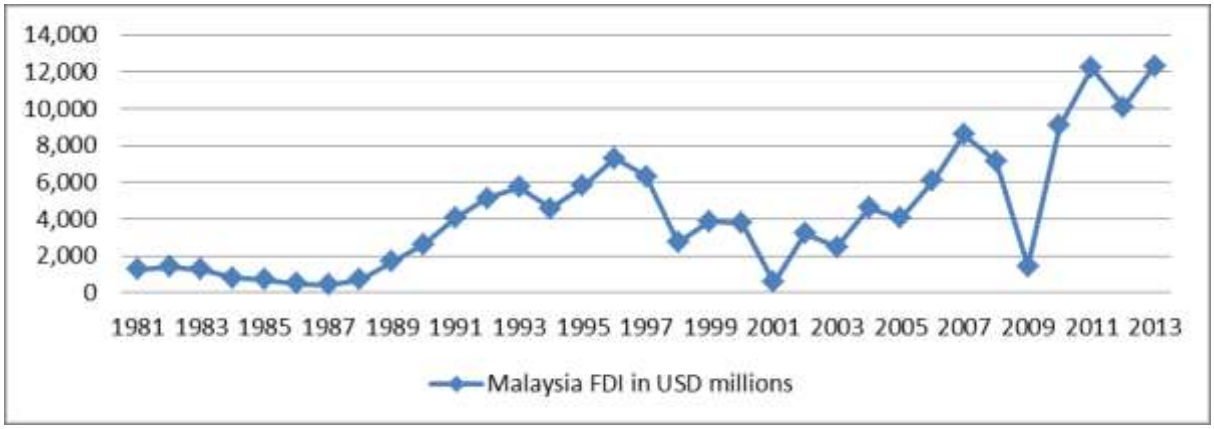


Source: UNCTAD (2015).

1.1 FDI in Malaysia

The Malaysian government has intensely encouraged FDI since the 1970s but it maintains some constraints on investment in specific sectors. While FDI inflow continues to improve after the effects of the 2008-2009 global financial crises, Malaysia's performance in attracting FDI relative to both earlier decades and the rest of the Association of Southeast Asian Nations (ASEAN) has slowed (U.S. Department of State, 2014). The level of FDI inflows for Malaysia has drastically fallen during the Asian financial crisis as observed in Figure 2 from a high of almost $7.3 billion in 1996 to a low of almost $600 million in 2001. FDI in the country is very sensitive to global conditions and even though FDI has expanded after 2001 to a peak of $8.6 billion in 2007, it fell drastically again to $1.5 billion in 2009 before rallying to a high of $12.2 billion in 2011 and fallen slightly to $11.6 billion in 2013 (UNCTAD, 2015).

Figure 2: Global FDI flows into Malaysia from 1981 to 2013



Source: UNCTAD, 2015

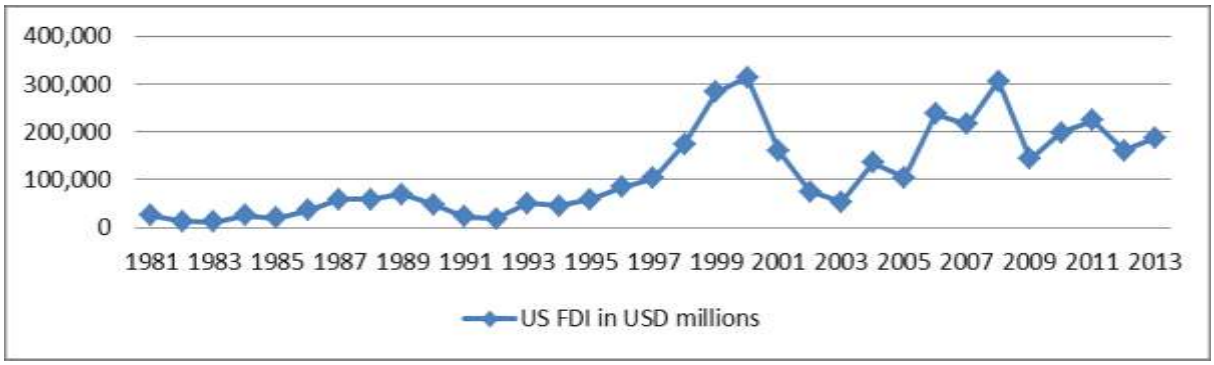
According to the Malaysia's central bank, Bank Negara Malaysia (BNM), the United States was the fifth largest source of new FDI to Malaysia in 2013 with $2.8 billion in new investments.

BNM reported Singapore as Malaysia's largest source of new FDI, with $5.2 billion in investments, followed by Japan with just under $4.8 billion, the Netherlands with $4.1 billion, and Hong Kong with $3.7 billion (UNCTAD, 2015). BNM lists the United States as Malaysia's third largest source of cumulative investment stock, with $11.7 billion as of 2012 (UNCTAD, 2015). FDI played a vital role in Malaysia's rapid economic growth through export-oriented industrialization (Athukorala and Wagle, 2011). Since Malaysia is a developing country, FDI plays a crucial role in its development and growth when Malaysia relies on its export-oriented activities for the generation of income and growth. The U.S. has always been a major foreign investor in Malaysia and any global crisis would drastically affect foreign investments in the country. FDI flow into Malaysia between 1997 and 1998 was interrupted by the Asian financial crisis but during that period, Malaysia has received more FDI than any of its neighbouring ASEAN countries (Athukorala and Wagle, 2011; Baharumshah and Almasaied, 2009). Malaysia is able to offer attractive incentives that attracted FDI into selected industries in electrical and electronics (Wong, Tang and Fausten, 2009). As mentioned by Choong and Lam (2010), Malaysia is one of the developing countries that could attract FDI really well even though Malaysia is a small country in terms of its income.

1.2 FDI in United States

The U.S. is one of the largest recipients of FDI flows in the world and hence the U.S. perspective is important in the study of FDI. The country has vast potential to absorb FDI flows due to its huge market. The amount of U.S. FDI has increased tremendously during the Asian financial crisis from a level of $84 billion in 1996 to a peak of $314 billion in 2000 as shown in Figure 3. There has been much volatility in the FDI flows since year 2000 and the proportion of U.S. FDI relative to the world FDI has deteriorated due to much of these flows going to emerging countries (UNCTAD, 2015). Over the past decade, FDI in the U.S. peaked in 2008, reaching $310 billion. The recent global economic recession had a direct influence on inward direct investment transactions. Foreigners dramatically reduced their investment in 2009, which dropped more than half from the prior year. Foreign investment in the U.S. increased in 2010 and again in 2011, before falling in 2012 with foreign companies' confidence in the market returning in 2013, and inward direct investment rose 35 percent (Organization for International Investment, 2015).

Figure 3: Global FDI flows into the United Sates from 1981 to 2013



Source: UNCTAD 2015

Japan was the United States' largest foreign investor in 2013 at nearly $45 billion, and it constituted nearly one-fifth of all foreign investment in the country. The United Kingdom, Luxembourg, Canada, and Switzerland were the top five largest investors in the U.S. For the fourth consecutive year, more than half of all foreign direct investment in 2013 flowed to developing and transition economies; in fact, developed countries now account for only 39 percent of global FDI inflows (Organization for International Investment, 2015). Between the year of 1974 and 1994, U.S. received the most FDI inflow from around the world and it is one of the preferred destinations for FDI due to its large market size and liberalized investment policy (Axarloglou, 2005). According to Salehizadeh (2005), FDI inflows into U.S. is said to be the positive contributing factor towards its macroeconomic indicators. Furthermore, U.S. is the largest supplier of FDI and the most receiver of FDI which account for almost 75% of total FDI that flowed into developed countries in 1999 (Choong and Lam, 2010). It is stated that most of the total world FDI was received by developed

economies and U.S. received the largest inflow (Roy and Berg, 2006; Bode and Nunnenkamp, 2011).

According to UNCTAD (2015), trends in global FDI flows are rather uncertain for 2015 due to: the fragility of the world economy; growth tempered by hesitant consumer demand; volatility in currency markets and geopolitical instability. In addition, the decline in commodity prices may also lower investments in the oil and gas and other commodity industries. Within the developed countries, increasing divergence in economic growth between the U.S., euro area and Japan may result in differing patterns of FDI while in developing economies investment could be negatively affected by slower growth prospects in emerging markets and regional conflicts.

Worldwide economic power shifts continue to evolve since the last two decades and it has resulted in dramatic changes in the trend in global businesses. This study aims to provide a clear understanding on evaluating factors that drive FDI in developed and emerging markets. FDI has become not only an important source of investment but also a foundation of vital capital formation and growth for markets. Policy makers from less developed countries who aspire to become emerging markets can learn from the experiences of other countries to attract FDI and move up the level of development (Ho and Rashid, 2011).

This research first analyses the trend of FDI flows into Malaysia and the U.S. from 1981 to 2013 and then investigates the macroeconomic fundamental and country specific determinants of FDI into these two countries. The results would provide policy implications to regulators on investment strategies and trade agreements as well as information to potential investors to make appropriate investment decisions through better understanding of these conditions.

The remainder of the paper is structured as follows: Section 2 reviews the empirical literature on fundamental and country specific factors on FDI. Section 3 describes the data and methodology applied in the empirical analysis and section 4 presents the empirical findings. Section 5 ends with a summary of the major findings and offers some policy implications.

2. LITERATURE REVIEW

Lokesha and Leelavathy (2012) defined FDI as the process where domestic investors of home country acquire assets for the intention of controlling the activities of the enterprise in a country which is located outside of the home country. FDI is very important for both developed and developing countries (Aamir *et al.*, 2011; Ramrattan and Szenberg, 2014) in guiding sustainable development and growth. According to Klimek (2011), mergers and acquisitions is the major form of global FDI flow and macroeconomic variables play a crucial part in the mode of foreign establishment. FDI brings about an important source of knowledge in terms of the transfer of technology and management skills to the labour forces in countries such as Indonesia, Malaysia, Thailand and the Philippines. FDI can also enhance the usage of more advance technologies by domestic firms and is one of the crucial sources of economic growth in a country as it promotes the country globally. It is also one of the principal sources of funding for developing countries especially when the particular country is facing financial crisis.

Two theories that commonly explain FDI flows are market imperfection theory and internationalization theory. The market imperfection theory explains foreign investment as a strategy to profit from tangible or intangible competitive advantages that not shared by competitors in foreign countries (Hymer, 1970). The competitive advantage of firms are essential elements in market imperfection for products and factors of production. The second theory is internationalization theory which explains the gradual process of firm's international involvement by concentrating on several interrelated steps that company must comply in order to invest in foreign countries properly. The evolution of foreign entry pattern starts with exports by local agents to new markets and later by setting up licensing and manufacturing plant. Rugman (1981) stated that process of internationalization starting with 1) exporting; 2) licensing; 3) establishment of local warehouses and direct local sales, 4) local assembly and packing; 5) formation of a joint venture; and eventually 6) foreign direct investment. In addition, the product life cycle hypothesis also provides evidence of the maturity of product process and shifting of production to the most cost efficient location.

Higher economic growth strengthens confidence in the performance of the domestic country with the expectation of higher future profitability of businesses that encourages foreign investors. A

rise in economic growth positively influences FDI inflows as it denotes a larger market with more opportunity and potential prospects for products produced. In addition, higher economic growth also encourages foreign investors to invest as it corresponds to a higher level of productivity that lowers the cost of production through economies of scale. Furthermore, increase in economic growth denotes advanced infrastructure facilities that boost the marginal return to capital, which eventually attracts foreign investors. According to a previous study by Baharumshah and Almasaied (2009), FDI and economic growth has a significant and positive relationship. Similar to Choong and Lam (2010), Aw and Tang (2010) found that economic growth and openness level of the Malaysian economy are very important factors that attract foreign investors into Malaysia. A country with higher gross domestic product (GDP) rate attracts potential investors who are willing to pour their investments into that particular country as it leads to higher demand of the products produced. Leitao (2010) analyzed the determinants of FDI in Canada and concluded that economic growth is positively significant in affecting FDI inflows.

Openness level is the degree of trade openness of an economy and it is measured by a country's import and export activities. Kakar and Khilji (2011) mentioned that free trade or openness level has been referred to as the engine of economic growth of a country. Fast growing trade activities play a major role in the acceleration of growth in local demand and the level of exports. When a country's openness level increases, it provides opportunities for foreign products and investors to enter into local markets (Athukorala and Wagle, 2011). Similarly, Demirhan and Masca (2008) employed cross-sectional data of 38 developing countries from 2000 to 2004 to test the determinants of FDI and found that trade openness is positively related to FDI inflows. Another study by Surge *et al.* (2008) on the drivers of FDI inflows into Rwanda also confirmed a positive significant effect of trade openness on FDI inflow. Hailu (2010) noted that a higher degree of trade openness attracts foreign investors as it indicates high integration of the host country to the international market making it cheaper to export products to other countries. Similar to Ho and Rashid (2011), Ho *et al.* (2013) also found that trade openness is positively significant in attracting FDI inflows for BRICS and Malaysia.

Empirical studies have also concluded that higher inflation negatively affects FDI inflow (Aw and Tang, 2010). High inflation rate indicates higher cost of conducting business that discourages foreign investment. In contrast, an increase in the inflation rate could also attract FDI implying larger demand and consumption levels that provide opportunities for foreign investors to increase production and benefit from higher sales in developed nations (Singhania and Gupta, 2011).

Host countries with lower interest rates are attractive to those multinational firms that plan to raise funds domestically. Lave and Hidalgo (2000) found negative relationship between FDI inflow and interest rate in the host country. High interest rates increase production costs and the cost of borrowing in the host country thus discouraging foreign investment. Ho *et al.* (2013) found significant negative relation between interest rate and FDI inflows in China and South Africa, and concluded that high interest rate increases the cost of doing business and discourages foreign investment. Anna *et al.* (2012) found no significant impact of interest rates on FDI inflows in Zimbabwe. In contrast, Yang *et al.* (2000) employed time series data in their study to examine the determinants of FDI in Australia and found that the interest rate is positively significant in affecting FDI inflows.

Exchange rate is the currency of a country expressed in another country's currency such as the value of Malaysian Ringgit (MYR) expressed as a unit of U.S. dollar (USD). A study by Aw and Tang (2010) found that there is no significant relation between exchange rate and foreign investment decisions. In addition to Suliman *et al.* (2015), Aamir *et al.* (2011) also found negative relationship between FDI and exchange rate. A later study on exchange rates by Mugableh (2015) found that exchange rates, gross domestic product, money supply and trade enhance the flows of FDI into Malaysia, while consumer price index worsened them. In addition, Dua and Garg (2015) investigated macroeconomic factors underlying FDI flows in India with cointegrating VAR and found that depreciating exchange rates, higher domestic returns and domestic output as well as better infrastructure are conducive to FDI, however, trade openness and global FDI flows are detrimental to India's FDI.

Enhancement of stock market performance is a good indicator of healthy economic condition and potential for future growth, thus motivating foreign direct investment. Agbloyor *et al.* (2013) found that countries with more developed stock markets attract FDI, as an improvement in the

stock market performance strengthens confidence of investors in terms of better outlook and investment climate for the domestic market, which attracts foreign investors. Arcabic *et al.* (2013) analysed both the long and short-term relationships between FDI and the stock market in Croatia and found that in the short run, upward movement on the stock market positively affects FDI. Countries with a more developed financial sector allow investors access to liquidity and funds via domestic or external finance which benefit foreign investors.

A recent study by Malhotra *et al.* (2014) evaluated the determinants of FDI in Brazil, Russia, India and China over the period 1995 to 2012 and found that debt servicing and inflation has negative impact on FDI flows while GDP growth and per capita income has positive impact on FDI. Additionally, Kirchner (2012) modelled inward foreign direct investment for Australia and found that FDI is positively related to income and productivity growth and negatively related to foreign portfolio investment, trade openness, exchange rate and foreign real interest rate. Moreover, Kaur and Sharma (2013) concluded that openness, reserves, GDP and long term debt positively impact FDI while inflation and exchange rate negatively affect FDI. In summary, changes in income, exchange and inflations rates, export and import as well as consumption, economic activities of the host country affect foreign investors' sentiment in investment decisions.

3. DATA AND METHODOLOGY

In order to analyse the impact of fundamentals and country specific determinants on FDI in Malaysia and the U.S., annual data from 1981 to 2013 are collected from International Financial Statistics - International Monetary Fund, World Economic Outlook - World Bank, United Nations Conference on Trade and Development (UNCTAD), Organization for Economic Co-operation and Development (OECD) and Global Market Information Database - Euromonitor International. The list includes nine macroeconomic fundamentals and country specific factors namely exchange rate, inflation rate, interest rate, economic growth, total trade, domestic stock index, domestic credit, household consumption and domestic investment. This list of factors is as shown in Table 1.

Table 1: Proxy for each variable and expected relation with FDI

Variables	Proxies	Expected Relation
Foreign Direct Investment (FDI)	Foreign Direct Investment/GDP	
Exchange Rate (ER)	Exchange Rate	Negative
Inflation Rate (INF)	Inflation Rate	Negative
Interest Rate (INT)	Interest Rate	Negative
Economic Growth (EG)	Gross Domestic Product	Positive
Total Trade (TR)	(Export + Import)/GDP	Positive
Stock Market (SM)	Domestic Stock Index	Positive
Domestic Credit (DC)	Domestic Credit/GDP	Positive
Household Consumption (HHC)	Household Consumption/GDP	Positive
Domestic Investment (DINV)	Gross Fixed Capital Formation/GDP	Positive

Ordinary least Square (OLS) multiple regression analysis is employed to investigate the FDI inflow behaviour of each country and to explore the significance of macroeconomic and country specific factors on FDI inflow as shown in equation (1). Additionally this approach also provides accurate predictions of the equation, and measures the extent, direction and strength of association of each determinant in explaining the change in FDI.

The OLS regression model in this study is describe in Equation (1) as:

$$FDI_t=\alpha_0+\beta_1 ER_t+\beta_2 INF_t+ \beta_3 INT_t+ \beta_4 EG_t+ \beta_5 TR_t+ \beta_6 SM_t+ \beta_7 DC_t+ \beta_8 HHC_t+ \beta_9 DINV_t+\varepsilon_t$$

where *FDI* is the inflow of foreign direct investment; *ER* is average yearly value of the country's currency in terms of one unit of U.S. dollar for Malaysia and one unit of British pound for the U.S.; *INF* is inflation rate proxied by changes in consumer price index; *INT* is interest rate; *EG* is economic growth as measured by the change in gross domestic product; *TR* is total trade flows as measured by total export and import as a ratio of GDP; *SM* is the change in domestic stock market index; *DC* is measured by domestic credit as a ratio of GDP, *HHC* is the domestic household consumption as a ratio of GDP and *DINV* as an indicator of domestic investment and is the gross fixed capital formation as a ratio of GDP; and ε_t is the error term and it represents the

effects of omitted variables. It is assumed that ε_t can be characterized by an independently, identically distributed, random variable with mean zero and variance and subscript *t* represent years.

The changes in the variables are computed as a measure of the respective transformed factors in order to ensure stationarity and to avoid spurious analysis of results. Unit root test results for both countries are shown in Table 2. This study applied both Augmented Dickey-Fuller (ADF) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) unit root tests in order to check stationarity of the time series. The data series are also corrected for multicollinearity, autocorrelation or heteroskedasticity problems with Variance Inflation Factor, White tests and Newey-West corrections.

Table 2: Unit root test results for the U.S. and Malaysia

	USA			Malaysia		
Variables	ADF Test t-stats	Model (lag)	KPSS Test KPSS statistic	ADF Test t-stats	Model (lag)	KPSS Test KPSS statistic
FDI	-6.7276***	C(0)	0.2121	-6.6373***	C(0)	0.2485
ER	-4.0614***	C(0)	0.0879	-4.2664***	C(0)	0.1381
INF	-7.1743***	C(1)	0.1801	-7.8368***	C(0)	0.1956
INT	-5.1837***	C(3)	0.3257	-5.9264***	C(0)	0.5000**
EG	-5.6028***	C(0)	0.0836	-4.9037***	C(0)	0.0793
TR	-6.4616***	C(0)	0.5000**	-4.7261***	C(0)	0.1234
SM	-5.6396***	C(0)	0.2692	-7.0074***	C(0)	0.0593
DC	-7.3553***	C(0)	0.2028	-5.2012***	C(1)	0.1113
HHC	-7.6819***	C(0)	0.2541	-5.2155***	C(0)	0.4193*
DINV	-4.8745***	C(0)	0.0849	-3.9570***	C(0)	0.1116

Note: ADF test has null hypothesis of the existence of a unit root in the time series while the null for KPSS tests is that the time series is stationary. ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively.

4. Empirical Findings

The empirical results on macroeconomic fundamentals and country specific determinants of FDI into the U.S. and Malaysia are detailed in Table 3 and these factors impact developed and emerging countries rather differently. The effect of exchange rates on FDI is negative for both countries where FDI is attracted by an increase in the value of domestic currency, signalling the strength of the domestic economy building confidence of foreign investors however it is not a significant determinant of FDI for both countries. Inflation rate has indirect relation with FDI in Malaysia but has positive relation with FDI in the U.S. and its effect is surprisingly different for developed and developing countries, however it is also found not to be significant for both countries. Higher inflation rate in Malaysia and most emerging countries worries foreign investors but the same is not true for developed countries. Higher inflation in the U.S. signals high level of economic activity and consumption thereby attracting foreign interest in investments.

Interest rate is found to be marginally significant in affecting FDI in Malaysia where increase in interest rate indicates positive economic condition with relatively higher level of investment and consumption attracting FDI into the market. Interest rate is however not a driver for FDI in the U.S. and the relation is also found to be negative. It is important to note that FDI inflow into the U.S. is significantly affected by economic growth positively. When the domestic GDP improves, more FDI is attracted into this developed nation. This is consistent with Choong and Lam (2010) as well as Aw and Tang (2010) where a growing and larger market attracts global investment which seeks markets for their ready products. It is interesting to note that economic growth is a major driver of FDI in developed countries like the U.S. and it is in fact the most significant driver of FDI for this developed nation but the same is not found for Malaysia.

Exports and imports play major roles in attracting investments from foreign nations and total trade signals the ease of doing business, especially in emerging countries. This factor is found to be significant in driving FDI for Malaysia and the relation is positive indicating that the higher the level of international trade, the more positive is the outlook for foreign investors to build capacity

and production in that country. The relation is also positive for developed U.S. but it is not significant. This is indeed one significant issue and benefit of negotiations in regional trade agreements especially for emerging nations in order not to be side-lined and miss out on investment and trade opportunities. It is surprise to note that stock market activities are not found to be a significant factor in encouraging foreign investment in both of the countries.

Another interesting finding is that both household consumption and domestic investment are not significant drivers of FDI for both countries. In addition the relation seems to be negative for both factors where an increase in domestic investment actually discourages foreign investments. This may be due to the crowding out effect of domestic investment replacing foreign investment and vice versa during this period of study. Domestic credit however is found to be another significant factor in fostering foreign investment in the U.S. where easing of domestic credit boosts economic activity, facilitating expansion in local production and consumption in signalling a rosy economy favourable to businesses. Unfortunately, the same is however not found for emerging Malaysia. These models are significant in explaining the changes in FDI in both countries with f-statistics of less than 10% which explain 33 percent and 23 percent of movements in FDI for the U.S. and Malaysia, respectively.

Table 3: Results on Fundamental and country specific factors on FDI for U.S. and Malaysia

This table presents the OLS regression results as shown in equation (1):

$FDI_t=\alpha_0+\beta_1ER_t+\beta_2INF_t+\beta_3INT_t+\beta_4EG_t+\beta_5TR_t+\beta_6SM_t+\beta_7DC_t+\beta_8HHC_t+\beta_9DINV_t+\varepsilon_t$

where *FDI* is the inflow of foreign direct investment; *ER* is average yearly value of the country's currency in terms of one unit of U.S. dollar for Malaysia and one unit of British pound for the U.S.; *INF* is inflation rate proxied by changes in consumer price index; *INT* is interest rate; *EG* is economic growth as measured by the change in GDP; *TR* is total trade flows as measured by total export and import as a ratio pf GDP; *SM* is the change in domestic stock market index; *DC* is measured by domestic credit as a ratio of GDP, *HHC* is the domestic household consumption as a ratio of GDP and *DINV* as an indicator of domestic investment and is the gross fixed capital formation as a ratio of GDP; and ε_t is the error term and it represents the effects of omitted variables. It is assumed that ε_t can be characterized by an independently, identically distributed, random variable with mean zero and variance and subscript *t* represent years.

	USA	Malaysia
ER	-0.1197	-0.1731
	0.3609	0.3798
INF	0.0051	-0.0026
	0.6154	0.6838
INT	-0.0012	0.0151*
	0.8025	0.0921
EG	0.0747***	-0.3373
	0.0002	0.3386
TR	0.3126	0.4842**
	0.1408	0.0375
SM	-0.0312	0.0134
	0.6027	0.6854
DC	0.5376**	-0.0686
	0.0233	0.4683
HHC	-0.4583	-0.5867
	0.3153	0.4914
DINV	-0.0156	-0.0171
	0.9509	0.9255
C	-0.0244	-0.0037
	0.2096	0.9251
Ad R^2	0.3257	0.2313
F-sig	0.0293	0.0838

Note: ***, ** and * denote statistical significance at 1, 5 and 10 %, respectively.

5 Summary and Conclusion

The objectives of this paper are to compile the statistics on FDI and investigate the impact of fundamentals and country specific determinants on FDI for both of these developed and developing countries. A set of nine factors are examined together in a model under two categories: fundamentals and country specific factors. Fundamental variables include exchange rates, inflation

and interest rates, economic growth and total trade; while country specific factors include stock market performance, domestic credit, household consumption and domestic investment from 1981 - 2013.

The results form empirical tests found that economic growth and domestic credit are significant drivers of FDI into the U.S. where higher level of economic activity in developed countries provides a catalyst to FDI while domestic credit expansion facilitates domestic investments especially from abroad. FDI in the U.S. is negatively correlated to foreign currency value where lower domestic currency value reduces the incentive for foreigners to invest in this developed nation but the factor is not significant. Inflation and international trade also affect FDI positively in developed country but they are also not found to be significant. Stock market performance, household consumption and domestic investment are all not found to be significant in driving FDI in the U.S. but there seem to be negative relation between these factors and FDI.

For emerging Malaysia, domestic interest rate and international trade are two significant factors attracting FDI into this emerging country. Similar to the U.S., exchange rate is not found to be significant and higher currency value seems to draw foreign interest in domestic investments. Inflation rate is negatively related to FDI for Malaysia but the factor is not significant. Domestic credit, household consumption and domestic investment are also not found to be significant in attracting FDI into Malaysia.

It is important to note that different factors are significant in driving FDI into developed and emerging nations. Future studies may look into other factors which may be specific to emerging countries including tax rates, skills and expertise, country risk factors and others for a more comprehensive investigation of a larger group of countries in order to fully understand the behaviour of foreign direct investments.

Acknowledgement

The corresponding author would like to extend her sincere gratitude to the J. William Fulbright Foundation, the U.S. Department of State and MACEE for the financial support provided on a 2014-15 Fulbright Scholarship. The corresponding author appreciates the support provided by the Thunderbird Graduate School of Global Management during her stay there for the research project. The authors alone are responsible for any error.

References

Aamir, M., Farhan, M. and Sharif, M.S. (2011). Market Size Effect on Foreign Direct Investment: A Case of Malaysia, *Interdisciplinary Journal of Contemporary Research in Business,* 3(7), 1002.

Agbloyor, E. K., Abor, J., Adjasi, C. K. D., and Yawson, A. (2013). Exploring the Causality Links between Financial Markets and Foreign Direct Investment in Africa, *Journal of Research in International Business and Finance*, 28, 118-134.

Anna, C., Machiva, B., Karambakuwa, R.T., Webster, D., Felex, T., Zivanai, O., Lovemore, M. and Mudavanhu, V. (2012). The Impact of Interest Rates on Foreign Direct Investment: A Case Study of the Zimbabwean Economy, *International Journal of Management Sciences and Business Research,* 1(5), 2226-8235.

Arcabic, W., Globan, T., and Raguz, I. (2013). The Relationship between The Stock Market and Foreign Direct Investment in Croatia: Evidence from VAR and Cointegration Analysis, *Journal of Financial Theory and Practice*, 37(1), 109-126.

Athukorala, P.C., and Wagle, S. (2011). Foreign Direct Investment in Southeast Asia: Is Malaysia Falling Behind? *ASEAN Economic Bulletin*, 28(2), 115-133.

Aw, T.Y. and Tang, T.C. (2010). The Determinants of Inward Foreign Direct Investment: The Case of Malaysia, *International Journal of Business and Society*, 11(1), 59-76.

Axarloglou, K. (2005). What Attracts Foreign Direct Investment Inflows in the United States? *The International Trade Journal,* 19(3), 285-308.

Baharumshah, A.Z. and Almasaied, S.W. (2009). Foreign Direct Investment and Economic Growth in Malaysia: Interactions with Human Capital and Financial Deepening, *Emerging Markets Finance & Trade*, 45(1), 90-102.

Bode, E. and Nunnenkamp, P. (2011). Does Foreign Direct Investment Promote Regional Development in Developed Countries: A Markov Chain Approach for US States, *Review of World Economics*, 147 (2), 351-383.

Choong, C.K. and Lam, S.Y. (2010). The Determinants of Foreign Direct Investment in Malaysia: A Revisit, *Global Economic Review*, 39(2), 175-195.
Demirhan, E., Masca, M. (2008). Determinants of Foreign Direct Investment Flows to Developing Countries: A Cross-Sectional Analysis, *Prague Economic Paper*, 4, 356-369.
Dua, P. and Garg, R. (2015). Macroeconomic Determinants of Foreign Direct Investment: Evidence from India, Journal of Developing Areas, 49(1), 133-155.
Hailu, A.B. (2010). Demand Side Factors Affecting the Inflow of Foreign Direct Investment to African Countries: Does Capital Market Matter? *International Journal of Business and Management*, 5(5), 104-116.
Ho, C.S.F. and Rashid, A.H.M. (2011). Macroeconomic and Country Specific Determinants of FDI, *The Business Review Cambridge,* 18(1), 219-234.
Ho, C.S.F., Ahmad, N., and Dahan, M.H. (2013). Economic Freedom, Macroeconomic Fundamentals and Foreign Direct Investment in Fast Emerging BRICS and Malaysia. *The International Journal of Banking and Finance*, 10(1), 57-73.
Hymer, S. (1970), "The Efficiency (contradictions) of Multinational Corporations", *American Economic Review*, 60, 441-448.
Kakar, Z.K. and Khilji, B.A. (2011). Impact of FDO and Trade Openness on Economic Growth: A Comparative Study of Pakistan and Malaysia, *Theoretical and Applied Economics*, 18(11), 53-58.
Kaur, M and Sharma, R. (2013). Determinants of Foreign Direct Investment in India: An Empirical Analysis*, Decision*, 40(1-2), 57-67.
Kirchner, S. (2012). Foreign Direct Investment in Australia Following the Australia-US Free Trade Agreement, *The Australian Economic Review*, 45(4), 410-21.
Klimek, A. (2011). Greenfield Foreign Direct Investment Versus Cross-Border Mergers and Acquisitions: The Evidence of Multinational Firms from Emerging Countries, *Eastern European Economics*, 49(6), 60-73.
Lave, J.H., and Hidalgo, F.L. (2000). Analyzing the Determinants of U.S. Direct Investment in Mexico, *Applied Economics*, 32, 1259-1267.
Leitao, N.C. (2010). Foreign Direct Investment: The Canadian Experience, *International Journal of Economics and Finance*, 2(4), 82-88.
Lokesha B.K. and Leelavathy D.S. (2012). Determinants of Foreign Direct Investment: A Macro Perspective, *The Indian Journal of Industrial Relations*, 47(3), 459-469.
Malhotra, D.K., Russow, L. and Singh, R. (2014). Determinants of Foreign Direct Investment in Brazil, Russia, India and China, International Journal of Business, Accounting and Finance, 8(1), 130-148.
Mugableh, M.I. (2015). Time Series Analysis of Inward Foreign Direct Investment Function in Malaysia, Procedia - Social and Behavioral Sciences, 172, 679-685
Organization for International Investment (2015). Foreign Direct Investment in the United States 2014 Report, retrieved on 29 May, 2015 at http://www.ofii.org/sites/default/files/FDIUS2014.pdf
Ramrattan, L. and Szenberg, M. (2014). A Generalized Model for Foreign Direct Investment Flow to All Countries, *The Journal of Developing Areas*, 48(1), 165-175.
Roy, A.G. and Berg, H.F.V. (2006). Foreign Direct Investment and Economic Growth: A Time-Series Approach, *Global Economic Journal*, 6(1), 1-19.
Rugman, A. M., (1981) "Inside the Multinationals: The Economics of Internal Markets", Book Review, *Managerial and Decision Economics*, 6(1), 64-65.
Salehizadeh, M. (2005). Foreign Direct Investment Inflows and the US Economy: An Empirical Analysis, *Economic Issues*, 10(2), 29-50.
Singhania, M., and Gupta, A. (2011). Determinants of Foreign Direct Investment in India, *Journal of International Trade Law and Policy*, 10(1), 64-82.
Suliman, A., Elmawazini, K. and Shariff, M.Z. (2015). Exchange Rates and Foreign Direct Investment: Evidence for Sub-Saharan Africa, *Journal of Developing Areas*, 49(2), 203-226.
Surge, N.C., Muhammad, A., Tamwesigire, C., and Mugisha. F. (2008). Determinants of FDI inflows into Rwanda: 1971-2003, *International Journal of Financial Services Management,* 3(2), 200-212.
U.S. Department of State (2014). Investment Climate Statement, June 2014 retrieved on May 19, 2015 at http://www.state.gov/documents/organization/228922.pdf
UNCTAD (2015). Global FDI flows declined in 2014 and China Becomes the World's top FDI recipient, Global Investment Trends Monitor, 18, released on 29 January, 2015.
Wijeweera, A., Villano, R. and Dollery, B. (2010). Economic Growth and FDI Inflows: A Stochastic Frontier Analysis, *The Journal of Developing Areas*, 43(2), 143-158.
Wong, K.N., Tang, T.C. and Fausten, D.K. (2009). Foreign Direct Investment and Services Trade: Evidence from Malaysia and Singapore, *Global Economic Review*, 38(3), 265-276.
Yang, Y., Groenewold, N. and Tcha, M. (2000). The Determinants of Foreign Direct Investment in Australia, *Economic Society of Australia Journal of Economic Record*, 76(232), 45-54.

Housing Affordability among Generation Y in Malaysia A Conceptual Analysis

Amira Aishah Binti Mohd Shoed[1] & Geetha Subramaniam[2*]
Universiti Teknologi MARA, Shah Alam, amirashoed@yahoo.com
Universiti Teknologi MARA, Shah Alam, geethamaniam@gmail.com

Abstract

Over the past few years, the house prices in Malaysia have experienced a huge value development and turned into a stress pattern for those who want to own a house, especially first time home buyers. This conceptual paper will examine issues of housing affordability among young Malaysians who have intentions of buying a house. The persistent increment of house prices have influenced the capability and ability of individuals to buy houses. The issue is extremely serious among the first time home purchaser, particularly the Generation Y. Thus, this paper will discuss some of the reasons behind this issue and also examine the current government housing policies which are in place to help home buyers. This conceptual study would form a theoretical framework for further empirical work to be done by future researchers and which can be used by policy makers and stakeholders in designing affordable housing for Generation Y in Malaysia.

KEY WORDS – housing affordability, generation Y.

…….

* Geetha Subramaniam is an Associate Professor at Universiti Teknologi MARA, Shah Alam and can be contacted at geethamaniam@gmail.com

INTRODUCTION

Housing affordability refers to a condition when people have the potential to save a certain portion of their income to buy a house, as well as to pay other expenditures in their working period (Anirban et. al, 2006). It refers to the ability of a person in acquiring something in financial terms. Housing affordability is one of the key variables that can portray the socio-economic stability and development of a nation. Housing affordability is important so that houses provided are at reasonable and affordable prices for all income groups. The Government of Malaysia recognizes that housing is a fundamental requirement for every citizen. It is additionally an essential segment of the urban economy. These have led the Government of Malaysia to formulate policies and programmes aimed at ensuring that all Malaysians have the opportunity and chance to obtain an appropriate place to stay.

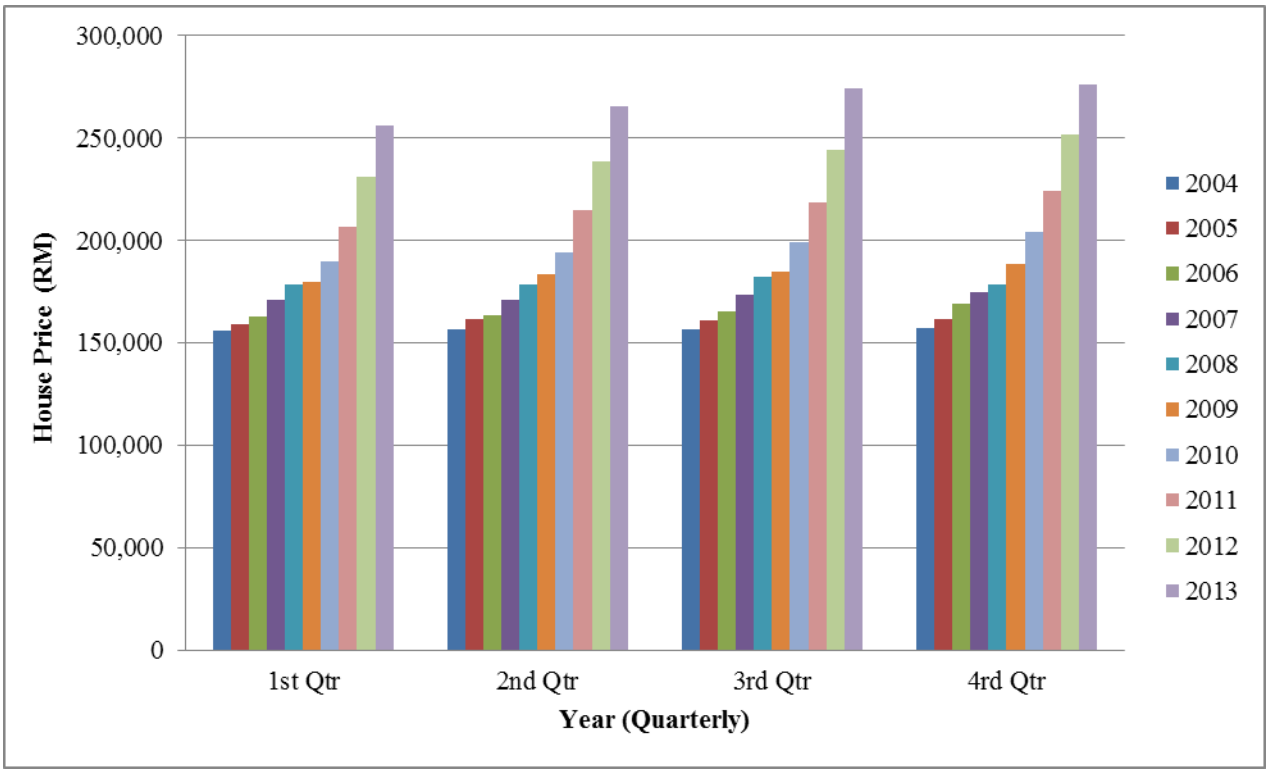
Generation Y or commonly referred to as Gen Y refers to the younger generation of population born between 1980 to 1995. Basically, they will be first time home buyers and would have either just completed their studies or in their early years of marriage.

A close look at the housing prices in Malaysia by the Valuation and Property Services Department of Malaysia (JPPH), Ministry of Finance revealed that, the prices have appreciated

dramatically in the past decade (JPPH, 2015). Figure 1 shows the average house pricies that have continued to increase from year to year from Quarter 1 (Q1) 2004 to Quarter 4 (Q4) 2013 (JPPH,2015).

As shown in Figure 1, during the period of 2004 to 2013, Malaysia experienced a dramatic increase in housing prices. It is alarming to note that in Q4 2013, the average house price for all houses in Malaysia hit RM 275, 870. The price has increased since the past four quarters; RM 251,731 (Q4 2012), RM 256,199 (Q1 2013), RM 265,737 (Q2 2013) and RM 274,351 (Q3 2013).

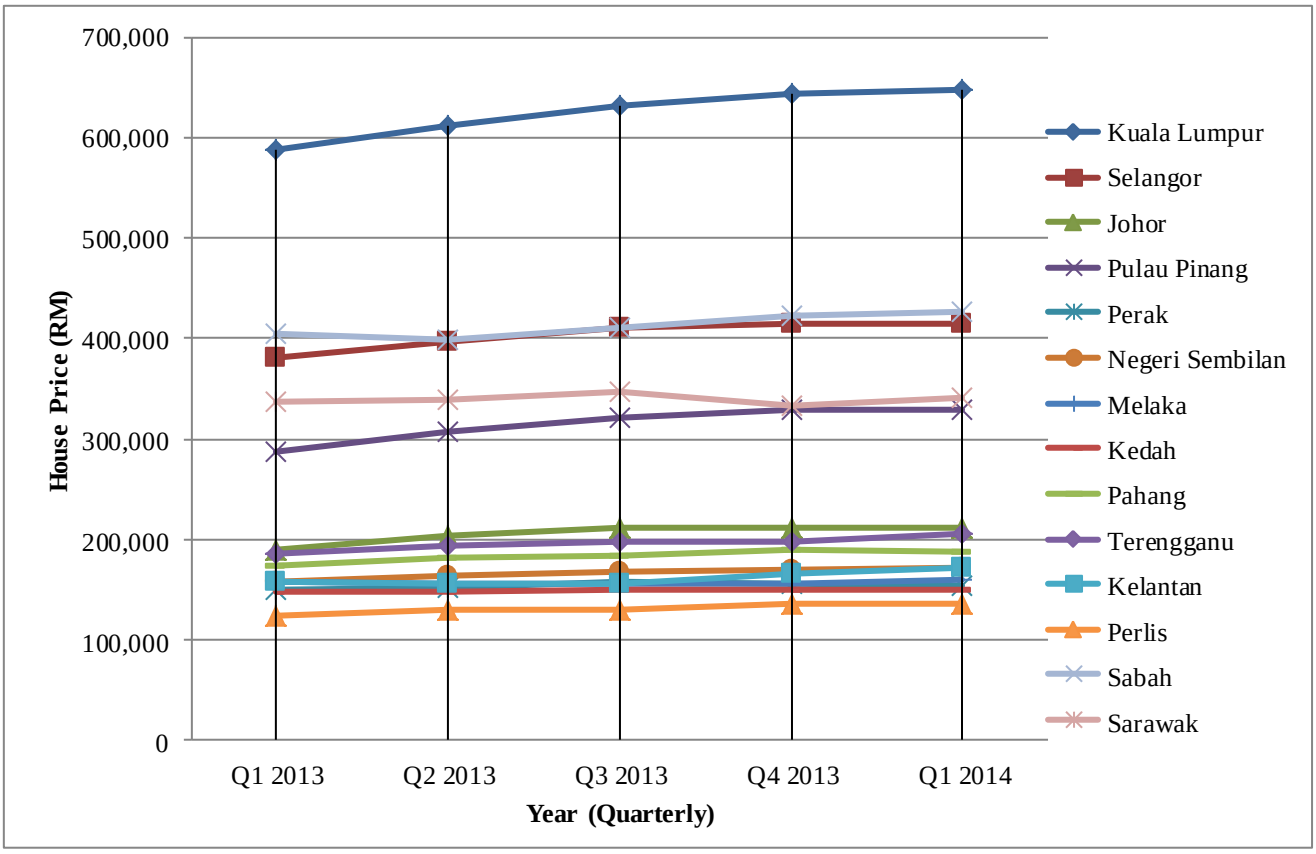
FIGURE 1 - House Prices in Malaysia, 2004 to 2013



Source: Valuation and Property Services Department (JPPH,2015)

Figure 2 shows the house prices in Malaysia according to states for the years 2013 and 2014. Among the states in Malaysia, Kuala Lumpur and Selangor recorded the highest house prices. Based on the figure, it can be seen in Q1 2004, the highest price of RM682, 438 was recorded in Kuala Lumpur, followed by Selangor at RM442, 024 and Sabah at RM 426, 421.

Figure 2 - House Prices in Malaysia by States, 2013 to 2014



Source: Valuation and Property Services Department (JPPH,2015)

Current Housing Scenario in Malaysia

The Property Market Status Report, (JSSH, 2014) shows that the primary market recorded a higher number of new launches in Q3 of 2014 .ie. 68,351 new units compared to 62,376 units recorded the year before. They also highlighted that the rise was largely due to the number of condominiums and serviced apartments, which amounted to nearly 44.9% of total new launches. As expected, the states which recorded the highest number of new launches were Selangor (18%), Kuala Lumpur (17.4%) and Johor (16.8%). However, in terms of performance, landed units achieved higher overall take-up at 34.4% compared to its high-rise counterpart which amounted to just 11.1%. Further analysis shows that the type of landed property which performed well in sales were among the new launches which consisted of terraced houses securing 36.9% in sales performance. The report also revealed that the number of residential overhang units on residential underconstruction increased by 6% while the unsold not constructed recorded an 8.5% rise.

This scenario in house prices shows a worrying issue of housing affordability challenge among many Malaysians, especially the younger generation. This housing affordability influences the home ownership among Malaysians, especially the younger generation. Some

issues emerge in home ownership in the housing sector. Based on property market status reports, reviews reval that many new units have been developed but the review also highlights that many existing units are unsold. Growing housing sector encourages the developers to build more new housing units. As indicated by the National Property Information Centre, there are approximately 7,538 new residential units launched in Malaysia in 2014, while there is a current stock around 4.8 million units in the market recorded in Q3 2014 (Property Market Status Report, JSSH, 2014). However, unsold houses were 26,469 in contrast to 61,524 units, which was propelled in Q3 2014. The huge number of unsold units suggest the issue of difficulty in selling and affordability.

Affordability is more likely to be a perceived and a real problem among households with less accessible resources and especially in those areas where housing cost is high and rising quickly. So as to enhance the housing sector in Malaysia, particularly in terms of cost and affordability, the government involvement or intervention is needed. The involvement or intervention of the government in solving the housing issues can be done through policies and development strategies. For example, Ministry of Housing and Local Government have introduced the National Housing Policy (NHP). The point of this approach is to provide sufficient housing, comfort, quality and affordability to enhance the ability of living (National Housing Policy, 2010).

This issue has become a national issue as housing is a fundamental right and a fundamental need. Besides its more a concern in the current global economic condition and national economic scenario with GST and increasing cost of living.

Government Housing Policies and Programmes to Help Home Buyers

The Malaysian government set up several programs to help Malaysians buy their own homes. First, My First Home Scheme or “Skim Rumah Pertamaku” (SRP), was announced in the 2011 Budget by the Malaysian Government to assist young adults who have just joined the workforce to own their first home. The Scheme allows young adults aged 35 and below with a monthly income below RM 3,000 (First Home Scheme, 2010) to acquire 100% financing from financial institutions, enabling them to own their 1st home without the need to pay a 10% initial installment or down payment. Due to increasing house prices, an amendment was made in the 2013 Budget, where the monthly income limit was increased from RM 3,000 to RM 5,000 and certain qualifying criteria were abolished with effect from 1st January 2013**.**

First home buyers are a young age group who have just completed their studies and joined the workforce. A majority of them would have just graduated from studies. Normally, the decision to purchase a house is made when the household size becomes larger or a single person gets married (Skim Rumah Pertamaku, 2011).

Another program by the Malaysian government to help those in the middle-income group is the 1Malaysia People’s Housing Programme. Perbadanan PR1MA Malaysia was established under the PR1MA Act 2012 to plan, develop, construct and maintain high-quality housing with lifestyle concepts for middle-income households in key urban centres. PR1MA homes come in various types and sizes within an integrated community. It is sensibly designed to suit different household needs. Priced between RM 100,000 to RM 400,000, which is aimed at Malaysians to own a home that is well within their reach. PR1MA is open to all Malaysians with a monthly household income between RM 2,500 to RM 10,000 (PR1MA, 2014).

Bernama (2015) reported that, in the 2015 budget, 80,000 more housing units will be built through this program with an allocation of RM 1 billion. Prime Minister Datuk Seri Najib Tun Razak said each unit under the program would cost 20% lower than the market price. The announcement of 80,000 more housing units to be built under the 1Malaysia People’s Housing Programme was made under a broader announcement for the construction of around 223,000

new housing units aimed at helping the low and middle income groups to own homes. Additionally, to address the issue of home ownership at affordable prices, various projects and programmes will continue to be implemented, as announced in the 2015 budget. Among them are, National Housing Department (JPN) to build 26,000 units under the People's Housing Programme (PPR) with an allocation of RM644 million, Syarikat Perumahan Negara Berhad (SPNB) to build 12,000 units of the Rumah Mesra Rakyat (RMR) and also 5,000 units of Rumah Idaman Rakyat (Najib, 2014). In addition, recognising the affordability problem, Youth Housing Scheme was announced by the Malaysian Prime Minister Datuk Seri Najib Tun Razak in the 2015 budget. Youth Housing Scheme is a smart partnership between the Government, Bank Simpanan Nasional, Employees Provident Fund and Cagamas. The scheme offers a funding limit for a first home not exceeding RM 500,000 for married youth aged between 25 and 40 years with a household income not exceeding RM10,000. The maximum loan period is 35 years. Under the scheme, the Government will provide monthly financial assistance of RM200 to borrowers for the first two years to reduce the burden of monthly instalments. The Government will also give a 50% stamp duty exemption on the instrument of transfer agreements and loan agreements. The Government will also provide a 10% loan guarantee to enable borrowers to obtain full financing including cost of insurance. Borrowers can also withdraw from EPF Account 2 to top up their monthly instalment and other related costs. However, this scheme is offered on a 'first come, first served basis' for 20,000 units only.

Recently, as announced by Prime Minister Datuk Seri Najib Tun Razak in the 2016 budget, there was no relaxation on the measures to cool the rise in the property prices. Budget 2016 instead chose to concentrate on what the government can do in terms of providing more affordable housing. A total of 351,500 housing units will be built, involving multiple agencies, for all segments of society to address the issue of home ownership and the alleviate the cost of living. Among them is a RM1.6 billion allocation for 175,000 houses under the PR1MA programme which will be sold for 20% below market price, 10,000 Rumah Mesra Rakyat houses to be built by SPNB where each household will enjoy a subsidy of RM20,000 and 5,000 units of PR1MA and Perumahan Penjawat Awam 1Malaysia (PPA1M) units to be built in 10 locations around LRT and monorail stations, including Pandan Jaya, Sentul and Titiwangsa (Rashid, 2015).

THE ISSUE - HOUSING AFFORDABILITY AMONG GENERATION Y (GenY)

Over the past ten years, the residential property market in Malaysia has encountered a significant price expansion all through Malaysia. According to the Minister of Housing and Local Government, Abdul Rahman Dahlan, in the 16th National Housing and Property Summit 2013, there is a 40% difference between the demand for affordable housing and its supply in the nation right now. This is because according to the National Property Information Centre (NAPIC), just 31.7% of the total number of housing units constructed in the year 2012 had a price tag below RM 250,000 (Annual Property Market Report Year 2013). In addition, 80% Malaysians gain less than RM 6,900 per month and cannot afford houses priced at higher than RM 300,000 (Department of Statistics Housing Income Survey, 2013). Besides, affordable housing accessibility has become a more critical problem among the middle income group, which is the reason the government has introduced the 1Malaysia People’s Housing Program (PR1MA). Additionally, as mentioned by the Prime Minister Datuk Seri Najib Tun Razak, the number of people applying for PR1MA is seven times higher than the number of homes available (Bernama, 2015). Thus, this demonstrates that there is a mismatch between the demand and supply of houses towards the right target group in Malaysia.

Malaysians, especially the Gen Y find it extremely difficult to keep pace with the price hike of housing units. Also, the continuous rise of house prices has affected the ability of people

to buy homes, especially for the first time home buyers aged 24 to 35 years the most (Mentaza Khan, Mahamud & Kamaruddin, 2012).

THEORETICAL CONSIDERATIONS

Theory of Supply and Demand

Applying the basic economic model of supply and demand helps us in understanding the determination of the price of quantity of a good sold in the market. The explanation works by looking at two different groups, the buyers and sellers asking how they react each price equilibrium. Consider an equilibrium as a situation where there is no inherent tendency to change and the market just clears. The equilibrium must satisfy the market-clearing condition, where quantity demanded is equal to quantity supplied. A lower than equilibrium price causes an excess demand and a higher than equilibrium proce causes a shortage. However, This mismatch between demand and supply will cause the price of house to rise or fall for market to clear. However, in the market for housing, what is noted is there is a surplus of luxury houses, including the luxury apartments and condominiums and a shortage of mid range terrace houses being constructed. Besides, it is also noted that this mismatch affects the Gen Y more than the other age groups.

Housing Affordability

One of the main issues in the housing sector around the world is about housing affordability. The meaning of affordability is excessively subjective. As indicated by Zan and Yue (2008), affordability or moderateness is not characteristics of housing, but a characteristic of a housing administration as it identifies the capacity and the yearning of buyers to pay for it. Additionally, another definition of housing affordability is a condition when individuals can possibly save a certain portion of their income to buy a house, as well as to pay other expenditures in their working period (Mostafa et al., 2006). As demonstrated by Vliet in the Encyclopedia of Housing (1998) as cited by Mentaza Khan, Mahamud and Kamaruddin (2012), it proposes a sliding scale of moderateness which dentifies with both family unit size and wage level where almost 30% of the family unit wages were spet on houses and the balance for other family costs. Thus, the commitments towards housing is averaged at a rate of 30% of the adjusted income salary.

FACTORS AFFECTING HOUSING AFFORDABILITY – A REVIEW OF LITERATURE.

Introduction

In Malaysia, much has been researched in regards to housing affordability in the last ten years. For example, Hashim (2010) took two distinct nations to demonstrate the distinctions of moderateness. The findings reveal that the demand for proprietor possessed is dictated by the cost of housing, population development and the family arrangement rate and income growth. He discussed that housing business is unsustainable when the cost was too high and possession was troublesome. Research also has been done on low cost housing and also on the middle and lower income Malaysian.

Housing affordability has become the main issue in the housing sector as the house price and living cost continues to increase especially in urban areas. Factors such as household income, house price and expenditure of household influence the affordability levels of house

buyers. The continuous increments of house prices have affected the ability of an individual or person to purchase a house. The problem is more severe among first time home buyers aged between 24 – 35 years old, especially fresh graduates, more so with increasing household expenses. Although the government has introduced several schemes for first time home buyers, but they still fall below the affordability level. This concurs with the continuous increase in home price and high living expenses in theory. This means the house ownership becomes nearly impossible for young people in urban areas (Mentaza Khan et. al., 2012).

Studies show that housing affordabilitby is influenced by socio-demographic factors, individual attitude, spending behavior and institutional support and government policies. Hence this paper highlights these four variables.

Demographic Factors and Housing Affordability

Bujang, Abu Zarin and Jumadi (2010), claim that in recent times, there has been an increasing volume of literature researching on the relationship between affordable housing needs and population in Malaysia. They conclude that demographic factors have a greater influence on housing affordability. Their micro level study used primary survey among 200 respondents in Johor Bahru found that demographic factors such as marital status, number of households, age, educational level and household income have an influence on the the housing market and have brought about diverse levels of moderateness. However, this study concluded that reasonable housing cost in Johor Bahru was not more than RM150,000 for each unit.

Secondly, the Gen Y have been faced with a few issues relating to housing affordability. Bujang, Jiram, Abu Zarin and Md. Anuar (2015) also found that the affordable housing price among the young Malaysians, more specifically Gen Y whose monthly income is below RM 3000 is at RM 200,000 per unit. In addition, the study found that the affordability issues faced by Gen Y to buy and own a house are increasing house prices, difficulty to pay the deposit, lack of affordable or low cost house supply in the market and also the difficulty to secure credit.

Another interesting study in China, in Guangzhou by Qianwei, Danglun and Jie (2013) was done on the potential determinants of housing affordability of the 'sandwich class'. In an East Asian term, the ‘sandwich class’ refers to the lower middle class. This study examined home-ownership and affordability, using indicators such as their own assessment of most extreme home cost, greatest month to month contract installments, greatest in advance portion that they could bear the cost given their present and anticipated financial assets. The findings reported the home-ownership reasonableness determinants of the lower working class in Guangzhou are both permanent income and transitory income, the structures of both income and down payment, housing related assistance (Housing Provident Fund and employer-provided housing subsidies), and occupational sectors, gender and marital status.

Spending Behaviour and Housing Affordability

Income levels and house prices are not the only determinants of housing affordability. In fact, spending behaviour among buyers is another in determant for housing affordability. Ab Majid, Said and Daud (2014), assess the extent of expenditures that influence housing affordability among the young couples aged between 20 and 35 years living in the state of Selangor, Malaysia. A total of 215 respondents were analysed in a nine part questionnairre.They are monthly loan repayment, food and beverages, transportation, utilities, communication, household equipment, healthcare expenses and children’s education, miscellaneous spending and saving. The results show that all expenditures are very significant (< 0.01) within indicated Cronbach’s Alpha analysis (> 0.7). Nonetheless, each expenditure indicated different correlation value at two different statuses of home owners. The result

suggests that the spending patterns among young couples have a significant impact on housing affordability.

A study on home-ownership affordability in Nigeria's urban housing market conducted by Nwuba, Kalu and Umeh (2015) established the determinants of households' affordability outcomes, and the nature of their impact. The cross-sectional survey using semi-structured questionnaire was used to collect data from a sample of households selected through a stratified random technique across Kaduna State, the study area. The binary logistic regression was used to model the probability of home-ownership affordability as a function of specified explanatory variables. The findings show that home-ownership affordability is influenced by expenditure and spending behaviour. Apart from household income, another determinant of home-ownership affordability with positive impact is savings while current rental housing expenditures and non-housing expenditures are determinants of affordability with negative impact.

Individual Attititude and Housing Affordability

According to Price, Amould and Zinkhan (2004, as cited in Qiuxie & James, 2013), the most important determinant of consumer behaviour is behavioural intentions and that depends both on a person's attitude towards performing the behaviour and the influence of others' opinions about the behaviour. Attitude plays a critical role in consumer behaviour, and they are especially important because it motivates people to behave relative to consistent ways. In addition, attitudes simplify consumer decision making by providing a way for the individual to evaluate alternatives based on his or her knowledge of the attributes and benefits offered by each.

Qiuxue and James (2013) conducted a study on how internal influences such as perception, attitudes, learning behaviour, motivation and emotions impacts house buying behaviours. A survey on consumer commercial house buying behaviour was conducted in GuangXi, China. The data analysed using multiple regression analysis revealed that perception, attitudes, learning, motivation and emotion significantly influence consumer house buying behaviour.

Ab Majid, Said and Daud's (2014) study on household incomes and high house prices found that the house price is no longer the principal benchmark for housing affordability. This is because housing affordability is influenced by buyers' habit through their expenditure patterns. Among young couple households, the pattern of household income generally influences house ownership. The different pattern would contribute to different allocation of their affordability.

CONCLUSION

This conceptual review on research on housing affordability among Malaysians led to some interesting conclusions. Firstly, it looks like there is a major issue of increasing house prices and affordability especially among the Gen Y in Malaysia. Secondly, there is a concern of mismatch between the types of houses constructed and the types of houses affordable to Gen Y. Thirdly, studies show that there are many socio-demographic factors which influence housing affordability, where some have a higher influence than others. Fourthly, other than socio-demographic factors, other factors such as individual attitude, spending behavior and government housing policies also greatly affect housing affordability. Finally, the Malaysian Government is serious in combatting the issue of housing ownership among Malaysians based on its policies and programmes in the last five years. However, the issue is how effective have

these policies been among the Malaysian Gen Y. Also how aware are some of the Gen Y regarding these Govrenment policies and programmes.

It is obvious that no single factor is responsible for housing affordability among Malaysians. Therefore this conceptual study paves the way for an empirical study to be done to examine to what extent does this housing mismatch affect housing affordability among young Malaysians. Besides, this conceptual study would form a theoretical framework for further empirical work which can be used by policy makers and stakeholders in designing affordable housing for Gen Y in Malaysia. Besides, with so many government policies in place, the study will also look at the effectiveness of these government policies.

REFERENCES

Ab Majid, R., Said, R., & Daud, M.N. (2014). The Assessment of Young Couples' Behaviour on Expenditure Towards Homeownership. *International Surveying Research Journal (ISrJ), 4* (2), 35-52.

Bujang, A.A., Abu Zarin, H., & Jumadi, N. (2010). The Relationship Between Demographic Factors and Housing Affordability. *Malaysian Journal of Real Estate, 5* (1), 50-58.

Bujang, A.A., Anthony Jiram, W.R., Abu Zarin, H., & Md. Anuar, F.H. (2015). Measuring the Gen Y Housing Affordability Problem. *International Journal of Trade, Economics and Finance 6* (1), 22-26.

Hashim, Z.A. (2010). House Price and Affordability in Malaysia. *Akademika, 78*, 37-46.

JPPH (2015) Valuation and Property Services department, Ministry of Finance Malaysia, from http://www.jpph.gov.my/

Khazanah Research Institute. 2015. Making Housing Affordable. Kuala Lumpur: Khazanah Research Institute. License: Creative Commons Attribution CC BY 3.0.

Malaysian House Price Index Data. Valuation and Property Services Department. Retrieved March 29, 2015, from http://napic.jpph.gov.my/portal

Mentaza Khan, P.A., Mahamud, R., & Kamaruddin, N. (2012). An Overview of Housing Affordability For First Time Home Buyer In Malaysia. 3rd International Conference on Business and Economic Research Proceeding. 12-13 March, Bandung.

Mostafa, A., Francis, K.W. Wong., & Chi, M.E.H. (2006). Relationship between Housing Affordability and Economic Development in Main China: Case of Shanghai. *Journal of Urban Planning and Development*, *132* (1), 62-70.

National Housing Policy. Retrieved April 1, 2015, from http://www.kpkt.gov.my/lain_terbitan/DRN_KPKT_(ENG).pdf

National Property Information Center 2013. Retrieved March 30, 2015, from http://napic.jpph.gov.my/portal

Nwuba, C.C., Kalu, I.U., & Umeh, J.A. (2015). Determinants of Homeownership Affordability in Nigeria's Urban Housing Markets. *International Journal of Housing Markets and Analysis, 8* (2), 189 – 206.

PR1MA. Retrieved 10 April, 2015, from http://www.pr1ma.my/

Property Market Status Report, Q3 2014. JSSH, Ministry of Finance. Retrieved March 29, 2015, from http://napic.jpph.gov.my/portal

Rashid, F.H. (2015, October 24). Boost for home ownership. New Straits Times,

Qianwei, Y., Danglun, L., & Jie, C. (2013). The Determinants of Homeownership Affordability among the 'Sandwich Class': Empirical Findings from Guangzhou, China. *Urban Studies Journal Limited, 50* (9), 1870-1888.

Qiuxue, L., & James, P.T.J. (2013). Influences on the Buying Behavior of Purchasing Commercial Housing in Nanning City of Guangxi Province, China. *Journal of Management and Marketing Research, 2* (12), 1-11.

Razak, N. (October 10,2014). The 2015 Budget Speech. Bernama. Retrieved September 16, 2015, from http://www.bernama.com/bernama/v8/newsspeech.php?id=753

Salvatore, D. (2009). *Principles of Microeconomics.* New York: OXFORD University Press.

Skim Rumah Pertamaku. Retrieved April 10, 2015, from http://www.srp.com.my/docs/html/home.html

Zan, Y., & Yue, S. (2008). The Affordability of Owner Occupied Housing in Beijing. *Journal Housing and Built Environment, 23,* 317-335.

Personal Bankruptcy Prediction in Malaysia

Salwana Hassan[1, 4], Nordin Abu Bakar[2], Sharifah Heryati Syed Nor[1]*,
Wan Mohd Farid Wan Zakaria[1], Raihanah Abdul Aziz[3]

[1]Faculty of Business Management, Universiti Teknologi MARA, Malaysia.
[2] Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA, Malaysia.
[3]Faculty of Business Management, Universiti Teknologi MARA, Malaysia
[4]Accounting Research Institute, Universiti Teknologi MARA, Malaysia
*sharifahheryati_syednor@yahoo.com

ABSTRACT

Predicting personal bankruptcy is a phenomenon of increasing interest to bankers, lenders, creditors, as well as government agencies. The reason is simply due to the fact that personal bankruptcy in Malaysia is increasing at a staggering pace and borrowers or lending agencies are looking to secure their investments. In 2013 annual report of Insolvency Department of Malaysia, it was reported that personal bankruptcy cases have increased, from 2007 to 2013 as much as 66.09 percent. The total cases were 108,931 as at 2013. The objective of this paper is to identify the determinants of personal bankruptcy and to predict personal bankruptcy based on the identified determinants. Several determinants have been identified from literature to form a foundation for this study such as debt-to-income ratio, credit card debt, unemployment or job loss, marriage problem, financial knowledge and many more.

Personal Bankruptcy Prediction Framework (PBPF) will classify the individuals into three categories; namely, highly likely to be bankrupt, potentially to be bankrupt and less likely to be bankrupt. The PBPF will facilitate clustering algorithm such as self-organizing map (SOM) in order to describe and predict financial future of the individuals based on the determinants mentioned above. The main outcome of this study is to produce a framework that will be used to identify objectively those individuals that are keen to file personal bankruptcy in the future. The data will be gathered from the public who fit into the criteria such as having a loan, use a credit card, and in debt. This will significantly prevent potential individuals to fall bankrupt.

Key Words: Personal Bankruptcy, Insolvency, Finance, Debt Management

1. INTRODUCTION

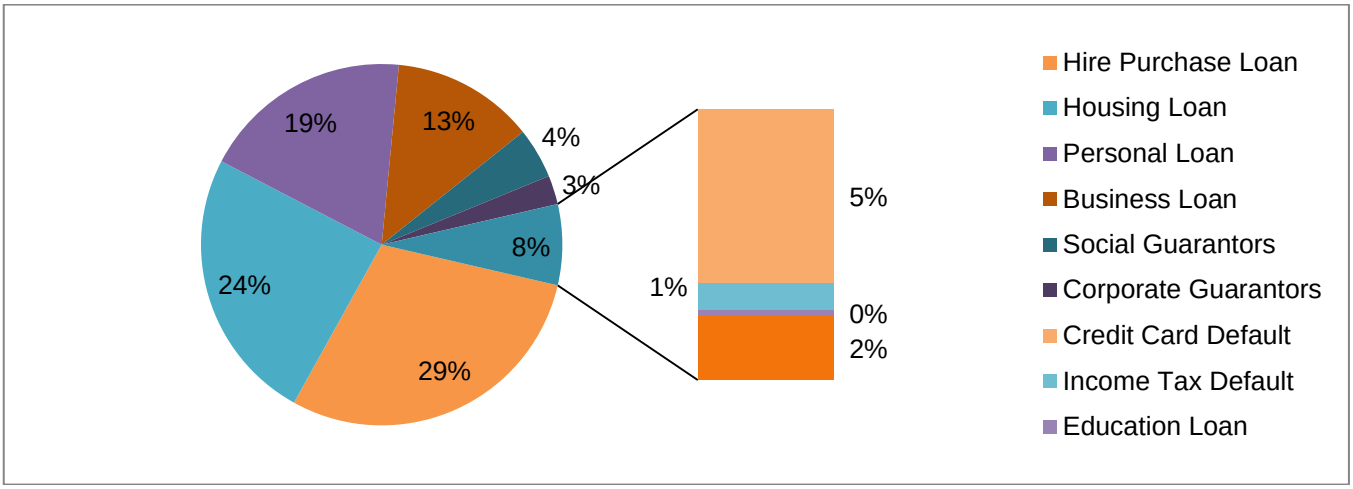
Personal bankruptcy occurs in almost every country in this world and the number keeps rising each year. Recent years have seen a significant rise in personal insolvencies in many major economies (Bishop and Gripaios, 2010). In the United States of America (US), for example, rates of filing for non-business bankruptcy rose from 15 to 54 persons per 10,000 populations from 1980 to 2004 whilst, in Canada, personal bankruptcies grew by 87 percent over the period 1990–2007. Similarly, there was a staggering 350 percent increase in bankruptcy in Australia over the 10 years from 1988 to 1998 and, in England and Wales, individual insolvencies rose from an average of 7,000 per annum in the 1980s to 27 500 in the 1990s and then to more than 100,000 in 2006 and 2007.

In Thailand, from 2006 to 2010 there were over 13,000 new consumer and business bankruptcy cases each year. On average for the past five years, two out of 10,000 persons were sued in bankruptcy cases per year (Jullamon, 2013). Whereas in Korea, the number of bankruptcy cases has grown from 11 cases in 1985 to 15,266 cases in 2004 (Oh, 2006). In Malaysia, bankruptcy cases are also on the rise. In 2013 annual report of Insolvency Department of Malaysia, it was reported that personal bankruptcy cases have increased, from 2007 until 2013 as much as 66.09 percent. The total cases stood were 108,931 as at 2013.

2. PERSONAL BANKRUPTCY

2.1 Current Personal Bankruptcy Cases in Malaysia

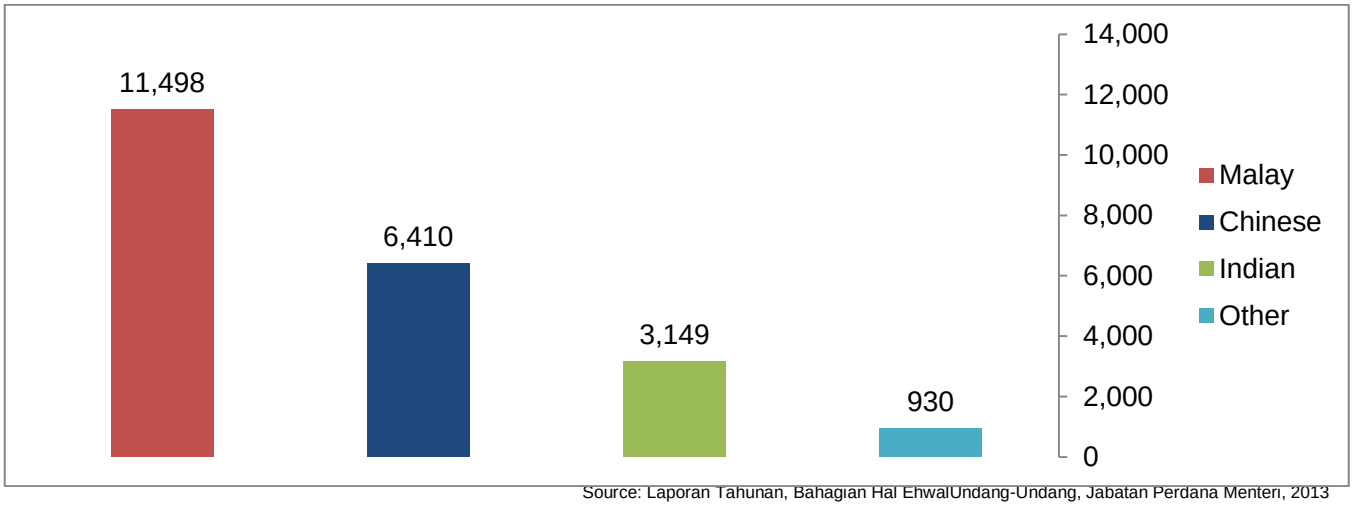
Insolvency Department reported that there were 21,987 cases of declared bankruptcy in 2013. From that total, as illustrated in Figure 1, 6,468 cases were from hire purchase loan, 5,396 cases were from housing loan, 4,174 cases were from personal loan, 2,800 cases were from business loan, 995 cases of social guarantors, 567 cases of corporate guarantor, 1,016 cases of credit card defaulters, 163 cases of income tax defaulters, 32 cases of education loan and 376 cases of other debt.



Source: Laporan Tahunan, Bahagian Hal EhwalUndang-Undang, Jabatan Perdana Menteri, 2013

Figure 1: Total Bankruptcy Cases by Reason of Indebtedness For The Year 2013

The highest percentage of bankruptcy by age group between 35 to 44 years old is 34 percent. While gender, it was dominated by male, at 69 percent and followed by female, 31 percent. The highest cases of bankruptcy by ethnicity was dominated by the Malay race which was at 11,498 cases, followed by Chinese, 6410 cases, Indians at 3149 cases and lastly other races at 930 cases. Selangor had the highest number of bankruptcy cases and Perlis scored the lowest bankruptcy cases.

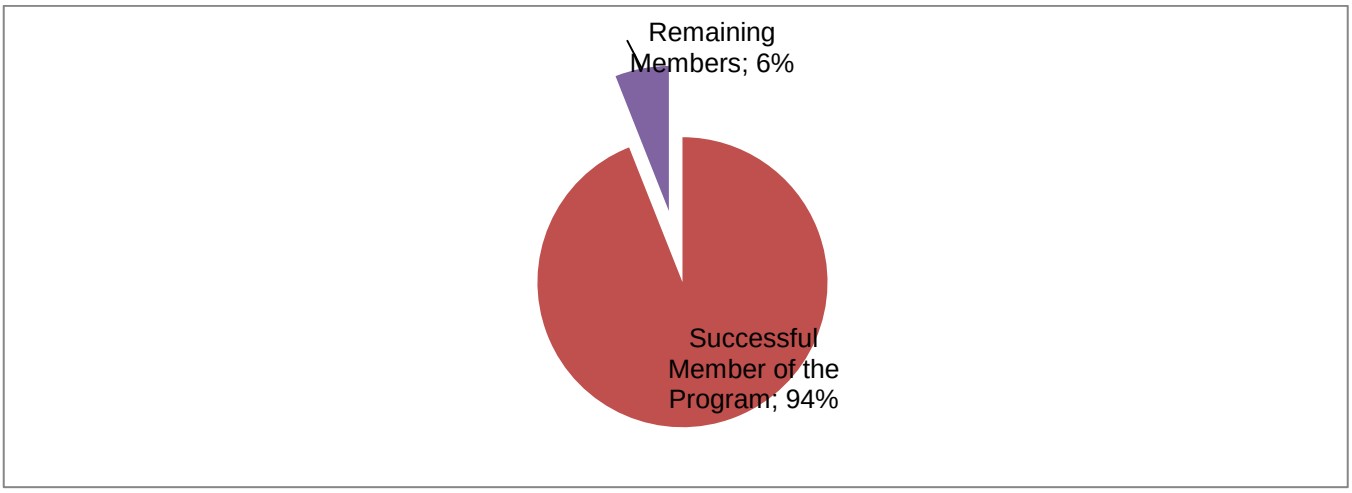


Source: Laporan Tahunan, Bahagian Hal EhwalUndang-Undang, Jabatan Perdana Menteri, 2013

Figure 2: Number of Bankruptcy Cases by Races for The Year 2013

In order to curb the rising bankruptcy cases, Bank Negara had set up Agensi Kaunseling dan Pengurusan Kredit, also known as AKPK. AKPK's vision is to create a society that is financially savvy through consumer financial education, financial counselling and debt management programmes.

As at 31st May 2015, 342,824 individuals have attended AKPK's counselling services and from that, 131,196 customers have applied to enrol into their Debt Management Programme (DMP). Debt Management Programme is to assist financially distressed consumers in regaining their financial control. As at the mentioned date, 7835 individuals successfully exited from DMP with a total outstanding of RM324.4 million. These successful individuals only make up 5.97 percent of the total 131,196 members of DMP. To sum up, only a small percentage (5.97 percent) of the total members of DMP managed to free from financial distress and avoid bankruptcy.



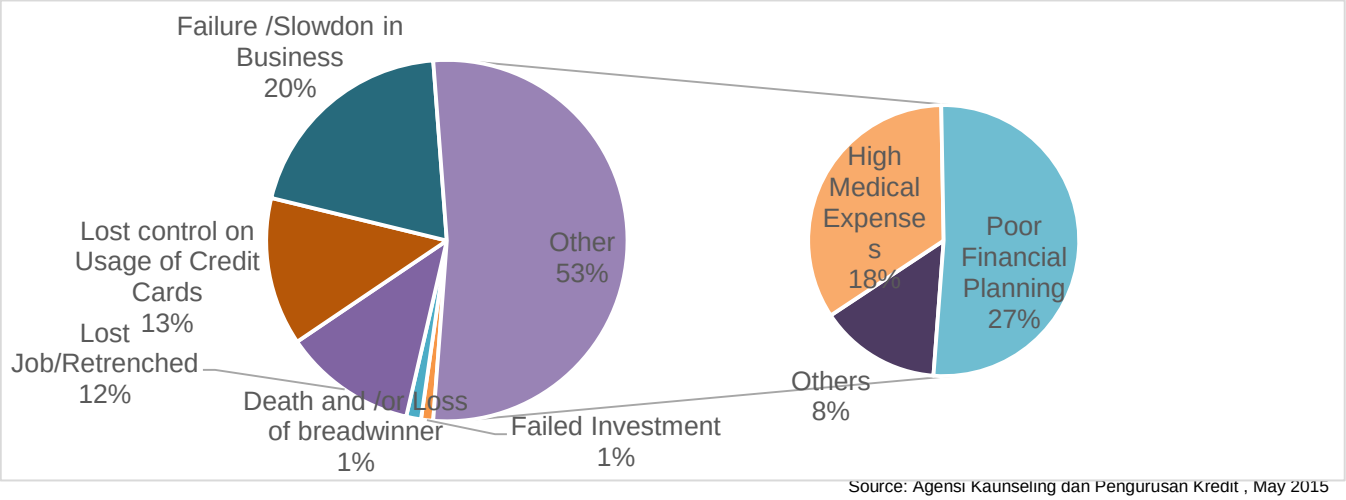
Source: Media fact sheet from Agensi Kaunseling dan Pengurusan Kredit

Figure 3: DMP Members as at 31st May 2015

2.2 Causes of Personal Bankruptcy

Many studies have been conducted all around the world to identify the causes of personal bankruptcy. Among the reasons are factors such as debt-to-income ratio (Paquin & Weiss, 1998; Hussain, 2002 and Sullivan, Warren & Westbrook, 2000), credit card debt (Loke, Yen & Tan, 2013; Domowitz & Sartain, 1999; Mason, 2000; Noordin, Zakaria, Zool, Mohamed & Ngah, 2012; Ausubel, 1997 and Azaizeh, 2010), unemployment or loss of job, divorce (Domowitz & Sartain,1999; Fisher & Lyons, 2006; A.deMagalhaes & Stokes, 2005; Sullivan, Warren & Westbrook, 2000; Bland, A.deMagalhaes & Stokes, 2007; Stuart and Peyman, 2009 & Sullivan, Warren and Westbrook, 1995), financial knowledge (A.deMagalhaes and Stokes, 2005; Bland, A.deMagalhaes & Stokes, 2007; Eaw, Khong, Rajagopalan & Abd.Hamid, 2014 and Rhee, 2001) and so on. Their customers' statistics showed that the main reason people face financial problems is because they lack financial education (Fan & Yavuzoglu, 2013).

The breakdowns of the reasons for unmanageable debts are as follow:



Source: Agensi Kaunseling dan Pengurusan Kredit , May 2015

Figure 4: Statistics of Reasons for Default /Debt Problem in Debt Management Program

From Figure 4, it can be concluded, poor financial planning reason has the highest percentage given by the members of Debt Management Program, Agensi Kaunseling dan Pengurusan Kredit.

2.3 Methods of Bankruptcy Study

According to Moorman & Garasky (2008) and Fan & Yavuzoglu (2013), data on people who are already bankrupt should be collected first as a preliminary analysis prior to study. This allows researchers to split the personal bankruptcy case into two different segments; voluntary filed for bankruptcy and declared as bankrupt person according to law. Information on personal bankruptcy can be obtained through questionnaire as an instrument to collect informations on socio-demographic, adverse events, consumption patterns, and financial problems or difficulties. Interview also can be conducted to give clear pictures of respondents problems before bankruptcy event.

Descriptive statistics summarize basic nature of this study. It helps to make a better interpretation of correlation between variables. Different model adopted in numerous number of studies to estimates the relationship between selected variables with personal bankruptcies. The significant of the model can be tested by using regression analysis. For instance; logit, probit, simple regression (ordinary least squares) and etc can be used.

Different methods have been adopted by different researchers based on their study setting. A study of Moorman & Garasky (2008) used cross sectional, time series data and employed the binomial logit model as a method of analysis. The key variables used in their study were financial problems and consolidation loans as the independent variables. Logistic regression analysis was run using the binomial logit model (see Equation 1). Standard errors were estimated with a Huber–White procedure.

Equation 1: Binominal Logit Model of Personal Bankruptcy

$$BANKRUPT_{i,j} = \alpha FPFP_{i,j-1} + \alpha CLCL_{i,j-1} + \beta X_{i,j-1} + \mu_{i,j}$$

From Equation 1, BANKRUPT is an indicator of whether household *i* filed for bankruptcy (=1) or not (=0) in year *j*. Function of financial problems (FP) of filing for bankruptcy can be measured through a count of occurrences of the five (5) types of financial difficulties. Obtaining a consolidation loan (CL) is measured through an indicator variable set to 1 if a loan was obtained and 0, if otherwise. X is a vector of input variables. FP, CL and X are measured in the year prior to the year that bankruptcy was measured to avoid endogeneity, while **μ** is an error term.

Meanwhile, Fisher & Lyons (2006), in their study used the Panel Study of Income Dynamics data to investigate the relationship between divorce and bankruptcy. The two dependent variables tested in this study were divorced decision and bankruptcy decision. This study employed the single-equation probit model and the simultaneous two-equation probit as a method of analysis. Probit and simultaneous probit was run to estimate bankruptcy and divorce. The results of the simultaneous probit were compared to the traditional single-equation models. Thorne (2001) conducted a qualitative study to examine the gendered division, and emotional effects of household financial labor among severely indebted couples prior to filing for bankruptcy. The study used a constant comparative method. The answers to questions about debt management were combed for persistent themes and analytically significant subcategories.

Macroeconomic variables also were used as determinants of personal bankruptcy. Hussain (2002) argued that greater indebtedness led to the growing number of personal bankruptcies which was measured by debt-to-income ratio along with pressure from external factors e.g. unemployment rate, real disposable income, and changes in interest rates. He employed Augmented Dickey-Fuller (ADF) tests to establish the time series properties of the variables, a stochastic or deterministic trend to see implications before the series can be modelled. The Engle-Granger two-step procedure used to estimate the long-run error correction mechanism, and a dynamic equation. Regression analysis and ordinary least squares estimated the long-run equation for personal.

The impact of gambling on personal bankruptcy rates suggested that the increased availability and accessibility to gambling might be a determining factor in increasing the personal bankruptcy rate (Viña & Bernstein, 2002). The study was designed based on the NORC panel database and data was collected from 100 counties in 36 states in US. Access to gambling, unemployment and pari-mutuel wagering are the variables used in determining the increase in the bankruptcy rate. Regression analysis, fixed effect model and random effect model were used to test the significant rise in the personal bankruptcy rate.

A study was done by Komoto in 2014 on factors associated with suicide and bankruptcy among Japanese pathological gamblers used the retrospective cross-sectional design on 141 adults who were primarily identified as pathological gamblers. The variables used in this study were demographic variables and medical variables. A Pearson correlation analysis was used to assess correlations between suicide attempts and bankruptcy and other variables. Multiple stepwise backward linear regression analysis was used to identify the independent predictors of attempted suicide and bankruptcy. Full regression models were performed as an analysis of variance. Statistical significance was set at 95-percent confidence level ($p<0.05$).

According to Rhee (2001), the probability of filing for bankruptcy is specified as a function of eight factors: (1) individual household's default-risk related factors (X_1–X_4) , (2) bankruptcy stigma related factors (X_5), (3) state bankruptcy laws (X_6), (4) creditors' risk tolerance (X_7), and (5) time trend (X_g). An individual *i* 's propensity to file bankruptcy in year *t* is specified as Equation 2 below.

Equation 2: Probability of Filing for Bankruptcy

$$log\left(\frac{P_{it}}{1-P_{it}}\right) = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \cdots + \beta_6 X_{6it} + \beta_7 X_{7it} + \beta_8 X_{8it}$$

Where, $\mathbf{P}_{it}$: Odds of Filing Bankruptcy; $\mathbf{X_{1it}}$: Debt /Asset Portfolio; $\mathbf{X_{2it}}$: Repayment Ability; $\mathbf{X_{3it}}$: Time Preference; $\mathbf{X_{4it}}$: Credit Accessibility; $\mathbf{X_{5it}}$: Bankruptcy Stigma; $\mathbf{X_{6it}}$: State Bankruptcy Laws; $\mathbf{X_{7i}}$: Creditors' Risk Tolerance; $\mathbf{X_{8it}}$: Time Trend Factors and $\boldsymbol{\beta_0}$, $\boldsymbol{\beta_1,....\beta_8}$ are coefficients for corresponding variables.

The individual household characteristics related to default risk included (1) asset of debt and asset portfolio variables reflecting the financial incentive for filing for bankruptcy, (2) household income

and education level of the household head for the repayment ability of the household, (3) a set of variables capturing the current consumption needs of the household and (4) other demographic variables proxying for credit constraint.

To sum up, a comprehensive methodology of determining personal bankruptcy in developing a robust model may include internal and external factors that have effects on a personal financial situation before one has been declared bankrupt according to law. Combinations between quantitative and qualitative data are required in designing a solid model of personal bankruptcy. Statistical tests on descriptive, serial correlation and regression are used to make further analysis and to test the robustness and significant of the developed model.

3. METHODOLOGY

3.1 Personal Bankruptcy Prediction Framework Using SOM

This study will utilize a computational learning algorithm called the Self-Organsing map (SOM) to classify the data. SOM is an unsupervised learning algorithm that relates similar input data (strength values relative to a threshold) and places them on the same region of a neuron map. Previous research was done by Hsieh (2004) used SOM to build a behavioral scoring model in order to predict potential customer behaviour. The SOM that will be used here is a two-dimensional map arranged as an array of neurons. Each of these neurons is connected to the input variables through synaptic weights which are adjusted through learning. Diagramatic description of this framework is presented in Figure 5.

3.2 Data Collection Process

For the purpose of this study, primary data collection will be used. The instrument for primary data collection will be through questionnaires. Questionnaires will use structured questions using both positive and negative approaches to ensure reliability of the answers of the related issues. The questionnaire will be conducted in English with Bahasa Malaysia translation. Sampling size consists of 500 individuals vulnerable to bankruptcy in Malaysia, which will be randomly selected. Simple Random Sampling would be used as suggested by Sekaran (2003) for this type of study. Simple random sampling has the least bias and offers the most generalization ability. Data analysis will be in the form of descriptive analysis, correlation analysis, and multiple regression analysis among other tests.

The process of data collection is summarized in Table 1 below:

Table 1: Process of Data Collection

Types of Data	Primary
Instruments	Questionnaires
Sampling Size	500
Sampling Unit	Individuals vulnerable to bankruptcy
Sampling Frame	Individuals with consumer loans
Sampling Design	Simple random
Data Analysis	Descriptive, correlation and multiple regression
Hypothesis Testing	Reliability test

Data Testing	Reliability test

3.3 Proposed Research Framework

The Personal Bankruptcy Prediction Framework is developed using several components; such as debt factors (Paquin & Weiss, 1998; Domowitz & Sartain, 1999; Stavins, 2000; Rhee, 2001;, A.deMagalhaes and Stokes, 2005; Zhu, 2011 and Azaizeh, 2010), repayment ability factors (Chakravaty & Rhee,1999; Agarwal, Chomsisengphet & Liu, 2011; Alfaro & Gallardo, 2012 and Loke, Yen & Tan, 2013), consumption needs factors as in Fay, Hurst, & White, 2002; Li & Sabarwal, 2005; Keys, 2010 and Jullamon, 2012) and last but not least credit accessibility factors (Chakravaty & Rhee, 1999; Rhee, 2001; Duca & Rosenthal, 1993; Stavins, 2000 and Azaizeh, 2010).

Independent Variables

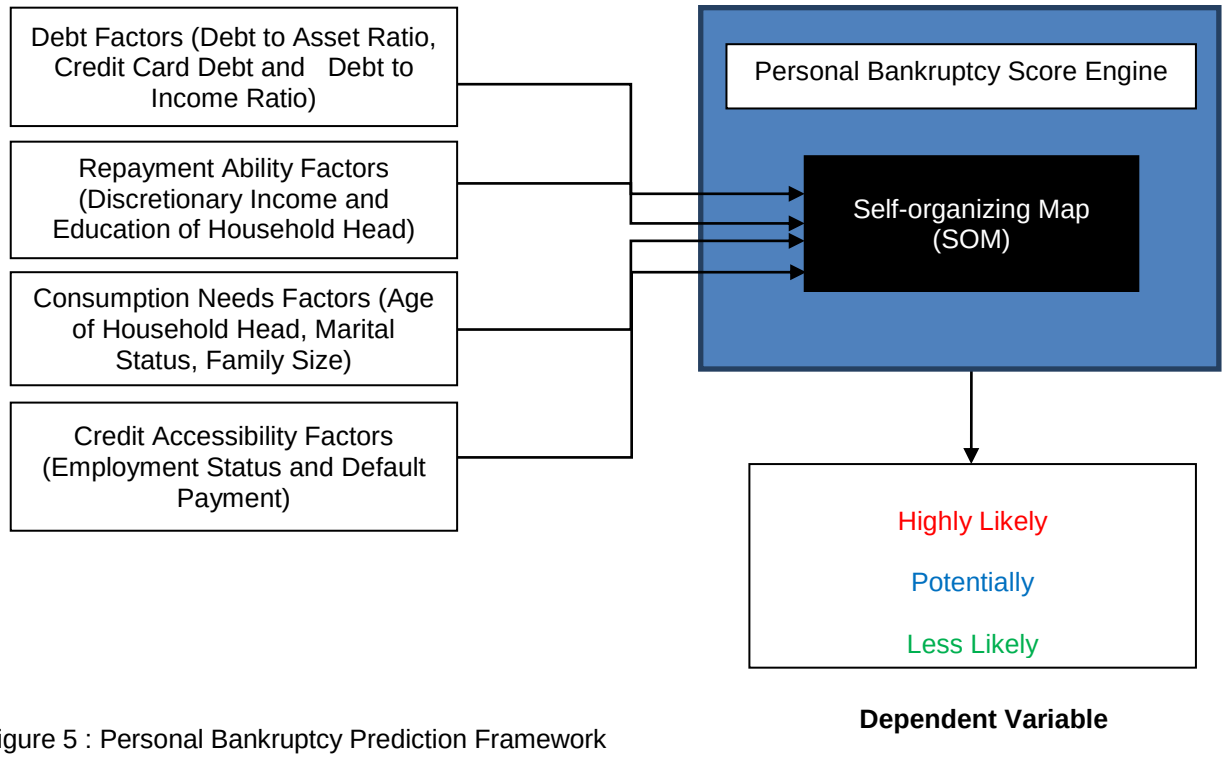


Figure 5 : Personal Bankruptcy Prediction Framework

4. CONCLUSION

As mentioned earlier, personal bankruptcy cases in Malaysia are on the rise. This is a serious problem because once we are bankrupt, there are many limitations in our lives. For example, a bankrupt person will cease from serving as a government servant, denied any loan applications, restricted from travelling overseas, cannot hold any account with financial institutions, cannot own an asset, cannot act as a guarantor and so on (Annual Report of Insolvency Department of Malaysia, 2013).

Moreover, bankruptcy also has an impact on the demand and supply of credit. Bankrupts are restricted from applying for credit and the supply of credit is affected if the non-performing loans and bad debts of financial institutions are high. Gropp, Scholz and White (1997), found that bankruptcy reduces the demand and supply of credit. Bankruptcy exemptions are likely to affect both the supply and demand for credit. As the bankruptcy exemption rises, debtors are more likely to file for bankruptcy and repay less in bankruptcy, holding other factors constant. However higher bankruptcy

exemptions also reduce the amount that creditors receive in repayment of debt and may make them more likely to refuse to lend in the first place. Thus, higher bankruptcy exemptions are predicted to reduce credit supply.

5. ACKNOWLEDGMENT

The researchers express their gratitude for the financial support from Fundamental Research Grant Scheme(FRGS), Ministry of Education Malaysia and Universiti Teknologi Mara [Project file: 600-RMI/FRGS 5/3(132/2014)]

REFERENCES

A.deMagalhaes, J., & Stokes, P. (2005). Attitudes and Assets: An Investigation of the Causes of Personal Bankruptcy. Journal of Business & Economics Research (JBER), 3(6). Retrieved from http://www.cluteinstitute.com/ojs/index.php/JBER/article/view/2786

Agarwal, S., Chomsisengphet, S., & Liu, C. (2011). Consumer bankruptcy and default: The role of individual social capital. Journal of Economic Psychology, 32(4), 632–650. doi: 10.1016/j.joep.2010.11.007

Alfaro, R., & Gallardo, N. (2012). The Determinants of Household Debt Default. *RAE Revista De Análisis Económico, 57-70.*

Ausubel, L. M. (1997). Credit Card Defaults, Credit Card Profits, and Bankruptcy. *American Bankruptcy Law Journal, 71*(Spring 1997), Pp. 249-70.

Azaizeh, S. Y. (2010). Essays on Household Demand for Credit Cards, Bankruptcy And Over-Spending (Order No. 3426646). Available from ProQuest Dissertations & Theses Global. (763225189). Retrieved from http://search.proquest.com.ezaccess.library.uitm.edu.my/docview/763225189?accountid=4251

Bernstein, D., & Viña, L. d. (2002). The Impact of Gambling on Personal Bankruptcy Rates. *Journal of Socio-Economics, 31, 503–509.*

Bishop, P., & Gripaios, P. (2010). Personal Insolvency in England and Wales: A Spatial Analysis. *Urban Studies, 47(8), 1687–1702. doi:10.1177/0042098009356119*

Bland, E. M., deMagalhaes, J. R. A., & Stokes, P. P. (2007). A Comparison of Perceptions: Students and Bankruptcy Filers On Causes Of Financial Distress. *Journal of Business & Economics Research (JBER), 5(7).*

Chakravarty, S., & Rhee, E. (1999). Factors Affecting an Individual's Bankruptcy Filing Decision. *SSRN Electronic Journal SSRN Journal*.

Domowitz, I., & Sartain, R. L. (1999). Determinants of The Consumer Bankruptcy Decision. *The Journal of Finance*, *54*(1), 403-420.

Duca, J. V., & Rosenthal, S. S. (1993). Borrowing Constraints, Household Debt, and Racial Discrimination in Loan Markets. *Journal of Financial intermediation, 3(1), 77-103.*

Eaw, H. C., Khong, K. W., Rajagopalan, U., & Abd.Hamid, B. (2014). Causality of Personal Bankruptcy in Malaysia, *(April 2006), 363–367.*

Fan, X., & Yavuzoglu, B. (February, 2013). Understanding Personal Bankruptcy Behavior: A Structural Model with Emphasis on Labor Supply and Health Insurance Enrollment Decisions. *Retrieved 10 April, 2015 from http://www.ssc.wisc.edu/~byavuzog/Bankruptcy.pdf*

Fay, S., Hurst, E., & White, M. J. (2002). The Household Bankruptcy Decision*. American Economic Review, 92(3), 706–718. doi:10.1257/00028280260136327*

Fisher, J. D., & Lyons, A. C. (2006). Till Debt do us Part: A Model of Divorce and Personal Bankruptcy. *Review of Economics of the Household, 4(1), 35–52. doi:10.1007/s11150-005-6696-0*

Gan, L., & Sabarwal, T. (2005). A Simple Test of Adverse Events and Strategic Timing Theories of Consumer Bankruptcy (No. w11763). National Bureau of Economic Research.

Gropp, R., Scholz, J. K., & White, M. J. (1997). Personal Bankruptcy and Credit Supply and Demand*. *The Quarterly Journal of Economics (1997) 112 (1): 217-251.doi: 10.1162/003355397555172*

Hsieh, N. C. (2004). An Integrated Data Mining and Behavioral Scoring Model for Analyzing Bank Customers. *Expert Systems with Applications*, *27*(4), 623-633.

Hussain, I. (2002). Macroeconomic determinants of personal bankruptcies. *Managerial Finance*, *28*(6), 20-33.

Jullamon, K. (2012). Consumer Bankruptcy in Thailand (Order No. 3633256). Available from ProQuest Dissertations & Theses Global. (1562209086). Retrieved from http://search.proquest.com.ezaccess.library.uitm.edu.my/docview/1562209086?accountid=42518

Keys, B. J. (2010). The Credit Market Consequences of Job Displacement.

Komoto, Y. (2014). Factors Associated with Suicide and Bankruptcy in Japanese Pathological Gamblers. *International Journal of Mental Health and Addiction, 12(5),* 600-606.

Laporan Tahunan 2013, Bahagian Hal Ehwal Undang-Undang, Jabatan Perdana Menteri. Retrieved from http://www.bheuu.gov.my/portal/pdf/Penerbitan/Laporanpercent20Tahunanpercent20BHEUUpercent202013.pdf

Loke, Y. J., Yen, S. T., & Tan, A. K. G. (2013). Credit Card Ownership and Debt Status in Malaysia. *The Singapore Economic Review*, 58(03).

Mason, J. R. (2000). Demographic Influences and Personal Bankruptcies. *Research in Banking and Finance*, 1, 229–257.

Moorman, D. C., & Garasky, S. (2008). Consumer Debt Repayment Behavior as a Precursor to Bankruptcy. *Journal of Family and Economic Issues*, 29, 219-233. *doi: 10.1007/s10834-008-9103-1*

Noordin, N., Zakaria, Z., Zool, M., Mohamed, H., & Ngah, K. (2012). Bankruptcy among Young Executives in Malaysia, *IPEDR 28*, 132–136.

Oh, S. (2006). Personal Bankruptcy in Korea: Challenges and Responses, (c), 1–20.

Paquin, P., & Weiss, M. S. (1998). Personal Bankruptcies: Study Finds Four Key Determinants. *Journal of Retail Banking Services.*

Rhee, E. (2001). Determinants of Consumer Bankruptcy: Evidences from The Panel Study Of Income Dynamics (PSID), 1984--1995 (Order No. 3037627). Available from ABI/INFORM Complete; ProQuest Dissertations & Theses Global. (304725146). Retrieved from http://search.proquest.com.ezaccess.library.uitm.edu.my/docview/304725146?accountid=4251 8tp://www.akpk.org.my/happenings/news/press-r

Sekaran, U. (2003). Research Methods for Business. A Skill Building Approach. (Fourth edition). Wiley.

Stavins, J. (2000). Credit Card Borrowing, Delinquency, and Personal Bankruptcy. *New England Economic Review, 2000(July)*, 15–30. Retrieved from http://www.bostonfed.org/economic/neer/neer2000/neer400b.pdf

Stuart, a, & Peyman, A. (2009). Household Bankruptcies. Eyenet, 39–44.

Sullivan, T. A., Warren, E., & Westbrook, J. L. (1995). Bankruptcy and the family. *Marriage & Family Review, 21(3-4)*, 193.

Sullivan, T. A., Warren, E., & Westbrook, J. L. (2000). The Fragile Middle Class: Americans in Debt. *Yale University Press*.

Thorne, D. (2010). Extreme Financial Strain: Emergent Chores, Gender Inequality and Emotional Distress. *Journal of Family and Economic Issues*, *31*(2), 185-197.

Zhu, N. (2011). Household Consumption and Personal Bankruptcy. *The Journal of Legal Studies, 40(1)*, 1–37.

Reliability and Construct Validity of Knowledge, Perception and Acceptance towards Implementation of Goods and Services Tax (GST) Questionnaire

Rugayah Ahmad, Nur Farhana Mohamed Zaki, Nur Athirah Fatini Zulkiflee, Nursyazana Norazman, Muhammad Azwa Daud, Mohammad Nasir Abdullah

Department of Statistics, Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA (Perak), Tapah Campus, Tapah 35400, Perak. Email: **athirahzulkiflee@yahoo.com**

Abstract

Goods and Services Tax (GST) is a newly implemented tax system in Malaysia which had been announced on 1st April 2015. GST is a tax imposed on goods and services; and it is one of the tax system that is fairer than the previous tax system because it uses the concept of equal rights for all items with the 6% rate. The aim of this study was to assess the reliability and construct validity of knowledge, perception and acceptance towards implementation of Goods and Service Tax in Malaysia especially in the state of Perak. A cross-sectional study was design to validate the knowledge, perception and acceptance on implementation of GST in Batang Padang district, Perak. Twenty eight item of the knowledge, perception and acceptance questionnaire were design based on the literature and expert opinion. The items on the questionnaire develop for this study were divided into four main section which are demographic, knowledge, perception and acceptance. Reliability was determine using Cronbach's alpha for internal consistency. The results indicate that Cronbach's alpha coefficients showed acceptable and satisfactory internal consistencies. Cronbach's alpha coefficient for perception and acceptance were 0.785 and 0.822 respectively; therefore confirming the adequacy of the internal consistency of these scale for instance the internal consistency of knowledge among respondents was the lowest scale among of the three domains with acceptable (Cronbach's alpha = 0.708). From the analysis, results of the validation study suggested that the knowledge, acceptance and perception scales on Goods and Services Tax (GST) was valid and reliable for assessing knowledge, perception and acceptance in Malaysia especially in Perak state.

Keyword: Acceptance, Goods and Services Tax, Knowledge, Perception

1. Introduction

Taxation is one of the sources of income for certain countries and the most efficient economic tool. The revenue collected from taxes can be used as a source of fund for country development projects, improve education, revitalize the economic growth and also improve all the infrastructures. Tax policies of a country play a vital role on the economy through their impact on both efficiency and equity. A good tax system should always be the important issues of income distribution and at the same time, also give support in term of government expenditure on public services and infrastructure development which generates by the tax revenues (Kumar, 2014).

According to (Shamsudin, 2013) in Malaysia, the taxation system is divided into two; direct taxes and indirect taxes. Indirect taxes which consist of four components, custom duties, excise duties, sales tax and service tax are administered by the Royal Malaysian Custom Department (RMCD) while the direct tax such as income tax (individual and

business), petroleum income tax and real property gains tax is managed by Inland Revenue Board of Malaysia (IRBM).

Generally, the Malaysian government announced the implementation of Goods and Services Tax (GST) in Malaysia is to replace the Sales and Service Tax (SST) (Bidin & Shamsudin, 2013). The idea and the first proposal to implement GST were first raised in 1988. However, due to the effectiveness of sales and services tax on that time, the proposal was put on hold until the sixth Malaysia Prime Minister, Dato' Seri Mohd Najib bin Tun Abdul Razak announced in the Budget 2014 presented on 25 October 2013 that the implementation of GST at a 6% rates will replace the existing sales and services tax, with effect from April 1,2015. In determining the tax rate, the government is considering a number of factors like exemptions and zero-rating, current rate of previous sales tax and service tax, social and economic considerations, compliances costs and rates in other countries that implemented GST amongst others (Mansor & Ilias, 2013).

In accordance with the GST implementation proposal, once the taxpayers in Malaysia achieve certain prescribed annual sales turnover, they will have to register with the RMCD. They will also be required to submit periodic GST returns. They can seek a refund from RMCD if their input tax smaller than output tax (Shamsudin, 2013). In Malaysia, the Goods and Services Tax Act 2014 (the ''GST Act'') is applied based on ''invoice basis'' as prescribed under Section 37(1), which is a form of accrual basis (Yong & Lee, 2015). This means the suppliers must pay the GST in taxable period form, which is correspond to the said Tax Invoice when GST is levied in a Sales Invoice.

The introduction of GST has long recommended by the International Monetary Fund (IMF) as a way to raising the efficiency of the Malaysia tax system and eventually to increase the tax collection. The GST is intended to compensate with the direct tax collection, personal and corporate tax. The government felt that when GST is introduced in Malaysian taxation system it would provide the opportunity to reduce corporate and individual income tax rates ("Understanding GST," 2013). This tax has been implemented in many countries such as Canada, Australia and New Zealand. Roughly, 90 percent of the world's population lives in countries with GST or VAT (Customs, 2015).

Last 1st April 2015, Malaysia's sixth Prime Minister, Dato' Seri Mohd Najib Bin Tun Abd Razak had implement a new tax system which is Goods and Services Tax (GST) for replacing the Sales and Service Tax (SST). This issues had cause many misunderstanding from Malaysian's citizen. It is very crucial for the Malaysian citizen to really understanding this GST implementation. Most of the Malaysian's citizens do not really know the real purpose government implements this tax system. The exemption from GST is made based on certain characteristics of businesses, turnover, and specified threshold level. Those who are GST exempted are not eligible for input tax credit claim on their input purchases. So, the extent of the impact of GST on these players needs to be analysed to enable them to prepare for the eventualities arising from the proposed tax regime (Hee & Khorana).

Although implementation of GST seem to be fair for all which it will contribute to many benefits for Malaysian's citizen, but there still a few citizen that take it as a burden. This negative perception towards implementation of GST is because they do still not really understand the purpose of this GST implementation. Most of the feedback towards this implementation of GST is a negative feedback. Thus, in order to ensure the citizens have a clear understanding about this GST taxation matter, the Government should explain clearly and transparently about it. The problem is that the Government does not provide sufficient and unclear information towards GST implementation. Therefore, enhancing to provide clear and particular explanation about GST systems is essential tactic to gain public acceptance and confidence. The new tax reforms also could create uncertainty on future expenditure (Shamsuddin, 2013). The uncertainty would subsequently initiate resistance and poses

challenges towards government initiative to impose GST. The purpose of this study is to measure the reliability and construct validity of knowledge, perception and acceptance questionnaire towards the implementation of Goods and Services Tax (GST) in Malaysia.

2. Study Design and Sample Size

This study was cross-sectional and a set of questionnaire was designed to validate the knowledge, perception and acceptance on implementation of GST in Batang Padang District, Perak. It was piloted to residents outside Batang Padang District, Perak. Residents outside Batang Padang District were selected based on their home location by trained data collector. After getting consent from them, all the respondents included in this study were then participating in the study. A self-administered questionnaires were distributed to 177 respondents, based on sample size calculated using PS Software from the value alpha 0.05, power 0.8, compare means 1.2 and standard deviation 4.013 (Dupon & Walten D. Plummer, 2014). To ensure the completeness of the questionnaire, the trained data collector have checked and return questionnaire onsite. The response rate was 100%. It took around 10 minutes to complete one questionnaire.

3. Questionnaire

Twenty eight items of the knowledge, perception and acceptance questionnaire were design based on the literature and expert opinions. The items on the questionnaire developed for this study were divided into four sections: 1) demographic factors: which intended to discover the demographic and socio economic characteristic. 2) Knowledge: define as respondent's knowledge about GST. This domain consisted of ten true/false for each question. Correct answers received one point; incorrect answers received zero point. 3) Perception: define as respondent's opinions about GST system. This domain contain five items of strongly disagree/disagree/agree/strongly agree with "neutral" category in each question. 4) Acceptance: define as respondent's acceptance towards the implementation of GST system. This domain consist five items assessed by strongly disagree/disagree/agree/strongly agree with "neutral" category in each question. Data from the knowledge, perception and acceptance domains were respectively sum into a percentage score to treat the variable as continuous data.

4. Statistical Analysis

Data entry and analysis were done using the SPSS version 21.0 (Statistic, 2012). Mean and standard deviations were calculated for continuous variable frequencies and percentages for categorical variables. Internal consistency was measured using Cronbach's alpha coefficient of the instrument including Pearson's Rank Correlation for item analyses were also carried out (Abdullah, Azib, Harun, & Burhanuddin, 2013)

5. Result

Based on Table 1, we found that from 177 of respondents there were 82 males (46.3%) and 95 females (53.7%). Furthermore, we found that 150 of the respondents (84.7%) were Malay, 10 respondents (5.6%) were Chinese, 13 respondents (7.3%) were Indian and another four respondents (2.3%) from others. Besides that, for the highest education level, there were 81 of the respondents (45.8%) had SPM, 55 respondents (31.1%) had Diploma, 21 respondents (11.9%) had Degree and above and 18 respondents (11.3%) had others. Next, for the type of employment, the results shows that 81 respondents (45.8%) were on the government sector, 37 respondents (20.8%) were on private sector, 24 respondents (13.6%) work as individual and 35 respondents (19.9%) are unemployed. For marital status, we found that 86 respondents (48.6%) were single, 89 respondents (50.3%) were married and only two respondents (1.1%) were widowed. We also found that the average age of the respondents was 31.39 years old (Mean: 31.39 (SD: 11.006)). Lastly, the results also found

that the average income for the respondents was RM 2197.14 (Mean: 2197.14 (SD: 2789.431).

Table 1: Socio-demographic characteristics of knowledge, perception and acceptance (n=177)

Variable code	Description	n (%)	Mean (SD)[a]	Median (IQR)[b]
Age			31.39 (11.006)	
Monthly Income			2197.14 (2789.431)	1500 (1400)
Highest Education Level	SPM Diploma Degree above Others	81(45.8) 55(31.2) 21(11.9) 20(11.3)		
Type of Employment	Government Private Individual Unemployed	81(45.8) 37(20.8) 24(13.6) 35(19.9)		
Marital Status	Single Married Widowed	86(48.6) 89(50.3) 2(1.1)		

[a]SD= standard deviation ; [b]IQR = inter quartile range

5.1 Reliability (Internal Consistency)

Table 2, 3 and 4 shows the results of total correlations for each item and Cronbach's Alpha coefficients for knowledge, perceptions and acceptance towards the implementation of Goods and Services Tax. The Cronbach's Alpha act as an indicators of internal consistency (Pallant, 2013). The ideal value of Cronbach's Alpha coefficient is must be above than 0.7 (Pallant, 2013). Briggs and Cheek (1986) state that range from 0.2 until 0.4 is the minimum range for the inter-item correlation (Pallant, 2013). Total correlation is a linear correlation coefficient that provide the measurement to evaluate the strength of relationship between x and y values (Kya, Ngor, & Awang, 2012). The value of total correlations for each item are more than 0.3. So that can be indicate as good correlation (Abdullah et al., 2013)Table 2 shows there is a positive correlation for each item for knowledge (Range from 0.197 to 0.610) based on table 3, values for all item-total correlations for perception scale were greater than 0.4 and it tend to be indicate as a good correlation (Abdullah et al., 2013) (Range from 0.348 to 0.656). Whereas, based on table 4, the values of acceptance have a strong value for total correlation for each item which is in the range of 0.457 to 0.734. Each scale of the acceptance item also indicate good correlations. In a nutshell, the Cronbach's alpha coefficients were acceptable for knowledge (0.708), perception (0.785) and for acceptance (0.822).

Table 2: Respondent's Knowledge towards GST (n=177)

Variable Code	Item	Corrected Item – total correlation	Cronbach's Alpha
B1	What is GST stand for	0.197	0.708
B2	What is the purpose date for introduction of GST in Malaysia?	0.163	
B3	State the rate of GST that fixed by the government (%)	0.292	
B4	GST is implemented to replace the old tax system	0.113	
B5	GST is imposed when citizens buy houses	0.416	
B6	GST is imposed on RON95 consumption	0.610	
B7	GST is imposed on diesel consumption	0.588	
B8	GST is imposed to the toll in Malaysia	0.549	
B9	GST is imposed when consumers use public transports such as taxi, bus and train	0.484	

Table 3: Respondent's Perceptions towards GST (n=177)

Variable Code	Item	Corrected Item – total correlation	Cronbach's Alpha
C1	In general, I am satisfied with GST system that has been implements in Malaysia	0.661	0.785
C2	GST implementation not increase the price of goods	0.476	
C3	GST implementation not affects the cost of living	0.559	
C4	A GST rate of 6% is reasonable	0.671	
C5	GST implementation gives positive impact on government	0.489	

Table 4: Respondent's Acceptance towards GST (n=177)

Variable Code	Item	Corrected Item – total correlation	Cronbach's alpha
D1	GST system is fairer compared to the old tax systems	0.633	0.822
D2	GST bridges the income gap between low and high income earners	0.584	
D3	GST helps in term of paying country's debts	0.547	
D4	GST system is easy to understand	0.601	
D5	GST contributes in developing Malaysia's economy	0.734	

6. Validity

According to (Huang, Huang, & Thomas, 2006), during the process of questionnaire development, content validity was established by defining concepts and their associated items based on social cognitive theory with its components including behavior capability, self-efficacy and management of emotional arousal (Abdullah et al., 2013) . Before we distribute this questioner, in order to ensure the completeness of the questionnaire, the trained data collector have checked and returned questionnaire onsite. For this second pilot study, the Cronbach's alpha for knowledge is 0.708, perception is 0.785 and Cronbach's alpha for acceptance is 0.822.The expert's opinions (Huang et al., 2006) says that, validity of a questionnaire was also done by giving training to the interviewers. These procedures were used to improve the validity and feasibility of the questionnaire (Abdullah et al., 2013). Since the result of corrected item for total correlation is positive, it shows that there are a relationship between those variable which is respondent acceptance and perception towards Good and Service Tax (Trochim, 2008). Since most of the respondent could understand all the question, this prove that the questionnaire is valid to be use for the actual survey. Validity is the best available approximation to the truth of a given proposition, inference, or conclusion (Trochim, 2008).

7. Discussion.

This study is conducted to validate the variable of perception and acceptance of respondent towards Goods and Services Tax (GST) at Tapah, Perak, Malaysia. Perception and acceptance are the scale used in this survey. This two scale are being used to prove the internal consistencies. Since the Cronbach's Alpha for knowledge, perception and acceptance are respectively 0.708, 0.785 and 0.822, it prove the adequacy of internal consistencies of the scale (Abdullah et al., 2013). From the past research for the study of Educators' Awareness and Acceptance Towards Goods and Services Tax (GST) Implementation In Malaysia : A Study In Bandar Muadzam Shah, Pahang, the Cronbach's alpha for the scale of perception is higher than 0.5 and higher than 0.6 for acceptance (Shamsuddin., 2014) where in this study, we got higher Cronbach's Alpha.

8. Acknowledgement

The authors would like to thanks Universiti Teknologi MARA (Perak), Tapah Campus for the facilities and knowledge for us in preparing and completing these research.

9. References

Abdullah, M. N., Azib, W. N. H. W., Harun, M. F. M., & Burhanuddin, M. A. (2013). Reliability and Construct Validity of Knowledge, Attitude and Practice on Dengue Fever Prevention Questionnaire. *Paper presented at the 2013 IEEE Symposium on Humanities, Sciences and Engineering Research (SHUSHER). 3*(5).

Bidin, Z., & Shamsudin, F. M. (2013). Using Theory of Reasoned Action to Explain Taxpayer Intention to Comply with Goods and Services Tax (GST). *Middle-East Journal of Scientific Research, 17*(3), 387-394.

Customs, D. o. R. M. (2015). MALAYSIA GOODS AND SERVICE TAX (GST). from http://gst.customs.gov.my/en/Pages/default.aspx

Dupon, W. D., & Walten D. Plummer, J. (2014). PS: Power and Sample Size Calculation (Version version 3.1.2).

Hee, M. A. G., & Khorana, L. An Assessment ofIntroduction of Goods and Services Tax (GST) in Malaysia and its Implications on the Merchant Shipping Sector and Maritime Supply Chain. from http://www.mima.gov.my/mima/wp-content/uploads/gst%20-%20final%20report%2020jul10.pdf

Huang, M.-C., Huang, C.-C., & Thomas, K. (2006). Febrile convulsions: development and validation of a questionnaire to measure parental knowledge, attitudes, concerns and practices. *Journal of the Formosan Medical Association, 105*(1), 38-48.

Kumar, N. (2014). Goods and Services Tax in India: A Way Forward. *Global Journal of Multidiscplinary Studies, Vol.3*(6), 10.

Kya, L. T., Ngor, P. Y., & Awang, Z. (2012). *Statistics for UiTM* (3 ed.): Oxford Fajar.

Mansor, N. H. A., & Ilias, A. (2013). Goods and Services Tax (GST): A New Tax Reform in Malaysia. *International Journal of Economics Business and Management Studies, 2*(1), 12-19.

Pallant, J. (2013). *SPSS SURVIVAL MANUAL* (5 ed.): Mc Graw Hill.

Shamsuddin, A. (2013). EDUCATORS'AWARENESS AND ACCEPTANCE TOWARDS GOODS AND SERVICES TAX (GST) IMPLEMENTATION IN MALAYSIA: A STUDY IN BANDAR MUADZAM SHAH, PAHANG.

Shamsuddin, A. (2014). EDUCATORS'AWARENESS AND ACCEPTANCE TOWARDS GOODS AND SERVICES TAX (GST) IMPLEMENTATION IN MALAYSIA: A STUDY IN BANDAR MUADZAM SHAH, PAHANG. *Vol. 4*(Issue 1).

Shamsudin, Z. B. a. F. M. (2013). Using Theory of Reasoned Action to Explain Taxpayer Intention to Comply with Goods and Services Tax (GST). *Middle-East Journal of Scientific Research, 17*(3), 8. doi: 10.5829/idosi.mejsr.2013.17.03.12167

Statistic, I. S. (2012). IBM SPSS Statistic 21.0 for windows (Version version 21.0).

Trochim, W. M. K. (2008). Introduction to Validity. from http://www.socialresearchmethods.net/kb/introval.php

Understanding GST. (2013). from http://gst.customs.gov.my/en/gst/Pages/gst_un.aspx

Yong, K. V. K., & Lee, F. K. (2015). Analysis of the GST Panel Decision 2014 on Claiming Bad Debt Relief. *Available at SSRN 2544987*.

Work Environment and Fertility Rate in Malaysia – A Comparison between Formal and Informal Sectors

Geetha Subramaniam[1] , Nurfarahain Mohd Saleh Saleh[2]
Universiti Teknologi MARA, Shah Alam, Malaysia, geethamaniam@gmail.com
Universiti Teknologi MARA, Shah Alam, Malaysia, farah.nia@gmail.com

Abstract

The fertility rate of Malaysian women has shown a declining trend from having 3 children per woman in 2000 to 1.98 children per woman in 2015. This is an issue of concern for the labour market because declining fertility rates may lead to a stagnant population with other issues such as an ageing population and declining labour force due to low replacement levels. The main purpose of this study is to examine to what extent work environment has an impact on fertility rates in the formal and informal sectors in Malaysia. The study firstly reviews the current trend of women's fertility rate in Malaysia. It then further examines the working environment of married women in the formal and informal work environment by comparing two different states in Malaysia. Using self-administered questionnaires, 200 married women from the formal sector of Penang and the informal sector of Kelantan were identified through purposive sampling. Data was analysed using descriptive statistics and cross tabulation. The trend review shows an alarming decline in fertility rates in the last ten years. The empirical findings reveal that younger women, with higher educational level, earning a higher income and living in urban areas are more likely to have less number of children. In terms of working environment, women in the informal working sectors tend to have more children. Policy implications in terms of awareness and better work-environment in terms of family friendly policies are recommendations to encourage women to consider having more than one child because if this trend continues, it will have a serious implication on the quantity and quality of the labour force.

Keywords— fertility rate, family friendly-policies, formal and informal sectors, flexible working arrangements.

…….

* Geetha Subramaniam is an Associate Professor at Universiti Teknologi MARA, Shah Alam and can be contacted at geethamaniam@gmail.com

INTRODUCTION

The World Bank defines total fertility rate (TFR) as the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates (World Bank, 2012). Fertility is measured using number of children.Replacement level is defined as a situation when women tend to give birth to children enough to replace her and her husband (Department of Statistics, 2014). A rate of two children per woman is considered the replacement rate for a population, resulting in relative stability in terms of total numbers. Since 2010, fertility rate in Malaysia has fallen below replacement level (Department of Statistics, 2012).

Looking at the global scene, World Bank (2015) shows that fertility rates across the world have substantially declined in recent years, falling significantly in the last decade and by 2011, was close to replacement level (World bank, 2015). The report also observes that nearly 50% of the world's population now lives in countries with TFRs that are below replacement level. Another remark in the report was regarding emerging economies which have TFRs that are already substantially below replacement level. Emerging economies also show the same declining trend. In China, decisions about fertility were imposed on the population by the government a decade back and this has resulted in falling fertility rates below replacement level now. Just last week, a new two - child policy was introduced in China The TFR for India, the second largest country in the world, is likely to dip below replacement in the next few years.

Countries with declining populations already account for nearly 20% of the world population. This rapid decline in human fertility has been due to contraception, sterilisation and abortion, the provisions of which have been generously supported by the government, while in western countries lower fertility has been achieved without coercion but by simple appeal to the selfish nature of man (United Nations, 2015). The world's total population is currently increasing at a rate of 1% per year. According to the United Nations (2015), a low fertility population is forecast and the world's population will begin to fall between 2040 and 2045. Declining human fertility and population reduction is already having severe consequences in some countries and the situation will continue to deteriorate in terms of future labour supply of the country and a shrinking population. This might become a bigger threat to many industries that rely on labour. Currently many countries including United States, Italy, Japan and Singapore have TFR below replacement level.

According to the Malaysian Minister of Women, Family and Community Development, United Nations has projected that Malaysia's TFR will fall to 1.91 children per household by 2020 and is currently already 1.98 (Malay Mail, 2015). Based on the 2012 fertility rate, Malaysia's population is estimated a projected slowdown in population growth and will only reach 32 million in the next five years. If this happens, Malaysia will fall into the category of an elderly nation as 15% of the total population would be aged 65 years or older (Bernama, 2015).

Therefore, a declining TFR has consequences on the labour market, in terms of both quantity and quality of labour. The main purpose of this study is to examine to what extent work environment has an impact on fertility rates in the formal and informal sectors in Malaysia. The study firstly reviews the current trend of women's fertility rate in Malaysia. It then further examines the working environment of married women in the formal and informal work environment by comparing two different states in Malaysia.

LITERATURE REVIEW

The economic theory by Becker (1960) has served as the foundation for most empirical analyses of fertility, including those that consider the response of fertility rates to variation in economic conditions. In standard static models of fertility behavior, parents maximize a utility function that depends on quality-adjusted child quantity and all other consumption, subject to a family budget constraint. According to Becker's model, permanent

changes in wages, income and the price of children cause income and substitution effects that alter fertility decisions.

Ermisch's theory (1983) distinguishes between women who work and those who do not. Ermisch explains that as more females choose to work most of their lives, the average age at first birth increases and the intervals between births decrease. In particular, women employed in professional positions tend to wait longer between marriage and the birth of their first child. This implies that when the number of females in the labour force increases, fertility tends to decrease even during times of economic growth. In a similar study, Macunovich (1996) measured the interaction of relative income and female wages and found that that an increase in the male's relative income will cause a rise in fertility while an escalation in female wages will produce descending pressure on fertility. That is, a rising female wage will have a negative effect on fertility and vice versa.

In USA, Fernandez and Fogli (2009) in their study of 87,305 American born women found that cultural proxies have positive significant explanatory power on TFR even after controlling for education and spousal characteristics.

An early research in Malaysia done by Ying (1992) on determinants of fertility behavior among the three main ethnicities found a sharp decline in Chinese and Indian TFR as educational level and market work increases. On the other hand, Malay fertility behavior displays little relationship with socio-economic variables. Hashim (2010) also explored the effects of urbanisation on roles of women and the extent it influences their fertility.

Findings from the study indicate that progress in women's education and participation in the public sphere and rapid urbanisation of the Malay society within the past four decades had caused a decline in fertility among Malay women. The study also found that women's employment, socio-cultural factors (including religion) and urban or rural background do influence the decision on the number of children they have. Another major finding of the study is that the lack of adequate support system that had forced some women to leave the public sphere. Women who juggle between work and family often felt guilty and some had to decline job promotion and forego opportunities for getting further academic qualifications.

This study focuses more on working environment and fertility rates in the informal and formal sector.

METHODOLOGY

This study set out to examine whether the working environment of married women has an effect on fertility rate and the number of children they had. As the objective was to compare fertility rate between women working in the formal sector and informal sector, two states in Malaysia were identified. The Department of Statistics Report (2013) showed that the state with the highest fertility rate was Kelantan and the state with the lowest fertility rate was Penang. At the same time, majority of the respondents in Kelantan were operating their own small-scale businesses, a very good representation of the informal sector. While in Penang, all the working women were working in the formal sector.

This study was conducted in late 2013 and took two months to complete as it involved two different states. A self-administered survey questionnaire was given to 200 women, 100 from the urban, formal sector in Penang and 100 from the rural, informal sector in Kelantan. The study focused only on married women with young children. Using purposive sampling in terms of marital status, area of living and type of job sector, this study was limited only to the states of Kelantan and Penang. Both urban and rural respondents from Kelantan and Penang were identified using convenient sampling. Response rate was high as the researcher carried out the survey personally.

The questionnaire consisted of three main categories. Section A consisted of demographic profile; Section B consisted of family responsibilities; Section C consisted of working environment. Data was analysed using SPSS version 20. Descriptive statistics and cross tabulation analysis was done and inferential statistics were used to provide adequate scope for drawing logical conclusions on the reasons for women's different fertility rates.

FINDINGS AND DISCUSSION

Trend Review of Fertility Rate in Malaysia

Table 1 shows the trend analysis of Total Fertility Rates in Malaysia since the year 1958 until 2013 by Department of Statistics, Malaysia (2014).

Figure 1 - Fertility Rate in Malaysia, 1958-2013

Year	Total fertility rate	Year	Total fertility rate	Year	Total fertility rate	Year	Total fertility rate	Year	Total fertility rate
1958	6.3	1969	5.1	1980	4.0	1991	3.4	2002	2.6
1959	6.2	1970	4.9	1981	4.0	1992	3.5	2003	2.5
1960	6.0	1971	4.9	1982	4.0	1993	3.5	2004	2.4
1961	6.2	1972	4.7	1983	3.8	1994	3.4	2005	2.4
1962	6.0	1973	4.5	1984	3.9	1995	3.3	2006	2.3
1963	6.0	1974	4.4	1985	4.0	1996	3.2	2007	2.3
1964	6.0	1975	4.3	1986	3.9	1997	3.1	2008	2.3
1965	5.6	1976	4.2	1987	3.7	1998	3.0	2009	2.3
1966	5.7	1977	4.1	1988	3.7	1999	2.9	2010	2.2
1967	5.4	1978	4.0	1989	3.4	2000	3.0	2011	2.1
1968	5.4	1979	4.0	1990	3.5	2001	2.8	2012	2.1
								2013	1.9

Source: Department of Statistics (2014)

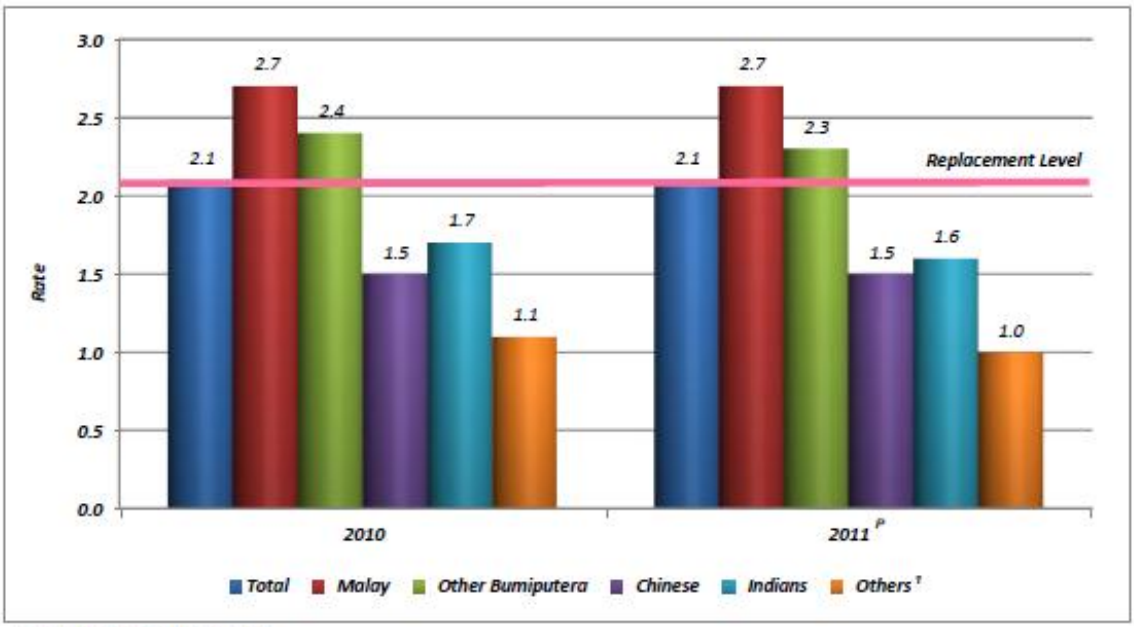
High fertility rate (more than 4)

Medium fertility rate (3)

Low fertility rate (2 and below)

Based on the graph in Figure 1, it shows that there is a decreasing trend in TFR since 1958. Based on United Nations (2012) categorisation, the green highlight indicates high fertility rate from 4 to 6. The yellow highlights the medium rate of 3 and the brown highlight is the low fertility rate (2 and below). 4 to 6 children is considered as high fertility rate, average fertility rate is 3 children while 2 and below is considered below replacement level and is categorised as low fertility rate. We note that Malaysia reached low TFR from 2001, but the replacement level was reached at 2010 whereby, a married couple tends to have only 2 children that can only replace themselves.

Figure 2: Total Fertility Rate by Ethnic Groups, Malaysia, 2010–2011



Source: Department of Statistics, 2012

The fertility rate in Malaysia has reached the replacement level i.e., 2.1 from the year 2010. An analysis of TFR according to ethnicity shows that the TFRs are not identical among the three ethnicities where TFR for Malay and Other Bumiputera recorded above the replacement level at 2.7 and 2.3 respectively for every woman aged 15-49 years. However, the rates for Chinese and Indians decreased below the replacement level at 1.5 and 1.6 respectively, in 2011.

Demographic Profile

The respondents in this study are married, working and have children. 100 respondents are from Penang and 100 respondents are from Kelantan. In terms of age group and educational level, there is an even distribution. A majority (45%) of the women are in the age group of 30-39 years. In terms of women's highest educational level attained, 33% of the women are degree holders and 31% of them are diploma holders. The spouse's highest educational level shows a reversal where a majority (35%) of them have completed SPM and only 26% are degree holders. Some of these women and the spouses have postgraduate and professional degrees.

As for the income level, nearly half of these women (46%) are earning in the income range of the RM1001 - RM2000 per month. The spouse's personal income shows that 54% of them are in the RM2001 - RM3000 income group. However, nearly half of these women (48%) are from household income groups of RM4001 - RM6000.

A majority of the respondents (65%) are Malays, 27.5% Chinese and 7.5% Indians. As for the ethnic composition of the respondents, care was given through purposive sampling in order to obtain the sample as close as possible as the Malaysian population composition. Most of the selected women in this study come from urban areas (77.5%) and the remaining 22.5% are from rural areas. However, in the urban areas of Kelantan, they were working in the informal sector.

Demographic Factors and Fertility Rate

Table 1 : Influence of Demographic Factors and their significance on Fertility Rate

DEMOGRAPHIC PROFILE					
	NUMBER OF CHILDREN				TOTAL
	0-2 children		3 and more children		
	(N)	(%)	(N)	(%)	N (%)
Age*	74	37	126	63	200 (100)
a) 20-29 years old	21	72	8	28	29 (100)
b) 30-39 years old	32	36	58	64	90 (100)
c) 40-49 years old	18	29	44	71	62 (100)
d) 50-59 years old	3	16	16	84	19 (100)
Age of marriage	74	37	126	63	200 (100)
a) younger than 20 years old	9	26	26	74	35 (100)
b) 21-25 years old	52	39	82	61	134 (100)
c) 26-30 years old	8	40	12	60	20 (100)
d) 31-35 years old	5	45	6	55	11 (100)
Self's highest educational level*	74	37	126	63	200 (100)
a) lower education	7	12	53	88	60 (100)
b) higher education	67	48	73	52	140 (100)
Spouse's highest educational level*	74	37	126	63	200 (100)
a) lower education	10	14	61	86	71 (100)
b) higher education	64	50	65	50	129 (100)
Monthly household income*	74	37	126	63	200 (100)
a) RM1000-RM2000	0	0	2	100	2 (100)
b) RM2001-RM4000	11	24	35	76	46 (100)
c) RM4001-RM6000	41	43	55	57	96 (100)
d) RM6001-RM8000	6	23	20	77	26 (100)
e) RM8001-RM10000	7	54	6	46	13 (100)
f) Above RM10000	9	53	8	47	17 (100)
Ethnicity*	74	37	126	63	200 (100)
a) Malay	34	26	96	74	130 (100)
b) Chinese	35	64	20	36	55 (100)
c) Indian	5	33	10	67	15 (100)
Area of living**	74	37	126	63	200 (100)
a) rural	11	24	34	76	45 (100)
b) urban	63	41	92	59	155 (100)
*significant at 10%; ** significant at 5%.					

Table 1 shows demographic factors which have a significant influence on TFR whereby 0-2 children is considered low and 3 and more children is considered high (World Bank, 2015). Based on Table 3, younger women tend to have less children (72%), whereby the older women in the age group of above 40-49 years tend to have more children (more than 71%). Age was a significant factor. This conforms to studies by Lehar (2012) who found that age significantly does influence the number of children women have.

At some circumstances women in Malaysia literally delayed their birth because of their jobs, education or perhaps age of marriage. However in this study, it was found that age at the time of marriage is not significant. This finding is in contrast to the previous research by Elizabeth et al. (2008) whose study done in European Union (EU) countries. Besides this could be because, most of the women in the sample are married at the age of 21-25 years old.

A majority (88%) of the women who had more children have lower educational level. In this study, primary and secondary educational levels are considered as lower educational level and diploma, degree, postgraduate and professional degree are grouped as high level of education. From the findings it shows that the lower educated women (88%) tend to have more children than (48%) of women with higher education level that have 2 or less children. It is a similar situation for the spouses, whereby the majority of them (86%) were lower educated and have more children.

Self's and spouse's highest educational level are found to be significant. This conforms to previous studies by Blacklow (2006), Ying (1992) and Hashim (2010) that had significant results based on women's education. Furthermore, Narayan (2006) declared that female education and female labour force participation are found to be the main determinants of fertility in Taiwan in the long run.

Higher education is always a dilemma for a woman whereby they need to choose between self-satisfaction and family, causing a delay in childbirth and fertility rate will actually decrease. Education also is strongly related to income whereby, it is believed that the more educated a person, the greater the income they will receive from employment. But somehow, in this study it contradicts where the educational levels do not reflect their income level.

This is because, most of our respondents are literally businesswomen, they own businesses and basically the jobs that they are involved in do not need any special skills. Moreover, women who run a business in these states most probably inherited the business from their family. Hence, their businesses are well known and already have many regular customers.

It is intereting to note that most of the families in those two states who earn an income around RM2001-RM4000 and RM6001-RM8000 have more children whereas (54%) of the families that earned RM8001 and above recorded fewer number of children. Monthly household income significantly influences the number of children. This conforms to findings by Miligan (2004) who found that an increase in income of USD$10 000 per annum was found to increase the probability of having a child by 1.75 percentage points. Blacklow (2006) on the other hand found that women's wages were generally found to have a significant and negative effect on fertility.

To examine work environment and TFR, this study had compared two different phenomenon in Malaysia where Penang is identified as an urbanised state since it recorded a high urbanisation rate. On the other hand, Kelantan is a state that recorded lowest in the urbanisation level. By having this income gap it indirectly reflects the standard of living between these two states. Women in Penang were working in a more formal work-environment concentrating in the manufacturing and industrialised sector but on the other hand the Kelantanese were in the informal sector of wholly owned businesses and personal services. Therefore, the difference in term of standard of living might cause a different impact to their earning capacity.

Based on Table 1, Malays have more children compared to Chinese and Indians and the ethnicity and religion were found to have significant influence in TFRs. Research done by Ying (1992) states that empirical evidence on determinants of fertility behavior in Peninsular

Malaysia shows that the sharp decline in Chinese and Indian marital fertility concur with cross-section evidence that women's education and market work have a negative impact on fertility.

Another significant variable is area of living. Most (76%) of the respondents who have more children came from the rural area of the states. On the other hand, (41%) of the respondents who have less children came from urban area of the states and tended to have less number of children. This variable is significant at 5% level of significance. Hashim (2010) confirmed the findings whereby urban and rural backgrounds do influence the decision on the number of children to have.

Working environment and Fertility Rates

Table 2 shows the working environment that is divided into two sectors which are the formal working sector and the informal working sector. A majority (62%) of the respondents were from the informal working sector since most of these women are involved with wholly owned businesses and personal services. As for the formal working sector, most (80%) of the respondents were working in the government sector, manufacturing sector and professional services sector. Almost half of the spouses (48%) are working in the government sector and (39%) are working in the private sector.

Table 2 - Working Environment Profile of Respondents By Sector

WORKING ENVIRONMENT PROFILE		
	Frequency (N)	**Percentage (%)**
	200	100
Formal working sector	77	38
Informal working sector	123	62

Table 3: Influence of Working Environment on Number of Children

WORKING ENVIRONMENT PROFILE					
	NUMBER OF CHILDREN				TOTAL
	0-2 children		3 and more children		
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)	N (%)
	74	37	126	63	200 (100)
Formal working sector	40	52	37	48	77 (100)
Informal working sector	34	28	89	72	123 (100)
FORMAL WORKING SECTOR					
Self-Type of employment*	40	52	37	48	77 (100)
a) private sector	6	50	6	50	12 (100)
b) government sector	34	52	31	48	65 (100)
Spouse-Type of employment*	35	49	36	51	71 (100)
a) private sector	18	64	10	36	28 (100)
b) government sector	12	35	22	65	34 (100)
c) self-employed	5	56	4	44	9 (100)
Working conditions*	40	52	37	48	77 (100)
a) little stress	14	45	17	55	31 (100)
b) stressful	26	57	20	43	46 (100)
Flexible working arrangement*	40	20	37	48	77 (100)
a) yes	29	30	27	70	56 (100)

b) no	11	52	10	48	21 (100)
INFORMAL WORKING SECTOR					
Working conditions*	34	28	89	72	123 (100)
a) little stress	13	22	45	78	58 (100)
b) stressful	21	32	44	68	65 (100)
Number of working hours per week*					
a) 0 to 60 hours	34	17	89	83	123 (100)
b) 61 hours and above	5	19	22	81	27 (100)
	29	85	67	15	96 (100)
*significant at 10%; ** significant at 5%;					

Formal working sector

The formal working sector in this study refers to women who worked generally standard working hours, in the government and private sector. Some of them were in the professional field while others were academicians.

Table 3 shows that the type of employment of women and their spouses have a significant on TFR. Respondents who worked in the government sector tend to have more children (52%) than those who worked in the private sector. More than half (64%) of the spouses who worked in the private sector have lesser children. On the other hand the spouses who worked in the government sector tend to have more children (65%). This finding conforms to research done by Hashim, (2010) where the results were significant. Furthermore Risse, (2006) found that in particular, women employed in professional positions tend to wait longer between marriage and the birth of their first child. He also found that in single-earner households with only one male wage earner, if the male wage rises rapidly and the cost of children remains constant, that family will have more children.

Next, findings show that respondents who are stressful with their working conditions tend to have fewer children. In this study, more than half (57%) of the women are stressful and 55% are a little stressed with their working conditions. Working conditions have a significant relationship with number of children. In this study various types of employment are examined, therefore it might also relate to the workload and the environment. Perhaps the private sector and the government sector might not have the same portion of workload. The size of the company should be considered as well. The bigger the company, the more problems it may lead to. If the company is smaller it may lead to better management and a comfortable environment.

Flexible working arrangements (FWAs) include flexi hours, permanent part-time work, working from home, teleworking, job sharing and compressed week. FWAs give workplace flexibility and work time flexibility to the respondents. The flexibility of time is important at the beginning of children's growth since infants need extra care. 70% of the respondents who have FWAs tend to have more children since they have extra time to manage their work and family responsibilities. Perhaps, FWAs in a formal sector does have a significant relationship with number of children. This conforms to studies done by (Subramaniam, 2010) who found that FWAs have an effect on women’s decision to exit the labour market.

Informal working sector

The informal working sector in this study refers to women working in jobs which are more flexible in nature and most of them were self-employed owning small businesses.

The working conditions of the informal working sector for those respondents are quite similar to the formal working sector. 78% of the respondents who have little stress in their working conditions tend to have more children. Perhaps, the mental and emotional state of mind of women could influence their decision making on the number of children to have.

The number of hours worked per week was also one of the variables in this study. Since the informal working sector does not have fixed and scheduled time of working, it is

interesting to know how the number of working hours per week will affect the number of children. This study found out that 81% of the respondents who work 60 hours and less weekly, have more children. 70% of the respondents who work more than 61hours per week have fewer number of children. Therefore, from the findings it shows that working hours do have a significant effect on number of children.

A further cross tabulation was done and the results are shown in Table 4. It is noted that self's type of employment, spouse's type of employment, working conditions, childcare facilities, and flexible working arrangements in the formal sector have a significant impact on TFR. Whereas in the informal sector, only working conditions and working hours have a significant effect on TFR.

Table 4 - Working Environment and Significant Factors

WORKING ENVIRONMENT			
FORMAL WORKING SECTOR			
Variables	***Value***	***df***	***Asymp. Sig (2-sided)***
Self's type of employment*	12.025	2	0.002
Spouse's type of employment*	12.849	3	0.005
Working conditions*	14.502	4	0.006
Childcare facilities*	13.361	2	0.001
Flexible working arrangements*	12.004	2	0.002
INFORMAL WORKING SECTOR			
Working conditions*	13.670	4	0.008
Number of working hours per week*	13.237	2	0.001

* Significant at 10%

CONCLUSION

Overall, a few conclusions can be inferred from this study.

Firstly, the TFR in Malaysia is declining and has reached below replacement level.

Secondly, in this study it was found that the main factor that influences TFR is area of living and the working sector. Area of living matters in a way of measuring standard of living and cost associated with it such as cost of living and cost of education. It relates to working conditions and working hours. This is due to the matter of having flexibility of work and flexibility of time to cope with career and family responsibilities. Women who experience flexible working arrangements are more likely to have more children.

Thirdly, socio-demographic factors such as age, self's highest educational level, spouse's highest educational level, monthly household income, area of living and ethnicity have a significant impact on the TFR of Malaysian women. Women who are younger, more educated, earning a higher income, working in the formal sector with more stress and less workplace flexibility tend to have less children. The TFR among the Chinese and Indians is declining faster than the Malays.

As this study covers only Kelantan and Penang, further research should also explore the other states in Malaysia to represent the fertility trend of the country, using a larger sample.

IMPLICATIONS AND POLICY RECOMMENDATIONS

The implications that can be made from this study are multiple. The most apparent one is that a continuous decline in TFR in the country will lead to a labour shortage.

Secondly, this trend if not checked will lead to an ageing population. As stated by Risse (2006) age structure of the population has significant impact on the economy.

Thirdly, it was noted that the educated women are having lesser children, this implies that the issue of quality labour will be at risk.

Fourthly, working conditions play a vital role in determining TFR and hence our future labour input.

Finally, working conditions have to be examined more closely as it involves work stress and the work-life balance effect.

The results of this study are advantageous to policy makers, employers and the society on the whole so as to create good, effective policies and programs to cater for women's wellbeing and hence increase the TFR.

The first policy recommendation here would be the provision of childcare. Policy makers should thoroughly consider providing childcare with more scrutiny on cost, infrastructure and reliability. The cost of childcare should be more affordable based on living area and also be more trustworthy. Perhaps, it can be proposed to the government to plan a "Childcare 1Malaysia" program along the lines of 'Klinik 1Malaysia', 'Restaurant 1Malaysia' and 'Kedai rakyat 1Malaysia'.

The second recommendation involves policy makers and employers with regard to working arrangements. As noted by Subramaniam (2010) in her earlier study, family friendly working arrangements may be one method to help women stay in the labour force and juggle the double burden. Family friendly policies such as flexible working time, working from home and part-time work may provide married women with children who require parental time, to balance between career and family. This gives rise to some underlying issues which is of great concern and needs immediate action.

However as mentioned by the Minster of Women, Family and Community Development Minister, various programmes have been done to create awareness among couples on declining TFR but the ultimate choice is still left to the couple (Malay Mail,2015).

As Malaysia moves towards achieving an industrialised nation status and quality of life is utmost in everybody's mind, one should also take note that children are the backbone of the future nation.

REFERENCES

Becker G. S. (1960)."An Economic Analysis of Fertility", in: Universities National Bureau Committee for Economic Research (eds): Demographic and Economic Change in Developed Countries, Princeton University Press, Princeton, 1960, p. 209-231.

Bernama (2015) retrieved from http://english.astroawani.com/malaysia-news/

Blacklow, P., (200^ *"* Fertility choices of Australian couples*",* proceedings of the Australian Conference of Economists, 2006, 25-27 September 2006, Perth, Western Australia, pp. Session 31, Paper 2 (1-39). ISBN 1 74067 5010

Department of Statistics, (2014), Labour Force Survey Report (2014)

Department of Statistics, Malaysia (2013) *Social Statistics Bulletin, 2013.*

Elizabeth A., DiCioccio, and Phanindra V. W.,(2008) *"Working and educated women: Culprits of a European Kinder-Crisis?"* Eastern Economic Journal 34: p. 213-222.

Ermisch J. (1983). "The Political Economy of Demographic Change." Imago Publishing Ltd.

Fertility," American Economic Journal: Macroeconomics, American Economic Association, vol. 1(1), p. 146-77, January

Hashim H.,(2010) *"Urbanization and women: A case of middle class Malay In Shah Alam".* For JSPS-VCC Environmental Planning Group, IIUM's National Seminar on Sustainable Environment for Future Generation: Generating a Model for Better Community Living16th& 17thApril 2002, at the KAED Auditorium International Islamic University Malaysia (IIUM), Kuala Lumpur, 2010.

Lehar H.,(2012) *"The MALAYSIAN economy, past and present"*, second print, UiTM Press,

Macunovich, Diane J. (1996) "Social Security and Retirees- an economist's perspective". National Academy of Social Insurance. Washington, D.C.

Malay mail (2015) retrieved from http://www.themalaymailonline.com/malaysia/article/as-national-birthrate-declines-malaysians-urged-to-make-more-babies#sthash.VYM0rJHL.dpuf

Malay mail (2015) retrieved from http://www.themalaymailonline.com/malaysia/article/as-national-birthrate-declines-malaysians-urged-to-make-more-babies#sthash.VYM0rJHL.dpuf

Narayan, K.P., (2006)*"Determinants of female fertility in Taiwan",* 1966–2001: Empirical evidence from co integration and variance decomposition analysis; Asian Economic Journal, 20: p. 393-407, 2006.

Narayan, K.P., (2006)*"Determinants of female fertility in Taiwan",* 1966–2001: Empirical evidence from co integration and variance decomposition analysis; Asian Economic Journal, 20: p. 393-407, 2006.

Norville, C., Gomez, R. and Brown, R. L. (2003) Some Causes of Fertility Rates Movements, IIPR Insurance and Pension Reports No.2003-02, Institute of Insurance and Pension Research, University of Waterloo.

Risse L., (2006) "*Does maternity leave encourage higher birth rates? an analysis of the Australian labour force",* Australian Journal Of Labour Economics Vol. 9, No. 4, December 2006, pp 343 – 370.

Subramaniam, G, Mohamad, S & Selvaratnam, D. P.,(2010) "*Why do some women leave the labour force? - A micro perspective from Malaysia*", Economic Bulletin, Volume 11,

United Nations Population Division, United Nation.Retrieved from*:http://esa.un.org/wpp/unpp/p2k0data.asp*

World Bank (2015) retrieved fromhttp://data.worldbank.org/

World Bank Report, (2015) World Bank, International Comparison Program database,

Ying S. L., (1992) *"Determinants of fertility in Malaysia: How much do we know?"* Journal of Southeast Asian Studies, Vol. 23, No. 1 (Mar., 1992), p. 112-132.

TRACK IV

ETHICS, SOCIAL RESPONSIBILITY AND OTHERS

A Model for the Performance Monitoring and Evaluation of Organizations to Migrate to the Cloud based on System Approach

Jalal Sarabadani[1], Ayoub Mohammadian[2]
[1]*Faculty of Management, University of Tehran, Nasr Bridge, Chamran Highway, Tehran, Iran*
[2]*Faculty of Management, University of Tehran, Nasr Bridge, Chamran Highway, Tehran, Iran*
Sarabadani.j@ut.ac.ir, mohamadian@ut.ac.ir

Keywords: Cloud Computing, System Approach, Performance Evaluation, Shannon entropy, E-readiness

Abstract: In recent years, the concept of cloud computation has been an issue of great importance both for researchers and practitioners. This paper aims to assess the performance of cloud computing from business perspective, when they want to migrate to the cloud environment. In this paper, the criteria related to performance evaluation are extracted through a system approach, based on content analysis and Shannon entropy research methods. The results show that financial, technological, operational and strategic outcomes are more important parameters for strategists to plan for migrating to the cloud.

1 INTRODUCTION

Businesses have always been seeking for a way to increase their business agility, availability and accessibility meanwhile reducing their operational costs and time to market. Cloud computing is the technology through which businesses can gain their desires. According to NIST, cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction (Gaithersburg, MD, 2011).

In this article, we are going to propose a framework for the systematic monitoring and evaluation of businesses who want to migrate to the cloud environment with the aim of improving their performance through system approach. In addition, the model we are proposing here could be a basis for strategists to help them identify to what things they should pay attention to in terms of business goals, IT strategies, actions, and resources they need.

A system is a collection of elements or components that are organized for a common purpose (Rouse, Margaret, 2005). System approach is one of the most favorite methods in scientific investigations, which can bring organized work and problem break down to sub processes, which are more controllable (ZiaeiPour, E., Taghizade, A., Bazazan F., Khoshalhan, F., Mohamadian, A., 2009). These sub processes are input, process, output, outcome, and impact. Performance evaluation is a tool to measure progress towards the achievement of the goals of the comprehensive plans which is accomplished through constant monitoring and evaluation. Monitoring is a routine process of data collection and measurement of progress towards objectives. Evaluation is the non-routine use of information to systematically investigate the effectiveness of a program. We monitor the progress of the plan as it unfolds, and then periodically evaluate the achievement of the

organization's plans for migrating to the cloud computing.

The paper is organized as follows, in the second section different aspects of cloud computing adoption dimensions are explained. In the third section, based on system approach, content analysis, and Shannon entropy a new classification has been proposed. In the third section, based on system approach, a model has been proposed which helps businesses to monitor and evaluate performance of migration to the cloud computing.

2 LITERATURE REVIEW

The IT environment evolved from mainframes to client servers, the Internet, virtualization and cloud computing (Caroll, M., Kotzé, P., 2011). Cloud Computing is a network-based environment and shares resources, even they can be hardware or software. The virtualization is the technology, which all providers employ in Cloud Computing, and provides abilities for resources through network infrastructure (Azarnik, A., Shayan, Sh., Alizadeh, M., Karamizadeh, S., 2012). Buyya has defined it as follows: "Cloud is a parallel and distributed computing system consisting of a collection of inter-connected and virtualized computers that are dynamically provisioned and presented as one or more unified computing resources based on service-level agreements (SLA) established through negotiation between the service provider and consumers" (Buyya R, Yeo CS, Venugopal S, Broberg J, Brandic, 2009). Different types of cloud computing are provided 'as a service' to consumers, and most of them fall under one or more of three categories: Software as a Service, Platform as a Service, and Infrastructure as a Service (Williams, M., 2010). In this article, we are going to look at cloud computing from a business perspective. Then for the purpose of measuring its performance, system approach is used to consider different aspects including Inputs, processes, outputs, outcomes and impacts. To do so, we are going to have a look at others' researches that have worked on these dimensions. Finally, we will propose a new model that businesses can use to assess their performance if they want to migrate to the cloud with the aim of improving their performance.

2.1 Cloud Computing Inputs

It is important for businesses to consider some resources as inputs when they intend to migrate to the cloud, in fact this dimension should be carried out based on resource based view. According to (Rashmi, Mehfuz, Sh., Sahoo, G., 2012) organizations need to consider some factors as the inputs of the whole system. Such factors are: business factors, and technical factors. In this dimension, they need to consider what the organization owns in terms of their existing IT investments, existing IT infrastructure, IT professionals and etc.

2.2 Cloud Computing Processes

The next dimension that should be considered is activities. This is the dimension where businesses should move forward as slow as possible if they want to make the most of the cloud. In this aspect, based on the activity based theory, we are going to find the activities that need to be taken before moving to the cloud. In this aspect, so many activities should be measured to see if the organization can move some parts of its business to the cloud.

As it is stated by (Marston, S., Li Z., Bandyopadhyay, S., Zhang, J., Ghalsasi, A., 2011), some of the activities that organizations should

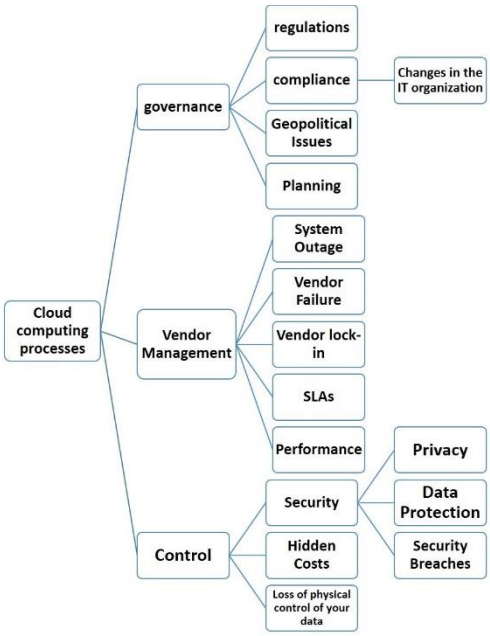


Figure 1: Cloud computing Processes.

take account for are: security, regulations at the local, national, and international level. (Azarnik, A., Shayan, Sh., Alizadeh, M., Karamizadeh, S., 2012) also believes that businesses should take time to consider factors like: geopolitical issues, and functional risks. In figure 1, we have divided the activities

into three groups which are: (a) governance; (b) vendor management; and (c) control.

2.3 Cloud Computing Outputs

In this dimension, different types of cloud computing are provided 'as a service' to consumers, and most of them fall under one or more of three categories: Software as a Service, Platform as a Service, and Infrastructure as a Service (Williams, M., 2010). Software as a Service provides complete business applications delivered over the web. Examples of SaaS include enterprise-level applications such as Salesforce, Netsuite or Google Apps to personal applications such as GMail, TurboTax Online, Facebook, or Twitter (Marston, S., Li Z., Bandyopadhyay, S., Zhang, J., Ghalsasi, A., 2011). Platform as a Service provides consumers with a stable online environment where they can quickly create, test and deploy web applications using browser-based software development tools. Examples of PaaS include Microsoft's Azure Services Platform, Salesforce's Force.com, Google App Engine, Amazon's Relational Database Services and Rackspace Cloud Sites. IaaS provides consumers with administrative, web-based access to fundamental computing resources such as processing power, storage and networks. Amazon's S3 storage service and EC2 computing platform, Rackspace Cloud Servers, Joyent and Terremark are some prominent examples of IaaS.

2.4 Cloud Computing Outcomes

Enterprises which want to take up cloud computing would like to gain some features within a short time. By adopting cloud computing, businesses can achieve a wide range of benefits. As it is mentioned by (Marston, S., Li Z., Bandyopadhyay, S., Zhang, J., Ghalsasi, A., 2011), cloud computing can have outcomes like: scalability, business agility, cost reduction, and reduced time to market the very first moment organizations move their data into the cloud. In addition, (Velte, A., Velte, T., Elsenpeter, R., 2010) believe that businesses will benefit from improved security and are able to gain some security related advantages such as: centralized data, security access, and improved software security. Below, a new grouping of cloud computing outcomes is shown that businesses can expect by adopting it in a short period of time. In figure 2 we have divided outcomes of cloud computing into four parts which are: (a) technological; (b) financial; (c) operational; and (d) trategic.

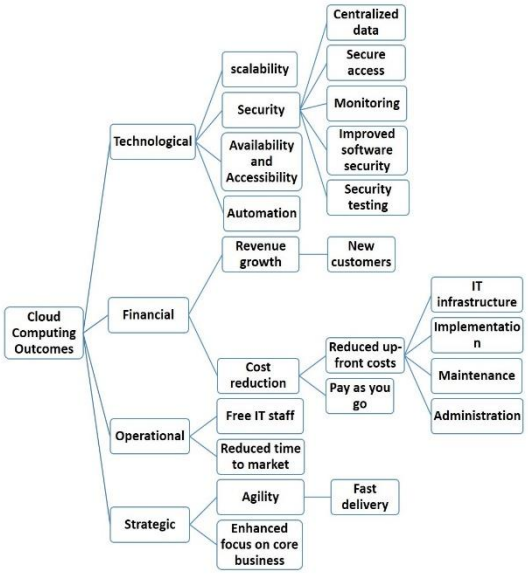


Figure 2: Cloud Computing Outcomes

2.5 Cloud Computing Impacts

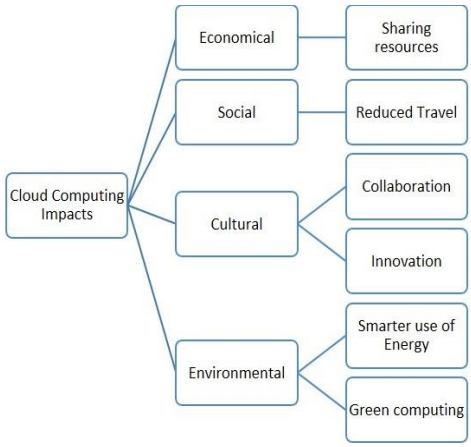


Figure 3: cloud computing impacts

In this dimension, based on value based view, we are looking for the impacts that cloud computing

Table 1: Cloud computing dimensions based on a system approach

System Approach \ Articles/ Books		Marston, S., Li Z., Bandyopadhyay, S., Zhang, J., Ghalsasi, A., 2011	Avram(Olaru), M., 2014	Azeemi, I., Lewis, M., Tryfonas, Th., 2013	Bouyer, A., Arasteh, B., 2014	Rashmi, Mehfuz, Sh., Sahoo, G., 2012	Azarnik, A., Shayan, Sh., Alizadeh, M., Karamizadeh, S., 2012	Velte, A., Velte, T., Elsenpeter, R., 2010	Williams, M., 2010
Inputs	Existing Investment		✓			✓		✓	
	Existing IT Infrastructure		✓		✓	✓			
	IT skills					✓			
Processes	Governance	✓	✓			✓	✓	✓	✓
	Vendor Management	✓	✓	✓			✓	✓	✓
	Control	✓	✓			✓	✓	✓	✓
Outputs	Saas	✓	✓	✓	✓		✓	✓	✓
	Iaas	✓	✓	✓	✓		✓	✓	✓
	Paas	✓	✓	✓	✓		✓	✓	✓
Outcomes	Technological	✓	✓	✓	✓		✓	✓	✓
	Financial	✓	✓	✓	✓		✓	✓	✓
	Operational	✓	✓	✓	✓			✓	✓
	Strategic	✓	✓		✓		✓	✓	✓
Impacts	Economical	✓	✓	✓	✓			✓	✓
	Social							✓	✓
	Cultural	✓	✓	✓	✓		✓	✓	✓
	Environmental	✓					✓	✓	✓

can have on the society within a long term. According to (Azarnik, A., Shayan, Sh., Alizadeh, M., Karamizadeh, S., 2012), green computing is a benefit that is achievable by adopting cloud computing since environmental issues are increasing and businesses care more about running their firms in an environmental friendly way. In addition (Mona A., Pillutla M. Sh., 2014) explain how cloud computing can increase collaboration in organizations. In figure 3, we have divided the impacts of cloud computing on the society into four parts from a business perspective which are: economical, social, cultural, and environmental.

3 RESEARCH METHODOLOGY

Content analysis and Shannon entropy methods are used in this article. Through the use of content analysis, we have reviewed those articles related to the organizational issues of cloud computing and took out the factors we needed, and at last we came up with a new classification which is shown at the end of this section.

Most of the related articles have been reviewed and the necessary factors have been taken out to provide a new dimension of E-readiness for those organizations who want to migrate to the cloud. Content analysis is done through different steps which are as follows: (a) before analysis: The first step is to specify the number of questions that the researcher intends to answer. (b) Content review: By doing a preliminary study in this phase, in each category the common dimensions as an analysis unit are identified and the number of times that each is repeated are counted. (c) Analysis of data: the last step is to process the codified data by the formula of Shannon entropy. Iin information theory, entropy is a measure of the uncertainty in a random variable. In this context, the term refers to the Shannon entropy, which quantifies the expected value of the information contained in a message.

$$w_j = \frac{-K\sum_{i=1}^{m}[P_{ij}.L_n P_{ij}]}{\sum -K\sum_{i=1}^{m}[P_{ij}.L_n P_{ij}]}$$

4 ANALYSIS

Based on system approach as shown in figure 4, systems are divided into five distinct parts: inputs, processes, outputs, outcomes, and impacts. They

are surrounded by an environment and often include a feedback mechanism. In order to consider all dimensions of the performance evaluation of businesses to migrate to the cloud, the shown model in figure 4 has been proposed by authors. The model is based on system approach, different kinds of performance and e-readiness models. In this model, existing investment, existing IT infrastructure, and IT skills have been considered the input part of the system. In this dimension, we should see what organizations use to do the work.

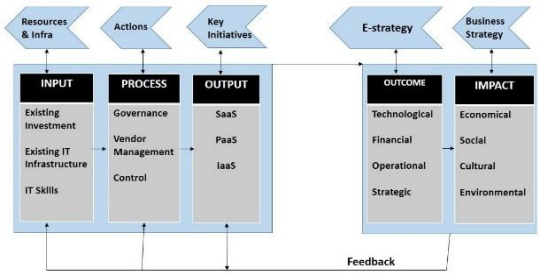


Figure 4: The proposed model for determining different types of indicators based on system approach.

In the next dimension which is process, we are going to find the activities we should do to have the job done. Some factors like governance, vendor management, and control are considered here. The Next dimension is output in which the services that businesses want to deliver are listed. The most common services that are provided here are: SaaS (Software as a Service), Paas (Platform as a Service), and Iaas (Infrastructure as a Service). Outcome is the next dimension which lists the short-term goals that businesses can achieve by adopting cloud computing which are divided into four categories: (a) technological; (b) financial; (c) operational; and (d) strategic. Finally, in the last dimension, we are going to list the benefits of cloud computing for the society that will be delivered within a long-term as impacts. These can be put into four categories which are: economical, social, cultural, and environmental. It is mentionable, the feedbacks can be used to control and adjust all other dimensions align with the environmental changes.

Furthermore, Shannon entropy has been used for determining quantitative proportion of past research in supporting each of the dimensions and factors. As shown in figure 5, cloud computing outcomes for businesses was the most important dimension which was mentioned in the cloud computing literature while the resources of cloud computing have been determined with the minimum contribution in migrating to cloud. So, Based on the results of this research, it is necessary for organizations to consider the value based perspective instead of resource based view for migrating to the cloud with high performance.

Rank	Wj of dimensions	Wj of factors	Ej	$\sum_{i=1}^{23}[P_{ij}.L_n P_{ij}]$	iterations	Factors	Dimensions
4	0.08	0.04	0.53	-1.10	3	existing investment	inputs
		0.04	0.53	-1.10	3	existing IT infrastructure	
		0.00	0.00	0.00	1	IT skills	
3	0.20	0.07	0.86	-1.79	6	Governance	processes
		0.07	0.86	-1.79	6	vendor management	
		0.07	0.86	-1.79	6	control	
2	0.22	0.07	0.94	-1.95	7	Saas	outputs
		0.07	0.94	-1.95	7	Iaas	
		0.07	0.94	-1.95	7	Paas	
1	0.28	0.07	0.94	-1.95	7	technological	outcomes
		0.07	0.94	-1.95	7	financial	
		0.07	0.86	-1.79	6	operational	
		0.07	0.86	-1.79	6	strategic	
2	0.22	0.07	0.86	-1.79	6	economical	impacts
		0.03	0.33	-0.69	2	social	
		0.07	0.94	-1.95	7	cultural	
		0.05	0.67	-1.39	4	environmental	

Figure 5: Obtained weights for each of the factors and dimensions by the Shannon entropy

5 CONCLUSION

Considering the importance of migrating to the cloud environment, businesses are more concerned about themselves whether they are ready to take the big change. In this article, we focused on evaluating organizations with the aim of improving their performance. To do so, we proposed a new model through system approach and content analysis in which five dimensions which were discussed in detail. The dimensions were inputs, processes or activities, outputs, outcomes, and impacts that businesses need to consider if they are about to migrate to cloud.

6 REFERENCES

NIST, NIST Definition of cloud computing v15, NIST, Editor. 2011, National Institute of Standards and Technology: Gaithersburg, MD.

Margaret, R., 2005. Systems. [online], Available:http://searchwindowsserver.techtarget.com/definition/system

ZiaeiPour, E., Taghizade, A., Bazazan F., Khoshalhan, F., Mohamadian, A., 2009, A Model for National E-readiness Assessment based on System Approach, *sixth International Conference on Information Technology: New Generations.*

Caroll, M., Kotzé, P., 2011, Securing Cloud Computing Benefits, Risks and controls. *Information Security South Africa (ISSA)*, 2011. 15-17 Aug.

Azarnik, A., Shayan, Sh., Alizadeh, M., Karamizadeh, S., 2012. Associated Risks of Cloud Computing for SMEs. *Open International Journal of Information*.

Buyya R, Yeo CS, Venugopal S, Broberg J, Brandic, 2009, Cloud computing and emerging IT platforms: Vision, hype, and reality for delivering computing as the 5th utility, *Future Generation Computer Systems*, 25:599 616, 2009.

Williams, M., 2010 *A quick start guide to cloud computing* : moving your business into the cloud. Kogan Page, London, Phila Delphia, 2010.

Rashmi, Mehfuz, Sh., Sahoo, G., 2012, A Five-phased Approach for the Cloud Migration, *International Journal of Emerging Technology and Advanced Engineering*, ISSN 2250-2459, volume 2, Issue4, April 2012.

Marston, S., Li Z., Bandyopadhyay, S., Zhang, J., Ghalsasi, A., 2011, Cloud Computing – The Business perspective, *Journal of Decision Support Systems*, 170-189, journal homepage: www.elsevier.com/locate/dss

Velte, A., Velte, T., Elsenpeter, R., 2010, *Cloud Computing A Practical Approach*, MC Graw Hill publication.

Mona A. Mohamed Sharma Pillutla, (2014),"Cloud computing: a collaborative green platform for the knowledge society", VINE, Vol. 44 Issue 3 pp. 357 – 374

Avram(Olaru), M., 2014, Advantages and challenges of adopting cloud computing from an enterprise perspective, *The 7th International Conference Interdisciplinary in Engineering* (INT-ENG 2013), Procedia technology 12 (2014) 529 – 534

Azeemi, I., Lewis, M., Tryfonas, Th., 2013, Migrating To The Cloud: Lessons and Limitations Of 'Traditional' IS Success Models, *Conference on Systems Engineering Researh (CSER'13*), Procedia Computer Science 16 (2013) 737 – 746

Bouyer, A., Arasteh, B., 2014, The Necessity Of Using Cloud Computing in Educational System, *CY-ICER 2014, Procedia – Social and Behavioral Sciences* 143 (2014) 581 - 5

Android Based Vehicle Tracking System

Omer Ali Abubakr Abd Elrhman, Asim Mohammed Ahmed, Tarig Hyder Mekki, Ghassan Mohammed Taha
Department of Electrical and Electronic Engineering
University of Khartoum
Khartoum, Sudan

***Abstract*— Android [1], as an operating system, has provided users with great opportunity to innovate and get things done in a mobile device. In this paper we present how to use the GPS technology in android devices to complete an interactive application which can be used to monitor a fleet of vehicles and display their positions on Google Maps. By using SMS messages, this information can be transmitted to the server. It provides a telemonitoring system for distribution or transportation vehicles owned by a specific company. The whole system is made of two key parts. The first one is the client which represents an Android application that is installed in the vehicle. During vehicle motion, its location can be reported by SMS messages. The second is the server which is a computer program represents a map using Google maps to show the last known locations of all tracked vehicles.**

The current system is able to provide monitoring process from anywhere. The purpose of this system is to use the android platform to provide the following feature: i) Location information (longitude, latitude). ii) Real time tracking using SMS. iii) Map View of all vehicles locations.

This system is needed by many companies to monitor illegal and unethical use of their vehicles. Also provides insurance that the location of the vehicle is known in the case of robbery.

I. Introduction

Smart phones have become an essential part of human life. It is integrated with multiple and different features that allow us to communicate with the world, organize our lives and document events. One of the most important features is location based services.

Smart phones use different features to get the location of the phone. One of these features is the GPS. The GPS uses satellites to get the exact location of the phone in terms of longitude and latitude. The smart phone utilizes this coordination and uses them to show the phone location in a map application. In addition, special mobile applications have been developed with various abilities of navigating [2].

Vehicles tracking have always been a problem for big companies with transport vehicles or cargo vehicles. GPS tracking device are complicated, expensive and the technologies used in them are monopolized by their vendors. An open source technology with location based services and free map API is needed to develop a tracking system for multiple vehicles all at once with low expenses.

The main problem this project is dedicated to solve is to develop a system with a client android application that acquires the phone location and send this location to a server program. The server program receives the location of multiple vehicles and displays them on a map, with the ability to track one vehicle or multiple vehicles in the same map.

The objective of this project can be summarized into the following points: Develop a vehicle tracking system that in general has the ability to: i) get the location of the device in longitude- latitude format. ii) Store the locations history of all vehicles. iii) Display the last known location of the vehicle. iv) Display the location of multiple vehicles in one map. v) Display the information of the vehicle and the time in the map. vi) Track the locations history of one vehicle.

II. Client "Android" application

This application represents the client of the system where the location of the vehicle is acquired and sent to the server. It is basically an android application [3].

After installing the application on the targeted smartphone running one of the versions of android OS, the icon appears on the screen along with the other applications icons, click on the icon will open the application [4]. Figure 1 shows the main flow of the client application, opening the application leads to splash screen, after two seconds the login screen is opened.

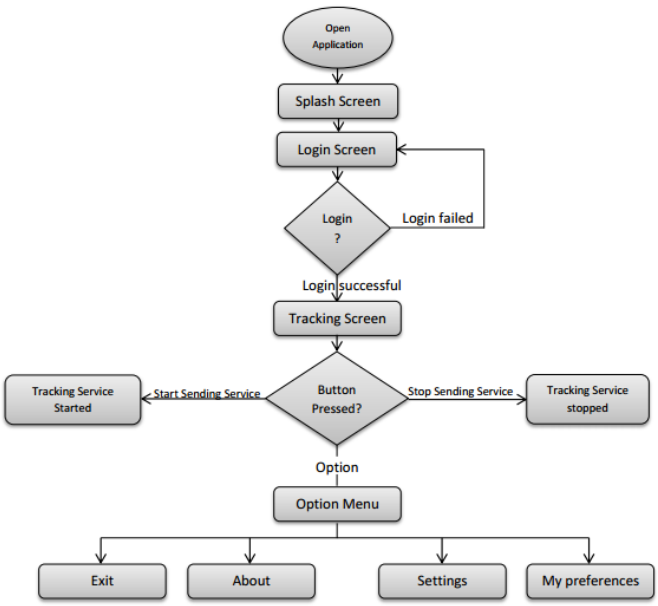


Fig 1. The main flow of the client application

GPS technology [5] is used to track the user current location. It's the major important functionality of the application.

Whenever the GPS of the phone is enabled; GPS located current location point, and the application saves this location to be sent later using other functionalities. Whenever the location of the phone changes, GPS will track it and updates the current location of the phone. This service starts automatically when logged into the application unless the GPS is disabled where a "GPS is disabled" messaged is popped on the screen.

Sending the location of the phone to the server is the second functionality of the application. This service uses SMS messages to send the location from the application.

The application acquires the location from the location service and the message sending service build up an SMS message with the server phone number and sends it automatically. The time interval between sending the SMS messages is determined in the settings functionality as well as the number of messages to notify the user. The sending service sends a message every time interval that specified in the settings. After a number of messages are sent the service notify the user with the total number of messages sent. This service is started by clicking the "start sending" button in the tracking activity described earlier. When the service is started a notification pops up in the notification bar. This notification will be visible as long as the service is running.

The sending service starts automatically along with the location service if the auto boot option is selected from the settings menu. Figure 2 shows the main interface of the client application.

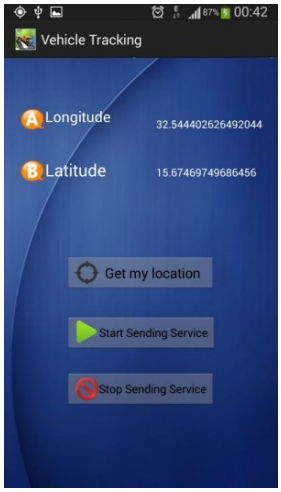


Fig 2. The main interface of the client application

III. Server "Computer" Program

This application represents the server of the system where the vehicles location is presented on a map. It is basically a computer program. Figure 3 shows the main flow of the server program, opening the application leads to splash screen, after two seconds the main screen is opened.

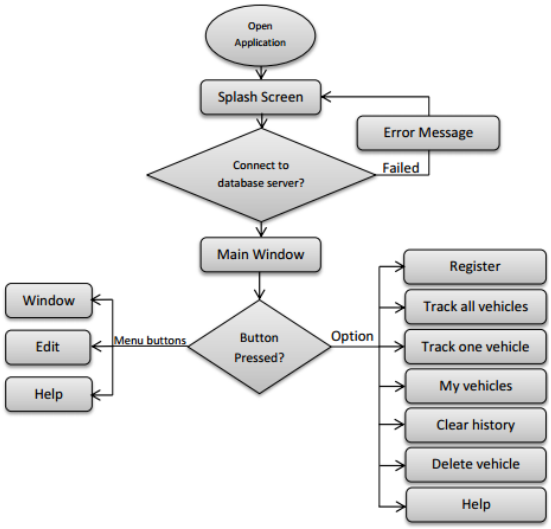


Fig 3. The main flow of the server program

The SMS is received from the client through a modem and then saved into a database using the SMS enabler program. Our program then collects these messages from the database and save them into a file in a certain format. The JavaScript receives this file and use it in showing the current locations of the vehicles on the map. Figure 4: "SMS handling" shows the flowchart of handling the SMS messages.

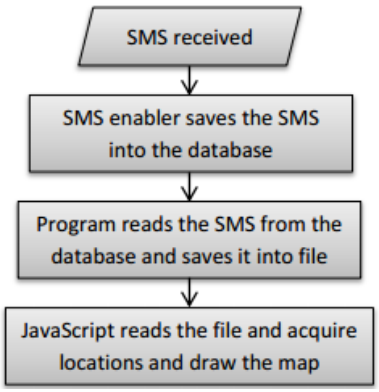


Fig 4. SMS handling

Drawing and updating the map is a functionality of the Google maps API [6]. The map is drawn using information from the file created in SMS handling. The file contains the location of the vehicles as well as the information about the registered vehicles. After the map is drawn it is updated every 10 seconds to check if new location updates is received.

The database design for the program consists of two unrelated tables. The first table contains the messages received from the clients. The second table contains the information of the registered vehicles to be used on the map. Figure 5:'The program database structure" shows the design of the database

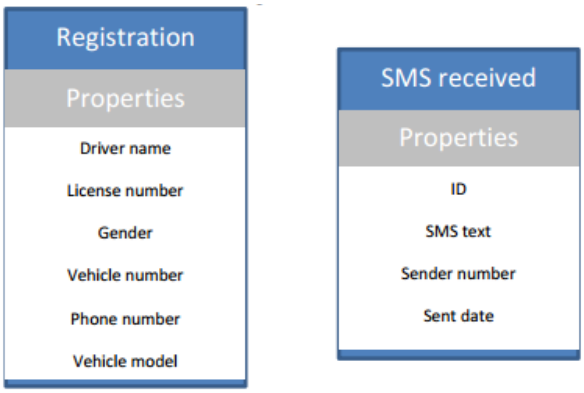


Fig 5. The program database structure

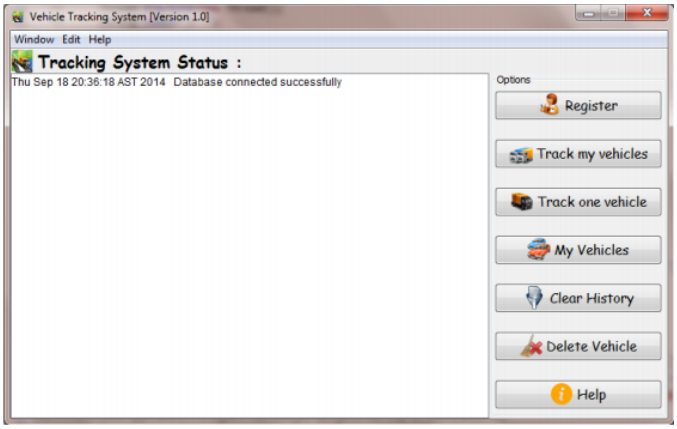


Fig 6. The main interface of the server program

IV. Implementation

The client application is an android based application where the authenticated customer interacts with a graphical interface on his smart phone to start or edit the tracking service.

The client application is developed using java based android programming and xml. The code for the location consists of location change alerts as well as location provider status "GPS or network". Figure 7 shows the code for the location request in the application.

```
//************************* My Location Listener ****************************

    public class MyLocationListener implements LocationListener{
        SharedPreferences pref = getSharedPreferences("Registration",0);;
        @Override
        public void onLocationChanged(Location loc){
            final Editor editor = pref.edit();
            editor.putString("Longitude",  Double.toString(loc.getLongitude()));
            editor.putString("Latitude",  Double.toString(loc.getLatitude()));
            editor.commit();
        }
        @Override
        public void onProviderDisabled(String provider){
            Toast.makeText( getApplicationContext(),provider + " Disabled",Toast.LENGTH_SHORT ).show();
        }
        @Override
        public void onProviderEnabled(String provider){
            Toast.makeText( getApplicationContext(),provider + " Enabled",Toast.LENGTH_SHORT).show();
        }
        @Override
        public void onStatusChanged(String provider, int status, Bundle extras){}
    }/* End of Class MyLocationListener */
}/* End of UseGps Activity */
```

Fig 7. Location request code

The server program is computer program where the system owner interacts with a graphical interface on his computer to track the vehicle on a Google map.

The server program is developed using java, HTML 5, JavaScript [7] and MySQL database [8]. The code for the map API view consists of the Google maps API [9] as well as the functions to draw the vehicles locations on the canvas. Figure 8 shows the code for the map draw in the program.

```
var map;
function initialize(){
                map = new google.maps.Map(document.getElementById('map'), {
                        zoom: 2,
                        center: new google.maps.LatLng(15.6, 20),
                        mapTypeId: google.maps.MapTypeId.ROADMAP,
                        panControl: true,
                        zoomControl: true,
                        mapTypeControl: true,
                        scaleControl: true,
                        streetViewControl: true,
                        overviewMapControl: true
                }
        );
```

Fig 8. Map drawing code

The program uses text files extracted from the database [10] to draw vehicles locations on the map as well as each vehicle information. Figure 9 shows a snapshot of the interface for vehicles locations.

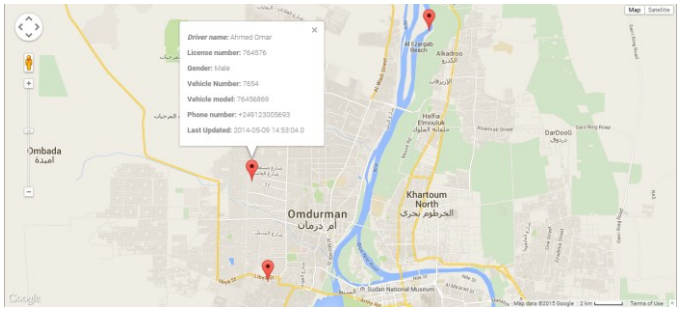


Fig 9. Snapshot of the vehicles Tracking

Vehicle tracking client is tested for different smart phones with different versions and it is proven fast and reliable. The server program is tested on different browser and it works as designed for all browsers.

V. Conclusion

In this paper, we presented vehicle tracking system. The project objectives were to develop a system to track vehicles using android operating system to get the location and send it to server. The server is a computer program that receives multiple vehicles locations through a modem and displays these locations on a map. These objectives have been met successfully. The project scope was enhanced to allow user to track one vehicle rather than all vehicles at once.

VI. Acknowledgment

The authors would like to thank Husam Elmutasim Graduate Student in the Department of Electrical and Electronic Engineering University of Khartoum, for reviewing the manuscript. The authors also like to thank Dr. Ghassan Mohammed Taha Ali from Department of Electrical and Electronic Engineering, University of Khartoum for useful discussions and assistance during the project.

REFERENCES

[1] Android (operating system) [Online].Available: http://en.wikipedia.org/wiki/Android_(operating_system) [Accessed 22 12 2013]

[2] Android Software development [online] Available: http://en.wikipedia.org/wiki/Android_software_development [Accessed 22 12 2013]

[3] Application Fundamentals [online] Available: http://developer.android.com/guide/components/fundamentals.html [Accessed 3 1 2014]

[4] Starting an Activity [online] Available: http://developer.android.com/training/basics/activitylifecycle/starting.html [Accessed 5 1 2014]

[5] Global Positioning System [online Available: http://en.wikipedia.org/wiki/Global_Positioning_System [Accessed 3 8 2014]

[6] Google Maps Overview [online] Available: http://www.ariadne.ac.uk/taxonomy/term/13922?articletype=&term=&organisation=&project=&author=henry%20s.%20thompson [Accessed 5 8 2014]

[7] JavaScript [online] Available: http://en.wikipedia.org/wiki/JavaScript [Accessed 5 8 2014]

[8] MySQL Enterprise Edition [online] Available: http://www.oracle.com/us/products/mysql/mysqlee-prod-guide-487992.pdf [Accessed 7 8 2014]

[9] Google Maps JavaScript API V3 [online] Available: https://developers.google.com/maps/documentation/javascript/tutorial [Accessed 5 8 2014]

[10] Database management system [online] Available: http://en.wikipedia.org/wiki/Database [Accessed 7 8 2014]

Exclusive Breast Feeding among Women Workers as Efforts to Reduce the Risk of Death and Improve Children Intelligence in Indonesia

Riani Rachmawati Ph.D, Dept. Management Universitas Indonesia, Indonesia, riani.rachmawati@ui.ac.id
Dr. Helda Nazar, Dept. Epidemology Universitas Indonesia, Indonesia, Heldanazar1@gmail.com
Rifelly Dewi Astuti, MM, Dept. Management Universitas Indonesia, Indonesia, Uni_felly@yahoo.com

ABSTRACT

The number of women who entered the workforce in Indonesia continues to increase from year to year, both in the formal and informal sectors. This of course requires the attention of policy makers and corporate management about the needs of women workers, including the opportunity to provide exclusive breastfeeding. Previous studies show that Indonesia suffers a low level of exclusive breastfeeding. The study aims to measure the knowledge and attitudes towards exclusive breastfeeding among women workers as well as company supports for them. This research was conducted in two manufacturing companies located in West Java: HF and CI. 190 questionnaires have been collected. The results of this research showed that respondents do not understand the definition of exclusive breastfeeding. In addition, the main supports expected by women workers to be provided by the company include: the lactation rooms and sufficient leave scheme postpartum.

Keywords : Exclusive breastfeeding , women workers , Indonesia
Corresponding Author's Email Address : riani.rachmawati@ui.ac.id

1. INTRODUCTION

The number of women who entered the workforce in Indonesia continues to increase from year to year, both in the formal and informal sectors. Data from Pusdatinaker Kemenakertrans processed by Anwar and Supriyanto (2012) showed that in the formal sector, the female workforce in Indonesia tends to increase continuously which originally totaled 10,228,373 as of August 2008 to 10,992,799 (August 2009), and then again increased into 12,055,011 (August 2010) and 12,968,864 (February 2011). Meanwhile in the informal sector, women's labor force reached more than doubled compared to the formal sector. As of August 2008 recorded 28,425,009 female workforce, then increased to 29,885,171 (August 2009) and 30,689,675 (February 2011). An increase in women labor force impact to the increasing number of issues related to women workers, one of which is an issue of exclusive breastfeeding for women workers who have infants aged 0-6 months.

Exclusive breastfeeding which is given until a baby reaches 6 months, followed by another breastfeeding time until the child reaches 2 years old could prevent a child from infections and ensure optimal infant health (WHO, 2013). Additionally, a systematic review presented by the WHO states that 3 of the 8 studies found that exclusive breastfeeding give a positive impact on intellectual development of children in school (WHO, 2007).

For working mothers, challenges of exclusive breastfeeding may come from the employment sector. Many working mothers do not give exclusive breastfeeding for their infants breastfeed after returning to work due to long working hours, no places for breastfeeding or

pumping and no designated breast milk storage (WHO, 2013). Consequently, by not giving exclusive breastfeeding, there is additional expenditure for households to buy formula milk for the infant and of course in addition to the health risk and growth of the infant.

In Indonesia, the regulation on exclusive breastfeeding for working mothers were outlined in the regulations introduced by the Ministry of Women Empowerment, the Ministry of Manpower, and the Ministry of Health. Exclusive Breastfeeding Act No. 33 of 2012 states that the employers as well as the management of public facilities must support exclusive breastfeeding programs, where the implementation is tailored to the company rules or collective labour agreement that are agreed between employers and workers/union.

The existence of regulations governing exclusive breastfeeding should provide a great opportunity for working mothers in providing exclusive breastfeeding for their infants. However in reality, exclusive breastfeeding is experiencing a downward trend from year to year. Therefore, this research aims to know describe and explain the knowledge and attitudes of the working mothers towards exclusive breastfeeding as well as explore the organisational supports needed by the working mothers to enable them to give exclusive breastfeeding for their infants.

This study uses mixed methods of quantitative and qualitative. While quantitative study aims to provide a description of the knowledge and attitudes toward exclusive breastfeeding, the qualitative study aims to explore the working mothers' understanding of exclusive breastfeeding, the influence of their attitude and behavior of giving exclusive breastfeeding and their experience as well as expectation of organisation support for them in/for giving exclusive breastfeeding. lusive breastfeeding to women workers. The research is conducted in two manufacturing companies in West Java, HF and CI, by involving 190 respondents.Those who participate in this research are working mothers of the two companies who have children aged between six months to five years.

2. LITERATURE REVIEW

Female participation in the labor market Indonesia

In the past three decades, there has been a consistent improvement in women's participation in the labor market in Indonesia. This is shown by the data of Labor Force Participation Rate (LFPR) of women that there is a steady increase from year to year. Women in Indonesia today become one of the pillars in supporting the national economy, by increasing the female workforce, particularly in the manufacturing sector in Indonesia, given the figure that the proportion of women workers is around 80 percent of total manufacturing workers (World Bank, 2012). This is supported by the data Pusdatinaker Kemenakertrans processed by Anwar & Supriyanto (2012) in which the female workforce in Indonesia continues to increase from year to year, both in the formal and informal sectors. In the formal sector, the female workforce in Indonesia tends to increase continuously from 10,228,373 as of August 2008 to 10,992,799 (August 2009), and then increased again to 12,055,011 (August 2010) and 12,968,864 (February 2011). Meanwhile in the informal sector, women's labor force reached more than doubled compared to the formal sector. As of August 2008 recorded 28,425,009 female workforce, then increased to 29,885,171 (August 2009) and 30,689,675 (February 2011)

It is undeniable that alongside with the improvement in women's level of education, especially in urban areas , they now have bigger and wider opportinity to take part in the working world . This opinion is supported by Sulistiyaningsih and Rumondang (2005) which suggests that the LFPR of women is affected by increasing education, increasing demand for women workers and increasing overall national productivity.

Nonetheless, there have been many studies conducted to understand the phenomenon of the lack of women's participation in social activities. Some of the reasons disclosed include direct barriers such as availability of employment; fundamental barriers such as male dominance in terms of policy; and/or structural barriers such as issues of gender role ideology (United Nations Development Programme (UNDP) Indonesia , 2010) .

Increased participation of women become highly desirable because it could increase the value of Gross Domestic Product (GDP) of a country. The case of Malaysia's GDP, for example, which is ranked 51 in the world, can grow by 2-4 % per year if the participation of women workers rose from 47 % to 70 % (UNDP, 2010 as cited in Woon , 2010). Therefore, the Indonesian government should start thinking more seriously about policy tools that can improve the protection of the rights of women who choose to work in order to raise the participation rate.

Development of policy tools can be based on existing studies such as the results of UNDP analysis of the low participation of women compared to men in the realm of politics and government that led to the need for institutional reform recommendations. One form of institutional reforms meant that the procurement of daycare places for the sake of pressing the advent of the personal and psychological barriers often faced by women when it goes into the public domain (UNDP Indonesia , 2010) .

However, unlike in the western world, family-friendly organizational policy very rarely perceived by the majority of working women and men in most Asian countries (Brough, 2008). Research reveals, socio-cultural environment in Hong Kong caused a lot of professional women workers only receive very limited support from husbands and also place their work in helping to manage the amount of full- time demands of work and family responsibilities (Lo, 2003). In a business context across countries, different studies show that workers in multinational companies operating in developing countries are also experiencing high conflict between work and family, as well as workers in the United States and other advanced economies in the other western, although family-friendly policy has become a major research theme in these countries (Hill, et.al, 2004) .

Breastfeeding among working mothers

In Indonesia, the increasing number of women in the work force must be accompanied by policies and practices in the workplace that address the needs of women by concerning equally important roles in the family, as a mother. Exclusive breastfeeding for infants aged 0-6 months is one of the rights of a mother, including those who work. Exclusive breastfeeding will provide many positive impacts, especially for the infant/child, which in return, will impact to better health rate of a country.

Exclusive breastfeeding starts from when a baby is born until she reaches the age of 6 months and can be continued until the child reaches two years old. This practice can prevent the child from infections and ensure optimal infant health (WHO, 2013). In addition, a systematic review presented by the WHO states that 3 of 8 studies found exclusive breastfeeding have a positive impact on intellectual development of children in school (WHO, 2007).

The results of existing studies show that infants aged 4-5 months who are not exclusively breastfed were 2.5 times more likely to die than infants who were fed breast milk. When exclusive breastfeeding increased from 39 % to 78 %, then the risk of infant mortality can be reduced by half. Through exclusive breastfeeding program can save 1.3 million babies lives each year. If breastfeeding continues with up to two years breastfeeding alongside with appropriate additional foods, another lives 5,500 babies per day can be saved. It means that a year there are about two million babies lives can be saved (UNICEF, 2005 and Siswono, 2006).

The scope of exclusive breastfeeding in the world today is still low, less than 40 % (WHO, 2013); while the scope of exclusive breastfeeding in Indonesia decreased from 42.4 % in 1997 to 39.5 % in 2002-2003 (IDHS, 2007), and 13.5 % in 2010 (Health Research (Riskesdas), 2010)

One of the challenges of exclusive breastfeeding for infants comes from the employment sector. Many working mothers who do not breastfeed after returning to work because it did not have sufficient time to breast-feed or to pump when at work, there is no designated space for feeding/pumping, and there is no a sufficient breastmilk storage (WHO, 2013). Exclusive breastfeeding, on the other hand, has been stipulated in Government Regulation (PP) No. 33 In 2012 , as follows :

1. Management of the workplace and public facilities should support exclusive breastfeeding programs .
2. The program to support exclusive breastfeeding in the workplace as referred to in paragraph (1) shall be implemented in accordance with company rules which are settled between employers and workers, or through collective agreements between employers and unions.
3. Management of the workplace and public facilities should provide special facilities for breastfeeding and / or pumping according to the company's ability.

Organizational support in exclusive breastfeeding

Family-friendly organisational policies are still very rarely perceived by the majority of working women and men in most Asian countries (Brough, 2008). For example, socio-cultural environment in Hong Kong caused a lot of professional women workers only receive very limited support from husbands in regards to their work in managing full-time demands of work and family responsibilities (Lo, 2003). In a business context across countries, different studies show that workers in multinational companies operating in developing countries are also experiencing high conflict between work and family, as well as workers in the United States and other advanced economies in the other western, although family-friendly policy has become a major research theme in these countries (Hill, et.al, 2004) .

Support for breastfeeding mothers in the workplace can consist of many things. Some of them are the company's policy to support breastfeeding mothers, which also serves to educate workers about the importance of exclusive breastfeeding; providing facilities designed for breastfeeding or pumping breastmilk; providing flexible working time for mothers who breastfeed their children during working hours; providing longer maternity leave (than that regulated in the Employment Act No. 13 Year 2003); providing childcare facilities; providing breastpump; recruit professional lactation specialist to provide support and learning for nursing mothers (The CDC Guide to Breastfeeding Interventions).

Dodgson, Chee, & Yap (2004) in his article on "Workplace breastfeeding support for hospital employee" suggests that there are elements that support breastfeeding mothers in the workplace which is divided into three categories. The first is, structural support where the possible interventions organization is a space specifically designed with the characteristics of supporting privacy nursing mothers, affordable location, chairs and other devices that support the comfort, telephone, also works of art that can motivate mothers to breastfeed, on second intervention performed in this category are devices which support breastfeeding mothers such as electric pumps and supporting equipment, such as cleaning equipment and refrigerator.

The second category of organizational support for nursing mothers is the support from the fellow workers while the third category of organizational support for nursing mothers is from the organization. Organization can provide support through interventions such as introducing policies

and philosophy, which support breastfeeding mothers or developing a committee to support and solve breastfeeding issues in the workplace.

In Indonesia, there have been laws that support breastfeeding for working mothers. The Act No. 36/2009 on Health mentions that family, governments and communities need to support mothers by providing sufficient time and special facilities. Provision of special facilities referred to in this Act include facilities at workplaces and public facilities. This Act also imposed criminal sanctions for anyone who deliberately blocks the program of exclusive breastfeeding.

3. RESEARCH METHODS

This study uses quantitative methods. Data was collected through a survey by distributing questionnaires to women workers who have babies aged 6 months - 5 years in two manufacturing companies in West Java where women workers are majority. 90 questionnaires were collected from HF and 100 questionnaires were collected from CI. In terms of interview, eight informants from HF have been interviewed and 11 informants were from CI.

Profile of respondents

90.1% of the respondents are aged 31-45 years old, while the remaining are 15-30 years old. The majority of respondents graduates from high school (90.1%) and works for more than 6 years in the company. The type of work of the majority of respondents is operational employees (conveyor, assembling) (65.1%); the majority of respondents (74%) work in office hour (as opposed to shifts) and the majority of workers earn above 3 million Rupiah.

Behaviour of women workers towards breastfeeding

63.5% of respondents answered that they gave exclusive breastfeeding up to 6 months for their first child. Just as much as 21.9% of respondents who answered only breast milk given to children, while 78.1% answered that they gave additional milk/food to their 0-6 month babies. This finding indicates that respondents do not understand the definition of exclusive breastfeeding, as the statistics above is not match. In terms of additional food, within one month 38% of respondents spend between 351-600 thousand Rupiah for formula milk, while 20.3% of respondents spend 100 thousand to 350 thousand Rupiah, and 17.2% of respondents claimed to spend over 600 thousand Rupiah. 61.5% respondents provide additional food other than breast milk to infants aged between 6-9 months, but there are still 21.9% respondents giving extra food in addition to breast milk for infants aged 3-6 months, even 7.3% giving infants 0-3 months. 46.4% respondents added formula in addition to breast milk, and 40.1% added honey in addition to breast milk for their infants.

Perception of women workers on exclusive breastfeeding and company support

The table below shows the perception of respondents towards exclusive breastfeeding

Tabel 1. Attitudes of respondents to exclusive breastfeeding

No	Statement	Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree
1	Exclusive breastfeeding make my child healthier	2,1%	0,5%		26%	71,4%

2	Exclusive breastfeeding gives my child immune to disease and infection	2,6%	0,5%	1,6%	28,6%	66,7%
3	Exclusive breastfeeding contains nutrition and energy	2,6%			36,5%	60,9%
4	Exclusive breastfeeding strengthen the bond with my child	3,6%			27,1%	69%
5	Exclusive breastfeeding enable better psychological development	1,6%	7,8%	3,1%	42,2%	45,3%
6	Exclusive breastfeeding prevent me from bleeding (postpartum)	4,2%	8,3%	11,5%	46,4%	29,7%
7	Exclusive breastfeeding for infant up to 6 month is not sufficient	11,5%	35,4%	6,3%	37%	9,9%
8	Exclusive breastfeeding makes my child suffers from malnutrition	16,1%	65,6%	7,8%	6,8%	3,6%
9	Exclusive breastfeeding makes me fatty	12,5%	57,3%	12,5%	13,5%	4,2%
10	Exclusive breastfeeding enables me to save some money	2,6%	3,6%	1%	48,4%	44,3%

The table above shows the positive perception of the respondents of exclusive breastfeeding, both for the child and the mother. Additionally, the respondents also believe that exclusive breastfeeding helps them save the money since the expenditure required to buy formula milk is around 300-600 thousand rupiah per month.

Tabel 2. The expectation of organizational support

No	**Statement**	**Strongly Agree**	**Agree**	**Don't know**	**Agree**	**Strongly Agree**
1	A written policy about exclusive breastfeeing	6,8%	6,3%	9,9%	54,7%	22,4%
2	Flexible time policy	6,3%	5,7%	8,9%	60,4%	18,8%
3	Designated breastfeeding room	2,1%	4,2%	6,3%	71,4%	16,1%
4	Designated refrigerator to keep breast milk	2,1%		2,1%	74%	21,9%
5	Provision pump (breast pump)	10,9%	23,4%	7,3%	45,8%	12,5%
6	Other equipment	12%	17,7%	13,5%	44,3%	12,5%
7	Daycare	29,7%	34,4%	20,8%	12,5%	2,6%
8	Education (seminars/discussion) about breastfeeding	21,9%	21,4%	16,7%	31,3%	8,9%
9	Easier job for nursing workers	14,6%	22,4%	10,4%	37%	15,6%
10	Sufficient maternity leave	2,6%	13,5%	4,7%	61,5%	17,7%
11	Sufficient maternity leave for exclusive breastfeeding	6,3%	22,4%	8,3%	52,1%	10,9%

The above data shows that female workers needs the nursing space provided by the company, as well as a designated refrigerator for breast milk storage. In addition, the majority of workers also expect flexible working time and sufficient leave after giving birth to enable them to breastfeed their children.

CONCLUSIONS AND SUGGESTIONS

The conclusions of the findings of this study are as follows:

1. There is various understanding of exclusive breastfeeding. Some data show inconsistencies, such as the majority of respondents said they give exclusive breastfeeding for their 0-6 month infant, but other data indicates that they give additional food/milk to their 0-6 month children. This is reinforced by data on exclusive breastfeeding define according to respondents: the majority of respondents stated that exclusive breastfeeding is breastfeeding, plus milk formula or other additives when milk less. This indicates that the understanding of exclusive breastfeeding among women workers is still weak.
2. The findings also show that women workers who were respondents in the study had a positive perception of exclusive breastfeeding, that exclusive breastfeeding a positive impact on their children and for themselves.
3. Respondents also express the expectation of support from the company, by providing the nursing room and refrigerator for breast milk storage, flexible hours that allow them to give exclusive breastfeeding for their children, as well as sufficient leave after giving birth. Furthermore, they expect that there is a written policy, which support exclusive breastfeeding.

The findings also highlight some recommendations as below:

1. There is a need for education and socialization of exclusive breastfeeding women workers truly understand the meaning of exclusive breastfeeding, Although the data collected shows that the women workers felt they do not need a seminar/discussion about exclusive breastfeeding.
2. Companies that already provide nursing room should continue to monitor the appropriateness of the nursing room along with the equipment, including the refrigerator for keeping breast milk.
3. There is a need to give a recommendation to relevant policy makers on maternity leave for women workers, to enable them give exclusive breastfeeding for their children.

REFERENCES

Anwar, R.P., & Supriyanto, A. (2012). *Non-standard work, social dialogue and collective bargaining in Indonesia*. Geneva: International Labor Organization (ILO).

Badan penelitian dan pengembangan kesehatan kementrian kesehatan RI, 2010*. Riset Kesehatan Dasar.*

Brough, P., Holt, J., Bauld, R., Biggs, A., Ryan, C. (2008), "The ability of work-life balance policies to influence key social/organisational issues", *Asia pacific Journal of Human Resources*, Vol. 46 No.3, pp.261-74

Hill EJ, Yang C, Hawkins AJ, Ferris M. (2004). A cross-cultural test of the work-family interface in 48 countries*. Journal of Marriage and Family*, 66, 1300–1316.

Lo, S. 2003. Perceptions of work-family conflict among married female professionals in Hong Kong. *Personnel Review* 32: 376–90.

UNDP Indonesia, 2010, Partisiweaning food perempuan dalam politik dan pemerintahan: Makalah kebijakan,

WHO. 2013. 10 fact on breastfeeding. URL: www.who.int. Diakses 3 Januari 2014.

WHO. 2007. Evidence *on Long Term effect of Breastfeeding: systematic reviews and meta-analyses*. Geneva: WHO.

Gaining Tacit Knowledge based on Deterministic Approach for Risk Analysis in the Real Estate Industry

Nur Atiqah Rochin Demong[1], Melissa Shahrom[2] and Masrur Mohd Khir[3]

1 Centre for Postgraduate and Professional Studies, Faculty of Business and Management, Universiti Teknologi MARA,40450 Shah Alam, Selangoar, Malaysia, rochin@salam.uitm.edu.my
2 Faculty of Business and Management, Universiti Teknologi MARA,42300 Puncak Alam, Selangoar, Malaysia, melissa@puncakalam.uitm.edu.my
3Institute of Business Excellence, Faculty of Business and Management, Universiti Teknologi MARA,40450 Shah Alam, Selangoar, Malaysia, masrur@puncakalam.uitm.edu.my

Abstract
Decision on property investment involves modelling and taking into account various uncertainties of the risk factors and therefore requires related software systems to support a dynamic risk prediction. Ranking and weighting of the uncertain factors for investment decision highly depends on the expert judgments. Also, since investors have different requirements and preferences, the risk prediction and decision making needs to provide a personalization mechanism. However, existing studies cannot handle these issues. This paper proposes a Personalized Association Mapping (PAM) method which collects knowledge via the deterministic approach and integrates with the heuristic approach to map the weight and ranking factors between the requirements of the investors and pattern discovery for achieving investor's goals. This PAM method has been implemented in a web-based personalized risk prediction system. A set of experiments demonstrated that the PAM method figures out a decision which meets the investor's goals and personalization mechanism does give impacts in achieving the investor's objectives. This PAM method can be applied to problem solving in the real estate industry and other fields which related to dynamic risk analysis decision making.

Keywords: risk prediction, decision under uncertainty, personalization, property investment

1 INTRODUCTION

Real estate investment involves with a high risk, high cost, dynamic and various uncertainties (Hui, Yu, & Ip, 2010; Yu, Wang, & Guo, 2009; Zhang, & Li, 2009). The relationship between risk, cost and the rate of return are very complicated and uncertain. In the real situations, the risk factors in the real estate industry are mostly defined as uncertainty factors which are affected by other qualitative or quantitative factors. The higher the uncertainty of risk factors related to decision making the higher the level of risk (Liu, Zhao, Liu, 2007; Zhou, Zhang, & Li, 2008).

Risk with high uncertainties will lead to the occurrence of a higher percentage of probability to fail and consequences of the risk factors impact. Moreover, the impacts on the level of dynamic risk prediction will varies in which it is dependent on what takes place from the initial investment to the later stages of the real estate development. Another impact of the uncertainties of the risk factor is the level of understanding and knowledge on how to interpret the risk factors involved when predicting the risk level. Most of the risk analysis techniques applied in the real estate

industry assign weights to the risk factors based on experts' experience. The main concern is the investor's goals may not similar as the expert's goals. By using expert judgement, there are many limitations and disadvantages to help property investment decision making.

The experts in the field might be familiar with the sources and factors that will affect the decision making, and know about how to monitor and control the uncertainty factors. However, they might have different perceptions and ways of thinking (Lafleur, 2011; Chen, 2010). For example, the experts in the field could have a different experience, and this leads to the misinterpretation of ranking and weighting of the risk about those factors, compared with the end-user or investor. Moreover, objective of the experts in the field might not align with the investor's goals. Thus, there is a need for the end-user to have a comprehensive and interactive system for them to model and predict risk in making decision.

There are some risk analysis and prediction methods available, such as analytic hierarchical process (AHP) and analytic network process (ANP). However, these methods do not provide tools for interaction such as personalization of risk level by the decision makers which definitely will have different limitations, goals and objectives. There are various online real estate and property investment application systems to help investors browse property information such as Korean real estate agencies (Yuan, et al., 2013); www.r114.com, www.drapt.com, www.bd119.com and Taiwan real estate agencies (Fang, et al., 2009); Sin-Yi Agency, Yung-Ching Agency and ETwarm Agency. These existing online real estate systems provides information and reports about the current situation of the real estate industry in their country and get quotation for available property by giving them the information of potential property for sale, rent or buy. However, these application systems have three weaknesses: 1) it does not provide any mechanism to model and carry out risk prediction; 2) information overload, that is providing a tremendous amount of information to the end user; and 3) there is no personalization mechanism which is important for investors to adjust the risk factor level according to their goals and to interact with the system.

This study aims to propose a personalized association mapping (PAM) method and implement it into a system to solve both lacking of risk prediction and lack of personalization mechanism during real estate investment. Three main contributions of the study are: 1) the integration of the multidimensional data model using data mining techniques to rank and weight the risk factors mapping with the user's requirements rather than only experts' judgments; 2) the personalization element which allows interaction between the investors and the risk prediction; 3) the implementation of the system which allows the decision makers to interact with the system for prediction analysis via personalization mechanism. Personalization can help to reduce information overload and thus can improve user decision on predicting risk of investment (Montgomery, & Smith, 2009; Kwon, & Kim, 2012; Glorio, Mazon, Garrigos, & Trujillo, 2012). Besides, it saves investors time and energy to discover and search for prospective property for investment thus better satisfying each of them by having an effective system (Piyatrapoomi, Kumar, & Setunge, 2004). The innovation of this study is to implement the multi-dimensional data model and knowledge discovery for weighting and ranking the risk factor level for risk prediction mapping with the investor's requirement through personalization mechanism.

The structure of the rest of this paper is as follows: In Section 2, the related work about risk analysis in the real estate industry, existing web-based real estate investment system and the concepts of the personalization are discussed. Section 3 presents the PMP framework. Section 4 describes the PAM method in detail which integrates the heuristic and the deterministic approaches. A Web-based Intelligent Real Estate Property Analysis System (WIREPAS) prototype is presented in Section 5. In Section 6, experiments and results are analyzed and

discussed in detail to validate the effectiveness and the applicability of the PAM method and the WIREPAS prototype system. The comparisons and discussion of the proposed method described in Section 7. The conclusion and future direction of this research are discussed in Section 8.

2 RELATED WORKS

This section first discusses the concepts and related techniques of risk analysis in the real estate industry. It then introduces an existing web-based real estate systems followed by the concepts of the personalization.

2.1 Risk Analysis in the Real Estate Industry

Investment in the real estate industry incurs a very high cost and high risk (Ren, & Yang, 2009; Gao, & Wang, 2009; Yu, & Wang, & Guo, 2009). However, the real estate investment is an activity with high income even though it associated with a high-risk (Zhang, & Li, 2009). The risk is higher because of the uncertainty of the risk factors and it involves with multi criteria decision making (Pomerol, 2001; Li, & Liao, 2007). A decision support system for the modelling and management of risks and risk interactions is a crucial activity with a growing complexity with higher uncertainties and tighter constraints. It may be extremely difficult to assess the risks associated with an investment decision due to the great uncertainty involved such as adjustment of property prices, incomplete risk data and lack of reliable and relevant data (Fang, Lin, Huang, & Chou, 2009). In decision making, the correct methodology is important to ensure the right decision is made and beneficial to the users in decision making processes (Hussain, Chang, Hussain, & Dillon, 2007; Fang, et al., 2009). Comprehensive risk analysis method needs further development to carry on the whole level estimation and valuation for multi-target risks in a research development direction. Risk analysis involves three main processes namely risk identification, risk estimation and risk assessment (Jin, 2010).

The most challenging part of the risk analysis is to determine the risk factors for decision making process risk identification. Risk estimation is to quantify the risks existing in the process of investment in real estate projects on the basis of risk identification. The weights of risk factors that will affect the result of risk analysis need to be quantified and measured. AHP is a multi-criteria decision analysis technique and the most popular technique used to rank and weight the risk factors in the real estate industry (Sun, Huang, Chen, & Li, 2008). Another model introduced by Saaty is called ANP which is the generalization of AHP, allows both interactions and feedbacks within a cluster of elements (inner dependence) and between clusters (outer dependence). Both AHP and ANP determine the risk evaluation index and the weight of the risk factors based on experts' survey (Angelou, & Economides, 2009).

The issues related to the application of expert survey in determining the weight estimation are that the experts in the field might have different opinions and judgments about the risk factors and this will affect the result of the decision made. Moreover, the investors will view the factors in different ways and sometimes they might not be satisfied with or agree with the judgments given by the experts in the field (Bolger, & Wright, 1994). There are many approaches to confirm the assigned weight which reflect experts' practical experiences but it's hard to avoid the personal view of the expert and some weight of positive index given by the experts may be negative for the investors which are unreasonable and subjective (Lafleur, 2011).

2.2 Existing Real Estate Data Analytic Systems

There are many web-based real estate systems available over the Internet and it is easy to find real estate properties either for rental or to buy. These real estate agency websites can help

home buyers to search for houses. However, home buyers usually have to access many different websites to retrieve the useful information because of the various website structures and different format of information (Fang, & Marle, 2012). Most available web-based real estate systems are constantly being overloaded with information. For example, the realestate.com.au, the Australia's number one property site does not provide the risk prediction analysis when searching for properties to buy or rent. Moreover, the search results will list all related properties based on users' search queries which results in information overload and more time needed for browsing and to choose an option. Advance queries such as more details or more attributes given for search queries should be available to limit the results. Furthermore, personalization mechanisms for the search attributes need to be activate to fulfil the investor's goals and objectives.

According to the American National Association of Relators (NAR) On-line Technology Survey, conducted in 2011, indicated that 88% of home buyers chose the Internet as an information source when searching for a home, an increase of 14% since 2010. The median time that home buyers spent on a home search was 12 weeks, the same as in 2009 (Yuan, Lee, Kim, & Kim, 2013). This implies the user of real estate websites did not improve home buyers' search efficiency (D'Urso, 2002). Technological innovations have resulted in new applications that allow home buyers to select affordable price ranges, take virtual tours, obtain information about the neighbourhood and the surrounding environment, access comparative data of different districts, and view property values over time (Yuan, et al., 2013). However, so far there is no risk prediction involved in their system which will affect their result on investment. Therefore, this paper investigates real estate websites functions which serve only as a search tool and its impact on all search dimensions or attributes (fields) in helping the investor's to make decision on property investment. A personalized multidimensional process framework is generated to accomplish this (Demong, & Lu, 2011). An effective system must support and allow decision makers to detect anomalies in dimensions of search criteria and extract useful knowledge in evaluating the risks and selecting the appropriate alternative during an incident, and provide different services to satisfy the decision maker requirements (Peng, Zhang, Tang, Li, 2011).

3 PERSONALIZED ASSOCIATION MAPPING METHOD

The integration of the heuristic approach using input from the investor and deterministic approach using KDD for the dynamic risk prediction comprises of seven steps as follows:

Step 1: ***Setting the goals and objectives and send queries to the system developed (Heuristic approach)***
Investor's will set their goals and objectives and send the corresponding information as queries to the system. The system will process the data according to the query set by the investor.

Step 2: ***Generate the result based on the user's query (criteria) using data mining techniques (Deterministic approach)***
The online system will generate an initial result based on the investor's query, and the output will be displayed to the users based on their search criteria. The results displayed were analyzed using data mining techniques based on investor's criteria which will show pattern of data for the selected attributes. The most popular and useful technique for data mining in this study is an association technique which identifies the unforeseen factors that will affect the user's decision making process. The result will be the classification of property with all related attributes such as suburb profile which includes transport to work, occupation, education level, and country of birth.

The data mining analysis is applied to the PAM method to help investors in their decision of evaluating and buying a property for investment, finding a relation between property characteristics and market value. The comparison of properties with many features and specifications and the right evaluation of their prices will be time consuming if done manually and did not shown any structured decision. Data mining algorithms were used in extracting new knowledge and relations, not visible in a database. The data set was extracted from a large Australian Property Monitor domain database, subscribed by the University of Technology Sydney library. A linear regression algorithm is applied in evaluating the price. The main objective of a data mining algorithm is to fit the data to a model.

Example of situations for the analysis includes: a) association rules: Find all houses which are frequently rented with two bedrooms; b) classification: Find all houses which rental rate below than AUD 400 per week located at Botany Bay; c) clustering: Identify houses with similar additional features.

***Step 3:* Rank and weight the risk factors based on the output from the system (Heuristic approach)**

Based on the output from the system, the investor will rank and weight the risk factors based on their requirements and goals for investment. For example, the investor might rank the price of the property (financial risk) as the major risk factor, followed by the location (location factor risk), additional features of the property (design risk) and suburb profile of the matching property (social risk, socioeconomic environment risk). These ranking factors are assigned by the users and are relative to each other. The investor will personalize the number of criteria, rank and weight of the factors for the analysis and decision making process. The number of criteria provided by the investor will determine the number of fields that need to be analyzed by the system. The new criteria will be set by the users based on the results displayed by the system using the deterministic approach as discussed in Step 2.

***Step 4:* Mapping the weight and ranking factors between investor's requirements and data available in the system (Integration between heuristic approach and deterministic approach)**

The system will then map the investors' personalization with the data available in the data warehouse. Next, the system will display the result based on the query set by the investor's (personalization) mapping with the deterministic approach as in Step 3. At this stage, data extracted and stored in the database created will be processed and data mining techniques will be used to discover various kinds of knowledge and to find the pattern of data. Decision tree induction as a data mining technique will be used to find the pattern of data from the database. PAM method will be used to map the user's personalization and data available in the system.

***Step 5:* Make changes to the weight and rank of the risk factors (Heuristic approach)**

Based on the output provided, the investors' will make changes to the weight and ranking of the risk factors continuously to see the variation of the risk factors using personalized multidimensional – sensitivity analysis (PM-SA) to understand the sensitivity of the factors towards the investors' personalization. This process is similar as shown in Step 3 and is an iterative processed, that continues until the user's satisfied with the results which fulfil their goals and objectives.

***Step 6:* Run sensitivity analysis using the PM-SA method (Deterministic Approach)**

Since risk factors are related to uncertainty and investor's requirements may vary from time to time, a PM-SA will be used to determine the sensitivity of the risk factors dynamically in which proving the most up-to-date property data in real time. The system will process the user's

queries based on user's personalization where the combination of output from Step 3 and Step 4 will be compared to achieve an optimal decision. The system will process the user's personalization data similar as shown in Step 4. Step 3 and Step 4 will be repeated until the user's goals and objectives are met.

***Step 7:* Make decisions based on the analysis of results (Heuristic approach)**
Finally, the investors will make their decision based on the analysis of the result from the system that fulfil their requirements and mitigate the risk.

The PAM method proposes support of both qualitative and quantitative measurements of the risk factors for the risk prediction. The qualitative measurement is supported by clustering technique while quantitative technique is supported by forecasting techniques of data mining. Hence, a comprehensive risk prediction will helps the investor to achieve better results.

4 EXPERIMENT AND RESULT ANALYSIS

This section presents the data set and experiment design for the deterministic approach of the property investment risk prediction. Association technique as one of the data mining technique has been chosen for carrying out the experiment. The results of were also discussed in details.

4.1 Experiment Design
This section explores the experimental design of the data mining technique that have been chosen for the experiment. In order to explain on how the deterministic approach functions a set of data have been analyzed to train the data. To give an example of how the deterministic approach functions, a data mining technique have been chosen for the analysis namely the association technique to define patterns of data as discussed in the next subsection. This technique were chosen because it is the most popular and relevant technique for property of real estate analysis. However, other techniques such as forecasting, database segmentation and deviation detection would also applicable depending on the user's requirements.

Experiment: Association/Classification Technique to Define Patterns of Data
Association technique is used to infer or mine the patterns from data. The hidden patterns of data generated by the system will give more valuable information and knowledge to the decision maker's. They might not aware about certain criteria surrounding the property that match with their query or limitations which will influence the overall decision making process. Thus, by analyzing the hidden knowledge, it will manipulate the decision makers' requirements and objectives. They might change their objectives after looking at the hidden knowledge and personalize the rank and weight of the criteria for property investment analysis. Besides, predicting the patterns of features of the property in different locations will help the decision makers to achieve better results. In order to illustrate the use of association technique to define the patterns of data, a set of 339 properties of data is extracted and transform to train and test the data as shown in Table 1. The parameters of the testing dataset include the suburb name, number of bathroom, bedroom and car park of the selected properties, property type and size, rental rate and other additional features such as a study room, dining room and others.

Table 1: Parameters of the testing data and the prototype.

Parameter	**Value**
Total number of	339

case/rows	
Suburb	36 suburbs
No. Of Bathroom	Minimum = 1, Maximum = 7
No. Of Bedroom	Minimum = 1, Maximum =6
No. Of Carpark	Minimum = 1, Maximum = 8
Property Type	3 types (Townhouse, House, Unit)
Property Size	Minimum = 55 sqm, Maximum = 13779 sqm
Rental Rate	Minimum = 100, Maximum = 6500
Additional Features	33 features (study room, Separate dining room, family room, billiard room, rumpus room, ensuite, internal laundry, walk in robe, sauna, air conditioning, heating, fire place, courtyard, pool, tennis court, barbeque, balcony, spa, been renovated, polished timber floor, alarm, garage, garage (lock up), ocean, harbour, river, bay, city, district, park, mountain, bush, water)

4.2 Pre-analysis and Pre-processing

All the data extracted were stored in the prototype system developed using MySQL database management system, Apache server and PHP as the programming language. The data stored in the prototype system was then exported to Microsoft Excel with data mining add-ins for the data analysis. For this study, 399 properties of data which contain 36 suburbs with selected property features have been chosen for the experiment.

Before selecting the sample dataset for the experiment and analysis, the data needs to be cleaned and transformed into a standard format. The data available in the APM website contains missing value of the property features that can produce misleading results for the end users.

4.3 Results Analysis

This section discusses the results based on the experiments of sample data collected from Australian real estate industry.

4.3.1 Association/Classification Technique to Define Patterns of Data

Based on the testing data summarized in Table 1, the pattern of rental in three different suburbs is associated with different attributes as shown in Figure 1.

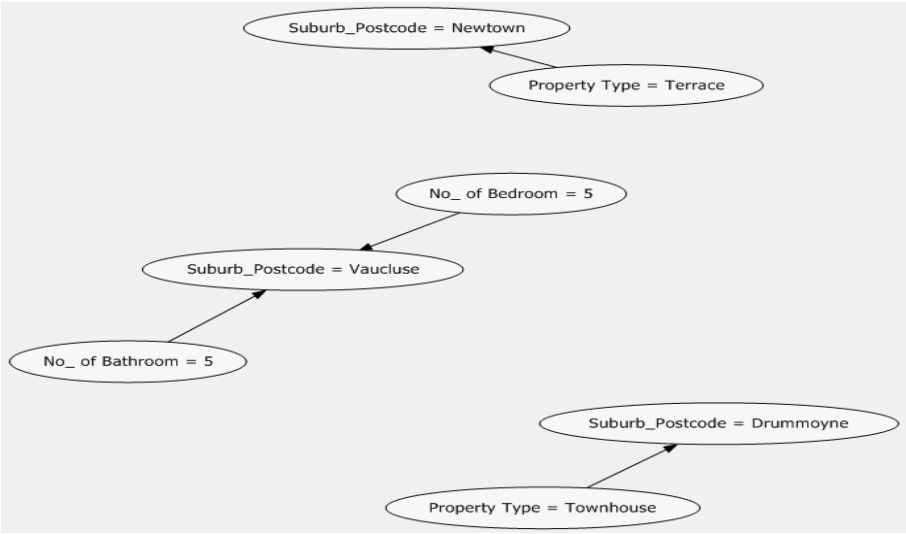


Figure 1: Pattern of Rental at Selected Suburb

Based on Figure 1, different suburb has a different pattern of property for rent features as summarized in Table 2. The pattern generated using this technique was based on data to find type of property that implies the presence of similar features of properties in selected suburbs.

Table 2: Summarized of patterns of data for property rental in different suburbs.

Suburb	Popular features of property rental
Drummoyne	Property type = Townhouse
Newtown	Number of bedroom = 5 and Number of Bathroom = 5
Vaucluse	Property type = Terrace

Based on these patterns, investors can make better decision on what are the suitable properties to buy if they want to make investments for property rental in different suburbs. For example, if the investor would like to buy a property for rental in Drummoyne, they have to find a townhouse to ensure high probability for the property to get it rented.

This personalization mechanism during decision making helps the investor to run analysis in more details according to their needs as shown in the experiment. The variation of the classified value will give high impacts for them to make detailed analysis and to produce better decision. Without personalization, the information given will be static and no further analysis can be produced.

5 DISCUSSION

From the review of literature, studies done by other researchers categorized the risk sources and risk factors differently. Some of researchers classified the risk factors according to the stages of the real estate investment and some other, group it according to the sources. This issue led to misinterpretation of factors thereby affecting the risk analysis result. Thus, this study applied the integration of heuristic and deterministic approach to identify and weight the risk sources and its factors that will affect the property investment risk prediction.

Furthermore, there are a number of issues related to available methods or models for risk analysis in the real estate industry (Rocha, Salles, Garcia, Sardinha, Teixeira, 2007; Sun et al.,

2008). For example, real option methodology has problems in the practical implementation of risk analysis, such as lack of mathematical skills, restrictive modeling assumptions, increasing complexity and limited power to predict investment in competitive markets (Rocha, et al., 2007). Moreover, Zeng, An and Smith (2007) believed that high quality data are a prerequisite for the effective application of sophisticated quantitative techniques. It is essential to develop new risk analysis methods to identify major factors, and to assess the associated risks in an acceptable way in various environments.

The majority of existing real estate investment risk evaluations gave priority to single-goal decision making, used single indices such as the maximum expectation, the largest variance, the minimum standard deviation rate to evaluate the real estate investment. Besides, there is a need for an effective and efficient technique to identify major factors and to assess the associated risks in an acceptable way in various environments, as older tools cannot be effectively and efficiently applied (Zhou, Zhang, & Li, 2008; Sun, et al., 2008). Additionally, dynamic risk analysis concepts and applications have been discovered by many researchers which applied different techniques or methods to support the decision making process in different field. For example, practices on risk-based decision making for investment in the real estate industry study has been conducted to investigate the risk related issues and it was found that many decisions made based on investigating and analyzing factors by giving weight, calculate and select the best option based on the highest performance index (Piyatrapoomi, Kumar, & Setunge, 2004). There is a gap found in the literature review where there is a need of the justification of risk factor weight and ranking which is based on historical data driven to decision support using knowledge discovery and investors personalization for real estate investment risk analysis.

Hence, this paper has estimated and weighted the risk factors based on the pattern of data discovered using data mining techniques (deterministic approach) and maps it with investor's requirements (heuristic approach) to achieve the investor's goals and objectives. The deterministic approach applied and used the concept of technology called decision support tools such as data mining techniques. Decision support tools help businesses to manage their business tasks efficiently and effectively, especially when managers deal with decision making processes in their daily routine (Lu, Zhang, Ruan, & Wu, 2007; Niu, Lu, Zhang, 2009).

By using the PAM method, the users only personalized the weight and rank each of the criteria based on the results shown by the system. In other words, the weight of the criteria available is determined based on the analysis of data stored and available in the system. The results shown act as a guideline and reference for the decision makers to personalize the criteria based on their requirements. With the personalization technique, the decision makers personalized the rank and weight of the risk factors based on their goals and limitations. The personalization of the risk factor level was based on the pattern of data provided by the system which applied the concept of knowledge discovery in database using the multidimensional data model. Moreover, by using the multidimensional data model, the results of the analysis more accurate because all related factors surrounding the property were considered. Each factor either certain or uncertain influenced the results of the analysis with the historical data available in the database. The decision making process became much easier and faster as long as the data available in the system are in a high level of data. Thus, it provides a simple and concise view around the property for analysis which matches with the decision maker's query.

6 CONCLUSIONS AND FUTURE STUDY

Judging the rank and weight of the risk factors in an actual risk evaluation is difficult and most popular technique used in the real estate industry is AHP and ANP. However, these two techniques require expert judgments that might not align with investor's goals and limitations. Thus, this paper presented a new method for improving problem solving and decision making process for dynamic risk analysis investment which incurred a very high cost in the real estate industry. The key idea of the proposed method is to map the weight and rank of the risk factors between investor's requirements (heuristic approach) with the output of pattern discovery using the multidimensional data model and data mining techniques (deterministic approach). A comprehensive risk analysis should be prepared to ensure the success of an investment. All related risk factors either qualitative or quantitative should be discerned at an early stage of the risk analysis before estimate the ranking and weighting of the risk factors. Mapping the weight and ranking of the risk factors between an investor's and the patterns of data using data mining operation are the innovation of this study. It integrates both heuristic and deterministic approaches for weighting and ranking the risk factors and at the same time help investors to achieve their goals and objectives. The experiments and results show that the PAM method proposed was very useful for ranking and weighting the risk factor analysis for property investment in the real estate industry.

An important extension of this approach, a subject of future work, is to develop the new hybrid method to understand and assess the sensitivity of the uncertainty of the risk factors which is independent from human judgment for risk prediction. Moreover, the deterministic approach using an intelligent decision support system that can be used for handling risk-based decision making in business operations is also an essential area to be explored. This is perhaps the most important concern for the future of an information system related to risk analysis or risk aggregation for managers who deal with decision making processes, because it will promote vital and useful technology to help investors identify the risk involved in making certain decisions to meet an organization's goals and objectives. Thus, it is vital to explore a new technique for risk analysis using decision support technology such as Intelligent Decision Support System (IDSS) for investment in the real estate industry. Therefore, a strong tool in analyzing the real estate market and can be used in the automation of evaluations and the extension of the analysis on larger markets is needed.

REFERENCES

Angelou, G.N., & Economides, A.A. (2009). *A multi-criteria game theory and real-options model for irreversible ICT investment decisions*', Telecommunications Policy. 33 (10-11), 686-705.

Bolger, F., & Wright, G. (1994). Assessing the quality of expert judgment: Issues and analysis. Decision Support Systems. 11, 1-24.

Chen, L. (2010). Research on the risk identification and evaluation of real estate development, 2nd International Conference on Information Science and Engineering (ICISE). 3087-3090.

Demong, N. A. R., & Lu, J. (2011). Personalized Multidimensional Process Framework For Dynamic Risk Analysis In The Real Estate Industry, 6th International Conference On Construction In The 21st Century, Malaysia. (2011) 111-118.

D'Urso, V. T. (2002). Home Buyer Search Duration and the Internet, MIT Sloan School Working Paper No. 4271-02. Available at SSRN: http://ssrn.com/abstract=360460 or http://dx.doi.org/10.2139/ssrn.360460

Fang, C., & Marle, F. (2012). A simulation-based risk network model for decision support in project risk management. Decision Support Systems. 52, 635-644.

Fang, Y.M., Lin, L.Y., Huang, C.H., & Chou, T.Y. (2009). An integrated information system for real estate agency-based on service-oriented architecture. Expert Systems with Applications. 36, 11039-11044.

Gao, J., & Wang, Z. (2009). Research on real estate supply chain risk identification and precaution using Scenario analysis method, In: 16th International Conference on Industrial Engineering and Engineering Management. 1279-1284.

Glorio, O., Mazon, J. N., Garrigos, I., & Trujillo, J. (2012). A personalization process for spatial data warehouse development. Decision Support Systems. 52, 884-898.

Hui, E. C. M., Yu, C. K. W., & Ip, W. C. (2010). Jump point detection for real estate investment success', Physica A: Statistical Mechanics and its Applications, 389 (5), 1055-1064.

Hussain, O.K., Chang, E., Hussain, F.K., & Dillon, T.S. (2007). Quantifying failure of risk Based decision making in digital business ecosystem interactions, Second International Conference on Internet and Web Applications and Services, 13-19 May, Mauritius, (2007) 49-49.

Jin, C.H. (2010). The Lifecycle Comprehensive Risk Evaluation for Real Estate Projects--Principle, International Conference on Management and Service Science (MASS), 1-4.

Kwon, K., & Kim, C. (2012). How to design personalization in a context of customer retention: Who personalizes what and to what extent? Electronic Commerce Research and Applications. 11, 101-116.

Lafleur, J.M. (2011). Probabilistic AHP and TOPSIS for multi-attribute decision-making under uncertainty, Aerospace Conference, IEEE. (2011) 1-18.

Li, Y., & Liao, X. (2007). Decision support for risk analysis on dynamic alliance. Decision Support Systems. 42, 2043-2059.

Liu, L., Zhao, E., & Liu, Y. (2007). Research into the Risk Analysis and Decision-Making of Real Estate Projects, International Conference on Wireless Communications, Networking and Mobile Computing, 4610-4613.

Lu, J., Zhang, G., Ruan, D., & Wu, F. (2007). Multi-objective group decision making: methods, software and applications, 1, Imperial College Press, London, UK, 2007.

Montgomery, A. L., & Smith, M. D. (2009). Prospects for Personalization on the Internet. Journal of Interactive Marketing. 23, 130-137.

Niu, L., Lu, J., & Zhang, G. (2009). Cognition-Driven Decision Support for Business Intelligence - Models, Techniques, Systems and Applications, 1st, Springer, Berlin/Heidelberg.

Peng, Y., Zhang, Y., Tang, Y., & Li, S. (2011). An incident information management framework based on data integration, data mining, and multi-criteria decision making. Decision Support Systems. 51, 316-327.

Piyatrapoomi. A., Kumar, A., Setunge, S. (2004). Framework for Investment Decision-Making under Risk and Uncertainty for Infrastructure Asset Management, Research in Transport in Economics, Vol 8. Elsevier Ltd, Chapter 10. 193-209.

Pomerol, J.C. (2001). Scenario development and practical decision making under uncertainty. Decision Support Systems. 31, 197-204.

Ren, H., & Yang, X. (2009). Risk measurement of real estate portfolio investment based on CVaR model, In: International Conference on Management and Service Science. 1-4.

Rocha, K., Salles, L., Garcia, F. A. A., Sardinha, J. A., Teixeira, J. P. (2007). Real estate and real options-a case study, Emerging Markets Review. 8(1) (2007) 67-79.

Sun, Y., Huang, R., Chen, D., & Li, H. (2008). Fuzzy set-based risk evaluation model for real estate projects', Tsinghua Science & Technology. 13(S1), 158-64.

Yu, S. W., Wang, J. P., & Guo, N. (2009). Application of project portfolio management in the real estate corporations, In: 16th International Conference on Industrial Engineering and Engineering Management. 1225-1228.

Yuan, X., Lee, J.H., Kim, S.J., & Kim, Y.H. (2013). Toward a user-oriented recommendation system for real estate websites. Information Systems. 38, 231-243.

Zeng, J., An, M., Smith, N. J. (2007). Application of a fuzzy based decision making methodology to construction project risk assessment, International Journal of Project Management. 25(6), 589-600.

Zhang, X., & Li, H. (2009). Extension evaluation on risks in earlier stage of real estate project, 16th International Conference on Industrial Engineering and Engineering Management. 1229-1233.

Zhou, S. J., Zhang, Z. D., & Li, Y. C. (2008). Self-adaptive Ant Algorithm for Solving Real Estate Portfolio Optimization, International Symposium on Computational Intelligence and Design. 1, 241-244.

GREEN IT MOTIVATION MODEL

[1]Hartini Abdul Jalil and [2]Erne Suzila Kassim
Faculty of Business and Management
Universiti Teknologi MARA, Puncak Alam
Malaysia
[1]tinifauzan@gmail.com
[2]ernekassim@puncakalam.uitm.edu.my

ABSTRACT

Global warming is a major concern to all. The ICT is without doubt plays a significant role to the global economy. However, the ICT has been found to be one of the reasons for global footprints. The total electrical energy consumption by data centers, servers and computers is steadily increasing. Thus, firms are urged to address the environmental and commercial goals simultaneously, rather than as a trade-off as the sustainability of economic, social and environment capitals must be satisfied for long run success. However, the fundamental role of green IT for sustainability is often not given an adequate attention. Hence, in this paper we seek to explore issues and challenges related to green IT implementation. We provide an intensive review of green IT and how it relates to sustainability. Then based on an in-depth discussion with two organizations, we discuss our findings as the related aspects of implementation issues. Finally we offer a model for promoting and motivating green IT in organizations. Such effort is significance, as it will become a point of reference for adopting and implementing green IT for greener world.

Key Words: Green IT; green IT motivation; green IT adoption intention; sustainability

1. INTRODUCTION

Global warming and climate change merging with limited availability and rising cost of energy has become a major concern for the global economy (Molla, 2008). Computer, computers-based applications, hardware and software, information technology and communications have become essential parts in human life. The information and communication technology (ICT) industry has an important role and contribution to the global economy but unfortunately ICT is responsible for 2-3% of the global footprint. Globally, the total electrical energy consumption by data centers, servers and computers is steadily increasing (Lacity, Khan & Willcocks, 2009).

Information technology is essential in innovation emergence that has helped organizations in shaping both business and society in general. Hence, the development of the information technology should not only focus on the tactical and operation of an organization alone, but also needs to focus towards sustaining the environment. A major energy consumed in an organization is typically from the use of IT. However, applying green IT can reduce a business's environmental footprint. The adoption of green IT can be measured as a critical factor not only to sustaining the business but also to the success of low carbon economy (Molla, 2008). Seeing its fundamental role to sustainability, green IT has become a national agenda for many countries. However the awareness about the importance of green IT practices has been found to be low. Therefore, we seek to explore the issues and challenges of green IT acceptance and adoption from previous research. Based on the issues, we conduct a set of organizational interviews with the related public agencies to get an understanding of green IT adoption in Malaysia. The results of the review and interview findings lead to the development of green IT motivation model, an effort to encourage organizations to implement green IT for greener technology.

In many organizations, green IT is a practice of innovation adoption as it deals with methods and strategies for reducing the economic and environmental impacts. Based on the theory of diffusion, for any new innovation adoption, some stages of processes follow, in which the intention is the pre-activity before the adoption and implementation. Therefore, as green IT in Malaysia is low in maturity, the focus of the discussion is limited to the intention and the motivational factors to the adoption intention.

2. REVIEW OF LITERATURE

2.1 Green IT

Concept of Green ICT can be referred to conserving energy, using computing resources efficiently, reducing carbon emissions, appropriate handling of hazardous waste and driven by the desire to reduce cost, benefit the environment and be a good corporate citizen (Hameed, 2011). Olson (2008) refers to these and similar initiatives as enterprise level green strategy and believe that such an approach has a possible positive impact on the environment. The business case for green strategy should also identify benefits to an enterprise's revenue and/or cost (Molla, 2008). Strategic use of IT in smart motor systems, buildings, logistics and grids is estimated to reduce approximately 7.8 billion tonnes (Gt) carbon dioxide equivalent (CO2e), which can be translated into an approximately €600 billion ($US 946.5 billion) of cost savings (The Climate Group, 2008).

Green IT seems to be the right component to connect both corporate innovation and environmental integration. As specified through the National IT and Telecom Agency in the "Green IT guidelines for public authorities" (2008), Green IT can be included in four phases of the product lifecycle:

1) *The development phase* includes the design of environmentally friendly systems and computers by consuming green material and pursuing energy efficiency consumption.
2) *The production phase* focuses on energy saving and the decrease of carbon emissions. The first deals with cost saving while the second deals with an environmental approach. On one hand, producing at lower costs targets to use less energy, on the other hand reducing the CO2 emission with use subsidized energy sources such as solar panels.
3) *The Usage phase* mentions to the organization itself, employee behavior, equipment and infrastructure. To implement a Green IT strategy, the management requirements to draw up a new process and implement new standards not only in terms of IT infrastructure but also in terms of individual usage such as printing work, employee green behavior, recycling paper and electricity custom.
4) *The Disposal phase* is the critical phase as it mostly depends on the government's participation to implement regulations and motivate companies to invest in product which can have a second life.

Green IT can be defined in various means to different people. Nunn (2007) defined the concept of green IT as handling IT assets and services in a more energy efficient way. It includes the activity on how to limit and reduce the organization's carbon footprint. Green IT adoption might be similar to the adoption of other technologies, it has a number of differences (Molla , 2008 ; Olson, 2008 Gonzalez, 2005). Olson (2008) stated, green initiatives take a longer period to break even and are likely to play an imperative role in the green IT adoption and can force some business to accept the technology, even if there is no to do so.

According to Murugesan (2008) green information technology, also can be defined as green computing, which refers to the study and practices and designing, manufacturing , using and disposing of computer , servers and associated subsystems such as printers, monitors, storage devices and communication systems and networking, efficiently and effectively with minimal or zero impact on the environment. According to Hart (1997), green information technology refers to the ability of an organization to systematically apply environmental sustainability criteria such as use of clean technologies and pollution prevention to the use and disposal of the IT infrastructure and also within the human and managerial components of the IT infrastructure. Saleh (2011) also stated that reutilizing and reusing the materials from end electronics can retain natural resources and also can avoid air and water pollution, as well as greenhouse gas radiations that are caused by manufacturing new products.

Molla (2008) adds, green IT includes policy, attitude governance, practice and technology the help to improve and raise environmental sustainability. On the other hand, previous study of greening technology and sustainability by Hedwing, Malkowski and Neumann (2009) have reported that Green IT includes all the activities and efforts that combine ecologically friendly technologies and processes into the whole lifecycle of information and communication technology. Mingay (2007) designates green technology in simple terms as the best information and

communication technology usage also its product, resources and services during the lifecycle. Furthermore, as a supply chain enable, IT can help to improve the efficiency and to reduce the power consumption and the carbon footprint of the organization as a whole. Thus, greening IT has become one of the newest thoughts of improving a business'.

2.2 Green IT For Greater Sustainability

The need of organizations to fulfill the sustainability of economic, social and environmental capitals in order to succeed in the extensive run is essential (Dyllick and Hockerts, 2002). Greening IT can therefore lead not only to reduction in carbon emissions but also to substantial cost savings (Mines, 2008; Donston, 2007; Nunn, 2007). Greening IT can therefore reduce the total cost of technology possession and increase the total environmental value of ownership (Tung, 2007). On the other hand, as IT has become a serious resource to most economies and business; it facilitates "the valuable reuse of movements or energy across industries important to a more resource-efficient production system and fewer adverse environmental effects" (Grant, 2010). In advance, the IT area offers opportunities to create sustainable business and society (Olson 2008) and a lower carbon economy with a possible of the IT sector reducing the 97% of emissions coming from the rest of the economy (The Climate Group 2008).

IT is also expected to play a leading role in supporting a business's sustainability initiatives. Instances of such initiatives include the development of analytical tools and information systems with support energetic routing of vehicles to reduce energy consumption, the implementation of emission management systems and the replacing of carbon releasing business practices through videoconferencing and other online collaborative amenities (Esty and Winston, 2006; Jones and Mingay, 2008). The increasing usage of ICT equipment and the highly dependence in ICT applications in almost aspects of life implies harmful effect in environment and other social aspects. Sustainable being of human and other creatures on earth requires that future ICT technologies must be essentially sustainable both by nature and in usage (Tahir Riaz, Gutierrez, Jens & Pedersen, 2010).

The business responses to these challenges will involve initiative of business sustainability and corporate social responsibility (CSR). Specific initiatives include creating an organizational culture for environmental stewardship and awareness, increasing the proportion of green power source, moving energy intensive processes to locations that are suitable for clean energy, using more recycling paper, office furniture and recycling office waste (Olson, 2008). Sustainability involves three main focuses of economic, social and ecological agenda. The balancing of economic cost-effectiveness with social responsibility and environmental obligations is commonly known as "triple bottom-line" (Elkingston 1998). IT organization can adopt several practices commonly called as Green IT and Green IS in pursuing eco-sustainability.

These practices can revolve around avoiding and controlling pollution during and after production and operations processes; embedding environmental concerns throughout a product lifecycle (including raw material sourcing, product design and development processes) and to all parts of the organization including people, process, technology and management): using more renewable and cleaner resources and cultivating an eco-sustainable culture and mindset among their management and employee (Hart, 1997). This indicates that while the success and benefit of Green IT and Green IS could contribute to a firm's environmental as economic value (Corbett 2010), the success itself could be influenced by a firm's overall strategy (Butler 2011, Molla et al 2009).

3.0 EXPLORING GREEN IT IN MALAYSIA

In looking for the answers of green IT implementation in Malaysia, specifically in the public sector, we conducted two sets of interviews with top management officers of Ministry of Energy, Green Technology and Water (KeTTHA) and The Malaysian Administrative Modernisation and Management Planning Unit (MAMPU). They were selected based on the relatedness of the issue and the organizations they represented. Similar characteristics or homogeneity traits are essential for reducing bias in qualitative research. Considering green IT is a new technology in their context, we generally defined green IT as an innovation in organization. Data gathered was analysed by

using constant comparison method. This was highlighted by Boeije (2002) that the aim of constant comparison method is to discover the concepts. There are four phases involved namely exploration, specification, reduction and integration. Following Corbin and Strauss (2014), three coding processes of open, axial and selective were adhered in the exploration phase. Validation was achieved by getting the respondents to approve the narrative summary.

Based on the analysis, major issues of green IT were summarised. First, the awareness of the importance of green IT is substantially low. The issue is not limited to the employees of the lower hierarchy, but it involves everyone at all levels. Though employees were observed having an understanding of what green IT is, translating its deep meaning into actions seem to be lacking. In many studies, lack of awareness has been reported as a barrier to new technology adoption, including green IT. It results in failure to seek opportunities of reducing environmental impacts that can be achieved with its adoption and implementation. The low awareness level is also coherently referred as the attitude issue.

In addition to low level of awareness, another issue that has become the challenge to green IT adoption is lack of experts in handling and maintaining the initiatives. The issue was highlighted because in adapting green IT as a new technology, the organizations need additional funding for purchasing new technologies or hiring field experts for the new projects.

Although top management commitment is important, the aspect seems to be disintegrated in the organizations. Developing and maintaining the green IT competitiveness require a strong commitment from the corporate leadership, namely senior IT management in working out the policy that relates with green IT. This commitment is not only driven by government regulations and alerts from legitimate environment watchdogs, but also the attitudes of the top management towards environmental issues (Sarkar and Young, 2009). Unclear identification of IT manager's role in organizational practice will influence the greening agenda of information technology in organizations. It is believed that the role of top management support is very important in implementing and conducting green IT projects.

Finally, the analysis concludes motivation has also become the challenge to the green IT adoption. In achieving successful green IT adoption, motivation is essential in meeting organization's goal and objective. Without strong motivation, the understanding of benefits of green IT will not achieved. Application of the organizational motivation theory on IT and eco-sustainability implies that, an organization's belief and value system related with eco-sustainability as well as the influence of external institutions can drive organizational actions to green IT.

Reviews of related issues from the literature yield majority of the early studies on green IT invention focused mostly on the definitional issues and theoretical explanations (Chen, 2011). Even though studies linking the green IT practices to environmental sustainability are emerging, there is still a lack of implementation and action dimensions in measuring green IT. Looking at the green IT measurement, attitude, policy, practice, governance and technology have been studied as the indicators of green IT maturity (Molla, 2008) but the examinations on the organizational factors on awareness, expertise and top management support in the relationship still requires further understanding. In addition, the role of motivation though significance, is given less emphasize as the determinant of green IT intention adoption. Given the issue of slow green IT uptake, it is necessary to give a greater attention to the adoption intention as suggested by Roger (1995) on the sequence of innovation diffusion.

4.0. GREEN IT MOTIVATION MODEL

Grounded on the qualitative approach findings and reviews of related studies, we offer a model for motivating and encouraging green IT implementation, specifically relating the factors to intention adoption. The main aim of the model is to allow for organizations to assess their economic and socio-political strengths and readiness for adopting and implementing green IT. This is referred as the motivation to the intention. However, as green IT is practically new to many organizations, some factors play the moderating roles between the interaction of the motivational factors and the intention to adopt. Findings of the interview reveal top management, employee awareness and human experts make the difference. Since green IT is related to sustainability, our focus is on the economic and socio-political motives, which we derive from the triple-bottom line theory.

4.1 Motivation

Motivation is the driving force of action towards targets and desired goals. It is the desire that initiates the activities of an organization. Motivation can be measured through several variables that consisted of economic and socio-political motives (Molla, 2008). The adoption of green IT could be different from other IT adoption because of the importance of ethical and eco-sustainability motivation considerations in the decision making process. A motivational perspective to Green IT adoption therefore provides beneficial insights as to what extent eco-sustainability considerations are influencing the IT managerial process. It helps to discern if organizational concern for the natural environment, even if economic profits are not tangible in the immediate short term, influence the adoption of Green IT.

The development of the organization's initiatives and efforts toward green IT adoption may be influenced by the motivational and institutional forces. Institution's approach can influence the initiatives by change of behaviour such as without immediate utilization of power; with the practice of order or by giving assets. However, regulatory movements can directly and indirectly affect the individual behaviour under their influence through alter behaviours. Hence, the result between influence and regulation is different depending on the forces that drive the advancement whether supply- push (preparation of innovative product or process) or demand-pull (readiness to utilize the product) as stated by King et al. (1994).

The motives behind organizational actions are clarified by the organizational motivations theory. Rahim et al., (2010) defines motive with the organization activities that make an innovation system through IT and empowered Information System. Motives can be separated into locus (source) and types (focus). The locus of motives is whether internal or external to an organization (Rahim et al., 2007). Motives by the internal factor are applied through missions, value systems and beliefs of the organization (Li, Nicholls, & Roslow, 2003) whereas motives by the external factor are originated from the intervention of formal and informal organizations.

According to DiMaggio and Powell (1983), through coercive, normative and mimetic pressure of the institutional forces can impact or control the behaviour of organizations. Developing from the forces, there are three eco-motivations identified by Chen et al. (2008) which are eco-effectiveness, eco-efficiency and eco-equity. Eco- effectiveness on the other hand, "means to stop pollution and exhaustion ... by guiding individual and organizational thoughtfulness regarding the underlying and central elements of environmental issues through a central redesign of the system" (Ibid: 195). Eco-efficiency denotes to a business's capacity to deliver "competitively priced goods and services while logically diminishing ecological effects" (De Simone and Popoff, in Chen et al, 2008: 190). Eco-equity emphases on "equivalent right of individuals to environmental assets" and a business's "social requirement regarding the future generations" (Ibid: 192).

Building on Chen et al. (2008) and Molla (2009), the motivation factor is categorized as economic motive and socio-political motive. For the economic motive, Green IT can be measured through eco- efficiency, eco effectiveness, eco-brand and eco-process. Socio-political motive can be measured through eco-responsiveness, eco-legitimacy, eco-learning and eco-value government.

4.1.1 Green IT Economic Motives

Eco-efficiency motive has internal locus and economic focus. It refers to the desire to implement practices and technologies to expand the eco-sustainability of IT but at the same time pursuing economic objectives such as cost reduction. Equally corporate demand for more data processing and storage capability remains to grow, energy costs are becoming a significant part of the total cost of running IT infrastructure (Rasmussen, 2006). The need for reducing the power, cooling and real estate costs and growing data centre efficiency might drive some organizations to turn to Green IT. Therefore, most IT managers and professionals are focused on reducing the direct environmental impacts of IT by making data centres and end user medium more energy efficient (Dedrick, 2010).

Eco-effectiveness motive has internal locus and socio-political focus. It occurs when organizations initiate Green IT initiatives due to their beliefs and value system associated with eco-

sustainability and for reasons other than instant economic gains. It refers to the desire to implement practices and technologies to increase the eco-sustainability of IT out of a sense of concern for the natural environment or in order to set a norm and become a thought leader. Managers and organizations that are ecologically embedded and that have deep relationship with the natural environment and the ability to learn from it show commitment to the adoption of sustainable practices (Corbett, 2010). An organization's relationship with the environment and the beliefs and value systems it has cultivated about the environment among its IT employees can motivate the adoption of Green IT. Overall, organizations that are environmentally involved are more likely to consider Green IT as an important undertaking and plan its implementation (Schmdit et al, 2010). Eco-process can be defined as permeating sustainability principles and practices within architecture, process and operation of an IT firm as well as its products and services. Eco-brand is an ability of an IT firm to create, manage, and reinforce its Green brand at both organizational and product levels demands.

4.1.1 Green IT Socio-political Motives

Eco-responsiveness motives occur at the meeting of external locus and economic focus. The importance is on Green IT initiatives that are induced to meet certain needs from the market environment such as green market opportunities. Green IT can lead to profitability through superior access to markets that reward the greenness of companies (Fschmid et al, 2010). It can also lead to introduction new products and services to the market (Sayeed and Gill, 2010). As businesses increasingly use green strategies as a basis for competition (Porter & Kramer, 2006), they set the green norms of competition and motivate their competitors' adoption of Green IT. Therefore, eco-responsiveness motives can lead to Green IT preferences that associate a business to market recognized norms of reducing emission, recycling, reuse and electronic waste management.

Eco-legitimacy motives can be occurring because of political and social pressures facing an organization. The political pressure comes from government burdens in the form of regulations, standards and taxes (Tyteca, 1996) whereas the social pressure come out from the maturity of the institutional environment within which an organization operates (Clarkson et al, 2008). The central thesis of this motive is that companies engage in Green IT projects when they face regulatory and social pressures on their legitimacy. Regulatory requirements and legislative actions play significant roles in the adoption of Green technologies and can strength some businesses to accept a technology or practice even if they do not have a strong intention to do so (Olson, 2008). In particular, governments can encourage the adoption of Green IT by legislations that generate the framework for the law carbon economy (Chen et al, 2008). National, professional and inter-governmental organizations often apply a great deal of influential power in relation to professional practice, in turn it can have implications for the adoption of Green IT. These organizations are producing guidelines related to Green IT. Therefore, the search of legitimacy within the wider social context could be one of the motivating factors in affecting the adoption of Green IT. *Eco-learning* can be defined as the IT firm's ability to cultivate a sustainability mindset and vision for product and service innovation, and create a pool of talent to realize the vision. *Eco-value governance* is the ability of an IT firm to identify whether tangible and intangible Green IT outcomes.

4.2 Awareness

According to Hamid, Ghafoor & Shah (2012), a gradual increase in people's awareness in the developed world has created a fairly cleaner environment in comparison to the developing countries. Lack of awareness has been reported to hinder application of technology (Wabwoba, Wanyembi, Omuterema and Mutua, 2013). Lack of technology awareness often results in organizations failure to pursue opportunities that can be achieved with its adoption and implementation (Ogunyemi & Johnston, 2012). By implementing Green IT practices in organizations it could help in the environment, economic and socio political sustainability. Each organization need to understand and realize about the importance of Green IT practices is not only about activities that reduce environmental impacts, it also will motivate organization in becoming more concern in their economics and socio-political sustainability. The decision to invest in, adopt

and implement green IT will be difficult to reach at when organizations are unconscious of the potential benefits they can derive from such an a undertaking (Wabwoba et al. 2013).

4.3 Expert Capability

In ensuring to sustain the Green IT initiatives the expertise staffs are important in ensuring all the systems run smoothly, costs could be reduced as there will be less economical to be spent in paying for outsourcing services. With adopting the technology it will need the expertise or human resource that enough and capable in maintaining the systems and green technology. In implementing the Green IT strategies, organizations will need additional funding for purchase new technologies or hiring field experts for the new projects (Chou and Chou, 2012). The good preparation also needed for organizational changes that are caused by new Green IT initiatives. Organizations also need to offer training programs to employees for familiarizing the new environmental policies and restrictions. In preparing for future Green IT organizations also need to create a profound knowledge management system for Green IT knowledge gathering and distribution (Chou and Chou, 2012).

4.4 Top Management

Studies have indicated one of the primary factors of green IT adoption success is the champion support, which is referred as the top management importance. It is essential for achieving the objective and as the driver of change. Top management can encourage change by communicating and stressing values over an articulated vision for the organization (Thong, 1999).

Support from top management seems important in areas where existing attitudes, beliefs and values can prohibit change (Combs, 2002; Miller and Rowney; 1999). Other than that, top management commitment will help the organization to defeat prejudice, stereotypes and destructive feelings by legitimizing the diversity cause to the organizational society (Guffey and Nienhaus, 2002; Liedtka, 1998).

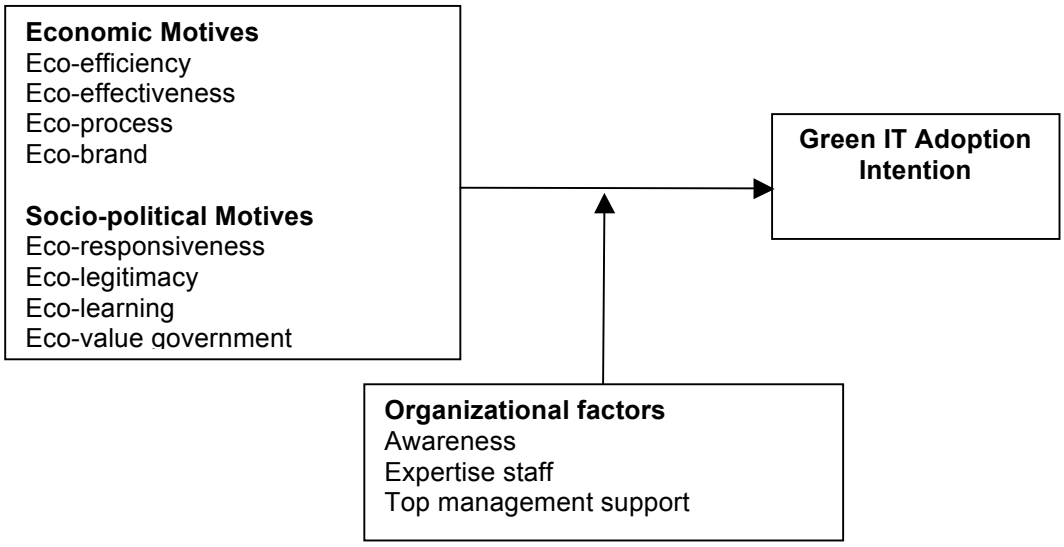


Figure 1: The Green IT Motivation Model

In addition, it is essential for top management to have a clear direction such as goals, objectives, mission as well ability to clarify roles and direction. By developing a clear picture of which the change effort is designed to achieve, the process of implementing and adopting in greening IT will be much easier. It is happened, when people understand the nature of the implementation, they are able to calibrate their implementation efforts more effectively so that desired outcome will be achieved. According to Moore, Konrad and Hunt (2010), the combination of both support from top management and clear vision is necessary for any change at enhancing diversity and inclusiveness. The process of adopting and implementing of green IT needs extensive resources that are available only with the active support from top management. Additionally, support from top management for adoption of green IT would also send a solid

indicator to encourage line management to actively participate in recommending and emerging of green IT (Jamaludin, Ahmad and Ramayah, 2012). Based on the discussion, we have suggest a model as described in figure 1 that reflects the responsibility of the Green IT initiatives in making the process becomes a reality.

5. CONCLUSION

Greening the government ICT requires basic and easy practices like to turn off computers overnight, defaulting printer to duplex mode and an efficient cooler for data center. Luckily, with this simple of practice will bring a significant implication to our earth as by turning off just one computer overnight is like to save 235kg of co^2 in a year and turning off 500,000 computers at night would have same effect as taking 40,000 cars in the road (Cabinet Office, 2007).

Green IT initiative is important because it will give the benefits to the staff and government agencies in their financial and performance. However, the implementation of Green IT initiative is a complex and a costly process as it involves more skilled personnel to handle it issues. The model is developed based on a set of interviews, we recommend validating the model via survey. This investigation will produce statistical evidences that can be generalized across.

REFERENCES

Butler,T. (2011). Compliance with institutional imperatives on environmental sustainability: Building theory on the of Green IS. *The Journal of Strategic Information Systems,20(1), 6-26.*

Boeije, H. 2002. A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and Quantity*, (36:4), pp 391-409.

Cabinet Office, Greening Government ICT: Efficient sustainable, Responsible, www.cabinetoffice.gov.uk/media/270265/one_year_on. pdf, 2007.

Chen, A.J.W, Boudreau, M., and Watson, R.T. (2008). Information Systems and Ecological Sustainability, *Journal of Systems and Information Technology* 10(3), pp. 186-201.

Chou and Chou, (2012). Awareness of Green IT and its value model.

Clarkson, P., Li, Y., Richardson, G., & Vasvari, F. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, vol. 33, no. 4-5, pp. 303-27.

Corbett,J. M. (2010). Unearthing the value of Green IT. *ICIS 2010 Proceedings*.

Corbin, J., and Strauss, A. 2014. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.

Dedrick, J (2010). Green IS: Concepts and Issues for Information Systems Research, *Communications of the Association for Information Systems*, 27(1), 11-18

DeSimone, L. D. & Popoff, F. (1997). *Eco-Efficiency: The Business Link to Sustainable Development*. Cambridge: MIT Press.

DiMaggio, P. J. and Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Behaviour, *American Sociological Review*, 48 (April), pp. 147-160

Donston, D. (2007). Green IT generates fertile ideas. *eWeek*, 24(16), 46

Dyllick, T. and Hockerts, K. (2002), Beyond the business case for corporate sustainability. *Business Strategy and The Environment*, Vol. 11, pp. 130-41.

Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st century business. *Environmental Quality Management*, 8(1), 37-51.

Esty, D. C. and Winston, A.S. (2006) *Green to Gold: How Smart Companies Use Environment Strategy to Innovate, Create, Value, and Build Competitive Advantage*, Yale University Press.

González, P.d.R. (2005) Analyzing the factors influencing clean technology adoption: A Study of the Spanish pulp and paper industry. *Business Strategy and the Environment* ,14(1), 20-37.

Guffey, W.R. & Nienhaus, B.J. (2002). Determinants of employee support for the strategic plan of a business unit, S.A.M. *Advanced Management Journal*, Vol. 67 (2), pp. 23-30.

Hamid S.A R, Ghafoor H.A. & Shah T.Z (2012). Analysis of attitude towards green purchase: Pakistan in context. *International Journal of Business And Social Science*, 3(6),112-115.

Hart, S. (1997). Beyond greening: strategies for a sustainable world. *Harvard Business Review*, 75, 66-77.

Hedwig, M., Malkowski, S., and Neumann, D. (2009). Taming energy costs of large enterprise systems through adaptive provisioning. *International Conference on Information Systems (ICIS 2009) Proceedings*, Phoenix, AZ.

Jamaludin, N., H., & Ramayah, T. (2012). Profitability vs. Sustainability: Preliminary Findings on Green Innovation Adoption in Information technology Usage. *International Conference on Technology and Operations Management.*

Jones, A.R. and Mingay, S. (2008) *Executive Summary: Going Green: The CIO's Role in Enterprise wide Environmental Sustainability*, Gartner Exp Premier, Accessed June 10, 2008 from www.partner.com

King, J. L., Gurbaxani, V., Kraemer, K.L., McFarlan, F. W., Raman, K.S., and Yap, C.S. (1994). The Institutional Factors in Information Technology Innovation. *Information Systems Research*, 5(2) pp. 139–169.

Lacity, M.C., S.A. Khan and L.P. Willcocks, 2009. A review of the IT outsourcing literature: Insights for practice. *Journal of Strategic Information Systems*, 18(3): 130-146.

Li, T., Nicholls, J. A. F., & Roslow, S. (2003). Organizational motivation and the global concurrent launch in markets with accelerated technology: A conceptual framework and research propositions. *International Business Review*, 12(5), 563-579.

Molla, A. (2009). Organizational Motivations for Green IT: Exploring Green IT Matrix and Motivation Models. *Association for Information Systems*.

Molla, A. (2008). GITAM: A Model for the Adoption of Green IT. *Australasian Conference on Information Systems*.

Mines, C. and Davis, E. (2007). Topic Overview: Green IT. Retrieved on October, 2014, available at: http://www.forrester.com/Research/Document/Excerpt/0,7211,43494,00.html

Moore, E., Konrad, M., & Hunt (2010), Creating a vision boosts the impact of top management support on the employment of managers with disabilities. *Equality, Diversity and Inclusion: An International Journal, 29,* 609-626

Mingay, S. (2007). Green IT: The new industry shock wave. *Gartner RAS research Note G00153703*

Murugesan, J. (2008). Harnessing Green IT: principles and practices, *IEEE IT Professional*, 24–33 January-February.

Nunn, S. (2007) Green IT: Beyond the data centre how IT can contribute to the environmental agenda across and beyond the business, *Accenture*, 1-7.

Ogunyemi A. A. & Johnston K. A. (2012 (b)). Exploring the roles of people, governance and technology in organizational readiness for emerging technologies. *The African Journal of Information Systems*, 4 (3) : 100-119.

Olson, E.G (2008). “Creating an Enterprise-level "Green Strategy,” *The Journal of Business Strategy*, 29(2), pp. 22-30.

Porter, M. E. and Kramer, M. R. (2006) Strategy and society: The Link between competitive advantage and corporate social responsibility, *Harvard Business review*, 84(12), 78-92.

Rahim, M., Sarkar, P. K., Shanks, G., and Johnstone, R. (2007). Organizational Motivation and Interorganizational Systems Adoption Process: Empirical Evaluation in the Australian Automotive Industry, *Journal of Electronic Commerce in Organizations (JECO)*, 5(3) 1-17.

Rahim, M., Shanks, G., and Jagielska, I. (2010). The Role of Organizational Motivations in Information Systems Implementation. *PACIS 2010 Proceedings*, 192.

Rasmussen, N. (2006). Implementing Energy Efficient Data Centres, *APC White Paper # 114*. Retrieved on October, 2014, available at: http://www.apc.com

Rogers, E, M. (1995). *Diffusion of Innovations*, 4th ed. New York: Free Press, 1995.

Saleh, M.S. (2011). *Green IT Shaping the Industry*. The National ICT Association of Malaysia (PIKOM).

Sarkar and Young (2009). Managerial Attitudes Towards Green It: An Explorative Study of Policy Drivers. *Pacific Asia Conference on Information Systems (PACIS) PACIS 2009 Proceedings*

Sayeed, L., and Gill, S. (2010). An exploratory study on organisational adjustments due to Green IT. *International Journal of Management and Enterprise Development*, 9(3), 233-250.

Schmidt, N.-H., Erek, K., Kolbe, L. M. and Zarnekow, R. (2010). Examining the Contribution of Green IT to the Objectives of IT Departments: Empirical Evidence from German Enterprises. *Australasian Journal of Information Systems*, 1(17), 127-140.

Shihab A. Hameed (2011). Special issues on Science and Ethics in Engineering. *IIUM Engineering Journal*, Vol.12 No.5.

Tahir Riaz, Jose M. Gutierrez, Jens, M. Pedersen. (2010). Strategies for the next generation green ICT insfrastructure. *2nd International symposium on applied sciences in biomedical and communication technologies ISABEL*,(2010).Ieeexplore.ieee.org/ie15/5367316/5373604.pdf

Thong, J. (1999) An Integrated model of information systems in small businesses. *Journal of Management Information Systems*, 15(4), 187-214.

Tyteca, D. (1996). On the measurement of the environmental performance of firms- a literature review and a productive efficiency perspective. *Journal of Environmental Management,* 46(3), 281-308.

Wabwoba F., Wanyembi W.D., Omuterema S. and Mutua M.M, (2013) Pervasiveness of green ICT awareness amongst Kenyan ICT personnel. *International Journal of Application or Innovation in Engineering of Management (IJAIEM),* Volume 2, Issue 1, January 2013.

STATE OF ITIL PRACTICES IN CORPORATE SECTOR WITH FOCUS ON SERVICE ORIENTED APPROACH

Talha Monis
Department of Engineering Management
Center for Advanced Studies in Engineering
Sir Syed Memorial Building, 19, Attaturk Avenue,
G 5/1, Islamabad.
Email: talha_monis@hotmail.com

Prof. Asad Naveed
Department of Engineering Management
Center for Advanced Studies in Engineering
Sir Syed Memorial Building,19, Attaturk Avenue,
G 5/1, Islamabad.
Email: asadnaveed@hotmail.com

Abstract— *The paper presents the current state of Information Technology Infrastructure Library (ITIL) in public sector organizations of Pakistan. The paper compares the current state with private sector set as a benchmark and finds flaws in existing implementations of the standard and remedies to overcome the flaws discussed in this paper.*

The problem with current IT infrastructures in public sector organizations is that too much time is spent on planning phase, thus there are a very few services which are managed according to the standard. There are a few services which are actually made a part of the service portfolio in ITIL. We see that the IT staff is managing critical business services both in private and public sectors alike. We see that most of the ITIL processes in Public Sector organizations are at an initial stage of maturity and need to push forward in order to achieve service excellence and customer satisfaction. The need to actually implement the architecture in Public Sector is equally weighed as compared to Private Sector because services are of high importance in both the sectors and downtime is intolerable. Hence there was a need to have an in-depth analysis and dig down the root causes of the ITIL implementations in Public Sector Organizations. This paper addresses the issues and provides recommendations for proper implementation of the universally recognized and accepted standard. The paper further clarifies how ITIL standard be effectively implemented in IT departments of Public Sector Organizations they can achieve Quality of Service (QoS) objectives.

Keywords— ISO/IEC 20000; Information Technology Governance; Information Technology Infrastructure Library, ITIL; Governance Risk and Compliance, GRC; Public Sector Organizations; Quality of Service, QoS; Information Technology Services Management, ITSM.

I-INTRODUCTION

Information Technology Infrastructure Library (ITIL) is an internationally renowned standard for managing Information Technology Infrastructure. There are other standards like COBIT which is mostly utilized for Information Technology Governance, and CMMI which is mostly used for software development best practices benchmarking and implementation. ITIL standard deals with aligning business goals with Information Technology objectives, which in turn provides framework for Information Technology Governance architectures like COBIT. ITIL although underpins ISO/IEC 20000 standard, it also has a few differences to account for. Where ITIL is used to align business services with organizational goals and business objectives, COBIT takes this a step ahead to Information Technology governance.

Information Technology with its wide span of implementation and ever expanding need for improved infrastructure has grown to offer cloud services and Infrastructure as a Service (IAAS) implementations require huge infrastructures to be put in place. Such huge infrastructures need proper management and a Management by Objective (MBO) model to justify and define investments in services from business perspective. Hence ITIL provides a perfect framework to start with and later go on to bigger avenues like COBIT and CMMI models to enhance the overall performance of Information Technology departments in an organization. ITIL framework includes Service Strategy, Design, Transition, Operation and Continual Service Improvement (CSI) as five concepts of service management as shown in Figure-1. Core of ITIL concepts is Service Strategy which derives Design, Transition and Operation and CSI governs all of the core concepts.

ITIL implementations are as complex in private sector organizations as it is in public sector organizations; however the implementation scenario changes and business objectives are rather organizational approach to achieving success. Key matrices need to be defined and agreed to and top management commitment is required to achieve this in both scenarios. ITIL implementation requires that organizational goals are well defined in the first place in a Public Sector organization and the people are aware and trained about the change implementation. Basic behavior of the employees within an organization requires a dynamic paradigm shift in order to successfully achieving Business-IT alignment.

The research focuses on the problem area that ITIL is neglected in Public Sector organizations and there seems to be lack of knowledge as how efficiently this tool can be implemented in Public Sector organizations to achieve organizational excellence. ITIL implementations are vital in reforming a Public Sector organization and its

implementation can overcome many hurdles and problems which the modern era Public Sector organizations face. Here it is necessary to set a benchmark and define a way forward for such implementations to progress in Public Sector organizations. This can be done by defining a Maturity Model and accessing the current state of Business-IT alignment in Public Sector organizations, then setting achievable objectives to attain performance goals within Public Sector IT departments. This paper focuses on the current state and the way forward in this regard and provides such organizations a change plan for Keizen improvement in Quality of Service objectives.

The study will provide insight into the underlying reasons of ITIL implementation success or failure rate in terms of the type of organization in which the standard is being implemented, the significance of services to the organization IT is providing to the end users, the orientation of the organizations towards delivery of service or delivery of product, end user satisfaction levels of various technical projects undergone by the service provider.

The study will also help differentiate between the strategic orientation of different companies and its impact on ITIL maturity levels hence helping new companies to define sound strategies for their IT infrastructure to have a successful ITIL implementation.

The study will benefit organizations of all sorts and types in successfully implementing ITIL standard and knowing the caveats beforehand so that the threats can be mitigated in an effective manner. The study will benefit organizations in effectively managing change within their organizations to successfully implementing the standard and obtain benefit from it.

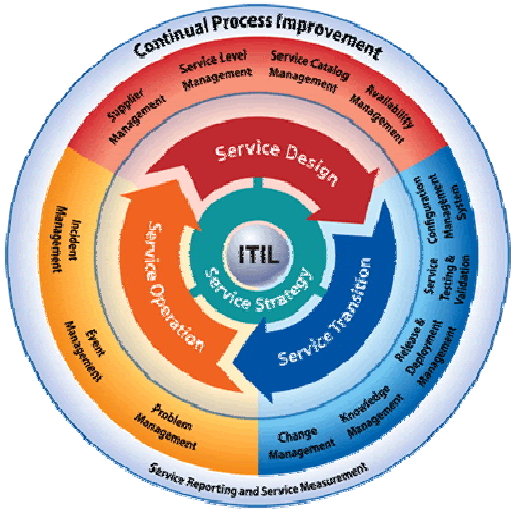


Figure 1 – ITIL Lifecycle

II- LITERATURE REVIEW

The literature review suggests overall that technology and business alone cannot drive the changes required for operating in the modern era. Business needs aid of IT Service Management and IT Governance concepts implemented in IT to achieve outcomes. Technology without direction will only produce results which might or might not benefit the core business. However when IT is aligned with core business objectives, real results can be obtained.

A. ITIL & ITSM

Over the past decade an increase in the use of IT based best practices and standards was observed, and there was a need to align IT with business objectives. [17] ITIL among other standards provide a solid foundation but does not provide answers to all the questions in any organization. It can be tailored to achieve desired results. [23] ITIL is considered the de facto standard when it comes to efficiently managing enterprise IT and forms the basis for ISO 20000 standard. This enables external and internal service providers to manage IT environment as a business. [24]

IT outsourcing relationships are positively influenced by ITIL; however this depends upon the maturity level of ITIL within an organization. [1] Implementation of ITIL as a best practice comes bundled with implications like staff resistance, task conflicts and ambiguous orders which need to be catered for. [9]. While implementing ITIL in large infrastructures having practically millions of configuration items in large Content Manager Databases (CMDBs). [10] ITIL implementation project includes 13 dimensions including senior management involvement, organizational commitment, group efficacy, implementation, benefits, process management, satisfaction, expectation, size, sector, time, business condition and budget. [5]

Enterprise Architecture (EA) refers to the alignment of an enterprise with its objectives, and ITIL can be helpful in such kind of EA alignment. [4] Service desk should be highly emphasized and enforced while implementing ITIL practices. [19] Our experience shows that the customers benefit from a deployed CMDB model leveraging the efficiency of the service provider but that alone is not sufficient. Customers' demands are met when a comprehensive solution is provided to them to address their data segregation concerns. [24]

Employees in an organization act as participants in service relations fulfill service commitments and eventually achieve organizational objectives. [16] ITIL is best suited for IT Operations, while CMMI is best suited for application development. [6] ITIL can be successfully applied to highly complex and service demanding organizations like Nuclear Power Enterprises. [8] Those organizations using Data Warehouses should take full advantage by implementing ITIL practices. [20] Large MSC status companies make better growth in implementing ITIL framework as compared to small companies. [18] Usage of Multi-Agent systems makes the implementation much easier and more efficient. [21] There can be multiple reasons for ITIL implementation failures in a developing country [23]

ITIL service management framework improves productivity, IT governance and swiftness to respond to the changing market and business needs. [18] Information Technology (IT) service quality is often influenced by IT service management, models, process improvement and innovation. [26] Further in several organizations, ITSM change programs fail because they overlook the importance of the internal support by the staff which are not ready to give up old ways of working. [13]

B. Business IT Alignment & BDIM

Over the past decade an increase in the use of IT based best practices and standards was observed, and there was a need to align IT with business objectives. [17] Management by Business Objectives (MBO) method ensures business strategic

objectives alignment with IT. [7] There are generally three dimensions of Business-IT alignment: Architecture, Governance and Communication. [22] It is not easy to convince the management to secure funds for just a meager percentage of service availability, it requires that IT contributes to business objectives in a measurable manner. [11] Information Technology is normally seen by business as the cost center, since goals are mostly not aligned with business objectives. [4]

Business Driven IT Management (BDIM) focuses on aligning IT with the needs of the business to achieve meaningful outcomes. [12] Business Driven IT Management (BDIM) focuses on improving business outcomes, quality of service and IT infrastructure consecutively. [11] Business Driven IT Management (BDIM) is an approach to quantify value of a service. [15]

Strategic alignment ensures that IT functions as a critical source for formulating strategies making business and IT partners of success delivering value at an acceptable cost. [22] We can say that ITIL has a clear competency to align Information Technology with strategic business objectives. [2]

C. *Service Orientation, Service Portfolio Management & Service Desk*

With increasing adaptation of Service Oriented Approach (SoA) by organizations around the world there was an increased demand to define this concept in consortium with Enterprise Architecture, giving rise to Service Oriented Enterprise Architecture (SoEA). Employees in an organization act as participants in service relations; fulfill service commitments and eventually achieve organizational objectives. ITIL service management framework improves productivity, IT governance and swiftness to respond to the changing market and business needs. [16] [18]

A proper constitution of a service portfolio is very important in defining a service strategy in ITIL. Creating the "best set" of IT services would involve proper addressing of customer demands and maximize the value customers receive. [7] [15] Service portfolio selection is tricky because there are conflicting criteria which need to be fulfilled simultaneously like a highly desirable product by customers at a low cost and spending fewer resources. [25]

Even after adaptation of ITIL most organizations did not achieve their desired service levels, and the core reason being that enterprises did not build a mature service desk to ensure ITSM implementation.

D. *Key Performance Indicators (KPIs), IT Governance & Human Capital*

It is very important for all organizations to select and negotiate key performance indicators (KPIs) to establish transparency. [28] Key Performance Indicators (KPIs), trained human resource having core competencies and placed correctly, organizational size in terms of budget are key deriving factors in adaptation of ITIL. [3]

IT Governance is actually a subset discipline of Corporate Governance focused on Information Technology systems. It is a system where all stakeholders have a clear accountability in decision making process affecting IT. IT Governance is a recursive process in a way that the organization has to align itself top to bottom for effective implementation. There are generally three dimensions of Business-IT alignment: Architecture, Governance and Communication. [14] [22] [29] IT based Cloud Computing (CC) governance model is necessary for defining good management practices to take full advantage of the technology changes. [30]

Implementation of ITIL as a best practice comes bundled with implications like staff resistance, task conflicts and ambiguous orders which need to be catered for. This means that the staff should change their basic behaviors based on the framework for a successful implementation. [9]There are four main indicators or issue areas to measure IT performance: IT Service Quality, Information System (IS) quality, process performance and customer satisfaction. [26]

III-RESEARCH METHODOLOGY

We intended to conduct a thorough research papers review on the subject and downloaded more than 100 papers from IEEE and other sources. These research papers were the starting point in our research. After studying various research papers on the subject we identified a gap in the current research that ITIL was not looked at with a demographical, contextual or background point of view.

Later on we conduct analysis on the questionnaire data, derive results and draw inferences. We developed the questionnaire on the basis to assess contextual factors, and fine a maturity level to substantiate the current level of ITIL process maturity in any organization. We distributed the questionnaire to a mix of organizations public sector and private sector both to obtain a clear conclusion, comparison and to obtain benchmarking and the way forward for Public Sector Organizations.

1V-RESEARCH QUESTIONS

Our research question was to obtain first level information how Public Sector organization manages its services and how implementation of ITIL standard can benefit the organizations to improve service management. What were the pain areas in a Public Sector organization in ITIL implementation, and what can be done to remove obstacles and enhance productivity of IT departments in Public Sector. This area of research is undermined and there was a need to address ITIL feasibility for Public Sector organizations and help achieve Quality of Services rendered. For this following research questions were designed:

Q.1 Current state of IT companies/ departments with respect to practical implementation of ITIL best practices?

Q.2 IT departments and companies are orientated towards delivery of service or delivery of product?

Q.3 What is the end user satisfaction level in contrast with management orientation of projects delivered in the past?

Q.4 How can service orientation help achieve business outcomes for companies?

V- FINDINGS AND ANALYSIS

Our study is based on a comparison between private sector and public sector entities operating in Pakistan on ITIL practices. Implementation level and maturity level of ITIL implementation is highly correlated to the type of organization it is implemented due to various factors. These factors are discussed in detail and remedies are provided to cope with introducing the much need service oriented approach. The study reveals that this architecture is equally

important in public sector as it is in private sector organizations and its usefulness cannot be under emphasized.

A. GENERAL INFORMATION & DEMOGRAPHICS

The sample was focused on service provider companies in either private sector or public sector out of these most of the respondent's organizations provided services internally and externally. The sample was evenly distributed between Public Sector and Private Sector so as to establish a sound footing upon the differences and the underlying reasons. In terms of the current duties of the respondents most of them belong to the management and executive levels in their organizations so that the validity of data can be increased. Target was to select a sample with maximum respondents from management levels in any organization.

The mean of the years of experience of the respondents is 5.6 years however they range from 1 year experience to 20 years of experience in their current organization, which also establishes the validity of the data collected.

B. CONTEXTUAL FACTORS

We see that IT Project Management for most of the Private organizations in the sample is a part of the portfolio and ITIL is used for it, however this is not even a part of the portfolio for Public organizations in the sample.

For "Software Development" and "Application Customization" we see a mixed trend in both Private and Public Sectors because mostly organizations are using other frameworks like CMMI for it, however most Private organizations under analysis have it in their portfolio.

For "Data Center Operations" and "Network Infrastructure" alike we see that these are part of the portfolio for both Public and Private organizations alike, but private organizations are using ITIL as the framework in both and public organizations are not using ITIL practically.

For "Support & Help Desk" Public sector organizations state that it is a part of their portfolio but ITIL is not being used practically for it. However in Private Sector organizations in the sample ITIL is the framework for Support & Help Desk functions.

In terms of strategy we see that Public Sector organizations are tilted more towards Low Cost of Business, Operational Support, IT Follower, Careful evaluation of IT initiatives, inclination towards Delivery of Product and Delivery of Service. For Private Sector organizations we see that the strategy is tilted towards High Business Innovation, Mixed inclination for Strategic Positioning and Operational Support, Being an IT Leader, Fast IT Innovation, Medium inclination towards Careful evaluation of IT initiatives, Inclination towards Delivery of Product and Delivery of Service Orientation.

We see that for both Public Sector and Private Sector organizations IT supports day to day operations, business/ client's activities, IT is highly critical for business/ client's operations, and the downtime of services will incur a cost impact for the organization. This question establishes that the services provided by IT are equally important for both Public and Private Sector alike. Table-1 shows the Service Portfolio implementation status for Private and Public Sector organizations:

Sr.	SERVICE	Public Sector State	Private Sector State
A	IT project management & planning	Not part of the Portfolio	Part of the Portfolio and ITIL Used
B	Software development	Part of the Portfolio but no ITIL use	Part of the Portfolio and ITIL Used
C	Application customization & integration	Not part of the Portfolio	Part of the Portfolio but no ITIL use
D	Datacenter operations	Part of the Portfolio but no ITIL use	Part of the Portfolio and ITIL used
E	Network & infrastructure management	Part of the Portfolio but no ITIL use	Part of the Portfolio and ITIL Used
F	Desktop & printers management	Part of the Portfolio but no ITIL use	Mixed
G	Support & help desk	Part of the Portfolio but no ITIL use	Part of the Portfolio and ITIL Used
H	IT training & communication	Not part of the Portfolio/ Part of the Portfolio but no ITIL use	Part of the Portfolio and ITIL Used
I	Other (non-IT) services	Not part of the Portfolio	Part of the Portfolio but no ITIL use

Table 1 – Service Portfolio Implementation Status

C. ITIL PROCESS MATURITY

Table-1 to Table-6 shows the ITIL process maturity measured for various Private and Public Sector companies:

SR	SERVICE STRATEGY	Public Sector Maturity Level	Private Sector Maturity Level
A	IT Service Management	Initial	Managed/ Optimized
B	Service Portfolio Management	Initial/ Defined	Managed/ Optimized
C	Financial Management for IT Services	None/ Initial	Optimized
D	Demand Management	Initial	Defined/ Optimized
E	Business Relationship Management	Initial	Managed/ Optimized

Table 2 – Service Strategy Maturity Level

SR	SERVICE DESIGN	Public Sector Maturity Level	Private Sector Maturity Level
A	Service Catalogue Management	Initial/ Defined	Defined/ Managed
B	Service Level Management	None/ Initial	Managed/ Optimized
C	Availability Management	None/ Repeatable	Managed/ Optimized
D	Capacity Management	Initial	Managed/ Optimized
E	IT Service Continuity Management	Initial/ Defined	Optimized
F	Information Security Management	Initial	Optimized
G	Supplier Management	None/ Initial	Defined/ Managed

Table 3 – Service Design Maturity Level

SR	SERVICE TRANSITION	Public Sector Maturity Level	Private Sector Maturity Level
A	Transition Planning and Support	None	Managed/ Optimized
B	Change Management	Defined	Managed/ Optimized
C	Service Asset and Configuration Management	Repeatable	Managed/ Optimized
D	Release and Deployment Management	Defined	Defined
E	Service Validation and Testing	Defined	Managed/ Optimized
F	Change Evaluation	None/ Repeatable	Managed/ Optimized
G	Knowledge Management	None/ Initial	Managed/ Optimized

Table 4 – Service Transition Maturity Level

SR	SERVICE OPERATION	Public Sector Maturity Level	Private Sector Maturity Level
A	Event Management	Repeatable	Managed
B	Incident Management	Defined	Managed
C	Request Fulfilment	Managed	Optimized
D	Problem Management	Initial	Optimized
E	Access Management	Defined	Optimized

Table 5 – Service Operation Maturity Level

SR	Continual Service Improvement	Public Sector Maturity Level	Private Sector Maturity Level
A	Continual Service Improvement	Initial	Optimized

Table 6 – Continual Service Improvement Maturity Level

D. OUTCOME MEASURES

Table-7 and Table-8 shows the outcome measures in the study conducted:

Sr	ALIGNMENT MEASURE	Public Sector Alignment Level	Private Sector Alignment Level
A	... the business's/client's activities?	LEVEL 2	LEVEL 4
B	... expectations of business's/client's IT users?	LEVEL 2	LEVEL 4
C	... needs of business's/client's IT users?	LEVEL 3	LEVEL 4
D	... demands of business's/client's IT users?	LEVEL 3	LEVEL 5
E	... business's/client's priorities?	LEVEL 3	LEVEL 4
F	... business's/client's objectives?	LEVEL 4	LEVEL 5

Table 7 – Business-IT Alignment Measures

	PERFORMANCE MEASURE	Public Sector Performance Level	Private Sector Performance Level
A	Efficiency of the service provider in performing its work	LEVEL 3	LEVEL 5
B	Quality of the services provided by the service provider	LEVEL 3	LEVEL 4
C	Support of business's/client's processes	LEVEL 2/3	LEVEL 4/5
D	Overall satisfaction of the business/client users	LEVEL 2	LEVEL 4
E	Effectiveness of service provider in supporting the business's/client's strategic goals	LEVEL 2	LEVEL 5
F	User satisfaction level in the last project you worked on?	LEVEL 3	LEVEL 4/5
G	Average user satisfaction level for past projects you have worked on?	LEVEL 3	LEVEL 4

Table 8 – Overall Performance Measures

VI. DISCUSSION

E. Insignificant Factors

ITIL Maturity levels or the end user satisfaction is not a function of the number technical staff in any organization. Number of Services in the service catalog varies for both Private Sector and Public Sector respondents thus this factor is not significant in this study.

F. Service Portfolio Implementation

For Public Sector organizations, IT Project Management & Planning, IT Training & Communication and Other (Non-IT) services are not a part of the service portfolio. However Software Development, Application Customization and Integration, Data Center Operations, Network Infrastructure & Management, Desktop and Printers Management and Support & Help Desk are a part of the Portfolio; however ITIL is not practically being used for these services.

For Private Sector organizations, IT Project Management & Planning, Software Development, Application Customization and Integration, Data Center Operations, Network Infrastructure & Management, Desktop and Printers Management and Support & Help Desk, IT Training & Communication and Other (Non-IT) services are a part of the Portfolio and ITIL is being used for these services.

G. Strategic Orientation

In terms of strategy we see that Public Sector organizations are tilted more towards Low Cost of Business, Operational Support, being an IT Follower and careful evaluation of IT initiatives, mixed strategy for Delivery of Product or Delivery of Service.

Similarly for Private Sector organizations we see that the strategy is tilted towards, High Business Innovation, Mixed inclination for Strategic Positioning and Operational Support, IT Leader, Fast IT Innovation, Medium inclination towards Careful evaluation of IT initiatives and inclination towards Delivery of Product and Delivery of Service Orientation.

H. Criticality of Services

We see that for both Public Sector and Private Sector organizations IT supports day to day operations, business/ client's activities, IT is highly critical for business/ client's operations, and the downtime of services will incur a cost impact for the organization. This question establishes that the services provided by IT are equally important for both Public and Private Sector alike.

I. ITIL Maturity Levels

In terms of "Service Strategy" we see that for Public Sector organizations the level of maturity is mostly "Initial" while for Private Sector we see that the level of maturity is mostly Managed or Optimized.

In terms of "Service Design" we have established that for Public Sector organizations the level of maturity is mostly "None" or "Initial", hence all areas need to be focused in "Service Design" i.e. "Service Catalogue Management", "Service Level Management", "Availability Management", "Capacity Management", "IT Service Continuity Management", "Information Security Management", "Supplier Management". A few respondents have also stated that "Service Catalog Management" and "Service Continuity Management" are at "Defined" maturity level. For "Private Sector" we see that all areas are either at "Managed" or "Defined" maturity levels except "Service Catalog Management" and "Supplier Management" which need attention.

For "Service Transition" we see that "Change Management", "Release and Deployment Management" and "Service Validation and Testing" are at "Defined" maturity levels and area of focus should be "Transition Planning and Support", "Change Evaluation", and "Knowledge Management, which are at "None" or "Initial" level of maturity. However for Private Sector we see that "Service Transition" is mostly "Managed" or "Optimized.

In terms of "Service Operation" we see that "Incident Management", "Request Fulfilment" and "Access Management" are well defined in Public Sector Organizations, and weak areas are "Event Management", and "Problem Management". For Private Sector we see that "Service Operation" is at "Managed" or "Optimized" level of maturity.

For "Continual Service Improvement (CSI)" we see that Public Sector needs a lot of improvement and currently they stand at "Initial" level of maturity, whereas Private Sector has a lot of focus on it having "Optimized" level of maturity for CSI.

J. Business-IT Alignment

In terms of "Business IT Alignment" we see that Public Sector organizations are at alignment level 2 or 3 mostly while alignment with "Business/ client's objectives" is at level 4. Private Sector organizations under examination show that they are at level 4 or level 5 in Business IT Alignment. This is evident from the fact that Private Sector has a greater ITIL maturity level as compared to Public Sector hence there exists a better alignment of Business and IT.

K. Performance Levels

At the end we measure the overall performance measures. We see that in terms of "Efficiency of the service provider in performing its work", "Quality of the services provided by the service provider" and "Average user satisfaction level for past projects" Public Sector measures up to "Level 3" whereas for "Support of business's/client's processes", "Overall satisfaction of the business/client users" and "Effectiveness of service provider in supporting the business's/client's strategic goals" the performance measure is at "Level 2". For Private Sector we see that they either stand at "Level 4" or "Level 5" performance level overall.

VII. CONCLUSION & RECOMMENDATIONS

We conclude that in terms of importance of services rendered by Private Sector and Public Sector organizations both are the same. Services are not only critical but downtime of these services will incur a cost impact on those organizations.

We also conclude in the end that Private Sector companies have implemented ITIL and in turn are enjoying Business IT Alignment at a higher level as compared to Public Sector organizations. Further the Business IT Alignment leads them to enjoy greater levels of customer satisfaction, higher Quality of Services, and greater efficiency in performing its work. The Private Sector organizations are helping meet strategic objectives of their companies by implementing ITIL and Public Sector organizations can follow suite.

There is a pressing need for Public Sector organizations or similar organization to move towards Business-IT alignment and improve quality of service and end user experience. Both the tilt towards Delivery of Service and Delivery of Product is important in achieving success for any organization. Both of these concepts go hand in hand for any organization.

First and foremost step any Public Sector organization should do is to change the management paradigm. The change in strategy would require more focus on High Business Innovation, Mixed inclination for Strategic Positioning and Operational Support, being an IT Leader, Fast IT Innovation, Medium inclination towards Careful evaluation of IT initiatives and inclination towards Delivery of Product and Delivery of Service Orientation.

In terms of Business-IT alignment we see that Public Sector organizations are very weak and rightly so because of their weak maturity level of ITIL implementation. If maturity level is increased Business-IT alignment will significantly improve.

There also exists a relation between Business-IT alignment and overall performance of the IT organization. Business-IT aligned organization will have a greater QoS and user satisfaction level hence its performance will be better. Hence this will improve the efficiency of the IT organization/ department.

In the end we have designed the following framework for successful implementation of the universally accepted standard to move towards a higher maturity level and higher Business-IT alignment and achieve end user satisfaction as a measure of success.

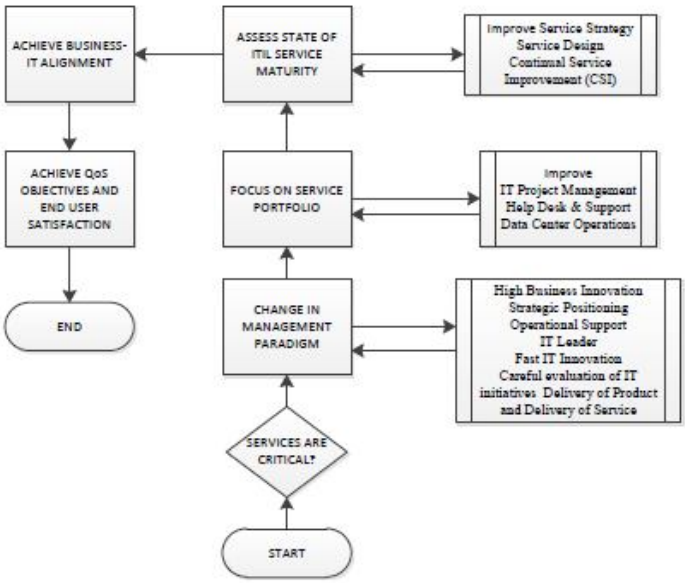


Figure 2 – Final Framework for Implementation

VII - FUTURE WORK

Future work can be done on the subject to assess the ITIL maturity levels in other Public Sector organizations or to other organizations where the quality of services is not optimal and the end user is not satisfied to see that what are the bottlenecks of implementation of ITIL and what are the problem areas which need to be addressed. Also work can be done to assess the core underlying reasons for ITIL implementation process which is slower in Public Sector as compared to Private Sector except for the management paradigm changes discussed in this study which directly affect the implementation process and other demographics and contextual factors which may have an effect on the implementation process may be brought into consideration.

In future more frameworks can be brought into consideration for Business-IT alignment and results can be compared with this study to measure the effectiveness of ITIL against any other standard.

A more in depth analysis be done on the root causes of sluggishness in implementing ITIL framework in Public Sector organizations as compared to Private Sector organizations. These root causes be identified and eliminated in order to achieve Quality of Service objectives in Public Sector organizations.

VIII - REFERENCES

[1] Alojail, M. ; Corbitt, B., "ITIL maturity model of IT outsourcing: Evidence from a "leading user"", "In Information Systems and Technologies (CISTI), 2014 9th Iberian Conference", DOI: 10.1109/CISTI.2014.6877020, Publication Year: 2014 , Page(s): 1 – 5

[2] Esmaili, H.B. ; Gardesh, H. ; Sikari, S.S., "Validating ITIL maturity to strategic business-IT alignment", "In Computer Technology and Development (ICCTD), 2010 2nd International Conference", DOI: 10.1109/ICCTD.2010.5645961, Publication Year: 2010 , Page(s): 556 – 561

[3] Saleh, J.M. ; Almsafir, M.K., "The Drivers of ITIL Adoption in UNITEN", "In Advanced Computer Science Applications and Technologies (ACSAT), 2013 International Conference", DOI:

10.1109/ACSAT.2013.100, Publication Year: 2013 , Page(s): 479 – 484
[4] Vicente, M. ; Gama, N. ; da Silva, M.M., "The Value of ITIL in Enterprise Architecture", In Enterprise Distributed Object Computing Conference (EDOC), 2013 17th IEEE International", DOI: 10.1109/EDOC.2013.24, Publication Year: 2013 , Page(s): 147 – 152
[5] Iden, J. ; Eikebrokk, T.R., "Understanding the ITIL Implementation Project: Conceptualization and Measurements", "In Database and Expert Systems Applications (DEXA), 2011 22nd International Workshop", DOI: 10.1109/DEXA.2011.87, Publication Year: 2011 , Page(s): 21 - 25
Cited by: Papers (1)
[6] Latif, A.A. ; Din, M.M. ; Ismail, R., "Challenges in Adopting and Integrating ITIL and CMMi in ICT Division of a Public Utility Company", "In Computer Engineering and Applications (ICCEA), 2010 Second International Conference Volume: 1", DOI: 10.1109/ICCEA.2010.279 Publication Year: 2010 , Page(s): 81 - 86 Cited by: Papers (3)
[7] Zhong Yao ; Xin Wang , "An ITIL based ITSM practice: A case study of steel manufacturing enterprise", "In Service Systems and Service Management (ICSSSM), 2010 7th International Conference", DOI: 10.1109/ICSSSM.2010.5530204, Publication Year: 2010 , Page(s): 1 – 5, Cited by: Papers (1)
[8] Huihui Yao ; Tingting Sun, "Application of IT Service Management Platform in Nuclear Power Enterprises Based on ITIL", "In Innovations in Bio-inspired Computing and Applications (IBICA), 2011 Second International Conference", DOI: 10.1109/IBICA.2011.41, Publication Year: 2011 , Page(s): 149 - 151
[9] Sharifi, M. ; Ayat, M. ; Rahman, A.A. ; Sahibudin, S., "Lessons learned in ITIL implementation failure", "In Information Technology, 2008. ITSim 2008. International Symposium Volume: 1", DOI: 10.1109/ITSIM.2008.4631627, Publication Year: 2008 , Page(s): 1 – 4, Cited by: Papers (3)
[10] Hagen, S. ; da Costa Cordeiro, W.L. ; Gaspary, L.P. ; Granville, L.Z. ; Seibold, M. ; Kemper, A. , "Planning in the large: Efficient generation of IT change plans on large infrastructures", "In Network and service management (cnsm), 2012 8th international conference and 2012 workshop on systems", "virtualiztion management (svm)", Publication Year: 2012 , Page(s): 108 – 116 Cited by: Papers (1)
[11] Sauve, J. ; Moura, A. ; Sampaio, M. ; Jornada, J. ; Radziuk, E., "An Introductory Overview and Survey of Business-Driven IT Management", "In Business-Driven IT Management, 2006. BDIM '06. The First IEEE/IFIP International Workshop", DOI: 10.1109/BDIM.2006.1649205 Publication Year: 2006 , Page(s): 1 – 10 Cited by: Papers (23)
[12] Bartolini, C. ; Stefanelli, C., "Business-driven IT management", "In Integrated Network Management (IM), 2011 IFIP/IEEE International Symposium", DOI: 10.1109/INM.2011.5990530, Publication Year: 2011 , Page(s): 964 – 969, Cited by: Papers (5)
[13] "Identifying IT Service Management Challenges: A Case Study in Two IT Service Provider Companies", "Database and Expert Systems Applications (DEXA), 2012 23rd International Workshop on", DOI: 10.1109/DEXA.2012.32, Publication Year: 2012 , Page(s): 55 - 59
[14] Coertze, J. ; von Solms, R., "The murky waters of IT governance", "In Information Security for South Africa (ISSA), 2014", DOI: 10.1109/ISSA.2014.6950498, Publication Year: 2014 , Page(s): 1 - 8
[15] Oliveira, J.A. ; Sauve, J. ; Moura, A. ; Queiroz, M. ; Bartolini, C. ; Hickey, M., "Value-driven IT service portfolio selection under uncertainty", "In Network Operations and Management Symposium (NOMS), 2010 IEEE", DOI: 10.1109/NOMS.2010.5488306, Publication Year: 2010 , Page(s): 416 – 423, Cited by: Papers (3)
[16] Nardi, Julio Cesar ; Falbo, Ricardo de Almeida ; Almeida, Joao Paulo A., "Revealing Service Commitments in Service-Oriented Enterprise Architecture", "In Enterprise Distributed Object Computing Conference Workshops and Demonstrations (EDOCW), 2014 IEEE 18th International", DOI: 10.1109/EDOCW.2014.49, Publication Year: 2014 , Page(s): 286 – 295
[17] Syed Mubashir Ali; Tariq Rahim Soomro; Muhammad Nawaz Brohi "MAPPING INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY WITH OTHER INFORMATION TECHNOLOGY STANDARDS AND BEST PRACTICES", "In Journal of Computer Science, Vol 9, Iss 9", Publication Year: 2013 January, Pp 1190-1196.
[18] Kanagi Kanapathy; Kashif Ibadullah Khan, "Assessing the Relationship between ITIL Implementation Progress and Firm Size: Evidence from Malaysia", "In International Journal of Business and Management, Vol 7, Iss 2(2012)", Publication Year: 2012 January, Pp 194-199.
[19] Xiaojun Tang; Yuki Todo, "A Study of Service Desk Setup in Implementing IT Service Management in Enterprises", "In Technology and Investment, Vol 04, Iss 03", DOI: 10.4236/ti.2013.43022 Publication Year: 2013 July, Pp 190-196.
[20] Hasan Y. Wahba; Tariq R. Soomro, "Role of Information Technology Infrastructure Library in Data Warehouses", "In American Journal of Applied Sciences, Vol 8, Iss 12", Publication Year: 2011 January, Pp 1384-1387.
[21] Youssef SEKHARA; Hicham MEDROMI; Adil SAYOUTI, "Multi-Agent Architecture for Implementation of ITIL Processes: Case of Incident Management Process", "International Journal of Advanced Computer Science and Applications, Vol 5, Iss 8", DOI: 10.14569/IJACSA.2014.050812, Publication Year: 2014 August, Pp 81-85.
[22] Esmaili, H.B. ; Gardesh, H. ; Sikari, S.S. , "Strategic alignment: ITIL perspective", "In Computer Technology and Development (ICCTD), 2010 2nd International Conference", DOI: 10.1109/ICCTD.2010.5645956, Publication Year: 2010 , Page(s): 550 – 555
[23] Ghayekhloo, S. ; Sedighi, M. ; Nassiri, R. ; Shabgahi, G.L. ; Tirkolaei, H.K., "Pathology of Organizations Currently Implementing ITIL in Developing Countries", "In Computer and Electrical Engineering, 2009. ICCEE '09. Second International Conference", Volume: 2, DOI: 10.1109/ICCEE.2009.260, Publication Year: 2009 , Page(s): 7 – 10, Cited by: Papers (1)
[24] Shwartz, L. ; Ayachitula, N. ; Buco, M. ; Surendra, M. ; Ward, C. ; Weinberger, S., "Service Provider Considerations for IT Service Management", "In Integrated Network Management, 2007. IM '07. 10th IFIP/IEEE International Symposium", DOI: 10.1109/INM.2007.374706, Publication Year: 2007, Page(s): 757 – 760, Sited by: Papers (2)
[25] Xu Wei ; Zhan Zhiqiang, "Service Portfolio Selection Driven by Multiple Business Objectives", "In Information Management, Innovation Management and Industrial Engineering (ICIII), 2011 International Conference", Volume: 2, DOI: 10.1109/ICIII.2011.183, Publication Year: 2011 , Page(s): 146 – 149
[26] Lepmets, M. ; Ras, E. ; Renault, A., "A Quality Measurement Framework for IT Services", "In SRII Global Conference (SRII), 2011 Annual", DOI: 10.1109/SRII.2011.84, Publication Year: 2011, Page(s): 767 - 774
[27] Deutscher, J.-H. ; Felden, C., "Concept for implementation of cost effective Information Technology Service Management (ITSM) in organizations", " In Network Operations and Management Symposium Workshops (NOMS Wksps), 2010 IEEE/IFIP", DOI: 10.1109/NOMSW.2010.5486580, Publication Year: 2010 , Page(s): 167 – 168
[28] Draheim, D., "On the Design of IT Key Performance Indicators", "In Database and Expert Systems Applications (DEXA), 2011 22nd International Workshop", DOI: 10.1109/DEXA.2011.59, Publication Year: 2011 , Page(s): 9 – 13, Cited by: Papers (1)
[29] Radovanovic, D. ; Sarac, M. ; Adamovic, S. ; Lucic, D., "Necessity of IT Service management and IT Governance", "In MIPRO, 2011 Proceedings of the 34th International Convention", Publication Year: 2011 , Page(s): 1430 – 1433
[30] Bounagui, Y. ; Hafiddi, H. ; Mezrioui, A., "Challenges for IT based cloud computing governance", "In Intelligent Systems: Theories and Applications (SITA-14), 2014 9th International Conference", DOI: 10.1109/SITA.2014.6847289, Publication Year: 2014, Page(s): 1 – 8

Sustainable Business Event and Usage of Information Technology

Norol Hamiza Zamzuri
Faculty of Business Management
Universiti Teknologi MARA, 43000 Puncak Alam, Selangor
norol@puncakalamuitm.edu.my

Khairil Wahidin Awang and Yuhanis Abdul Aziz
Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia
khairil@upm.edu.my; yuhanis@econ.upm.edu.my

Zaiton Samdin
Institute of Tropical Forestry and Forest Products, Universiti Putra Malaysia, 43400 Serdang, Selangor
zaisa@putra.upm.edu.my

ABSTRACT

Sustainable business event demands the commitment among event practitioners, and, this commitment demands the use of information technology in mitigating the process of sustainable business event. Thus, the aim of this study is to explore the role of information technology in the process of organizing a business event as it was found that there is lack of knowledge on how to organize a sustainable business event in Malaysia context. Moreover, it was found that using information technology assists the process of organizing an event through the use of several technology devices and reducing the use of paper. For this reason, inductive methods with 15 informants involving with company's directors, event managers, venue provider, event delegates and event suppliers. It is found that the role of information technology is important to mitigate the process of organizing a business event. Triangulation was used to ensure the reliability of the findings and members check as well as interview protocol used for validity purposes. The constant comparison on method of analysis was used to analyse information that result from semi-strucutred interview.

Keywords: Sustainable business event, process, inductive, constant comparison and information technology

1.0 BUSINESS EVENTS

The exploration of sustainable business event process begins by discussing on the growth of business event that creates a positive impact on the economic and society . The discussion also elaborates on the negative environmental impact that results from business event activities. Malaysia was ranked number 29 in the world rankings and number 7 in the Asia Pacific rankings for organizing business events. By comparing cities, Kuala Lumpur is ranked 21st in the world ranking and 5th in the Asia Pacific rankings (Malaysia Convention and Exhibition Report 2010 and 2011). It is also estimated that the economic impact value of international business tourism for 2010 was more than RM17.6 billion (Malaysia Convention and Exhibition Report 2010 and 2011). It was estimated that between January 2012 and December 2015, MyCeb would have secured some 45 major business events. These events are estimated to produce a revenue of RM597 million (Performance Management Delivery Unit, 2012). This number shows that there is a growth in demand for organizing business events in Malaysia.

2.0 INFORMATION TECHNOLOGY AND ENERGY EFFICIENCY IN BUSINESS EVENT

In a book entitled *Green Impact: Low Carbon Green Growth* which was published by the Ministry of Energy, Green Technology and Water, Malaysia and Green Purchasing Network Malaysia in the year 2010, p. 84. "In order for energy efficiency to take on, there needs to be a higher level of awareness, firstly, of what energy efficiency is all about and secondly, on how it will profit owners and users". Therefore, I concur that the practices of energy efficiency among event organizers is one of the processes involved in organizing a business event. The awareness among event practitioners about the importance of practicing energy efficiency during business event activities is vital to ensure the success of organizing a sustainable business event. The practice of energy efficiency is also related to the use of information technology specifically the use of system applications. This is because the use of system applications such as registration system namely EventPro and the use of digital board are examples of the role of technology in the process of organizing a sustainable event. However, it seems that there are lack of discussion on the use of information technology in business event, therefore, the aim of this paper is to explore the role of information technology in the process of sustainable business event.

3.0 METHODOLOGY

The inductive method is chosen as it provides a better view on the phenomenon. Yin (2009) has illustrated this by saying that the inductive method provides an in-depth discussion on issues. Rittichainuwat and Mair (2012) suggested this method for future research related to their study because according to them the qualitative method will provide better insight on an issue. For this reason, the inductive or qualitative method was chosen for this study. This is an optimum number because, as mentioned by Creswell (2012), four to five interviewees are enough for data to achieve its saturation point. This study only achieved its saturation point after analysing all the 15 interviewees as all the information obtained from the interviewees was triangulated. Triangulation is also one of the strategies used to ensure that the data is valid. Yin (2009) discussed this and found that the triangulation method confirms the validity of the data. Semi-structured interviews have been used as it gives a chance for an interviewer to obtain in-depth information about an issue as the researcher is not knowledgable enough about a phenomenon to ask relevant questions and it is usually used at an early stage of a study (Merriam, 2009). This study applied the one-to-one interview style, which is a data collection process that enables the researcher to ask questions and record the answers from one participant at a time. This type of interview is suitable for participants who are not hesitant to speak, who are articulate, and who can share ideas comfortably (Creswell, 2012, p. 218). The semi-structured interview outline was included in the interview protocol. An interview protocol implies a set of procedures and queries that is applied during an interview (Yin, 2009). The interview protocol includes a range of questions to gauge the interviewee's opinions on the process of organizing a sustainable event. Merriam (2009) describes the list of questions to be asked during an interview as an interview guideline.

> "The interview guideline will probably contain several specific questions that you want to ask everyone, some more open-ended questions that could be followed up with some probing and perhaps a list of some areas, topics and issues that you want to know more about but do not have enough information at the outset of your study to form specific questions", p. 103.

Initially, interviewees have open questions about the idea of organizing a green event among the employees. The open question is designed to enable interviewee to give their own views and opinions before any specific question is given to them (Mair & Jago, 2010). Further to that, interviewees have asked questions that are pertinent to their experience in organizing a sustainable event at their firm, with the intention of gauging any issues during the process of organizing a green event. The semi-structured questions are guided by literature. Semi-structured questions are between structured and less structured interview questions and all questions are flexible in order to gauge the individual's experience. It involves structured questions that are prepared before the interview and less structured questions, which are actually open questions that provide fresh insights and new information (Merriam, 2009). Apart from semi-structured interview, data collection was also based on observations carried out by using fieldnotes, which would ensure the reliability of the data. During the data analysis, they were analyzed by categorizing the code based on interview transcriptions and fieldnotes. The researcher triangulated the data that was produced during the interview with all the information produced from event managers, company directors and associations. This study involved 15 event practitioners namely event managers, event's suppliers and company's director, for the purpose of confidential, their personals are represented by using acronyms.

The informants information is listed in Table 3.1.

Table 3.1: List of Informants

Person's code	Position	Company
A1	Director	A
A2	Event Manager	A
A3	Event Manager	A
A4	Event Manager	A
P1	Event Manager	C
P2	Event Manager	D
P3	Event Manager	E
P4	Event Manager	F
P5	Event Manager	G
P6	Event Manager	H
P7	Event Manager	I
B1	Convention Centre Manager	J

B9	Director	K
B2	Event Executive	L

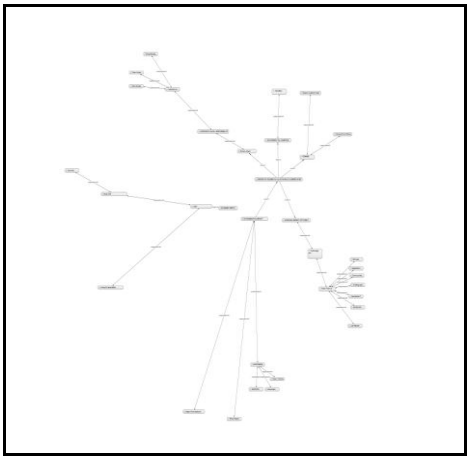
Note: 15 informants

Atlast.ti qualitative data analysis software was used to identifying the codes and themes. Atlat.ti handle data that keeps track of all data and it is save in a container called hermeneutic unit or HU. Atlasti.ti HU can be understood as a container which holds everything that need to be interpreted such as quotes, code, words, notes, memos links, code families and super codes (Friese, 2012).

3.0 RESULT

The result is illustrated as the above:

Table 3.1: The use of Information Technology



Note: Resut from data collection

The use of information technology during business event activities ***helps the cause of greening.*** This is acknowledge by [P4] as, "As far as knowledge of the event is concerned, we introduce the technology earlier since the use of technology is important for greening". The ***use of registration software*** and ***several mediums of communication*** assisted in ensuring the efficiency of an event (refer photo 1).

Photo 1

Note: Based on researcher's personal photo collection

The use of several information technology devices also created paperless environment and this indirectly created sustainable business environment. The use of information technology was seen during one of the events organized at the event venue.

The event saw information technology based on registration system was used to observe the number of conference participants registered as well as for security purpose. However, based on my observation during the event, although the purpose of the system is to assist the registration but the conference participant's attitude hindered the effectiveness of such system. This is because it was instructed that the operation of the registration is a day before the actual event. However, most of the conference participants only register on the day itself. This scenario indicates that although the purpose of using information technology is good but if there is still problem with conference participant attitude it will not lead to event success.

Apart from the issue of achieving efficiency from the use of information technology, the discussion revealed by P4 shows that the use of technology was important as one of the process in ***reducing the use of paper***. As mentioned by [P4], "we use registration software such as event prop, because, as you know if the conference is attended by more than 500 people, the organizers would print at least 2000 registration copies". This was agreed upon by [PA2], "We email the program book and burn it on a cd upon request, if they request the program book we give the cd, we do print but the copies are limited". The discussion indicates that the use of information technology may reduce the use of paper and assist in reducing time to disseminate information.

This shows that one of the processes in practicing sustainability was from the use of information technology by event practitioners. The use of email, websites and event software is a push factor that drives the use of technology for event promotions (Arcodia & Dickson, 2010). This is also the same strategy used by event organizers when promoting their event by using information technology such as the social media, for example the use of Facebook, Twitter and LinkedIn in promoting their event.

According to Lee and Tyrrell (2013);

> "Increased use of social networking media for meeting planners has been motivated both by the on-going economic recession and the dynamic behavioural adjustments of meeting planners in terms of social media use. The implication is that promotion of social media by meeting planners will be most effective if it stresses the number of planners who have already adopted the technology and the usefulness in the planning process. The results of this study indicated that the ease of use strongly influenced adoption of social media as a tool. Thus, when promoting the use of social media to meeting planners, aspects of convenience and fun should be emphasized" (p.16).

The discussion revealed that the use of information technology helped in driving the process of greening an event. Thus, the ***use of several event materials was replaced by several paperless technologies such as corporate and social media software***. Based on this, I found that ***green information technology devices assist in reducing waste consumption***. The practice of using information technology devices is observed from the practices at the convention centre and Company A. Several event organizers confirmed the use of information technology in their office. This highlights the usage of information technology as one of the processes of organizing a sustainable business event. However, I found a lack of information on green practices that appear at event's website organized by event organizers in Malaysia. One of the reasons based on the interview with some of the event organizers was the aim of the event, which was to make profits and to practice green is not the main motivator of organizing an event. As said by [P5], "when organizing events, the emphasis is on profits and implementing sustainability might defer the aim to gain profits". The discussion emphasizes the use of information technology as one of the processes of organizing a sustainable business event. However, the event organizers did not highlight the assimilation of green practices during an event by using website. This is actually similar to the discussion made by Dickson and Arcodia (2010) who mentioned that website was not used in disseminating information about green practices among event's companies.

5.0 Future Suggestions and Limitation of this Study

Based on the discussion, the role of information technology has an influence on sustainable commitment among event's stakeholders. I believe that the use of information technology plays a vital role for strengthening the sustainable commitment. The study is only limited to business event sector and in the context of Malaysia, therefore, future researchers should explore on other geographical areas and other event sectors.

References

Creswell, J. W. (2012). *Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Thousand Oaks: SAGE Publications.

Boije, H. (2010). *Analysis in Qualitative Research*. Thousand Oaks: SAGE Publications.

Lee, W., & Tyrrell, T. (2013). Exploring the behavioral aspects of adopting technology critical mass, *4*(1), 6–22. doi:10.1108/17579881311302329

Mair, J., & Jago, L. (2010). The development of a conceptual model of greening in the business events tourism sector. *Journal of Sustainable Tourism*, *18*(1), 77–94. doi:10.1080/09669580903291007

Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco: John Wiley & Sons, Inc.

Rittichainuwat, B., & Mair, J. (2012). An Exploratory Study of Attendee Perceptions of Green Meetings. *Journal of Convention & Event Tourism*, *13*(3), 147–158. doi:10.1080/15470148.2012.706786

Yin, R. K. (2009). *Case Study Research Design and Methods*. London: Sage Publications Ltd.

The Imprecise Navigation and Performance Measurements

Melissa Shahrom[12], Masrur Mohd Khir[1], Nur Atiqah Rochin Demong[1] and Norshima Humaidi[1]
1 Universiti Teknologi MARA, Malaysia
2 University of Melbourne, Australia
melissashahrom@gmail.com

ABSTRACT

This paper is based on a study about navigation under imprecision and the measurements for navigational performance. Wayfinding and navigation can be defined as spatial problem solving. It involves the process of knowing where you are in an environment, knowing where your desired location is and knowing how to get there from your present location. The imprecision in the context of navigation is usually due to two reasons; i) because of the positioning technology such as GPS cannot detect the precise location of a user, or ii) the use of technique in the navigation algorithm to protect location privacy. Many algorithms from computational geometry assume that the input received is correct. However, these algorithms need to consider the imprecision in the analysis in order to be used in practice. This paper outlines several performance measurements that can be used for measuring the imprecise navigational performance.

Key Words: Navigation measurement, Imprecise Navigation, Navigation Performance.

1. INTRODUCTION

To use navigation services, an application equipped with location-aware technology is required. Location-aware technology is a general term for technology that determines its own geographical location. In navigation, the imprecision refers to two different reasons, which are due to poor positioning technology and for protecting location privacy.

There are a variety of techniques for automatically sensing an individual's location, such as the Global Positioning System (GPS), infrared proximity sensors and wireless radio frequency network triangulation, which are used in location-based technologies (Duckham & Kulik, 2005). This sensor network technology promises a vast increase in automatic data collection capabilities through efficient deployment of tiny sensing nodes embedded in mobile devices such as smart phones. Current GPS-based appliances rely on a single GPS engine board for location detection. It suffers from the fact that there are no GPS signals in certain areas such as in tunnels, inside a structure or sometimes even in urban areas surrounded by high-rise buildings.

In the information privacy area, there has been much work on location privacy protection. According to Beresford & Stajano (2003), location privacy is defined as the ability to prevent other unauthorized parties from learning one's current or past location. People start to realize that failure to protect their location privacy might associate themselves with negative effects such as location-based spam, personal wellbeing and safety, and intrusive inferences (Gruteser & Grunwald, 2004; Schilit, Hong, & Grutese, 2003). There are numerous algorithms available in the domain of location-based services for protecting location privacy. Some of the early efforts include using a pseudonym instead of an actual name, intentionally adding noise to the data, and reporting locations as a region instead of a point (Krumm, 2009).

As imprecision in the context of navigation is receiving more and more attention, the algorithms developed for navigation services must be able to provide efficient instructions that can bring users to their destination. Recently, Shahrom & Duckham (2011) has developed a robust

private navigation algorithm that can generate efficient and simplest navigation instructions although the location information is imprecise.

2. WAYFINDING AND NAVIGATION

The term wayfinding and navigation are generally close in their meaning between one and the other. According to Golledge et al. (2000), wayfinding involves selecting path segments of an existing network to determine a route between two given points, whereas navigation includes the processing of spatial information regarding a position between the origin and the destination summarized as a course to be followed. It incorporates the information-gathering and decision-making processes, people use to orient themselves and move through space to enable them to move from one location to another.

The design of the wayfinding system is based on a human-centered approach that facilitates the movement of people. A successful design of wayfinding systems allows people to:

1. estimate their location within a setting,

2. determine their destination,

3. organize a plan to take them from their location to their destination, and

4. execute the plan and negotiate any required changes.

According to Darken, Rudolph & Peterson (2002), wayfinding is the cognitive element of navigation and it does not involve movement of any kind, but only the tactical and strategic parts that guide movement. They also stated that wayfinding and motion are intimately related in a complex negotiation, which is called navigation.

Many researches in human wayfinding have investigated the relevant processes and issues that take place when people orient themselves and navigate through space. Researchers try to explain how people find their way in the physical world, what people need in order to find their way, how they communicate directions, and how people's verbal and visual abilities influence wayfinding. Allen (1999) suggested taxonomy of wayfinding tasks based on functional goals. It consists of three categories:

1. travel with the goal of reaching a familiar destination,

2. exploratory travel with the goal of returning to a familiar point of origin, and

3. travel with the goal of reaching a novel destination.

Allen (1999) and Golledge (1999) described wayfinding behavior as a purposeful, directed, and motivated movement from an origin to a specific destination, which cannot be directly perceived by the traveler. Such behavior involves interactions between the traveler and the environment. As the ultimate goal of human wayfinding is to find the way from one place to another, the traveler must be able to achieve a specific destination within the confines of pertinent spatial or temporal constraints within the uncertainties that exist.

3. IMPRECISE NAVIGATION

Mobile devices that rely totally on GPS, often face imperfect-positional information. According to Marmasse & Schmandt (2000), in many cases, such as finding the nearest point of interest, it is often sufficient to know the vicinity in which a user is located. One way to solve imprecise location problem is by clustering the virtual locations and providing alerts for all locations

within the cluster (Duckham & Kulik, 2005). A similar concept has been introduced in Duckham, Kulik & Worboys (2003) which offers a solution based on two perspectives of imprecision, such as for a third party that wishes to determine more precisely the location of an individual, and for an individual wishing to access location-based services without revealing their precise location. They developed the imprecise navigation algorithm by using the concept of obfuscation for privacy protection while simultaneously providing navigation instructions. In the research, the space was modeled as a graph, where nodes were identified as locations and edges indicated adjacency. Hence, in order to obtain an imprecise location, a user sends a set of nodes instead of a single node from which he or she is located. By this way, the location-based service provider is not able to distinguish which of the nodes is the real one. Since this architecture is compatible with mobile ad-hoc networks, it allows an individual to connect directly with a third-party location-based service provider without the need to use other intermediaries.

The concept of imprecision is found in numerous literatures such as in Hong & Landay (2004), which uses landmarks and other significant locations as reference instead of coordinate-based geographic information. The reason for this is to provide less information about a user's exact location. One of the early papers on location privacy by Leonhardt and Magee (1998) had discussed access control policies on locations based on a hierarchy of locations, for example room, floor and buildings. They have indicated that a privacy policy might only report higher levels of the hierarchy, thus making the user's precise location ambiguous.

Snekkenes (2001) suggested that the precise location of an individual is adjusted for protection of location privacy. Gruteser and Grunwald (2003) introduced spatial cloaking, which uses a "quadtree" to explore the effects of adapting the spatial precision of information about an individual's location based on the number of other individuals within the same quadrant. In this technique, individuals are designated as *k*-anonymous if their location information is sufficiently imprecise in order to make them indistinguishable from at least *k*-1 of other individuals. It randomly replaces identifiers to prevent tracking by replacing the point location information in each message with a spatial cloaking box. For each message, it has to make sure that there is at least *k*-1 of other messages from different mobile units, with the same cloaking box. The drawback is that it is not possible to support users with different privacy requirements.

The difference between spatial cloaking in Gruteser and Grunwald (2003), and obfuscation in Duckham & Kulik (2005) is that, the former aims to guarantee an individual's *k*-anonymity, but contrary to the latter, the individual's actual identity is unable to be revealed for authentication and personalization (Langheinrich, 2001) and at the same time protecting for individual's location privacy. The exact location is abstracted as either a set of a client's past or future location points or an enlarged spatial bounding box by location obfuscation of the client. The location based services (LBS) server evaluates the queries based on the cloaked location query, evaluates the queries based on the distance to each location point or the client filters the answer based on its actual query.

3.1. Positioning Technology

There are two methods of collecting location information, which is either internally or externally. The former enables the mobile device to independently determine its location (handset-based) and the latter depends on other devices, it communicates with to identify its location (network-based) (Minch, 2004).

When using location-based services, the external location is determined in several ways, such as via nearby cellular network towers or by location service providers. There are three basic techniques for external automatic-location sensing, which are triangulation, scene analysis and proximity (Hightower & Borriello, 2001). The triangulation technique uses the geometric properties of triangles to compute the object's location. It has two subcategories, which known as "lateration" and "angulation". The former uses the distance measurements and the latter uses angles or

bearing measurements to determine the position of an object. The “scene analysis location-sensing” technique uses features of a scene observed from a particular vantage point to draw conclusions about the observer or objects in the scene. A proximity technique determines if an object is near a known location. Once the location data are retrieved, software applications can overlay digital information to add context and meaning to its users.

The most common method that supports the determination of independent locations is GPS. With the GPS unit embedded in mobile devices, the location information is safe from other entities. A GPS uses signals from geosynchronous orbiting satellites to triangulate a precise latitude and longitude. It requires a line-of-sight with the sky to receive satellite signals, thus very much limiting the use for indoor applications. In order to collect location information independently, mobile devices act as receivers and automatically determine its location without the knowledge of other entities. It ensures privacy because no other entity might notice where the object is located, unless the object specifically initiates an action to issue that information.

3.2. Protecting Location Privacy

Wayfinding research has led to a variety of algorithms that mostly aim to provide improvement on navigation services for a traveler, in its own way. However, a user’s privacy pertaining to the user’s location is still of a great concern. Users still desire a satisfactory service without the service provider knowing their exact location. As an alternative, it is important to have a navigation system that enables individuals to access high quality private navigation services whilst revealing the least possible information about their current location.

Duckham & Kulik (2003) addressed the problem of delivering navigation services to an agent under imprecision by considering the privacy issues and imprecise location information by using the obfuscation technique. Many of the early efforts on location privacy were focused on extracting a person’s important place from location traces, usually from GPS [(Krumm, 2009). “comMotion” was introduced in Marmasse & Schmandt (2000) and is one of the location-aware computing environments that are able to link personal information to locations in its user’s life. It focuses solely on outdoor tracking by means of a GPS receiver and they reported that the GPS signal was lost more than three times within a given radius, usually due to shadowing by tall buildings, after which the user was prompted for a place name (Marmasse & Schmandt, 2000). Then, they extended their work in Marmasse (2004) that looked at a combination of dwell time, breaks in time or distance, and periods of low GPS accuracy at potentially significant locations (Krumm, 2009).

One of the clustering techniques was used by Ashbrook & Starner (2003) in which they clustered the places where the GPS signal was lost and asked users to name such locations. Place Lab is a location-generated application that was introduced in Welbourne, Stewart, Kang & Borriello (2004) and used time-based clustering to identify places that the user would likely consider important. Hariharan & Toyama (2004) developed a time and location-sensitive clustering technique to hierarchically denote stays that are instances where a subject has spent some time at a single location and “destinations” that are clusters of stays. The technique outlined data structures and algorithms for investigating and producing location histories. Consolvo, LaMarca, Smith, Hightower & Hughes (2005) developed an algorithm to discover repeated groups of in-range GSM and Wi-Fi base stations where a user resides. The aim was to extract a person’s substantial location without any despicable purpose. The unique thing about this research is that the spatial coordinates were totally omitted as a location indicator, but instead they used sets of consistently sounding radio transmitters.

Although most location-based services do not need the personal identification of the user, better services might be offered if personalization is allowed. In order to obtain personalized services without revealing personal information, a trusted middleware infrastructure is normally used to make sure that only pseudonyms are sent to the service providers (Bettini, Wang & Jajodia, 2005). The reason behind this is to make sure that the service requested is anonymous.

Basically, there are two modes of privacy, which are the location privacy and query privacy. The former refers to privacy that a user wants to hide by way of his location and query information and the latter is when the user does not mind revealing his locations but they want to hide their queries. Pseudonyms could be helpful if there are no other attempts by any third parties to trace the movement of that user by using his or her positioning information. The inference attack happens when the location information of the user is monitored until the personal identification is revealed by associating the pseudonym and real user, such as by mapping the location information with relevant sources.

However, for imprecise navigation services, higher location privacy is expected to lead to a lower quality of service and vice versa. Thus, the navigation algorithm also has to be able to achieve a satisfactory level of location privacy and quality of service for navigation.

4. OBFUSCATION

Obfuscation is one of the privacy protection techniques and is used to intentionally obfuscate the location data, possibly by adding noise or reporting regions instead of points (Krumm, 2009). In Duckham & Kulik (2005), obfuscation is defined as deliberately degrading the quality of information about an individual's location in order to protect location privacy. The concepts of inaccuracy and imprecision were used as examples. The former here means giving a measurement different from that of the actual location, while the latter means giving a plurality of possible locations.

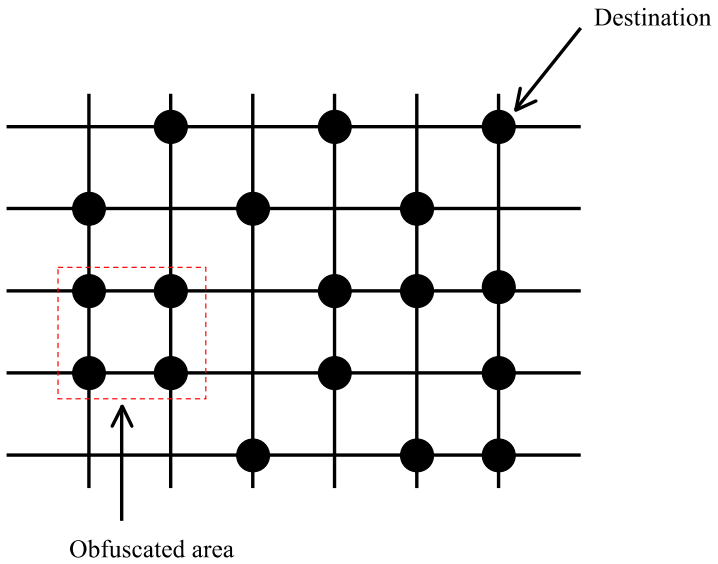


Figure 1: A set of nodes is sent instead of a single node in an obfuscated area

The concepts of uncertainty used in spatial information and obfuscation in location privacy are similar. According to Duckham & Kulik (2005), the uncertainty in spatial information focuses on imperfection as a consequence of the inherent limitations of the measurement and representation of spatial information. However, obfuscation in location privacy focuses on imperfection as the result of the deliberate degradation of spatial information quality.

There are three types of imperfection in spatial information mentioned by Duckham & Kulik (2005), namely inaccuracy, imprecision, and vagueness. Inaccuracy concerns a lack of correspondence between information and reality, while imprecision concerns a lack of details in the information, and vagueness concerns the existence of boundary cases in information (Duckham & Kulik, 2005; Duckham & Worboys, 2004; Worboys & Clementini, 2001). Any or all of these three types of imperfection could be used to obfuscate an individual's location.

For example, the statement “Agent Y is at the University of Melbourne in Sydney” is inaccurate and it should be “Agent Y is at University of Melbourne is in Melbourne”. However, Agent Y who is at the University of Melbourne is imprecise because it provides little detail about the agent’s actual location within the University of Melbourne. “Agent Y is near University of Melbourne”, is a vague statement because there exist boundary locations that could mean “certainly near University of Melbourne” or “certainly far from University of Melbourne”.

5. IMPRECISE NAVIGATION PERFORMANCE MEASUREMENTS

Agent-based simulation for human wayfinding has been used to simulate people’s wayfinding behavior with different spatial abilities in evaluating spatial information and design systems. The use of an agent to simulate wayfinding is a useful task before actual construction of a built environment. With agent simulation, it is possible to determine where people face wayfinding difficulties, why they face them, and how wayfinding information and design have to be changed to avoid such difficulties. Moreover, the testing of different navigation ideas and theories before implementation in the real world can result in major economic benefits.

It is important to measure the efficiency of any navigation algorithms or imprecise navigation based on the agent’s navigational performance. Route generation produced by each algorithm is different. It is usually based on the user’s preferences, which is either a long and hassle-free journey, or to have the shortest journey due to some limitations such as time constraints. Each algorithm might generate different routes and instructions. This paper provides three measurements that can be used to evaluate the imprecise navigation algorithms based on agent’s performances, which are success rate, normalized stopping distances, and number of queries.

5.1 Success Rate

Every wayfinding and navigation task aims to reach a desired destination by following navigation services. It is usually almost impossible to get a 100% success rate when the location is imprecise or obfuscated. A successful navigation or wayfinding happens when agents reach a destination by following navigation instructions. The success rate looks at the simulation, which might hold successes or failures. To calculate the success rate for imprecise navigation is to:

- determine the total number of nodes in the region. For example, a region which covers 3 nodes; A, B and C,
- find the number of successes in the simulation. As an example, getting the agent to reach the destination is considered a success and the number of successes is 2; A and B.
- divide the successes by the total number in the region to find success rate. In the example, 2 divided by 3 equals 0.67 or 67% success rate.

The number of successes is the number of successful navigations, such that, by following a static query navigation instruction, the agent is able to reach the destination.

5.2 Stopping Distance

Normalized stopping distance is the ratio of stopping distance from the last stop to destination to the actual distance from the start node to destination. A normalized stopping distance is used to evaluate how far is an agent from a stop location to a destination. A larger normalized stopping distance shows that the agent has to travel further to reach the destination. Two types of stopping distances are used as a measurement of navigation performance; Network

distance and Euclidean distance.

5.2.1 Network Stopping Distance

Network distance is the actual route length based on a path computation. The network stopping distance is the total length of edges from the last stop to the destination. As illustrated in Figure 2, a road network can be considered a graph with positive weights. The nodes represent road junctions and each edge of the graph is associated with a road segment between two junctions. The weight of an edge corresponds to the length of the associated road segment and directed edges are used to model two-way streets.

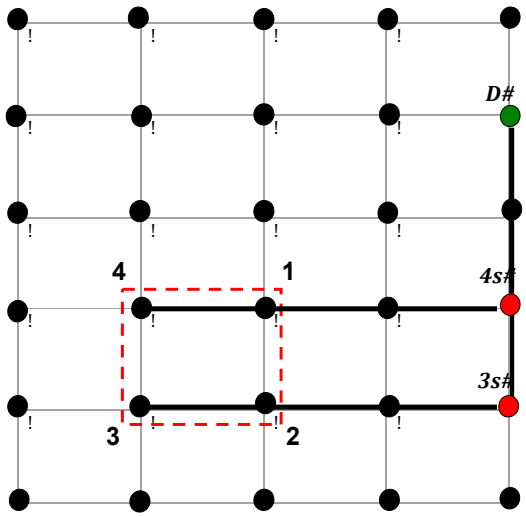


Figure 2: Network stopping distance

In Figure 2, assume that each edge (line) is weighted "1". The imprecise or obfuscated set contains the starting nodes to the destination; nodes 1,2,3, and 4. Let us say that the destination is reachable if an agent starts at 1 and 2 by using instruction generated by the algorithms. Such agents at location 3 or 4 failed to reach the destination and perhaps stop at the red dots (4s and 3s). The normalized network stopping distance *d(N)* from 4s to destination *(D)* is 0.4 and 0.5 from 3s, where this value is derived from the ratio of stopping distance *d(ns)* and actual distance *d(na)*:

$$d(N) = \frac{d(ns)}{d(na)}$$

5.2.2 Euclidean Stopping Distance

Euclidean distance is the measure of the straight-line distance between two nodes. The position of a node in a Euclidean space is a Euclidean vector. A vector can be described as a directed line segment from the origin node 1 (*x, y*), to a destination node 2 (*a, b*) in that space. If length is to be considered, it is actually the distance from node 1 (stopping distance) to node 2 (destination). The Euclidean length of a vector measures the length of the vector with the formula below:

$$dist((x,y),(a,b)) = \sqrt{(x-a)^2 + (y-b)^2}$$

The Euclidean distance formula is a good measurer for measuring real distances as compared to network distance. Since the Earth is relatively round, this means within

relatively small areas of Earth's surface, provided the distance is exactly what we want to estimate. However, to measure how fast one can get from one point to another while moving at a given speed, the Euclidean formula might not be very useful in providing the answer. Indeed, the network distance formula is the best to measure this situation. Such that in a city, it is often impossible to move from one location directly to another because there might be obstacles such as buildings, streets busy with traffic, fences or unexpected obstacles. Therefore, it is important that the analysis takes into account the two measurements to evaluate the algorithm's performance.

5.3 Number of Query

The navigation task would be successful if the destination is reachable from the start. However, considering a one-time query for imprecise location with the number of nodes >1, it is impossible that the destination is accessible at all times (Duckham & Kulik, 2003). Therefore, the re-query is performed in order to test the efficiency of the algorithms based on the number of query released. The lesser number of queries means highest level of privacy and vice versa (Duckham & Kulik, 2005).

For example, in Figure 3, the dots are the nodes in obfuscated region and *D* is the destination, a larger obfuscation size (4 nodes), would potentially increase the number of queries due to more possible navigation errors. The 4 nodes are considered as starting nodes and generation of instructions are based on these nodes due to the system having no information about the agent's precise location.

In wayfinding, the problem with continuous query is that it would lead to potential privacy attack (Chow & Mokbel, 2007) (Winter, Duckham & Robinson, 2010). One possible privacy attack based on query updates is a query tracking attack (Wang & Liu, 2009). Although the location information is obfuscated as regions, this attack could be used by adversaries to link consecutive time snapshots together to identify the query issuer (Chow & Mokbel, 2007). Once a query is issued, all decision points in the query region are candidates of the user's location. If the query is reported again, it would reduce the user's location privacy because the intersection of the region between the query instances can be identified (Chow & Mokbel, 2007).

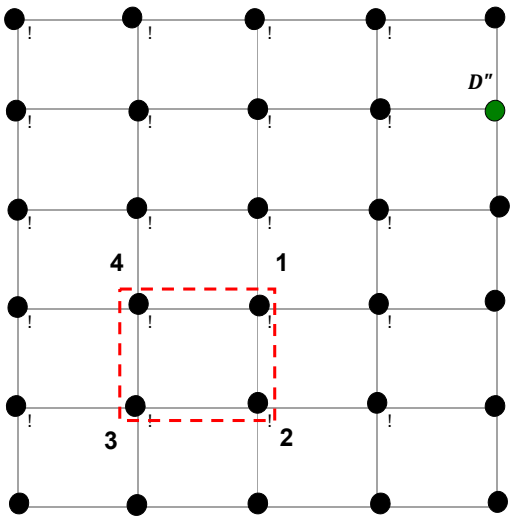


Figure 3: Imprecise location with 4 nodes

4. CONCLUSION

This paper discusses the concepts of wayfinding and imprecise navigation in spatial information and evaluation methods for measuring the navigational performance under imprecision. The issues of imprecision addressed in this paper are due to the location privacy techniques used in navigational algorithms to protect location privacy and the imperfect-positional information by GPS. Performance measurement methods discussed in this paper can be used to measure the effectiveness of the navigational algorithms with imprecise location information.

REFERENCES

Beresford, A.R. & Stajano, F. (2003). *Location privacy in pervasive computing*. Pervasive Computing, IEEE, 2(1):46–55.

Schilit, B., Hong, J., & Gruteser, M. (2003) *Wireless location privacy protection*. Computer, 36(12):135 137.

Bettini, C., Wang, X., & Jajodia, S. (2005). *Protecting privacy against location-based personal identification*. Secure Data Management, pp. 185–199.

Chow, C.Y. & Mokbel, M. (2007). *Enabling private continuous queries for revealed user locations*. Advances in Spatial and Temporal Databases, pp. 258–275.

Consolvo, S., LaMarca, A., Smith, I., Hightower, J., & Hughes, J. (2005). *Learning and recognizing the places we go*. In UbiComp 2005: Ubiquitous Computing, pp. 159–176. Springer.

Ashbrook, D. & Starner, T. (2003). *Using gps to learn significant locations and predict movement across multiple users*. Personal and Ubiquitous Computing, 7(5):275– 286.

Snekkenes, E. (2001). *Concepts for personal location privacy policies*. In Proceedings of the 3rd ACM conference on Electronic Commerce, pp. 48–57. ACM.

Allen, G.L. (1999). *Spatial abilities, cognitive maps, and wayfinding*. Wayfinding behavior: Cognitive mapping and other spatial processes, pp. 46–80.

Hightower, J. & Borriello, G. (2001). *Location systems for ubiquitous computing*. Computer, 34(8):57–66.

Krumm, J. (2009). *A survey of computational location privacy*. Personal and Ubiquitous Computing, 13(6):391–399.

Hong, J.I. & Landay, J.A. (2004). *An architecture for privacy-sensitive ubiquitous computing*. In Proceedings of the 2nd international conference on Mobile systems, applications, and services, pp.177–189. ACM.

Jacobson, R.D., Kitchin, R., Blades, M., Golledge, R.G., & et.all. (200). *Cognitive maps, spatial abilities, and human wayfinding*. Geographical Review Of Japan Series B, 73(2):93–104.

Johnson, T., Muthukrishna, S., Jana, R., & Vitaletti, A. (2001). *Location based services in a wireless wan using cellular digital packet data (cdpd)*. In Proceedings of the 2nd ACM international workshop on Data engineering for wireless and mobile access, pp. 74–80. ACM.

Duckham, M. & Kulik, L. (2005). *A formal model of obfuscation and negotiation for location privacy*. Pervasive Computing, pp. 243–251.

Duckham, M., Kulik, L., & Worboys, M. (2003). *Imprecise navigation*. Geoinformatica, 7(2):79–94.

Gruteser, M. & Grunwald, D. (2003). A*nonymous usage of location-based services through spatial and temporal cloaking*. In Proceedings of the 1st international conference on Mobile systems, applications and services, pp. 31–42. ACM.

Gruteser, M. & Grunwald, D. (2004). *A methodological assessment of location privacy risks in wireless hotspot networks*. Security in Pervasive Computing, pp. 113– 142.

Langheinrich, M. (2001). *Privacy by design-principles of privacy-aware ubiquitous systems*. In Ubicomp 2001: Ubiquitous Computing, pp. 273–291. Springer.

Shahrom, M. & Duckham, M. (2011). *Efficient Navigation for Privacy-aware Personal Navigation Services*. In Proceedings of the International Conference on GeoInformatics.

Marmasse, N. & Schmandt, C. (2000). *Location-aware information delivery with commotion*. In Handheld and Ubiquitous Computing, pp. 361–370. Springer.

Marmasse, N. (2004). *Providing lightweight telepresence in mobile communication to enhance collaborative living*. PhD thesis, Citeseer.

Darken, R.P. and Peterson, B. (2002). *Spatial orientation, wayfinding, and representation*. Handbook of virtual environments, pp. 493–518.

Hariharan, R. & Toyama, K. (2004). *Project lachesis: parsing and modeling location histories*. In Geographic Information Science, pp. 106–124. Springer.

Golledge, R.G. (1999). *Human wayfinding and cognitive maps*. Wayfinding behavior: Cognitive mapping and other spatial processes, pp. 5–45.

Minch, R.P. (2004). *Privacy issues in location-aware mobile devices*. In System Sciences, 2004. Proceedings of the 37th Annual Hawaii International Conference on, pp. 10–pp. IEEE.

Leonhardt, U. & Magee, J. (1998). *Security considerations for a distributed location service*. Journal of Network and Systems Management, 6(1):51–70.

Welbourne, W., Stewart, B., Kang, J.H., & Borriello, G. (2004). *Extracting places from traces of locations*. In Proceedings of the 2nd ACM international workshop on Wireless mobile applications and services on WLAN hotspots, pp. 110–118. ACM.