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A Study of the Student Preference on Mode of Learning and the Challenges during COVID-19 Pandemic

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Abstract: The preference on mode of education is an ongoing debate among educators. Currently, face-to-face class is the most common learning method. However, the online learning has become popular due to the COVID-19 pandemic. In this paper, a study is done to investigate the students' preference on mode of learning and the challenges during COVID-19 pandemic. A quantitative method was used and a set of questionnaires by Google form have been distributed to the students in UiTM Johor Kampus Pasir Gudang. The result shows most of student fairly or neutrally agree using online learning. It is due to many challenges including bad coverage on internet facility. The result of this paper can help tertiary education institutions to decide the suitable mode of learning for students in future.

Keywords: Online learning, face-to-face learning, COVID-19

1. Introduction

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In the lights of recent events, the novel coronavirus (COVID-19) pandemic is viewed as the biggest worldwide emergency and it had created an impact on the financial and social catastrophe around the globe. On 18 March 2020, Malaysia started the practice of movement control and as a result, the educational organizations are closed temporarily. Millions of pupils, educators, academics, and professional staff have been severely affected by the situation. Subsequently, a discourse has taken place investigating elements such as surrounding downturn, depression and descending financial measurements as a preoccupation (Mangan, Gramano, & Kullmann, 2020). As electronic communication becomes increasingly common in the 20th century, flexible learning became the primary platform during this pandemic as universities practised compromising learning chances such as teaching using virtual mode, online activities and discussions (Kemp, Nenagh, & Rachel, 2014). It is stated in Claude et al. (2018) that flexible learning could be beneficial for the pupils to gain access and flexibility with regard to at least one of the following aspects such as of time, place, learning style and pace, subject matter, learning path or evaluation are taken into consideration.

An ongoing debate has been going on for decades among scholars regarding which mode of education is dominant. A few scholars argue that online is dominant and some could agree that online is less efficient than traditional face-to-face curriculum (Alsaaty, 2016). Therefore, in this research, a study on the students' preference on mode of learning was done among Universiti Teknologi MARA (UiTM) students. This research identified the students' preference on mode of learning and the challenges during COVID-19 pandemic. The result of this paper can help tertiary education institutions to decide the suitable mode of learning for students in future.

2. Literature Review

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Currently, most university students in Malaysia are still practising face-to-face (F2F) instruction. Most educators chose the F2F mode but this could be perceived as an ultimatum for the educators as the inability to fully exhibit caring behaviours receptive to students' needs. Research endorses the presumption of an authentic bond between an educator and his pupils (Baig, 2011). As Malaysia is a developing country, students in the rural area are facing several issues such as poor internet connection, lack of technical device, poor technological infrastructure and unconducive study environment at home. A study by Tamargo (2010) discovered that the instructions in F2F classroom could be seen as an obstructing environment for pupils and its structure can be pressurizing and daunting. However, F2F instruction could also enhance a better lecturer-student engagement. It plays a role as an efficient medium to induce traits such as foreboding as students are able to interact with their peers and lecturers (Tamargo, 2010). According to the Malaysian New Straits Times recent research, students who are used to being in a physical face-to-face environment might find it difficult and awkward to adapt at first but it is something students can get used to. On the contrary, online learning in rural and lower socioeconomic areas could be a compelling issue if the lecturers lacked in successfully implementing a meaningful learning experience through online delivery and methodologies where the fulfilment of the online program will be jeopardized.

Many educational institutions and universities implemented an online learning mode due to current pandemic. e-Learning is defined as an online learning platform which relies on training and technical-based tuition whereas an Online Learning Environment (OLE) is a set of teaching and learning devices aimed to strengthen a student's academic experience by incorporating computer and the internet as primary parts of the schooling process (Alsaaty, 2016). The rise of e-learning has efficiently fostered the practice of students being in charge of their own attainment of knowledge (Ituma, 2011). Moreover, e-learning promotes the usage of interactive features that stimulate the motivation of undergraduate students for a meaningful learning experience to take place (Garza, Alejandro, Blythe, & Fite, 2014). This type of learning plays a role as a virtual environment for the students to participate and engage with one another through numerous activities. These activities promote aspects such as audio-visual interaction and inquiry within a diverse range of subjects. It serves as a proficient medium that offers students and teachers the chance to interact with each other. It is stated in Samir Abou El-Seoud et al. (2014) that educational institutions including higher education institutions need to ensure smooth access to these virtual courses for e-learning to recognize the significance of e-learning.

3. Methodology

This study uses quantitative method where the respondents consist of a total of 41 students from various faculties which are Faculty of Business Management, Faculty of Civil Engineering, Faculty of Electrical Engineering, Faculty of Mechanical Engineering, and Faculty of Chemical Engineering in UiTM Johor Kampus Pasir Gudang. This study used simple random sampling and the instrument used to collect the data was questionnaire. The questionnaire contained 15 questions and there were 3 sections namely demographic profile, students' preference on mode of learning and the challenges during COVID-19. Different question types such as ranking, yes-no listing and category were used in the questionnaire. The questionnaires were distributed into the group social media platform. Respondents who get

the questionnaires need to fill up all the questions in the form by using their electronic devices such as smart phone, tablet, laptop or computer. The questionnaires were made by Google form. The questionnaires in the electronic version is easier for the respondents to answer the questions. The questionnaires will be randomly answered by students who open the Google form as the form was distributed in the group social media platform.

4. Discussion and Conclusion

In this survey, there are 61% of male respondents and the rest are female respondents. The respondents are students from diploma level study. The age of respondents are between 18 - 24 years old. The students from all faculties and all semester (part 1 to part 6) are involved in this survey.

In order to investigate the students' preference on mode of learning, four questions are designed in this survey.

The first question asked the opinion whether online learning is better than face-to-face learning. The result is shown in Figure 1. The highest percentage of respondents have neutral opinion and the percentage is 36.6%. The second highest percentage of respondents disagreed on this opinion and the percentage is 24.4%. There are 14.6% of the students strongly disagree with this opinion. Students who strongly agree with this opinion consist of the third highest percentage with 19.5% while there are 4.9% of respondents agreed with this opinion. It shows that there are more students who oppose that online learning is better than face-to-face learning.

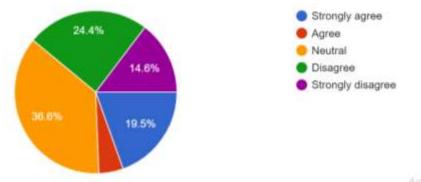


Figure 1: Students' opinion whether online learning is better than face to face learning.

The second question is about the understanding of the online lectures. Figure 2 shows the result.

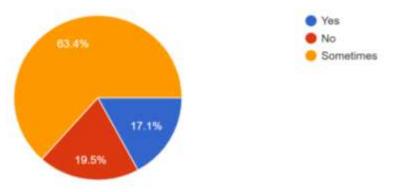


Figure 2: Students' understanding of the online lectures.

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Based on the Figure 2, the percentage of students who answered they sometimes understood the online lectures is the highest and the percentage is 63.4%. There are 19.5% of students who could not understand online lectures. The percentage of students who answered they can understand online lectures is the lowest and the percentage is 17.1%. It shows that most of the students could not fully understand during the online lectures. Only 17.1% of students fully understood when the lectures were delivered online. The percentage of students who did not understand is higher than the students who fully understood the lectures.

The third question is about the opinion of whether online assignments and online presentation are easier than the assignments and presentation in the face-to-face mode. The result is shown in Figure 3.

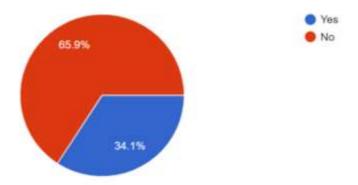


Figure 3: Students' opinion of whether online assignments and online presentation are easier.

From the Figure 3, there are more students disagreed that online assignments and online presentation are easier than the assignments and presentation in the face-to-face mode. The percentage of students who answered "no" is 65.9% and this percentage is higher than those who answered "yes" (34.1%). It shows that the students are having difficulties in completing the online assignments and performing online presentation. It could be due to the inefficient communication with the groupmates or classmates because most of the students stay in different locations and different states. The level of internet coverage is different in different locations in Malaysia. Based on the survey, most of the students are having medium internet coverage. Online presentation was done using video conferencing applications such as Google Meet. These video conferencing applications require very good internet connection in order to have a smooth presentation. Due to issue of internet connectivity and speed, most students were finding online presentation is disadvantage for those who do not have very good internet connection.

The forth question is about the opinion on whether online learning should replace face-to-face learning permanently. The result is displayed in Figure 4.

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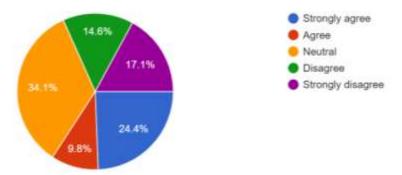


Figure 4: Students' opinion about whether online learning should replace face-to-face learning permanently

The results show that most students have neutral opinion. There are 34.1% of students fall into this category. There are 24.4% strongly agreed while 9.8% agreed that online learning should replace face-to-face learning permanently. On the other hand, 17.1% are strongly disagree and 14.6% disagreed on this opinion. The result shows that there is about one third of the students supported that online learning should replace face-to-face learning permanently. There is about one third of students who opposed it. There is also almost one third of students who have neutral opinion. Therefore, there is no single mode of learning clearly dominates in the students' preference of mode of learning.

In order to investigate the online learning challenges faced by students during COVID-19 pandemic, three questions are designed in this survey. The first question is about how often students face problem when attending online classes. The result is shown in Figure 5.

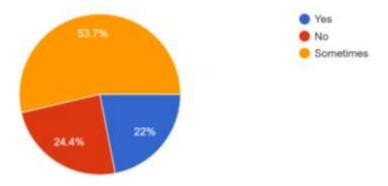


Figure 5: Students experienced problem when attending online classes

Figure 5 shows that the percentage of students who sometimes faced a problem when attending online classes is the highest, that is 53.7%. The percentage of students who always faced problems when attending online classes is 22%. There are only 24.4% of students who did not have problem when attending online classes. Therefore, there is only about a quarter of students who can attend online classes with adequate facility and without disturbance.

The second question asked about the challenges faced by the students during online learning. Figure 6 shows the result.

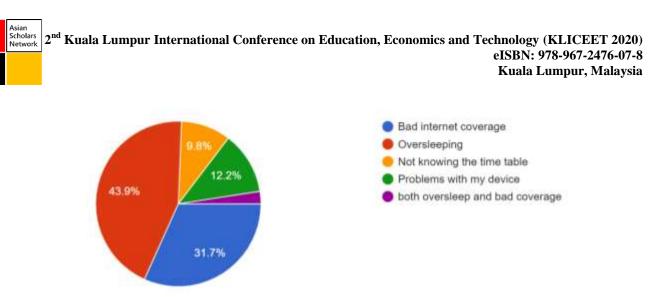


Figure 6: Challenges faced by the students during online learning

The result shows that most of the students (43.9%) overslept and this is the challenge for them in online learning. There are 31.7% of students answered that bad internet coverage is the challenge. The rest of the challenges include having problems with their devices and not knowing the time table. The result shows that there are about half of the students opined that the challenges are due to the internet facility and electronic devices. There are about another half of the students agreed that personal discipline is the challenge during online learning.

The third question surveyed on the internet coverage in the area where the students stay. The result is shown in Figure 7.

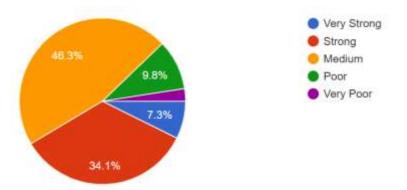


Figure 7: Internet coverage in the area where the students stay.

Five options are given about the internet coverage in the area where the students stay. The options are: very strong, strong, medium, poor and very poor. From Figure 7, it shows that majority of the students have medium internet coverage in their area of stay and the percentage of this category is the highest, that is 46.3%. There are 2.4% of students who have very poor internet coverage while 9.8% of students have poor internet coverage in the area where they stay. The result shows that there are students who do not have good internet facility to follow the online learning effectively.

5. Conclusion

The purpose of this study is to investigate the students' preference on mode of learning and the challenges during COVID-19 pandemic. The survey shows that there are more students who are in negative opinion that online learning is better than face-to-face learning. Majority of

students could sometimes understand the online lectures. There are more students disagreed that online assignments and online presentation are easier than the assignments and presentation in the face-to-face mode. It could be due to poor internet connectivity and speed, most students were finding online presentation is disadvantage for those who do not have very good internet connection. Most students prefer face-to-face learning as they can understand quickly when lecturer deliver the teaching while discussion can be happened freely in face-to-face learning. Sometimes, students love to learn together with their classmates. On the opinion of whether online learning should replace face-to-face learning permanently, there are about equal percentage of students who support it and who oppose it.

Regarding the online learning challenges during the COVID-19 pandemic, there is only about a quarter of students who can attend online classes with adequate facility and without disturbance. The challenges faced by the students include overslept, bad internet coverage, problems with their devices and not knowing the time table. These challenges can be categorized as the internet facility, electronic devices and self-discipline. The result of the survey shows that majority of the students have medium internet coverage in their area of stay and there are students who do not have good internet facility to follow the online learning effectively. Weather is also a factor that can cause the internet connectivity to be disturbed. As the conclusion, students need more time to adapt to online learning because some students are still trying to explore the new technology and techniques use in online learning process.

are still trying to explore the new technology and techniques use in online learning process. Therefore, a mixture of the mode of learning could be one of the options for the higher learning institution to be considered in future.

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M. Samir Abou El-Seoud, Islam A.T.F. Taj-Eddin, Naglaa Seddiek, Mahmoud M. El-Khouly, Ann Nosseir (2014)E-Learning and Students' Motivation: A Research Study on the Effect of ELearning on Higher Education. International Journal of Emerging Technologies in Learning (iJET), Vol 9, No 4

An Exploratory Study Of Malaysia's Bim Roadmap Awareness Among Stakeholders In Malaysia

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Abstract: Utilisation of Building Information Modelling (BIM) has become the platformto meet the Architecture, Engineering and Construction (AEC) industry needs. Each construction player uses BIM for different purposes. Nevertheless, Malaysian construction industry players are having difficulties in adopting BIM due to a lack of knowledge on their roles and responsibilities in adopting BIM. BIM also requires changes in current practices among construction players in terms of the processes and technology that are used in managing projects. Hence, the purpose of this research is to examine the stakeholder's views regarding Malaysia's BIM Roadmap, and to investigate the stakeholders' needs in developing their BIM roadmap. Qualitative approach has been adopted in this research by carrying out the openended interview among different professions, including architects, BIM consultants, contractors, developers, engineers and quantity surveyors. Content analysis is being used to analyse the data collected. The findings show that all respondents are aware of the Malaysian BIM Roadmap 2016-2020 and shown great anticipation towards BIM adoption in Malaysia. It also found that people is the priority challenge faced by the profession, while the least important is the policy.

Keywords: BIM, Roadmap, Stakeholders

1. Introduction

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The Construction Industry Transformation Programme (CITP) 2016-2020 has been formulated to contribute to and align with The Eleventh Malaysia Plan, 2016-2020 and the Services Sector Blueprint. The CITP 2016-2020 has identified four strategic trusts to guide the transformation and continued development of the construction industry as real and substantial issues still persist in the construction industry. Among others, quality in workmanship and quality assessments, limited levels of safety awareness and enforcement, added constraints to the industry due to regulations and bureaucratic procedures, negative public perception of the industry, high carbon emissions and energy, high contribution of construction waste to landfills, low adoption of technology and modern methods of construction, the availability of high-quality information, increasing competition from foreign players are the issues that still persist in the industry. The trusts are Quality, Safety and Professionalism, Environmental Sustainability, Productivity and Internationalisation.

Under Productivity trusts, limited adoption of information technology such as BIM has been highlighted due to 10% adoption rate of BIM technology in Malaysia (Stage 1: object-based BIM software is used in one discipline such as in Architecture) compared to United States (71%), Singapore (65%), and United Kingdom (39%). In response to the industry need, the

CITP has suggested BIM adoption and use of BIM platform to open and accurate sharing of information across project life-cycle and advance SME/Bumiputera capacity and capabilitybuilding (CIDB Malaysia, 2015). The adoption of technology in any business can increase its efficiency and productivity, which leads to growth and profitability.

The Building Information Modelling (BIM) was first introduced to Malaysia during the Infrastructure & Construction Asia's Building Information Modeling & Sustainable Architecture Conference in 2009. The first adoption of BIM in construction project is with the National Cancer Institute in Sepang in 2010 (Building Smart Malaysia, 2015). The national body to oversee the sustainability and growth of construction enterprises across Malaysia, Construction Industry Development Board (CIDB) has set up the National BIM Steering Committee and Subcommittee consists of government agencies, professional bodies, academicians contractors, developers and relevant industry players in 2013 (Mohd Haris Ismail, 2015). The Malaysia's BIM Roadmap (2014-2020) was formed to formulate a strategic plan within the national strategy that envisaged in Malaysian Vision 2020 through BIM adoption in Malaysia via several discussions, brainstormings and workshops (CIDB Malaysia, 2014).

The BIM Roadmap is a method for an organization to chart or map their corporate BIM strategy in a number of clear steps or layers (Sands J., 2015). The Malaysia's BIM Roadmap (2014-2020) consists of seven pillars include (1) standards and accreditation; (2) collaboration and incentives; (3) education and awareness; (4) national BIM library; (5) BIM guidelines and legal issues; (6) special interest group; and (7) research and development. Among others, the deliverables of the BIM Roadmap is CIDB BIM Centre, BIM Training Centre, BIM education syllabus, Malaysia BIM Guidelines, Malaysia BIM Standards and BIM Library.

Following the above background, the research has adopted exploratory study to identify stakeholder's awareness of Malaysia's BIM Roadmap. It is hoped that the findings of this research will be helpful to policy makers and construction industry seeking to review the existing BIM Roadmap and thus find viable strategies for BIM capacity building and development that is in line with visions of Malaysian Construction Industry Master Plan (CIMP) (2007).

2. Literature Review

Building Information Modelling (BIM) is recognized as the latest development in construction. Building Information Modelling (BIM) is "digital representation of physical and functional characteristics of a facility creating a shared knowledge resource for information about it forming a reliable basis for decisions during its life cycle, from earliest conception to demolition" (Snook, 2011). BIM is a collaboration of designing, creating and maintaining assets by adopting BIM technology (Blackwell, 2012).

Gu and London (2010) define BIM as an IT enabled approach that involves applying and maintaining an integral digital representation of all building information for different phases of the project lifecycle in the form of a data repository. CIDB (2018) defines BIM as a modelling technology and set of processes to produce, communicate, analyse and use digital information models throughout the construction project life cycle. Similarly, Public Works Department (2018) defines BIM as a modelling technology that involves the preparation and use of a 3D digital model which contains information to improve the delivery system throughout the project

life cycle. The definition adopted for this research is by Snook (2011) as the author's BIM definition is endorsed by significant bodies including the UK's RIBA and USA's National BIM Standards Committee, which is Building Information Modelling is digital representation of physical and functional characteristics of a facility creating a shared knowledge resource for information about it forming a reliable basis for decisions during its life cycle, from earliest conception to demolition.

Figure 1 shows BIM tool that produce digital models from projects information in projects adopting BIM compared to conventional practice, while the roles and responsibilities of stakeholders are similar. The use of BIM tools eliminate the traditional 2D paper-based into virtual digital models in managing project information and promote collaboration and communication among stakeholders. As conventional practice, stakeholders work independently without coordination with others, that generally lead to mistakes and delay, in managing project information and making decision respectively (Ahmad Latiffi et al., 2015).

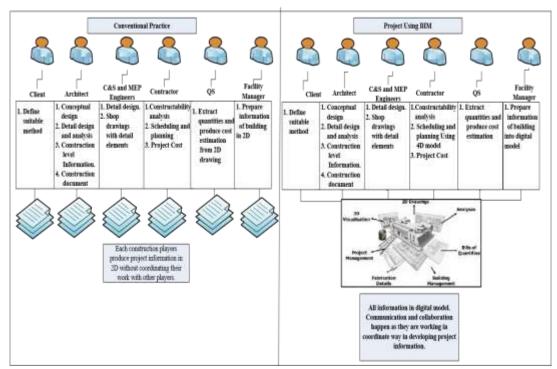


Figure 1: Comparison practice between conventional and BIM project (Ahmad Latiffi et al., 2015)

According to Bew and Underwood (2010), the level of BIM adoption can be differentiated based on their levels of maturity: Level 0, Level 1, Level 2, and Level 3. Hergunsel (2011) categorised BIM uses in building lifecycle into primary and secondary uses. One or more BIM uses can be assigned to specific BIM dimension (3D, 4D, 5D, 6D and 7D). Among others, the stakeholders are clients, architects, engineers, quantity surveyors, contractors, and BIM consultants. The stakeholder's roles and responsibilities in BIM projects is link to the BIM dimensions. BIM dimensions are defined on the information availability and its connectedness (Sediqi, 2018). The various BIM dimensions are shown in Figure 2. 3D and 6D is associated with architects and engineers, 4D of contractors, 5D of quantity surveyors, and 3D to 7D of clients.

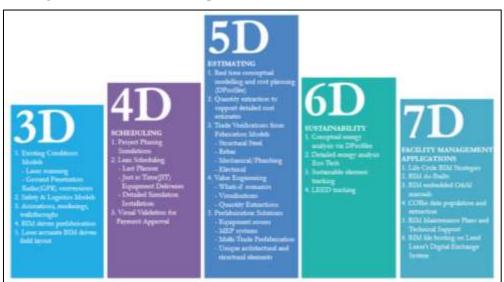


Figure 2: BIM dimensions (http://bimtalk.co.uk/ cited in Eleftheriadis (2014))

3. Discussion and Conclusion

The research flow of the study includes the four major steps which are (1) literature review, (2) data collection (exploratory interviews), (3) data analysis including transcribing of the interview data and analysing according to themes, and (4) writing of findings and writing of discussion. Literature review is a review from important articles, books, journals and so on which are related to the research topics. The primary data is obtained through fieldwork and indepth interviews. Purposive sampling and snowballing sampling has been carried out due to difficulties in examine the population. The target respondents are the clients, architects, engineers, quantity surveyors, and contractors. The respondents who have been selected are those who have BIM working experiences and involved in BIM projects. The main reason for choosing them is they are more likely familiar with their roles in adoption of BIM based on their profession. Besides, they are also more likely familiar with the challenges faced in BIM adoption based on their profession. The list of stakeholder firms that have been involved in BIM projects is shown in Table 1. There are 2 of developers and engineers, 3 contractors and quantity surveyors, and 1 and 4 of architect and BIM consultants respectively.

Roles	Interviewee	Position
Architect	A1	Assistant Architect
BIM consultant	B1	BIM Manager
	B2	BIM Specialist
	B3	BIM Coordinator
	B4	BIM Coordinator
Contractor	C1	M&E Manager
	C2	Senior Manager
	C3	BIM Coordinator
Developer	D1	Project Director
	D2	Assistant Project Manager
Engineer	E1	Senior Civil Engineer
	E2	Executive BIM
Quantity Surveyor	Q1	BIM Director
	Q2	Assistant Manager
	Q3	Project Executive

Table 1: List of respondents

The Malaysia's BIM Roadmap (2014-2020) consists of seven pillars: (1) standards and accreditation; (2) collaboration and incentives; (3) education and awareness; (4) national BIM library; (5) BIM guidelines and legal issues; (6) special interest group; and (7) research and development. For objective 1, it is found that only 9 out of 15 respondents (60%) are somewhat aware with Malaysia's BIM Roadmap 2014-2020. The stakeholders are architect (1), BIM consultant (4), contractor (2), developer (1), and engineer (1). The remaining 40 percent have heard about the roadmap, however unfamiliar with the content.

Table 2 shows the opinion of stakeholders regarding Malaysia's BIM roadmap. 60 percent of the respondents stated that the government should increase the stakeholders and public awareness on BIM. Respondent C1 stated that professionals that are BIM ready in the market are limited, thus the government should either provide in-house trainings or promote external trainers (such as by professional bodies) to the industry. Meanwhile, 40 percent of the respondents requested common standards to be used in BIM projects as mandated by government for project over RM100 millions. For example, they suggested the implementation of BIM ISO 19650 and BIM Protocol. Respondent B1 stated that Malaysia are currently moving to Level 2 BIM implementation and is hopeful that by end of 2020, the government will impose the application of BIM similarly as Singapore for all their projects. Respondent Q1 expected that the frontliners of BIM (architect and engineer) to provide BIM models that are compatible to other stakeholders such as quantity surveyor (for automated quantity take-off) and contractor (for planning and scheduling).

For BIM guidelines and legal issues (40%), a new or inclusion of BIM clause in the contract (terms and conditions) is essential particularly the cost of BIM implementation. Respondent C2 stated that there are dispute whether BIM cost have been included or excluded in the project value as there is no indication in contract of how many percentage that needs to be spend for BIM program (such as engaging BIM consultant). Twenty seven percent (27%) of respondent's expectation fall within collaboration and incentives. The respondents highlighted that enforcement is essential to assist the implementation of BIM in construction projects. Respondent Q2 claimed that government should provide subsidies to promote BIM implementation. Respondent C2 personally thinks the issues related to BIM can be solved through the stakeholder's commitment in finding solutions at their level. He stated that "I think government has done good enough in promoting BIM, increase public awareness and so on, we cannot just leave it and blame government." Similarly respondent E1 stated that "if the company has the initiative to implement on BIM for sure we can speed up the productivity in construction industry."

Pillar	Standards & accreditation	Collaboration & incentives	Education & awareness	National BIM library	BIM guidelines & legal issues	Special interest group	Research & development
A1			/				
B1	/	/					
B2	/						
B3	/						
B4	/						
C1			/				
C2		/	/		/		
C3	/		/		/		

 Table 2: Stakeholder's Awareness on BIM Roadmap in Malaysia

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D1		/			/		
D2			/				
E1					/		
E2			/		/		
Q1	/		/				
Q2		/	/				
Q3			/		/		
freq	6/15	4/15	9/15	0/15	6/15	0/15	0/15
%	40	27	60	0	40	0	0

It is also found that in total, there are 14 stakeholders' needs in developing their BIM practice (as shown in Figure 3). The needs can be categorised into four main groups: People (4), Process (3), Policy (2) and Technology (5). The highest need for stakeholders in developing their BIM practice is People (45%), followed by Technology (27%), Process (21%) and lastly is Policy (6%). For people, 14.6 percent of respondents stated that they require skilled workers and worker's willingness to change respectively. In addition, the respondents expressed that experienced workers (12.5%), and retention of skill workers (4.2%) are required to facilitate BIM in a project. For Technology, the respondents stated that higher investment cost (14.6%) is required to adopt BIM. The cost is to buy the required software and hardware (such as computer and server), and to send their workers for training. In addition, they needs to purchase licenced software (2.1%) and compatible software (6.3%) for better collaboration among stakeholders. The respondents are also concerned about the types and duration (4.2%) required for learning appropriate software. For Process, better coordination (8.3%) and communication (2.1%) are essential for BIM environment. Additionally, the respondents raised their concern on missing standards (6.3%) and return on investment (4.2%) when applying BIM practice. Top management support (2.1%) and BIM contract requirements (4.2%) under Policy are the least concern by the respondents.

Figure 3: The stakeholders' needs in developing their BIM practice



In conclusion, the findings show that all respondents are aware (60%) of the Malaysian BIM Roadmap 2014-2020 and shown great anticipation towards the roadmap. It is also found that People (45%) is the priority needs by the stakeholders in developing their BIM practice, while the least important is the Policy (6%).

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An Internal Marketing-based View of Porter's Model of Competitive Advantage: The Conceptual Framework

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Abstract: Organisational competitive advantage was often associated with external customers. However, internal marketing (IM) theory highlights the importance of employees in organisational competitiveness. IM treats employees as internal customers and their needs have to be fulfilled first before the external customers'. Despite the importance of human capital, there was no model developed to analyse the competitiveness of an organisation from internal market perspective, unlike Porter's Five Force model that was used extensively to gauge the level of competitiveness of an organisation from external marketing perspective. IM states that attracting, developing, motivating and retaining qualified employees lead to employee satisfaction. This paper attempts to use Porter's model to understand the nature of competitiveness from internal market perspective. The study also suggests means to assist employers in attracting and retaining good employees, thus establishing a strong competitive advantage from within the organisation. It was found out that Porter's five force model can be used to measure the competitive edge organisation possesses through its manpower

Keywords: Competitive advantage, Human resource management, Internal marketing, Porter's five forces

1. Introduction

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The original Porter's (1990) model of competitive advantage or better known as the 'five forces model' was set in a manufacturing industry context, but later was modified to cater for the production and delivery of services. Chen and Hsieh (2008) highlighted some issues that need to be considered when adapting the said model in the service industry.

First issue is in relation to the management of service delivery where it becomes more complex as compared to the delivery of products because services are intangible 'outputs' that are often used by customers or disappear altogether (Sasser, 1976; Chase & Aquilano, 1998). This means reducing delays and waiting time in the delivery of services become crucial. Thus, 'production process' can be regarded as part of customers' purchases. This leads to the second issue where service production refers to performance (not object). Service firms do not have to carry inventories of their products in the traditional sense (Lovelock & Yip, 1996), but differences in the production process itself can lead to differences among competing service firms (Mills & Morris, 1986; Shostack, 1987), specifically the 'service interaction' part of the 'production process of service'. Since there are many ways to interact with customers, the fourth issue is the need to have service standardisation to ensure service quality. Essentially, the main contributor here is the employees as they are the integral part of all three issues stated earlier. Hence, the issue of managing employee emotions to achieve successful service production and delivery is important and need to be addressed in a tactful manner because employees are 'emotional creatures' said to have the desire to express organisationally desired feelings during interpersonal transactions (Morris & Feldman, 1996).

The points mentioned above will feel very familiar as Internal Marketing (IM) theory is introduced in this paper. IM is defined by Berry in the 1970s when it was first developed as a marketing tool that treats employees as internal customers and jobs as internal products and satisfying employees come first before satisfying external customers because IM suggests that satisfied employees will lead to satisfied customers because of the positive experiences encountered by customers throughout their dealings with the service firm's employees. All issues presented earlier in modifying Porter's competitive model and IM theory emphasised the importance of employee role in ensuring service quality.

The following sections of this paper will explain in further details the concept of competitive advantage in Porter's model and IM theory and how these two can be complementary thus contributing in organisational competitiveness through its manpower.

2. Literature Review

2.1. Organisational competitive advantage

Competitive advantage can serve as one of the indicators to show that an organization can earn superior business performance than its competitors by utilizing its assets and/or competencies. Two schools of thoughts that had influenced competitive strategies thus playing an important role effecting competitive advantage of an organization are: (1) Porter's Five Forces Model (1994) that evaluate positioning theories through competitive strategy structure and make use of the five forces to analyze the competitiveness of an industry; and (2) Resource-based view (RBV) suggested by Wernerfelt (1984) which suggests that competitive advantage of an organization is built on the basis of its core competences (tangible and intangible resources) (cited in Lee and Hsieh, 2010).

Whilst Porter's model focuses more on the external market conditions that could affect organisation's competitive edge against its rivals, RBV on the other hand supports the notion internal marketing (IM) bring forwards where emphasis is given to employees and their satisfaction at work. More often than not, these two schools of thoughts were used separately by researchers in competitive advantage analysis. The following discussion attempts at integrating these two schools of thoughts by using IM as a bridging tool, and hope to reap the benefits of the convergence of ideas of these theories and models.

It is important to assess the competitive edge of an organization from its human capital point of view as emphasized by Barney and Arikan (2001:173; cited in Soh, 2005) who stated that "... Resource-based logic suggests that socially complex resources and capabilities should be among the most important sources of sustained competitive advantage for firms ...", and human resource is one example of the socially complex resources. Hence, competitive advantage is not only obtained from superior product quality or price tags, but more so from the strength of labour possessed by the organization.

Many previous researchers admitted to the fact that there are two opposing 'teams' in analyzing competitive advantage, such as Dogl and Joltbrugge (2010) who eventually decided to focus on specific industry, and therefore follow Porter's approach. But this article is trying to prove that these two schools of thoughts co-exist in a symbiosis relationship, hence should not be looked at separately, rather complimentarily.

2.2. Internal marketing (IM)

Service marketing theories acknowledge that the involvement of service employees in the marketing process is capable not only reinforcing and changing favorably customers' beliefs, attitudes, intentions, but also has a direct impact on the productivity and quality of services offered (Larkin & Larkin, 1996; Singh, 2000). Consequently, marketing scholars introduced the fifth P of marketing mix: people-power (Judd, 2003). Service employees are involved in the marketing process through their interactions with customers (Donavan, Brown & Mowen, 2004). The importance of people-power is similar to the idea preached by Berry (1981; cited in Rafiq & Ahmed, 2000) who introduced Internal Marketing (IM) theory that focuses on employee satisfaction first and foremost.

IM treats employees as internal customers and jobs as products that satisfy this group of people while keeping in mind the organisational goals. The underlying notion of IM is to gain employee satisfaction in order to satisfy customers by attracting, developing, motivating and retaining qualified employees (Berry & Parasuraman, 1991; cited in Rafiq & Ahmed, 2000). The philosophy of IM lies in the notion that employees constitute as its internal market, which has customers, suppliers that formed within the organisation which intended to fulfill the needs of both the internal and external customers (Berry, 1981; cited in Rafiq & Ahmed, 2000).

Expanding the idea from IM premise that employees are organisation's (internal) customers, it indicates that organisation appeals to them through 'marketing-like approach' (Ahmed, Rafiq & Saad, 2003). Applying the marketing-like approach to this is the fact that organisations as employers are in competition to hire and retain good employees (which in this case is regarded as internal customers). In order to attract good candidates or retain good employees, organisations must differentiate themselves from other employers, just like how they differentiate themselves against other market players/competitors.

Putting these facts into perspective, this paper attempts at applying and utilising the existing Porter's five force model in assessing organisations (internal) competitive advantage. The model is deemed suitable by the researcher for the purported reasons because of the lack of such well-established model in assessing competitive advantage from internal market perspective.

2.3. Porter's five force model

Competitive advantage is differentiating oneself to its competitors by creating value in the value chain. Value chain is then defined as a system of activities (both primary and support activities) undertaken by the firm in the process of value creation (Baldwin & Evenett, 2014). Competitive advantage needs to be analysed beyond its traditional immediate organization context, instead this paper attempts at highlighting the importance of understanding competitive advantage from within the organization i.e. through the human resource management system as survival depends on organization ability to adopt a holistic perspective on their business, including all stakeholders: customers, employees, retailers, suppliers and shareholders (Chen & Hsieh, 2008). Hence, the internal value chain of a firm from the production to marketing, essentially involve people i.e. employees.

Conventional/traditional marketing looks at Porter's Five Forces Model as a guidance to gauge the level of competition an organization has to face in selling their products and maintaining their brands by looking at several different indicators. The indicators are: (1) threats of new entrants, (2) threats of substitute products/services, (3) bargaining power of customers/buyers, (4) bargaining power of suppliers, and (5) intensity of competitive rivalry. By examining these indicators/factors, it would help organizations in identifying their weaknesses as well as strengths which helps in determining the type of business strategy they are going to adopt. Some common business strategies are cost leadership strategy, differentiation strategy, innovation strategy or operational effectiveness strategy.

The idea of using Porter's Five Forces Model in the context of IM has yet to be explored in greater details. Since IM has identified employees as customers and jobs as products, it is believed that Porter's Five Forces Model can be catered to suit the analysis on internal labour environment. There is a fierce competition among employers in getting the best possible candidates from the human capital/labour market. As such, rather than using the model to sell products as it has been widely used in the past, this paper will further discuss how the model could help organizations in 'selling' the jobs/positions/career they offer in the labor market.

2.4. Convergence of IM and Porter's five force model

2.4.1. Threats of new entrants -> Threats of new employers

In the traditional Porter's model, threats of new entrants are often associated with the possibility of new rivalries come into the same market due to opportunities and abundance of resources in the industry. Should the market have low barriers to entry, it indicates that new competitors can easily set up their "shop", hence it could hurt profitability as margins reduced due to fierce competition. Barriers to entry in this context, among others are requirements for capital or skills investment, availability of raw material and labour forces.

Putting this in the context of internal marketing where emphasis is given to the capitalization of human resource, competition in getting the best employees is becoming more severe should the market allows new participants to join in without much hassle. When new companies are established, indirectly, jobs or positions are being offered to the market. Hence, existing companies have to be on their toes to ensure existing employees are not lured to the new rivals as well as ensuring current recruitment process is able to attract the best possible candidates looking for jobs in the market, while competing with the newly set up companies.

Attracting talents is not an easy feat. Job seekers usually rely on employer's reputation and brand image in influencing them to apply for a job. According to employer brand theory, employees are ambassadors for the employer. They might speak for the organisation or they could speak against the organisation. What they do outside of the office area or office hours, could influence how external parties view the organisation. Of the employees show good behaviours and speak highly of the organisation, naturally outsiders would trust the information disseminated to them as they perceive employees as the mouth-piece of the organisation they work with. Thus, importance of employees as brand ambassadors and advocates of the organisation's brand is in line with the concept of IM. Organisation cultural beliefs is one of IM elements that could be used to influence employees in behaving in certain ways to the advantage of the organisation. Organisational cultural beliefs shape the kind of affiliation employees feel towards the organisation. Shared values, mission and vision is a good way to make employees like they are a part of the organisation. Hence, its success or failure also affects them as individuals. When the sense of belonging is strong, employees carry their organisation's business objectives in mind constantly, even outside of their official working hours

2.4.2. Threats of substitute products/services -> Threats of employers offering similar perks

Threats of substitute products/services could come from both existing and new rivals. The existing players in the market could have decided to launch a new product that is somewhat similar to their competitors. In this case, the industry has become even more competitive because similar products will give customers more option to choose from. Customers might respond well to the new products if they are priced right and lavishly promoted/advertised.

Looking from the human resource point of view, threats of substitute products/services can be interpreted as existing or new employers offering similar or better salary package and benefits. This means that employers who gained extra edge in retaining and attracting labour force through monetary rewards such as this will find themselves facing tight competition with other companies who might be offering the same.

This is why internal marketing plays an important role in retaining and attracting labour force by looking at other types of marketing efforts and activities that are preferred by the majority of the employee to ensure their loyalty and commitment. Often companies are short-sighted in believing that monetary rewards are sufficient to maintain its requirements on labour force. Because we are dealing with "human", this has become even more complex over the years because finding common traits are nearly impossible due to individual characteristics and preference of the people.

2.4.3. Bargaining power of customers/buyers -> Bargaining power of employees

Buyers' decisions are dependent on mainly two factors: price sensitivity and the perceived quality of products/services (Rajasekar and Al Raee, 2013). Price sensitivity in this context is influenced by both the income of the buyers and the associated values buyers place on the offered products and services. This notion brings about another important concept in understanding customer behavior i.e. the switching costs. Switching costs are fixed costs faced by buyers when they change suppliers. Low switching is unfavourable to the organization as it means that buyers can easily replace the products with others that are offered by other players in the same market. It also serves as a hint that the products you offer have no superior or added values as compared to other available products in the market that they are easily replaced.

On the other hand, bargaining power of employees lies in the expertise/experience they possess which is critical for the organization. This is in line with one of the types of 'power' suggested by French and Raven (1959; cited in Northouse 2010) based on their early research. The five types of power are: referent power, expert power, reward power, coercive power and legitimate power. Having 'power' is interpreted as having the capability to influence others to do things others would normally do (Singh, 2009). Hence, when employees have certain expertise, knowledge or experience that is highly sort after by employers, it makes them in control and possibly leads them in demanding benefits that are beneficial to them more than what the organization can afford to offer. This is especially true because employers know that the costs to recruit new employees are higher than retaining the existing ones.

One of the most popular IM initiative is training and development. Employees feel their worthiness by the amount of investments employer makes in their career development. However, development plans can be a double-edge sword to employers. Sometimes, when employees have been trained well and good through formal training or on job experience, they

are scouted by other employers for being good at what they do. However, if employers do not invest in enough training program for fear of loosing the employees and not getting a return on the investment made in their personal development, this could put employers at a disadvantage because untrained employees cannot perform as expected and what worse is having to retain the untrained employees will further aggravate the situation employers are dealing with. Hence, it is advisable for employers to provide enough training to their employees, and at the same time put in measures to retain them so the pool of talents that the organisation has invested in remains beneficial to the organisation. Pairing up training initiative and other counter measures to retain employees is what IM set out to do.

2.4.4. Bargaining power of suppliers -> Bargaining power of labour union

The suppliers' power of negotiation in the conventional sense usually focuses on the relative size of and concentration of suppliers relative to industry participants. Secondly, it focuses on the degree of differentiation in the inputs supplied (Grigore, 2014). If bargaining power of customers/buyers relates to buyers' switching costs, bargaining power of supplier is then related to organisation's switching costs. This means that the ability of suppliers to change the price charged to specific buyers based on the perceived value created for each of those buyers indicates a market with high suppliers' power of negotiation, hence high organisation's switching costs.

From internal market point of view, bargaining of suppliers can be interpreted as the bargaining power of the employees themselves. This is slightly different than the point discussed under the bargaining power of customers earlier which also indicates the ability of employees to demand certain things due to the expertise or experience they possess. Here, the power comes more from the collective power of employees under legal terms i.e. workers'/employees' union. Some examples of strong and influential employees' unions in Malaysia are National Union of Bank Employees (NUBE), National Union of Flight Attendants Malaysia (NUFAM). With the recent demands by NUBE for betterment of bank employees' minimal pay and working hours, employers have no choice but to consider this when packaging the salary/benefit schemes for their employees.

When it comes to the power of union, IM arguable could have prevented any aggressive movements or demands that union could have made by frequently gauge the needs of employees to ensure their satisfaction at work. In most cases, union strikes or walkouts were due to employees dissatisfaction at work place arising from unfair treatment, obvious pay gaps, unreasonable work hours (refer Amazon Prime case Day at https://www.inverse.com/article/46922-amazon-prime-day-boycott-prompted-by-unionwalkout-in-spain) and many other reasons that could have easily been prevented or at least controlled by engaging in IM strategy. IM strategy focuses above all, satisfying the employees, because it believes that satisfied employees will lead to satisfied customers through memorable experience and superior products offerings or services rendered.

2.4.5. Rivalry among existing competitors -> Rivalry among existing employers

Keep your friend close, and your enemies closer. This cannot be truer in analysing the competitive advantage of an organisation. This is proven so in the last element of Porter's model. Understand the rivalries' strategies is just as important in maintaining organisational competitiveness as any other elements in the model. Only when the rival's strategy is known can the organisation makes a counter move to win the market. Number of competitors in the market would determine the intensity in the marketing strategy an organisation has to

undertake. The traditional marketing strategies like differentiation, low cost and niche strategies are made complicated with the advancement of technology (Obradovic, Ebersold & Obradovic, 2015. According to Momaya (2005), there is a relationship between technology management and competitiveness. Rather than just the 'next door neighbor' companies (companies in the same industry), nowadays, organisations have to analyse their competitiveness level at an international/global scale, where competitiveness is now anlaysed at a country/nation level (Mittal, Momaya & Sushil, 2013).

From the internal market perspective, the concerns in regards to existing rivalries are almost similar to the ones identify in the external market. Number of organisations in similar industry (or not) can be the potential rival employers as they are capable of snatching an organisation's cream of the crop in labour force. Technology also plays an important factor in retaining and attracting employees because with technology, work from home has become the popular bait to attract potential employees who these days look more into non-monetary rewards such as work-life balance, freedom of time, empowerment, than monetary rewards. This is in line with Collin's view that stated competitiveness of business requires the facilitation and stabilization of flexible employment relations (2001). Another non-monetary benefit employee looks for is the flexible working hours (Tulejova & Kucharcikova, 2010). Organisations which were not set up to play against the more flexible type of organisations might lose out when it comes to appealing to the new generations, generation x and generation y (Kenan-Smalls, 2011).

2.4.6. Proposed conceptual model for convergence of Porter's model and IM

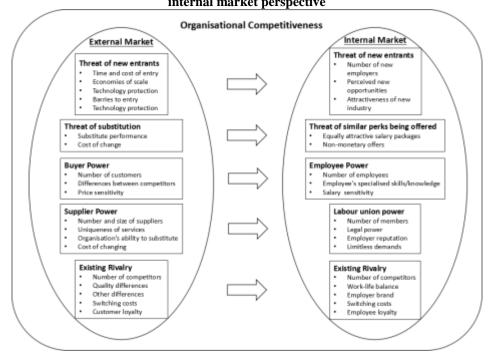


Figure 1: Assessing organisational competitiveness using Porter's five forces model from external and internal market perspective

2.5. IM and Porter's five forces contributions to human resource management (HRM)

It is important to analyse the intensity of competitiveness among the existing rivalries in the industry. This to assist in determining the possibility of efforts spent by organisations go to waste due to head-on-head collusion in competition. This is especially true for the high saturated market where many players and stagnant customer base occupy the business

environment. What Porter's model tries to highlight here is this fact although important, but only plays a role as one of the factors to determine the attractiveness of an industry or a market (Karagiannopoulos et al., 2005). Besides the existing rivalries, competitiveness should be analysed by looking at the potential new entrants, the bargaining power of buyers and suppliers as well as the threats of substitute products or services, as depicted in Porter's five forces model. It is so important to improve the human resource management as it was deemed one of the factors in increasing organisational competitiveness in the labour market. According to Buyar (2015), nowadays, not only employees, but employers also compete with each other in the labour market. The importance of managing human resource is also supported by Heffernan and Harney (2016), that a broad range of organisational performance measures include among many are employee performance and HR performance.

Internal marketing initiatives plays a crucial rule when it comes to managing human resource in order to gain a market edge. Hiring the right employees who best suited the jobs/positions lies in the capability of organisations to offer the things seek by both existing and potential employees. Not only that, loyalty and commitment also can be influenced by the things organisation offers to its employees. This point reiterates the importance of internal marketing as it helps employer to understand the variables that would affect the behavior of employees. Some elements offered by organisations might not be as desirable in employees' perspective as much as the employer thought. Knowing what to offer to employees would give an edge to the organization where it can optimize the investments (time and money) on incentives that are compelling in influencing positive attitudes and behavior of employees, hence contributing to the overall performance of the organization.

This is especially true when the organisation is facing an 'employee's market' situation where labour force has a little bit of an edge against the employers. The term 'employee's market' refers to a situation when employers are having a tough time finding qualified employees due to shortage of labour because of government interventions that put a cap on the number of foreign workers an employer can hire or in the situation where the labour market is suffering from 'brain drain'. This is another dreaded term employer despises where professionals left the country to work abroad, bringing with them all the expertise, skills and knowledge. In these situations, it is even more crucial for organisations to assess their competitiveness from internal market perspective, more so than external market. Organisations selling services are more vulnerable as compared to organisations selling products in the 'employee's market' and 'brain drain' situations because unlike products which are often homogenous and can be mass produced by machine at the factory, services are unique and often rendered by skilled employees through years of experience and training.

3. Conclusion

The above discussion on application of Porter's five forces model from the perspective of internal marketing is important to understand the competitiveness of the labour market from the eye of an employer as opposed to using it to understand the competitiveness of the conventional market of selling goods and services. Just as previous researchers have used Porter's Model to analyse the competitiveness and attractiveness of specific market by products, this study however, urges researchers to apply the model in term of competitive advantage as an employer. This is plausible because

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An Investigation Into The Influences Of Online Learning Environments On English Foreign Language Students' Autonomy At The University Of Da Nang, Viet Nam

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Abstract: This paper examines some online learning environments such as Edmodo, Moodle, MyELT, and Google Classroom which have been implemented by English teachers of Da Nang University of Foreign Language Studies to conduct blended-learning or online English intensive courses for students at the University of Danang in the past three years. Basing on analyzing pedagogical and technical features of these online learning environments, this study reveals the important role of the online learning environment in increasing the autonomy of students in learning English. Thereby it leads to the positive influences on the students' learning motivation, study habits, and English proficiency. Furthermore, the study addresses several academic benefits that the students can get from using several online assistant tools like Virtual Writing Tutor, Gramarly, Ozdic. collocation, etc. which often go along with these kinds of learning environments. These tools, and hence, can make the students more and more autonomous and interested in the online or blended-learning English intensive courses at the University of Da Nang, Viet Nam.

Keywords: online, learning environment, autonomy, influences, blended-learning

1. Introduction

The development of Information Technology has increasingly had a strong impact on the education principle, especially on the language teaching and learning discipline. Thanks to a multitude of online English teaching and learning platforms and software applications on the Internet or modern smart phones, the English foreign language (EFL) discipline has been greatly improved and developed in the past decade.

Since academic year 2017-2018, most of the teachers and students of Da Nang University have become quite familiar with studying in online or virtual learning environments when taking different kinds of English courses. The common virtual English learning environments include platforms such as Edmodo, Moodle, and MyE–an English learning website created by National Geographic Learning in the USA, and Google Classroom. Going along with these platforms, some software applications such as Virtual writing tutor, Grammarly, online Oxford Learning Dictionary, or online English collocations dictionary (ozdic.com) have been recommended (by the English teachers) to the students as virtual assistant tools to help them improve their pronunciation, writing and speaking skills during their online learning process. However, the conducting EFL courses in such virtual learning environments at the member Institutes at the University of Danang University is still spontaneous and has not been investigated systematically yet. These facts, so, encourage me to carry out the present study.

2. Definition of key terms

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2.1. What is online or virtual learning environment?

According to Rossi (2010), online learning is education that takes place over the Internet. It is often referred to as "e-learning" among other terms and it includes Internet-based courses offered synchronously and/or asynchronously. Online learning environments (OLE) offer an educational domain that is unique in terms of the potential for interaction, participation, and collaboration. Among the benefits to be derived from collaborative learning is the development of critical and problem-solving skills in a social atmosphere where learners can share, consider, and challenge one another's ideas.

In Wikipedia, a virtual learning environment (VLE) is an online-based platform that offers students and professors digital solutions that enhance the learning experience. Unlike a virtual classroom, which means to replicate and replace the physical classroom environment for distance learners, a VLE harnesses technology to supplement an in-class experience, with, for example, digital communication, interaction, and quizzes or polls run through the VLE.

2.2. What is autonomy?

In Oxford learners' dictionaries, autonomy is the ability to act and make decisions without being controlled by anyone else. And in research on human behavior in 2003, Wall suggested that an autonomous man can plan and strategize his intentions, decide what is important and worth doing. Besides, he or she has a desire to take control of his life and hence access to an environment that provides a wide range of options.

2.3. What is autonomy in language learning?

Ellis and Sinclair (19892) advocate that an autonomous student is responsible for and can take control of his learning process to make it more effective. He can carry on learning outside the classroom and set up his self-studying strategies transferred to other subjects.

In terms of learning a foreign language, the value of being autonomous is far-reaching because it involves the individual's ability not only to learn but also to communicate independently, which Littlewood (1996) describes as major factors enabling a person to make choices in life, they also contribute to each learner's autonomy as an individual. The notion of the value of meaningful, autonomous communication in the target language emerges as a significant factor of autonomy in language learning.

Basing on Littlewood's notion, Dillenbourg (2002) refers to an autonomous EFL learner with three characteristics: a good communicator with the ability to use the language creatively and select strategies for communication in specific situations; a good learner with the ability to work independently and select suitable learning strategies within and beyond the classroom, and an individual in an EFL environment who can express personal meaning and create individual learning contexts.

3. Carrying out the research

3.1. Research methodology

To explore what impacts of some online learning environments on the students' autonomy in learning English at Da Nang University, this study attempted to find out the answers to the two questions:

- 1. What technical and pedagogical features are there in the online learning environments conducted as teaching English for students at UDN?
- 2. How do these features impact on EFL student autonomy during their online English learning process?

Both the descriptive and quantitative methods are used to accomplish the goal of the study. Based on the materials, the description method describes the pedagogical orientation of three online learning environments conducted as teaching English for students at UDN. These environments include platforms Edmodo, Moodle, Google classroom, MyELT- an English learning website created by National Geographic Learning Organization, in the USA, and four software applications named Virtual Writing tutor, Grammarly, online Oxford Learning Dictionary, and online English Collocations Dictionary (ozdic.com).

The quantitative method is applied with the investigating tool of a questionnaire to collect the student participants' feedback on technological and pedagogical features of these online environments, as well as on their autonomy during their online English learning process.

3.2. Research Objectives and Participants

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As mentioned above, the four online English learning environments Edmodo, Moodle, Google Classroom, and MyELT are the subjects of this study. Firstly, the study describes and analyzes their technical and pedagogical features, and then the usefulness of each feature is assessed by the users via a questionnaire. Besides, 270 students who have taken several English courses at different levels at their colleges or universities since the year 2018 and 9 English teachers are involved in this study as the participants.

The information in Table 1 below presents some details of the online learning environments and English courses that have been conducted in the member Institutes of Da Nang University so far.

	Online learning environment	Universities	# Students	Language course	Englis h level
1	Edmodo	University of Science and Technology, University of Education	70	General English	A1- A2 A2 - B1
2	Moodle	University of Science and Technology, University of Foreign Language Studies	70	General English	A1- A2 A2 - B1
3	MyELT	University of Economics, University of Technology Education	70	General English	A1- A2 A2 - B1
4	Google classroom	University of Foreign Language Studies	60	Business English writing	B1-B2 B2- C1

 Table 1: The online learning environments and English courses

3.3. Issues to be surveyed

To complete the purpose of investigating the influence of the online learning environments on the EFL students' autonomy during their English learning processes, the researcher attempted to examine each platform and carry out a survey to get the participants' feedback on the following issues.

- Issue 1: Mobility of contents and learning activity types inside and outside lessons or modules
- Issue 2: Feedback or assessment of the learners' learning process
- Issue 3: Simplified and facilitated technical operation
- Issue 4: Multimedia and connectivity
- Issue 5: Attractive and friendly-user interface
- Issue 6: Extension of diversification of lesson contents and types of learning activities
- Issue 7: Quality of learning activity types
- Issue 8: Capability of individualization of learning procedure
- Issue 9: Students' motivation for studying English
- Issue 10: Learning habits

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Issue 11: Improvement in students' English competency

This study classified these eleven issues into three categories:

- i) the technological features including issues number 1 to number 5;
- ii) the pedological features according to the principles of Communicative Language Teaching containing issues number 6 to number 8;
- iii)the influences of the online learning environments on the EFL students' autonomy relating to the rest issues.

First, the 270 student participants were required to rate the impact (on a scale from value 1-no effect to value 5-very influential) of the first eight issues of the category technical features and pedagogical features on their autonomy as taking online English courses. Next, they made their self-assessment of the improvement of their learning motivation, study habits, and English proficiency (on a scale from value 1-not improved at all to value 5-greatly improved). Finally, both 270 students and 9 English teachers highlighted the benefits that some virtual assistant tools like Virtual writing tutor, Grammarly, online Oxford Learning Dictionary, and online English collocations dictionary (ozdic.com) bring to users during their English learning processes in these virtual learning environments.

4. Results

4.1. The student participants' rating the impact of technological features on their learning autonomy

The study investigated each OLE and received the participants' high evaluation (with value 4 or value 5) of the impact of technological features on their learning autonomy which is presented in the following table.

Table 2: Student participants' evaluation of the impacts of the five technological features on their learning
autonomy

	OLE	Number ofPercentage (%) of raters with high rating (RWHR) for issue				Average percentage of		
	OLE	raters	#1	#2	#3	#4	#5	RWHR
1	Edmodo	70	60	66	53	62	57	61.33 %
2	Moodle	70	70	74	81	85	69	74.83 %
3	MyELT	70	77	85	78	85	88	80.50 %
4	Google Classroom	60	68	81	64	60	65	66.33 %
	Total	270	275	306	276	292	279	

With the average total percentage of the five issues shown in the last column of Table 2, we can see that platform MyELT has the most impact (80.50%) on the students' autonomy in their English learning. Platform Moodle and Google Classroom follow right after MyELT with the rates of 74.83% and 66.33%, respectively. Edmodo has the lowest impact (with a rating of 61.33%).

Among the five technical features, feature 2-auto feedback is rated by student participants as having the highest impact on their self-study. This feature acts as an automatic tutor that often gives immediate feedback and grade for each exercise or activity done by the learners. Furthermore, platforms MyELT can provide users detailed comments and suggestions on the learners' work that could help learners self-recognize their weaknesses, correct the mistakes, practice more, and gradually improve their English proficiency.

The strength or weakness of this feature is closely related to feature 4-the ability of Multimedia and connectivity that is the second strongly rated by student participants concerned with the influence on students' learning autonomy. For example, platforms Google Classroom, Edmodo, and Moodle often synchronize with Google Documents. If users/learners install some virtual writing-editing tools like Grammarly, they will receive a range of up-to-click feedback in details of grammar correction, vocabulary choice, punctuation, and writing tone right after they have typed a word, a sentence, or a text on Google document. Similarly, the platform MyELT with the built-in application software 'Voice Recognizer' can provide users/learners with the ability to record and immediately compare one's intonation and phrasing to a native English speaker, visually present all pronunciation mistakes and give learners as many chances to correct them as possible. And thus, this is a useful way for EFL learners to drill listening and speaking skills and improve their pronunciation as well.

Following feature 4 is feature 5. Besides, platform MyELT with an attractive, user-friendly interface achieved the highest rating of all rating categories in this study. This result is not surprising at all because MyELT is an online English learning site that has plentiful content, an eye-catching interface, dynamic layout with various effects, videos, images, sounds, colors, etc. These factors can stimulate learners to go further insight into the content and thus enhance their English learning autonomy.

The two rest features were evaluated almost at the same rates of 275 and 276. If some particular platform has good feedback, strong connectivity, and an attractive interface, but it does not facilitate users/learners to operate the lessons inside and outside a virtual learning environment, it will probably make learners feel difficult and discouraged. And as a result, their learning autonomy will decrease over time.

4.2. The student participants' rating the impact of pedagogical features on their learning autonomy, studying motivation and habit.

In concern with the pedagogical features, the information in Table 3 presents the student participants' evaluation of the four platforms as follow.

	OLE	Number of raters	Percentage (%) of raters with high rating (RWHR) for issue			Average percentage of
			# 6	#7	# 8	RWHR
1	Edmodo	70	77	68	70	71.66%
2	Moodle	70	82	73	75	77.66%
3	MyELT	70	82	85	87	84 %
4	Google Classroom	60	70	79	88	79%
	Total	270	309	305	320	

 Table 3: Student participants' evaluation of the impacts of there pedagogical features on their learning autonomy

Basing on the average total percentage of the three pedagogical features described in table 3 above, platform MyELT once again achieved the highest evaluation (84%) of its impacts on the English learners' autonomy. The second highest rated platform is Google Classroom (79%), and the Moooodle and Edmodo are ranged at the third and the fourth position.

Although platform MyELT occupied the first position, Google Classroom achieved the best individualized-instruction feature because the learners using this platform are the Englishmajor students. This kind of learner/user took some intensive English courses like English business writing at level B2-C1. So, they used many virtual learning-assistant tools such as Grammarly, online Oxford dictionary, and Ozdic collocation which usually provide them with detailed feedback and suggest an individualized learning path for each learner in one particular learning context.

Similarly, basing on the learning result of each learner which is automatically recorded in "Grade book" in each learning session, MyELT could flexibly propose the most suitable learning strategy for the next session to improve the learning outcomes of each learner. Therefore, this pedagogical feature has the strongest impact on each learner's motivation in all kinds of virtual learning environments.

For the extension of diversification of lesson contents and types of learning activities, both Moodle and MyELT got the highest satisfaction from the student participants. Especially, with the presentation and decoration similar to a magazine, platform MyELT brought EFL learners an impressive, attractive, and exciting expression to the learners.

In comparison with MyELT, Moodle has the simpler layout of lesson content but it includes plentiful types of learning activities designed by the teachers which motivate and push up their learning habits and hence improve their English competences.

4.3. The academic benefits the learners get from some virtual learning-assistant tools

In the final part of the survey, the participants were asked to answer some questions relating to their habit and frequency of using online English learning tools such as Grammarly, Oxford Learner's Dictionary, etc. and the academic benefits that they received from these tools. Out of the four online learning-assistant tools, Grammarly and Oxford dictionary have the most frequent users with 78.5% and 63% respectively, followed by Ozdic collocation 35.1%, and Virtual Writing Tutor reached the lowest ratio of 8.8%.

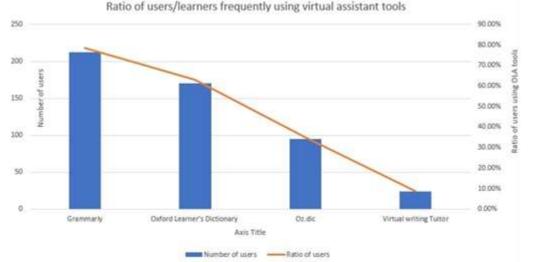


Chart 1: Ratio of users/learners frequently using online learning assistant (OLA) tools

When being asked about the most important benefits that users can get from these tools, a lot of the participants appreciated feature Grammar Correctness and Word choice /Vocabulary Profile included in Grammarly and Virtual Writing Tutor. These features aim to help learners recognize and correct grammatical errors and use the correct collocation. Besides, Grammarly has feature Engagement which a lot of student and teacher participants take into account. This is because it not only provides users with compelling vocabulary and lively sentence variety but also suggests them to choose the vocabulary or sentence patterns that can be the best suited to the context. For Oxford Learner's Dictionary, participants heavily focused on features of Word-level-determination, Synonyms, and Pronunciation. Apart from assisting learners in choosing compelling words, these features help learners' pronunciation and listening skills to be improved significantly as well. Similarly, Oz.dic offers users a variety of collocation types such as Noun-Noun collocation, Adjective-Noun collocation, Verb-Noun collocation, Verb-Adverb collocation, etc. for learners. However, the fact that it does not give any suggestions or hints of using compelling vocabulary or collocations in particular situations can cause beginning learners to encounter some difficulty while producing their text or speech.

Conclusion

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The online English language learning environment plays an important role in increasing learners' autonomy, having a positive impact on the aspects of learning motivation, study habits, and foreign language competency. To have an ideal online learning environment, teachers and leaners need to focus on the synthesis of the technical features and pedagogical features of the software or programs, from which they can make use of the advantages of the learning environment and improving their English competency. Furthermore, there are several academic benefits that the students can get from using several online learning assistant tools like Virtual Writing Tutor, Gramarly, Ozdic. collocation, and Oxford Learner's Dictionary that often goes along with these kinds of learning environments. These tools, and hence, can make the students more and more autonomous and interested in the online or blended-learning English intensive courses at the University of Da Nang, Viet Nam.

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Bankruptcy Risk Among Generation Y in Klang Valley

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Abstract: The purpose of this paper is to investigate the factors that influencing bankruptcy risk among Generation Y in Klang Valley, Malaysia. The independent variables for this study included spending behaviour, credit card usage and financial commitment. This is a quantitative study using probability sampling method and 209 respondents have given their feedbacks via online form. The findings revealed that that there was relationship between spending behaviour, credit card usage and financial commitment with bankruptcy risk. The factors studied in this paper are highly related to the respondent's personal perception and their own point of view. This research ignores external issues such as economics condition or political issue. Bankruptcies among the young generation have huge impact on the country growth and economies, as they are country future talent in stimulating the economy of the country. The results could be used as a guide for the government, financial institutions and public to understand the major factors that contribute bankruptcy risk among Generation Y.

Keywords: Generation Y, bankruptcy risk, spending behaviour, credit card

1. Introduction

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Selangor was the top of the chart as the state has the most number of people whom being declared bankrupt, with 22,593 cases, followed by Johor 12,028 cases and the Federal Territories 11,687 case according to a Minister in the Prime Minister's Department. Majority of the bankruptcy cases in Malaysia was caused by the vehicle purchases. In April 2016, the Insolvency Department recorded 101,537 cases of bankruptcy in the period 2011 to 2015. A total of 28,374 cases involved those defaulting on car loans (Baharom, 2017). Malaysia set an objective to become a high income status country in year 2020, however, the household debts continuously increasing in recent years. The debt problem faced by young generation is highly related to the absent of financial skills and also financial management. In fact, young generation experienced slowed growth in their income earnings (Idris et al., 2016).

An individual who has been declared for bankruptcy indicated that he or she has officially claimed that he or she was unable to repay the debt amount owes to the creditor. In other words, bankruptcy can be illustrated as the legal status of an individual or other entity that cannot pay back the debts it owes to creditors (Diana-Rose & Zariyawati, 2013). According to the Malaysia Department of Insolvency, an individual can be declared for bankruptcy only when a debtor is declared a bankrupt pursuant to an Adjudication Order made by the High Court against the debtor. There are many restrictions imposed on bankrupts; the person was restricted to go abroad and assets will be monitored by insolvency department. Besides that, there is no automatic discharge from bankruptcy in Malaysia. They may be discharged from bankruptcy by the Court or the DGI subject to any creditor's objection (Malaysian Department of Insolvency, 2019).

Generation Y tends to acquire new loan to cover their old debt. Eventually, they have to bear more debt and make their life more difficult. Gen Y or Millennials were born between 1980 and 1994, they are currently between 24-39 years old (Alam et al., 2014). Generation Y is technology savvy, has widely access to the internet and technology device. Therefore, they tend to spend more as these mediums allow users to spend their money virtually without having the feeling of spending real money (Zaminor, et al., 2016). The main factors that caused bankruptcy in Malaysia related to the limited financial management and also inability to repay the outstanding loan (Rajna & Anthony, 2011). Therefore, the objectives of this study is to investigate the factors that influences bankruptcy risk among Generation Y in Klang Valley.

2. Literature Review

Bankruptcy Risk

Bankruptcy came from Latin word "bench" and "break". The meaning of the bankruptcy expressed as "broken bench" as the debtors unable to repay the debt amount (Luckett, 1988). Individual who has been declared bankruptcy need to give up all the assets and belongings according to the Bankruptcy Act 1967 in Malaysia. Individual is not allowed to open a bank account as well as travel abroad without the permission of Director General of Insolvency (Selvanathan et al., 2016). Bankruptcy allows debtors to be exempted from repaying the debt. On the other hand, there were authors who claimed that bankruptcy play a role in solving financial problems during difficult time. This is because, the individual more likely to claim for self-bankruptcy when they faced financial difficulty. Subsequent to this matter, there are increasing number of individuals who tend to declare themselves for bankruptcy whenever they unable to repay the loan.

Spending Behaviour

Remund (2010) claimed that psychographic factors are the main reason that affected people's financial management. This occurred when people unable to control their spending. They are likely to spend their saving for impulsive purchase without thinking about the consequences. Omar et al. (2014) highlighted that people with low self-esteem is more likely to purchase expensive and luxury products in order to repair their value or increasing their self-esteem. They claimed that wealth and luxury material helps them to improve their social power (Arabzadeh & Aghaeian, 2015). People prefer to purchase the product without intention and the only aim is to improve their social status. Selvanathan et al. (2016) claimed that uncontrollable spending without proper management of their money will lead to bankruptcy. One of the factors that influenced high personal bankruptcy are causing by the overspending and also acquiring luxury items (Hilmy et al., 2013).

Credit Card Usage

Individual especially youngsters nowadays can obtain credit card from the financial institution without difficulty. Some of the individuals can obtain the credit card regardless of their income and occupation (Noordin et al., 2012). Therefore, the number of the credit card holders are increasing dramatically in recent years. Credit card usage are directly influenced by the holder's spending behaviour. People who have higher outstanding amount on their credit balance were influenced by their specific attitude. They are unable to control their expenses which caused them to have higher credit debt and more credit cards (Zamzamir et al., 2015). Credit card holders tend to have overspending behavior which caused by impulsive purchase (Juen et al., 2013). As a result, credit card usage plays a role in directly related to the consumer's debt which ultimately lead to personal bankruptcy.

Financial Commitment

Diana and Zariyawati (2013) found that working individual are likely to go bankrupt rather than those who are unemployed. The authors claimed that working individual are highly involved in borrowing which resulted the increasing of monthly financial commitment. Selvanathan et al. (2016) claimed that loan was the major issue that increase personal bankruptcy in the society. Nizar (2015) highlighted that financial commitment can be one of the threat toward the country economy. It will be a huge threat to the economy system when it exceeded certain level.

Financial Literacy

Individual who has limited financial literacy definitely has limited ability to make positive decision (Othman et al., 2015). The authors also claimed that people who have limited financial literacy are unable to make better and accurate decision when they deal with financial decision. Individual who has limited financial knowledge will cause financial difficulties thus ultimately lead to bankrupts. Idris et al. (2013) conducted a research related to the relationship between the level of financial distress and financial literacy and found out that the respondents who have low level of financial literacy, they will normally experience high financial distress level.

3. Research Methodology

This is a quantitative study using probability sampling method and 209 respondents from the Klang Valley have given their feedbacks via online form. Questionnaires was developed to delve their response using Likert Scale of 5. From the review of literature, the theoretical framework was developed as per Figure 1 below.

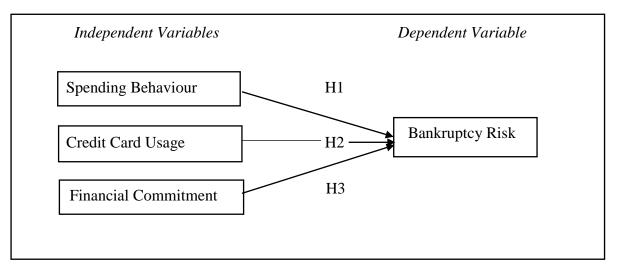


Figure 1: Research Framework

The hypotheses (H) for this study are as below:

H1: There is significant relationship between spending behaviour and bankruptcy risk.

H2: There is significant relationship between credit card usage and bankruptcy risk.

H3: There is significant relationship between financial commitment and bankruptcy risk.

Demographic Profile

Demographic Characteristics	Frequency	Percentage	
Gender			
Male	95	45	
Female	114	55	
Age			
24-29	53	25	
30-39	156	75	
No of Credit Card			
1	85	41	
2	101	48	
3	13	6	
More than 4	10	5	
Credit Limit			
RM2000 or less	75	36	
RM2000 01 less RM2001- RM5000	69	33	
RM5001- RM10000	42	20	
RM10001- RM15000	14	7	
More than RM15000	9	4	
Credit Card Usage per month			
No usage	0	0	
1-10 times	132	63	
11-20 times	51	25	
More than 20 times	26	12	
wore than 20 times	20	12	
Financial Commitment			
RM2000 or less	117	56	
RM2001- RM5000	81	39	
RM5001- RM8000	7	3	
More than RM8000	4	2	
Education			
SPM	17	8	
Diploma	67	32	
Degree	110	53	
Master /PhD	15	7	
Income Level			
Less than RM3000	67	32	
RM3000- RM6000	90	43	
RM6001- RM9000	39	19	
RM9001- RM11000	9	4	
More than RM11000	4	2	

Table 1: Summary of Demographic Characteristics

Majority of the respondents are from age 24-29 years' old which consists of 75% (156 out of 209 respondents). There are 48% respondents who owned two credit cards at the same time (101 out of 209 respondents) while 66% of the respondents (132 respondents) used their credit card regularly from one to ten times per month. Another 25% (51 respondents) used their credit card from eleven to twenty times per month. There are 43% of the respondents who earn between RM3,000 to RM6,000 per month (90 respondents) meanwhile the second highest respondents with the income level is below RM3,000 per month is 32%. Table 1 shows 39% and 56% of respondents have monthly financial commitment from the range of RM2,001 to RM5,000 and below RM2,000 respectively.

Hypotheses Testing

Hypothesis testing is used to examine the relationship between spending behaviour, credit card usage and financial commitment with bankruptcy risk. Pearson Correlation is examining one relationship between each of variables and used to evaluate the degree of relationship. The higher the value of Pearson correlation, the stronger the relationship between the variables. In contrast, the lower the Pearson correlation value, the weaker the relationship between the variables (Hair et al., 2007). Table 2 below shows the Pearson Correlation between spending behaviour, credit card usage, financial commitment and bankruptcy risk.

	Spending Behaviour	Credit Card Usage	Financial Commitment
Pearson Correlation	0.433	0.493	0.512
Ν	209	209	209

Table 2: Pearson Correlation

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

From Table 2, the researchers found the outcome of hypotheses as below.

H1: There is significant positive relationship between spending behaviour and bankruptcy risk.

Table 2 shows that there is significant positive relationship between spending behaviour and bankruptcy risk. The Pearson Correlation value is positive indicated that there is positive relationship between spending behaviour and bankruptcy risk. The Pearson correlation is 0.433 indicates that there is positive relationship between bankruptcy risk and spending behaviour among Generation Y. Diana and Zariyawati (2013) claimed that Generation Y nowadays unable to control their spending attitude, which may lead to bankruptcy. Youth generation spent most on branded products which caused them to spent more than their income.

H2: There is significant positive relationship between credit card usage and bankruptcy risk.

The result indicates that there is significant positive relationship between bankruptcy risk and credit card usage. The Pearson Correlation value is 0.493 indicated positive relationship between bankruptcy risk and credit card usage. The higher the number of credit cards usage will lead to higher possibility for Generation Y in facing bankruptcy. Juen et al. (2013) found that early bankruptcy caused by uncontrollable spending behaviour of the credit card young users. Credit card holders tend to spent more compared to the non-credit card holders. Henceforth, it was claimed that credit card usage plays an important role in influencing people's debt level which will lead to the increasing of bankruptcy risk.

H3: There is significant positive relationship between financial commitment and bankruptcy risk.

There is significant positive relationship between financial commitment and bankruptcy risk. The Pearson Correlation value is 0.512 which indicates positive relationship between financial commitment and bankruptcy risk. Selvanathan et al. (2016) claimed that high borrowing is one of the factor that lead to personal bankruptcy. Unemployment, high interest rate, bad spending habit or even emergency matters were among the reasons that lead to financial difficulties. Zhu (2015) emphasised that the person's low ability to repay the debt will lead to bigger debts.

Multiple Linear Regression

Multiple linear regression is to examine the relationship between variables. It examined the relationship between bankruptcy risk with spending behavior, credit card usage and financial commitment. In another word, multiple linear regression is uses regularly to examine group relationship.

Table 3: Multiple Linear Regression

Model	R	R Square
1	0.582	0.339

Table 3 illustrates that the R value equal to 0.582 which means the spending behaviour, credit card usage and financial commitment contribute up to 58.20% to the bankruptcy risk. R Square value of 0.339 is telling the actual contribution of the independent variables. It indicates that 33.90% of the bankruptcy risk explained by spending behaviour, credit card usage and financial commitment.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.691	3	12.564	33.482	.000 ^b
	Residual	73.546	196	.375		
	Total	111.237	199			

Table 4: Anova Table

Dependent Variable: Bankruptcy Risk

Predictors:(Constant), Spending Behaviour, Credit Card Usage, Financial Commitment

Anova is used to examine the relationship between variables. The result indicates that the model is significant and fit. From the table, the significant value is 0.000 which less than 0.05. Therefore, it can be concluded that there is relationship between bankruptcy risk with spending behavior, credit card usage and financial commitment.

4. Implications of Study

Agensi Kaunseling dan Pengurusan Kredit (AKPK) will be able to grab useful information pertaining the generation Y bankruptcy and they may assist other younger generation effectively by awareness campaign, seminar and other mediums on savings and spending. Bank Negara Malaysia may formulate new policy on credit cards in term of new limit, numbers of cards, income and other areas to curbs lesser bankruptcy cases. Malaysian government may develop a new plan by allowing the taxpayer to experience tax deductible on their certain limit of savings in any financial institution. This initiative may increase savings among citizens.

Limitation

Respondents may unaware on their behaviour and they may feel the questionnaires are related to their private financial life, hence they may provide vague answer to a few questionnaires. Furthermore, this paper is limited to certain demographic and by selected geographic areas which is focusing on Generation Y based at Klang Valley.

Suggestion for future study

Future studies can concentrate on other variables rather than human perspective. For instances, future researchers can study on how other factors like macroeconomic might influence bankruptcy risk. Besides that, future researchers may investigate on other areas other than Klang Valley.

5. Conclusion

The study reveals that sufficient financial literacy is very important to Gen Y so that they have knowledge and skills to manage their financial matters. Lack of financial literacy may lead to the overspending of money, irresponsible of credit cards usage, increasing financial commitment that lead to the bankruptcy risk. Government and financial institutions shall regulate new rules on loan especially credit card to curb the issue of increasing bankruptcy among young generations.

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Corporate Governance Attributes and Debt-to-Equity Ratio of Top 100 Malaysia Public Listed Companies

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Abstract: The debt-to-equity ratio is an important measurement in corporate finance. It is an effective assessment to which a company's daily operations are financed by its debt versus equity funds. Overall, it shows the ability of a company in financing (through its shareholder equity) its short-term and long-term liabilities in the event of business failure. A mistaken financing decision can affect the company's efficiency and result in a lower return to the owner and even expose the company to financial distress. The presence of corporate governance is critical to direct a firm towards better governance and sustainable financing decision. This study aims to examine the relationship between corporate governance and debt-to-equity ratio of Top 100 Malaysian Public-Listed Companies (PLCs). Five corporate governance attributes used in this study are the board size, board independence, CEO duality, managerial ownership and institutional investors. Additionally, four control variables are included in this study, namely, firm size, firm age, profitability and liquidity. The final sample comprising 77 companies has been included with observation over of three years from 2016 to 2018. The data are collected from the company's annual report, which is available on the company and Bursa Malaysia websites. The financing decision was measured using the debt ratio, and the result revealed a moderate level of debt ratio among Top 100 PLCs. The correlation and regression analysis are used to test the relationship between both variables. However, result showed that none of the corporate governance attributes has a significant relationship with the debt-toequity ratio. Result also shows that liquidity and size of a company have a significant effect on the company's debt-to-equity ratio. Overall, this study suggests that the corporate governance attributes have no significant effect on a company's financing decision (debt-to-equity ratio).

Keywords: company size, corporate governance, debt-to-equity ratio, financing decision, liquidity

1. Introduction

Corporate financing decisions deal with the amount of capital required for a firm to operate and the best mix of capital structure for the firm (Pike, Neale, Akbar, & Linsely, 2018). Financing decision is one of the most crucial parts in every company. According to Naseem et al. (2017), capital structure determination is considered one of the key corporate financing decisions and managers often face difficulty in finding the optimal one. Different theories exist in the finance literature

regarding this phenomenon, and this topic has been debated for a long time. According to Li and Islam, (2018), capital structure decision is related to the way a company funds its assets and business activities. It is a particular combination of debt and equity connected with the

company's leverage. A company's capital structure is very crucial as it is linked to the company's capacity to satisfy its stakeholders' requirements. The modern theory of capital structure originated from Modigliani and Miller (1958). They firstly highlighted the issue of capital structure, arguing that capital structure was irrelevant in determining the value of a company and its future performance. Following their piobeering research, a study by Shen (2012) showed that MM theory is irreverent to the contemporary capital structure, as they mentioned that companies must use additional debt.

Meanwhile, Hapsah, Mohamad, Bujang and Hakim (2019) stated that capital structure is related to financing decision on how companies use distinct sources to finance the general activities of the firm. Generally, a firm can finance its operations either by using debt, equity or a combination of these two sources (Abor, 2007). Benefits and drawbacks are identified to be associated with each source of funding. The equity may refer to common and preferred equities, whereas debt consists of long and short-term debts. According to Hapsah et al. (2019), the company tend to issue debt due to the tax advantages where the interest payments related to borrowing are tax-deductible and debt also allows the firm to retain ownership. Funding becomes plentiful and convenient to access in periods of low-interest rates and therefore, lending is an alternative to capital raising on stock markets. Other than reliance on debt, the company may inject the company's capital through equity. However, Naluwi and Ramakrishnan (2018) claimed that issuance of equity seems to incur high cost to a company, particularly when the interest rates from debt financing are competitive. Indeed, equity also tends to be somewhat costly due to a high dividend pay-out expected by the shareholders and the need of the company to provide high returns to attract potential investors. According to Abor (2007), the firm has better access to resources than potential investors, thereby compelling potential investors to anticipate their investment to yield a higher rate of return.

According to Naluwi and Ramakrishnan (2018), capital structure is a vital element in financing decisions, particularly at the firm level and has become a conventional content of corporate finance. To increase firm value, the company's management must set up the optimal capital structure. Consequently, Nirajini and Priya (2013) pointed out that decision on financing such as capital structure involves cost–benefit analysis. A financial manager must consider the cost and benefits that the company expects to gain through debt and equity financing. The financial manager must decide the accurate portion of the company's funding as the optimal capital structure plays a significant role in improving the company's performance.

Next, according to Cui, Jong and Ponds (2011), the financial decision is correlated with the determination of capital needs, sources, and the period of mobilisation for profit gain. Consequently, financing decision is one of the main choices taken by companies to achieve the benefit target. Indeed, Cui et al. (2011) reported that financing decision indicated the level of using debt-to-total assets, also known as debt ratio. Debt ratio refers to the quantity of debt used to finance the assets of a company that also refers to leverage. Debt ratio calculates the quantity of leverage used by the firm. By using multiple financial instruments, leverage enables the business to boost the prospective return on investment. It also enables the investor to decide which business is best suited to invest in. If the business has a higher debt ratio, investing in that specific business will be riskier for the investor.

Research by Fan, Titman and Twite (2012) discovered that the amount of leverage in developing nations is more significant than in developed countries. According to their study result, Malaysia has a small level of leverage ratio than other developing countries. This study

has also been carried out by a few other researchers who obtained a similar result as Fan, Titman and Twite, 2006. The median leverage ratio for this country is 0.23, which puts Malaysia at the end of the figure just before South Africa and Turkey as developing economies and a few developed countries. In comparison with other Pacific Rim countries, Malaysia only stands before Australia. Moreover, in the case of the long-term debt ratio, Malaysia stands among the five countries at the end of the leverage spectrum with the median of 0.28 which is lower than the median long-term debt ratio for developing economies in the sample at 0.35.

A study of capital structure which involves 42 countries has observed a very low leverage in some emerging markets including Malaysia (De Jong, Kabir, & Nguyen, 2007). Moreover, a study among ten developing countries by Booth, Aivazian, Demirguc Kunt and Maksimovic (2001) also discovered that Malaysia is one of the countries with low-debt group along with Brazil, Mexico and Zimbabwe. Indeed, Deesomsak, Paudyal and Pescetto (2004) in their study of capital structure of four Asia Pacific countries before and after the financial crisis found that Malaysia stands between Thailand and Australia in the case of leverage and debt ratio.

However, Fan et al. (2012) stated that in Malaysia, the rise in the leverage ratio over the period was higher because of the stronger creditor protection than other countries. Moreover, the average leverage ratios in Malaysia has risen significantly following the 1997–1998 Asian financial crisis because companies whosuffered from the losses and market capitalisation had fallen. Based on the above studies on capital structure studies, we can conclude that firm-specific factors, the legal system, financial and institutional environment, country's public policies and political patronage have an impact on Malaysian public-listed companies' (PLCs) debt ratio.

2. Literature Review

2.1 Level of Debt-to-Equity Ratio

A study of a capital structure affecting 39 countries undertaken by Fan et al. (2006) showed that the level of the leverage ratio in developing countries is higher than in developed countries with the median leverage of 0.32 and 0.27, respectively. In their study, they stated that Malaysia has a low level of the leverage ratio than other developing countries. Based on the study of De Jong, Kabir and Nguyen (2008), they found very low-level leverage in some emerging markets around the world which comprises 42 countries, including Malaysia. The analysis reported comparable findings with Booth, Aivazian, Kunt, and Maksimovic (2001) in which Malaysia was discovered as one of the countries with a low-debt group among ten developing countries. Indeed, Deesomsak et al. (2004) in their study of capital structure of four Asia Pacific countries before and after financial crisis found that Malaysia has a low level of leverage as it stands between Thailand and Australia in the case of leverage and debt ratio.

However, Fan et al. (2012) stated that the stringer creditor protection in Malaysia had influenced the rise in the leverage ratio over the period compared with other countries. Additionally, the average debt levels in Malaysia were higher and increased significantly after the Asian financial crisis of 1997–1998, since business struggling from losses and market capitalisation had plummeted. A study by Heng et al. (2012) also revealed that 44% of Malaysian Listed Companies' total assets are financed by debt capital. This finding leads to the formulation of the first research hypothesis as follows:

H1: The level of financing decision (debt ratio) among the top 77 PLCs in Malaysia is moderate.

2.2 Board Size

The total number of director on the board reflects the board size of the company. Existing literature regarding board size and debt ratio provides mixed findings. Jensen (1986) argued that firms with larger boards have high leverage or debt ratio. A study done by Esparza et al. (2018) revealed the positive relationship between board sizes and the company's debt level in Mexico. Ahmad, Akhter, Siddiq and Iqbal (2018) ascertained that board size has a positive relationship with the company's debt ratio in the context of Pakistan. The study demonstrated that the higher numbers of directors on the board are likely to signal the creditors that the company has a strong oversight and will thus cause a reduced debt cost. Next, in the context of Nepal, Handoo (2014) demonstrated a positive association between board sizes and capital structure. A study conducted in China by Wen et al. (2002) also found that board size has a positive relationship with the debt ratio among Chinese Listed Companies. Such finding would indicate that large boards size tend to pursue a higher debt to raise the value of the company. This finding consistent with Abor (2007) who believes that a broader board should control management to pursue a high debt approach to grow the company's value. A study in Malaysia by Saad (2010) revealed that the board of director facet which consists of board size, has a relationship with the debt ratio.

By contrast, Kumalasari et al. (2019) discovered that the size of the board in a company has a negative but insignificant effect on the debt ratio of companies listed in Indonesia. They also showed that an additional member of the board is associated with a reduced debt financing by a company. Similarly, a study by El-Habashy (2018) reported the negative relationship existing between the board size and debt ratio among listed Egyptian companies. Next, a study of Malaysia's leading company revealed the negative relationship between board size and the company's debt level Heng et al. (2012). Therefore, this finding, indicates that a larger board size tends to adopt a strong debt strategy in order to increase the company profit. Indeed, this phenomenon is attributed to the fact that larger boards tend to put pressure on management to pursue lower leverage in order to increase performance (Berger et al., 1997). Another study in Malaysia done by Purag et al. (2016) found that the board size and debt ratio are not significant. This result leads to the formulation of the second research hypothesis as follow: H2: A positive relationship exist between board size and financing decision (debt-to-equity ratio).

2.3 Board Independence

Empirical evidence concerning board independence and debt ratio produce mixed findings. The previous study by Ahmad et al. (2018) and Sheikh and Wang (2012)'s research on Pakistan's companies demonstrated the outcomes that external director's coefficients are favourably linked to the firm's debt ratio. Moreover, Abor (2007) revealed that an independent director and debt ratio have a positive relationship. This result is consistent with the earlier research by Pfeffer (2013) that reported a positive connection on board independence with debt ratio. A study by Berger et al. (1997) also provides the same result that board independence has a positive relationship with the company' leverage (debt ratio). A study on board independent and debt ratio among Malaysia's leading companies done by Heng et al. (2012) found a positive significant relationship between board independence and debt ratio. This finding indicates that the board of directors with a high proportion of independent directors would continue to follow high debt policy as a consequence of debt tax protection; it is assumed to

maximise the value of the company. The higher existence of independent directors on the board also provides diverse knowledge which may influence the company to secure its long-term fund with debt financing. In fact, debt is also an important disciplinary method for administrators to meet their debt obligation.

Alternatively, a negative connection between external director ratio and leverage was noted by Wen et al. (2002). They argue that the company with better corporate governance compliance such as increase board independence, tends to seek lower leverage and low debt financing. Next, Anderson et al. (2004)'s research obtained that cost of debt and board independence has an adverse direction. Moreover, they showed that debt costs are 17.5 basis points lower for firms with boards dominated by independent directors relative to firms with insider-stacked boards, suggesting that bondholders view board independence as an important element in the pricing of the firm's debt. A study conducted by Esparza et al. (2018) showed the negative relationship between board independence and PLC's debt level in Mexico. Another study by Purag et al. (2016) revealed a significant negative relationship between board independence and debt ratio and indicates that the proportion of the independent director is negatively related to the debt ratio of the family-owned company in Malaysia.

A recent study conducted by Bajagai et al. (2019) revealed that board composition is a significant influence on firm capital structure (debt-to-equity ratio). The study is consistent with Sheikh and Wang (2012)'s research on Pakistan's companies that external director's coefficients are significant and favourably linked to the firm's debt ratio. Research by Dimitropoulos (2014) also found a statistically significant relationship between board independence and debt-to-equity ratio. Moreover, Alagathurai (2013) reported a significant connection between board independence and debt ratio. Indeed, all of the above studies gain the identical outcome with the study of Malaysian leading company's debt level whose finding reveals that outside director has a significant relationship with company's debt ratio (Heng et al., 2012). Indeed, another study conducted in Malaysia by Purag et al. (2016) also revealed that board composition which involves independent directors is significantly associated with debt ratio. This finding suggests that a board with more independent directors can monitor the management more actively and therefore force the management to choose those actions that maximise the shareholder's wealth.

Furthermore, the presence of independent directors on the firm's board improves the creditability which allows the firm to borrow more on favourable terms to avail the tax shields benefits. By contrst, Bokpin and Arko (2009) found a statistically insignificant association between proportion of outside director and debt ratio. This finding leads to the formulation of the next research hypothesis:

H3: A negative relationship exists between board independence and financing decision (debt-to-equity ratio).

2.4 CEO Duality

Empirical evidence concerning CEO duality and debt ratio produce mixed findings. The recent study by Bajagai et al. (2019) discovered that the beta coefficient for CEO duality and company's debt ratio is positive which reflects that the higher the CEO duality value, the higher the leverage. Identically, a study in Egypt done by El-Habashy (2018) revealed a significant positive correlation between CEO duality and total debt to the total asset. This result is consistent with a study of CEO duality and the company's capital structure of companies

listed in the Tehran Stock Exchange by Emangholipour, Bagheri, Mansourinia and Arabi (2013). Next, a study on financing decision in Ghana by Abor (2007) found out the positive relationship between CEO duality and financing decision. Indeed, Bokpin and Arko (2009) found a positive but statistically insignificant relationship between CEO duality and financial leverage suggesting that an entrenched CEO prefers to finance the firm's operations by using debt capital instead of issuing new equity.

Alternatively, a study of the non-financial firm in Pakistan shows a negative relationship between CEO duality and debt ratio (Ahmad et al., 2018). Similarly, a study by Sheikh and Wang (2012) revealed that the variable CEO duality is negatively related to the total debt ratio. The negative relationship indicates that when the CEO also serves as chairman of the board, he prefers to use less debt to avoid the extra pressure and risk associated with the employability of high leverage. The negative relationship between CEO duality and capital structure is consistent with the work of Berger et al. (1997) showing that leverage is significantly lower in firms where the CEO does not appear to face intense monitoring. A study of a leading Malaysian company finds a negative relationship between CEO duality and level of debt (Heng et al., 2012). Alternately, a study by Purag et al. (2016) showed that CEO duality and debt ratio are insignificant. This finding leads to the formulation of the fourth research hypothesis as follow:

H4: A positive relationship exists between CEO duality and financing decision (debt-to-equity ratio).

2.5 Managerial ownership

Managerial ownership has two-fold roles in the company as they must act as a manager and shareholder at a particular time. As a manager and shareholder, management ownership does not want the business to experience financial difficulties or even bankruptcy, because either manager or shareholder will be harmed by financial difficulties or bankruptcy. Prior researcher provides mixed findings between these variables. A research done by El-Habashy (2018) discovered the positive correlation between managerial ownership and the company's total debt ratio. The author demonstrated that a corporation with high managerial ownership likely favours leverage as it will allow the executives to retain the preferred equity share. Another study by Bokpin and Arko (2009) reported a positive and significant relationship between inside ownership have a positive relationship as it indicates that executives whose financial incentives are more tightly aligned with external shareholders will pursue a more leveraged capital structure to boost the company's value.

However, few studies pointed toward the opposite direction. A recent study conducted by Kumalsari et al. (2019) and Sheikh and Wang (2012) found that the proportion of share held by the management has a significant negative effect on the debt ratio. Additionally, research by Ahmad et al. (2018) revealed that managerial ownership has a negative relationship with the company's debt ratio. The authors claimed that management favour using lower debt in the firm as it will impose a higher risk on the manager instead of the shareholders. Similarly, Friend and Lang (1988) discovered the negative relationship between managerial ownership and debt ratio. This finding is compliant with agency theory, which suggests that increased management ownership aligns the interests of managers with external shareholders and reduces the role of debt as a tool to mitigate the conflict between the agencies. The negative relationship between managerial ownership and deb ratio reflects that the higher shareholding

among management leads to lower use of debt in the company. Hence, this finding leads to the formulation of the fifth research hypothesis as follows:

H5: A negative relationship exists between managerial ownership and financing decision (debt-to-equity ratio).

2.6 Institutional ownership

The empirical literature on the relationship between institutional ownership and debt ratio is quite limited with contradictory results. Institutional investors refer to the financial institution that canlead to change on governance mechanism and influence corporate practices (Ahmad, Baek, Kim, & Shah, 2019). Prior research did not focus on the effect of institutional investors and capital structure decision (debt ratio) (Hussainey & Aljifri, 2012). According to the active monitoring theorem, the involvement of institutional investors will mitigate the moral hazard issue among managerial ownership by closely tracking company results (Shleifer & Vishny, 1986; Jensen, 1986). A study of non-financial firms in Pakistan by Ahmad, Akhter, Siddiq, and Iqbal (2018) found that the proportion of share held by the institutional investor has a positive relationship with company's debt ratio. The authors stated that the existence of institutional investor might help the company boost the lenders and public's confidence and therefore reduce the cost of debt and raise debt funding within the company. Similarly, a study in the UK done by Sun et al. (2016) revealed that institutional ownership has a positive and statistically significant effect on firm debt levels. Therefore, companies with more significant institutional investors are likely to retain additional debt whilst settling on their capital structure due to their confidence in the institutional investors to boost the company's value.

Conversely, a recent study conducted by Kumalasari et al. (2019) found that institutional investors have a non-significant negative effect on the debt ratio. Additionally, a study of Egyptian listed companies by El-Habashy (2018) discovered that a company with a large proportion of institutional shareholding tends to use lower debt. Thus, the study reported that institutional ownership has a negative relationship with the company's leverage. Indeed, prior research by Lakshmi (2009) also revealed that institutional investors' shareholding has a significantly negative relationship with the level of debt. Accordingly, Lakshmi (2009) argued that the close monitoring of institutional investors may force managers to make decisions in the interests of shareholders. Their ability to pursue self-interests may diminish. As a result, managers may be prevented from employing lower levels of debt to protect their employment risk. In the future, companies with a high level of debt may face an increased financial risk. Consequently, institutional investors may prefer companies with lower debt levels. Moreover, Hussainey and Aljifri (2012) revealed that it had been discovered to be negative, which means that companies with a significant percentage of institutional investors tend to use less debt to fund their operation. This finding leads to the formulation of the sixth research hypothesis as follow:

H6: A negative relationship exist between institutional ownership and financing decision (debt-to-equity ratio).

3. Research Methodology

3.1 Sample and Data Collection

The sample of this study involved the companies listed among top 100 PLCs based on market capitalisation as at 6th November 2019 in Bursa Malaysia. However, from 100 companies, this

study has excluded 16 companies from the financial and insurance sector due to the different compliance measures of corporate governance among these types of companies. Furthermore, seven companies have been excluded due to the insufficient information and unavailable annual reports from the year 2016–2018 in the Bursa Malaysia website and company's official website. Thus, the final sample used in this study consists of 77 companies with a total observation of 231 firm years.

3.2 Variables and Measurements

Variables	Instruments	Sources
Dependent Variables		
Financing Decision	Debt ratio	(Basheer et al., 2018; Nawaz, &
(FDDE)		Ali, 2018; Ahmad et al., 2018;
	Debt Ratio = Total Debt	Purag et al., 2016; Heng et al.,
	Total Asset	2012; Sheikh and Wang 2012;
		Saad 2010)
Independent variables	The total amount of director on the	(Kumalasari et al., 2019)
Board size	board	(Bajagai et al., 2019) (El-
(BSZE)		Habashy, 2018) (Basheer et al.,
		2018) (Purag et al., 2016)
		(Dimitropoulos, 2014)
Board independence	The proportion of independent non-	(Bajagai et al., 2019)
(BIND)	executive directors to total board	(Basheer et al., 2018) (Purag et
	member	al., 2016) (Dimitropoulos, 2014)
		(Wen et al., 2002)
CEO duality	Dummy variable where CEO who also	(Bajagai et al., 2019)
(CEOD)	serves as chairman is coded "1" and	(Ahmad et al., 2018)
	"0" if the CEO and chairman is a	(El-Habashy, 2018)
	different person.	(Purag et al., 2016) (Sheikh
	-	&Wang, 2012)
Managerial ownership	The total number of shares owned by	(Kumalasari et al., 2019)
(MOWN)	the directors and management will be	(Basheer et al., 2018)
	divided by the total number of shares	(Ahmad et al., 2018)
	issued.	(Dimitropoulos, 2014) (Bathala
		et al., 2013) (Sheikh & Wang,
		2012)
Institutional investor	The total number of ordinary shares	(Kumalasari et al., 2019)
(INST)	held by the institutional investor over	(Thuneibat, 2018)
、 <i>,</i>	the total number of shares issued.	(Ahmad et al., 2018)
		(El-Habashy, 2018)
		(Dimitropoulos, 2014) (Bathala
		et al., 2013) (Hussainey &
		Aljifri, 2012)
Control Variables	Natural log of the of total assets	(Bajagai et al., 2019)
Firm Size		(El-Habashy, 2018)
(FSZE)		(Shen, 2012) (Ahmad & Aris,
. /		2015) (Sheikh 2012)
Age of Firm	The number of years between	(Bajagai et al., 2019)

Table 1: Summaries of Measurement

(FAGE)	observation year and year of incorporation.	(Ahmad & Aris, 2015) (Shen,2012)
Liquidity (FLIQ)	Current asset divided by current liabilities.	(Maqbool, 2019) (Ahmad et al., 2018) (Ahmad & Aris, 2015) (Sheikh & Wang, 2012)
Profitability (FPRO)	The net profit over total assets.	(Bajagai et al., 2019) (Ahmad et al., 2018) (Sheikh & Wang, 2012) (Ezeoha & Botha, 2012) (Hsu & Hsu, 2011)

3.3. Regression Model

The relationship between corporate governance attributes and financing decision is tested using the following model:

 $FDDE = \alpha + \beta 1 BSZE + \beta 2 BIND + \beta 3 CEOD + \beta 4 MOWN + \beta 5 INST + \beta 6 FSZE + \beta 7 FAGE + \beta 8 FLIQ + \beta 9 FPRO + \epsilon$

The dependent variable in the model is financing decision (FDDE) and is measured by the total debt over total equity. Corporate governance attributes are the independent variables, namely, board independence, CEO-duality, managerial ownership and institutional investor. The model also includes firm size, firm age, firm liquidity and firm profit as control variables. Please refer to Table 1 for the description and summary of dependent and independent variables of the study.

4. Results

4.1 Statistics and Data Analysis

The first objective of this study is to measure the level of financing decision (debt ratio) among the top 77 Malaysian PLCs. A descriptive statistic has been used to measure the level of financing decision (debt ratio) by considering the means, median, mode and standard deviation. Table 2 and 3 show the result of the descriptive analysis of all variables of this study. Debt ratio (FDDE) is used to measure the level of financing decision of PLCs in Malaysia. From the above table, the means of debt ratio shows a total of 0.4778 with a central tendency of 0.18584. The minimum debt ratio value is 0.10 and the maximum value is 0.91. Thus, the level of debt ratio among Top 100 Malaysian PLCs can be concluded to be at 47.78%.

This study uses the scale suggested by Benge and Thompson (2018) to interpret the results of the finding. According to the measurement scale, if the debt ratio value falls between 0–0.4, it is categorised as a low leveraged company and considered as a financially healthy company. If the values are between 0.41–0.59, the company falls under moderate leverage and categorised as a low-risk company. Lastly, if the debt ratio falls between 0.60–100.0, it means the company is highly leveraged and considered as a risky company. The mean value of the debt ratio for Malaysian companies is 0.48. Thus, the level of debt ratio among top 77 Malaysian PLCs is at 48%. The result obtained shows that PLCs in Malaysia falls under the category of a low-risk company with moderate debt used to finance the asset of the company. The finding of the study supported the first hypothesis that the level of financing decision (debt ratio) among the top 77 Malaysian PLCs is moderate.

Variable	Ν	Minimum	Maximum	Mean	Std. Deviation
FDDE	231	0.10	0.91	0.4778	0.18584
BSZE	231	5.00	16.00	9.0823	2.11561
BIND	231	0.13	0.78	0.4132	0.12604
MOWN	231	0.00	0.70	0.1928	0.24930
INST	231	0.00	0.76	0.1532	0.16570
FSZE	231	4.22	7.87	6.5862	0.81765
FAGE	231	3	135	37.84	25.109
FLIQ	231	0.05	8.14	1.8713	1.28248
FPRO	231	-0.24	0.76	0.0907	0.10982

Table 2: Descriptive Analysis of All Variables

	Frequency	Percent	Cumulative Percentage
Non duality	73	94.8	94.8
Duality	4	5.2	100.0
Total	77	100.0	100.0

4.2 Correlation Analysis

Table 4 shows the result of the correlation analysis of the study. The correlation analysis involves one dependent variable (debt ratio), five independent variables (board size, board independence, CEO duality, managerial ownership and institutional investor) and four control variables (firm size, firm age, liquidity and profitability). Based on the result showed in the table, none of the independent variables namely board size, board independence, CEO duality, managerial ownership and institutional investors, correlates with the dependent variable (debt ratio) given that the P-value is > 0.05. By contrast, firm size is positively and statistically related to debt ratio (r = 0.187, P < 0.05). Liquidity is also significantly related to debt ratio but in an inverse direction (r = -0.456, P < 0.05). The results indicate that firm size and liquidity have a significant influence on the debt ratio. However, the other independent variables do not influence the debt ratio. Overall, the above correlation results provide no initial support to all of the hypotheses developed for the study.

Table 4: Correlation Analysis

						-				
Variables	DEBT	BSIZ	BIND	DUA	MGT	INST	FSIZE	FAGE	LIQ	PR
FDDE	1									
BSZE	.034	1								
BIND	.019	-1.09	1							
CEOD	107	83	.312**	1						
MOWN	148	88	-1.64*	.114	1					
INST	.058	.370**	30	128	214**	1				
FSZE	.187**	.025	-1.11	-2.34	.014	.101	1			
FAGE	051	.106	.102	.027	202**	067	123	1		
FLIQ	456**	030	.022	.108	.062	0.14	-1.42	.174**	1	
FPRO	.003	309	.005	092	050	242**	319**	.022	.043	1
The state of the			1 0 0 1 1	1 (0)	•1 1					

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

* Correlation is significant at the 0.05 level (2-tailed)

4.3 Regression Analyses

Table 5: Model Summary	
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Model	R	R Square	R Square Adjusted R Square Std. Error of the Esti	
1	.495	.245	.214	.16472

Table 5 above shows the value of R and R² in this study. The R² value of 0.245 represents the independent variables and control variables. Moreover, the model can explain approximately 24.5% of the variation in the indicator of the company's financing decision (debt ratio). An unexplained results of 75.5% reflects other factors that determine the firm's debt ratio, which cannot be solely explained by corporate governance mechanism and company characteristic.

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	1.947	9	.216	7.976	.000 ^b
1	Residual	5.996	221	.027		
	Total	7.944	230			

Table 6: ANOVA

a. Dependent Variable: Debt

b. Predictors: (Constant), Bsize, Bind, Duality, Mgt, Inst, Fsize, Fage, Liq, Pro

Table 6 presents the result of ANOVA, one of the tests which should be done in multiple regression. The ANOVA table is important to check whether the variables used in this study is significant. The P-value of ANOVA should be less than 0.05. From the above result, it shows that the entire model used in this study is statistically significant as the P-value is 0.000. Next, to certify whether independent variables have influence on the dependent variable, P-value in the coefficient table should be checked. The P-value should be < 0.05 to shows the significant influence of independent variables on the dependent variable.

	-	8	U		1 0	· ·
			Coefficients ^a			
	Model	Unstandardis	ed Coefficients	Standardised Coefficients	t	Sig.
		В	Std. Error	Beta		
1.	(Constant)	.326	.134		2.424	.016
	BSZE	.002	.006	.018	.270	.787
	BIND	.048	.094	.033	.517	.605
	CEOD	008	.055	010	148	.882
	MOWN	073	.047	098	-1.545	.124
	INST	.047	.074	.042	.630	.529
	FSZE	.034	.015	.151	2.303	.022
	FAGE	.000	.000	.020	.315	.753
	FLIQ	063	.009	435	-7.189	.000
	FPRO	.133	.114	.079	1.164	.246

 Table 7: Multiple Regression Results on Financing Decision Model (Debt-to-Equity Ratio)

a. Dependent Variable: Financing Decision (Debt-to-Equity Ratio)

Table 7 above shows the result of regression analysis which demonstrate the relationship between all independent and control variables with debt ratio. In multiple regression analysis, when the P-value is < 0.05, the independent variable seems to have a strong relationship with the dependent variable. Hence, based on the result displayed in Table 7, none of the

independent variables seems to have a significant relationship with the dependent variable as all five independent variables have P-value above 0.05. The regression analysis has confirmed the results of correlation analysis that none of the independent variables in this study (board size, board independence, CEO duality, managerial ownership and institutional investors) has a significant relationship with the dependent variable (debt ratio). However, the control variables of this study, namely liquidity and firm size seems to have a significant relationship with the debt ratio as the P-values recorded were 0.000 and 0.022, respectively. Therefore, based on the figure shown in Tables 7 above, none of the independent variables (corporate governance attributes) has a significant relationship with dependent variable (debt ratio). From the correlation analysis and multiple regression analysis, H2, H3, H4, H5, and H6 of this study could be concluded to be unsupported.

5. Discussion and Conclusion

This study aims to examine the relationship between corporate governance attributes and financing decisions (debt ratio) of leading listed firms in Malaysia. After excluding financial and insurance companies and insufficient annual report disclosure from the year 2016–2018, this study focused on the 77 of Top 100 PLCs based on market capitalisation. The independent variables used to represent corporate governance attributes in this study include board size, board independence, CEO duality, managerial ownership and institutional investors. This study has seven research questions and research objectives. Seven hypotheses have been developed in line with the research objectives. After several analyses, this study finally answered the research questions.

The result of this study supported the first hypothesis developed based on the previous study. The first hypothesis is that the level of financing decision (debt ratio) among the Top 100 PLCs in Malaysia is moderate. The findings of descriptive statistic revealed that the level of debt ratio among leading Malaysian PLCs is considered at low-risk level with moderate leverage. However, based on the result of the correlation and multiple regression analysis, the second until the seventh hypotheses are not supported as this study found no significant relationship between board size, board independence, CEO duality, managerial ownership, institutional investors and financing decision (debt ratio) of the Top 100 PLCs in Malaysia. These findings were consistent with those of Zabri et al. (2016) and Kumar (2015) that corporate governance mechanism has no relationship with the company's debt ratio. One of the key reasons why the study did not determine any relationship with any of the corporate governance attributes proposed is the small sample involved. Furthermore, the top 100 companies selected are those companies with well-established corporate governance system. Indeed, Girau, Ag Kee, Bujang, and Jidwin (2019) stated that the specific environment, legislation and economic policies could provide different findings in corporate governance studies, particularly in the Malaysian context. Furthermore, the limitations highlighted earlier may also cause an insignificant association found in the study.

This study revealed that liquidity and firm size have a significant effect on financing decision (debt ratio) of the company. Additionally, liquidity is found to be the main factor that influences the debt ratio of the companies. Although this study found no relationship between corporate governance mechanism and financing decision (debt ratio), the result of this study will provide insightful knowledge to the chief financial officer and finance manager to ensure that the company's liquidity is at the appropriate level as it will influence the financing decision of the company. At the same time, the findings of this study can also be used by the

investor to make an informed investment decision by looking together with the company's liquidity and other corporate governance mechanism practice in the company. Although the corporate governance mechanism used in this study shows a insignificant relationship with company's debt ratio, the top management of the company, especially the board of directors and the company secretary must ensure that the corporate governance practices are applied within the firm to secure adequately governance of the company. Corporate governance plays a big role in preserving PLCs' reputation in attracting potential investors and maintaining the company stakeholders' interests.

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Emotional Quotient in Higher Education as a Case Study of Awareness in Malaysia

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Abstract: Emotional intelligence is defined as the ability to ground about emotions. An individual needs to possess both academic intellectual and emotional intelligence equally so that each individual will be able to cope with challenges in life. This paper presents a case study that looks into the level of emotional intelligence among selected higher education students to identify the significant difference between the most and least dominant domains of EI as well as the differences between the level of EI and demographic variables (age, gender, and ethnic group). Data were collected from a convenient sample of 80 first-year students from a private college in Klang Valley. Using Malaysian Emotional Quotient Inventory (MEQI) as an instrument for data collection, the analysis indicates that, on the whole, the students generally scored well in most domains. The findings also revealed the students have lower means score in self-motivation compared to the other major domains and there are no significance differences between level of EI and the demographic variables. Based on the findings, the paper provides future implications such learning and counselling support program that may be relevant for first-year students.

Keywords: emotional intelligence, higher education, Malaysian Emotional Quotient Inventory (MEQI)

1. Introduction

Asian Scholars Network

Emotion is an essential element in the education process of a student. According to Noriah Mohd Ishak et al. (2016), the importance of Emotional Intelligence (EI) had been gaining some attention, in terms of measurement and evaluation of a person's success lately compared to Intelligence Quotient (IQ). To some extent of someone's success rating, emotional intelligence becomes one of the important criteria to look into apart from intelligence quotient. This means that intelligence quotient is no longer the only element is considered to make someone successful; however, emotional intelligence is becoming one of the important element to be measured in terms of managing emotions of one and others. Based from Goleman's Emotional Intelligence (EI) is one of the important aspect that may be able to influence a person's success (Noriah Mohd Ishak et al. 2016). This gives a better understanding that emotional intelligence may be an added element to show how successful a person could be in his life. Upon that persuasion, the society began to realize the role emotional intelligence for a person's success development.

Emotional intelligence (EI) is a set of emotional and social intelligence, which involves the capacity for recognizing and understanding one's feelings and the emotion of others and to act appropriately based on these emotions. It involves the ability to carry out acceptable emotional behaviour and enhancement of reasoning. Specifically, EI is defined as an individual's ability to perceive, integrate, understand, and manage emotions in an effective and meaningful way

(Schneider, Lyons, & Khazon, 2013; Romero-Temero, 2013). Emotionally intelligent individuals, it is claimed, create a less stressful environment for themselves by conducting their personal and social lives in ways that produce fewer frustrating or distressing events (Epstein, 1998). Evidence suggests that young people with higher levels of EI are more aware of their own emotions and are better able to manage their emotions effectively. They experience less depressive and anxious, symptoms; exhibit less disruptive behaviour (Kristensen et al., 2014; Rivers et al., 2012); achieve greater exam success (Perera & DiGiacomo, 2013); and display prosocial behaviour (Mavroveli & Sanchez-Ruiz, 2011).

The mounting evidence regarding the importance of emotional intelligence (EI) as a predictor of academic and career success has further underlined the importance of inculcating EI and its attributes in the preparation of graduates. However, In Malaysia, the community places greater importance and value on academic achievement. Excellent exam grades are regarded as the touchstone for one's achievement in life. There is a lack of awareness on the importance of Emotional Intelligence (EI) development among students and lecturers in the higher education sector. Students, in particular do not recognize emotional intelligence as an important element for them to develop a good interpersonal skill with people around them. They also faced difficulty in managing their own emotions and unable to control the emotions when needed. According to Nelson & Low (2003), emotional intelligence is an essential influencing variable in personal achievement, career success, leadership, and life satisfactions.

According to Nor Lailatul, Syed Najmuddin and Ruslan Hassan (2016), the need for realization on the goal of education does not depend on the number of A's that a student scores, but on how s/he uses her/her intelligence in other aspects of life such as relationship with others and making decisions. Therefore, there is an important need for the nation to develop and produce well-balanced younger generations that have equal understanding between intellectual and emotional intelligence.

Currently, most public and private universities rely on SPM or matriculation scores and high school grade point averages (HSGPAs) to determine whether a student is academically prepared for the challenges of attending college and ultimately to determine whether he or she will be successful. The assumption with this type of admission criteria is that students who are academically prepared for college will be able to overcome the obstacles necessary to graduate. This assumption has been challenged by various research findings which concluded that the overall relationship to college retention was strongest when academic scores were combined with non-academic factors such as institutional commitment, academic goals, social support, academic self-confidence, and social involvement" (Lotkowski, Robbins, & Noeth, 2004).

The present study is prompted by the need to look into the level of emotional intelligence among younger generation in this country as they will be representing the nation's greatest asset. It would be a big turned down, if the produced generation is highly educated, but lacking in emotional intelligence. Therefore, this aim is to examine the level of emotional intelligence among the first-year students in a private college and to identify the significance difference between the most dominant domain and the least dominant domain in first year students.

2. Literature Review

Emotional intelligence theories can be divided into two categories: mental ability and mixed models (Mayer, Salovey, & Caruso, 2000). Mayer and Salovey (1993) formulated emotional

intelligence as consisting of "a set of emotional capacities that involves the ability to monitor one's own and other's emotions, to discriminate among them, and to use the information to guide one's thinking and actions" (p. 433). In Mayer and Salovey's revised four-factor model, the domains of emotional intelligence are hierarchical and differentiated into four broad categories: the identification, use, understanding, and management of emotion. Each category is developmental, requiring mastery if individuals are to maximize their emotional and cognitive growth. By comparison, mixed models of emotional intelligence include a wide range of non-ability traits like motivation, impulse control, persistence, delayed gratification, adaptability, optimism, and hope.

Bar-On (1997) and Goleman (1995) represent a mixed model perspective of emotional intelligence. Bar-On defines emotional intelligence as ".. .an array of non- cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 1997, p. 14). Bar-On further divides emotional intelligence into five major skills areas: (a) intrapersonal skills (emotional self-awareness, assertiveness, self-actualization, self-regard, independence); (b) interpersonal skills (interpersonal interaction, empathy, sense of social responsibility); (c) adaptability skills (problem-solving ability, reality testing, flexibility); (d) stress- management skills (impulse control and stress management); and (e) general mood (happiness and optimism).

Goleman (1995) divides emotional intelligence into five similar areas: (a) knowing one's emotions (recognizing and monitoring feeling within oneself); (b) managing emotions (overcoming negative emotions like anxiety, anger, depression, pessimism and replacing them with more positive emotions like hope and optimism); (c) motivation (impulse control, persistence, delayed gratification, getting into and remaining in the flow of an activity); (d) knowing the emotions of others (recognizing feelings in others, empathy); and (e) handling relationships (managing feelings and successful interaction with others). Goleman's model is unique among emotional intelligence models in that it places much emphasis on motivation and how it correlates with academic achievement.

Emotionally intelligent students possess several abilities such as the ability to self-motivate, to delay impulses, to maintain an optimistic perspective, and to recognize self-defeating emotions. Emotionally intelligent students are generally more persistent and motivated in their studies, and tend to experience less anxiety in response to academic pressures. Conversely, students with low emotional intelligence tend to have more difficulty delaying gratification, are less focused, pessimistic, poorly motivated, and more prone to anxiety. Based on Goleman's theory, these students may become emotionally high-jacked (1995, p. 27). Accordingly, such students may perform below their true academic potential, and may be at a higher risk for attrition. This study was grounded in Goleman's (1995), Mayer and Salovey (1997), and Bar-On's (1997), theories of emotional intelligence and student development theory.

There are several assessments that scholars have developed to evaluate the emotional and general intelligence of a given individual, or in some instances, a group of individuals. The early emotional intelligence assessments consisted of essentially three different approaches: self-report tests that employed the use of Likert-type scales to evaluate characteristics such as patience, tolerance of stress, and relationship management; reports made by others and ability-based tests such as the Mayer-Salovey-Caruso Emotional Intelligence Test, or MSCEIT (Salovey & Grewal, 2005). Such assessments eventually evolved into various formats based

upon the predominant models of emotional intelligence. This study uses Malaysia Emotional Intelligence Inventory (IKEM) by Noriah (2003). IKEM has adopted the same five domains purported by Goleman: (a) Self Awareness, (b) Self-regulation, (c) Self-Motivation, (d) Empathy, (e) Social Skills; and added two extra domains namely spirituality and maturity to be adapted to the Malaysian traditional culture where the citizens prone to appreciate and respect elder people and practice spiritual aspects in their daily lives.

The level of EI is directly related to the capabilities to learn emotional and social competencies which will lead to a less stressful environment for them. Evidence suggests that young people with higher levels of EI are more aware of their own emotions and are better able to manage their emotions effectively (Bar-On 2000; Salovey and Mayer; Goleman). According to Harrington-Lueke (1997), emotionally intelligence is just as important to success in life as good grades (Holly Solomon Click, 2002). Individuals with high EQ are claimed to be able to identify, use, understand and control emotions. Literature review shows EQ having a significant relationship with a number of variables such as empathy, verbal intelligence, openness to feelings, self-esteem, interpersonal skills, self-knowledge, self-achievement, academic performance or achievements, creativity, leadership, stress and mental health (Boyatzis, Goleman, Rhee, 2002; Ciarrochi et al. 2000; Davies 2005; Hamachek 2000; Lam 2002; Mauldin 2002; Mayer, Salovey, & Caruso. 2000; Williams & Shiaw 1999).

Methodology

The main objective of this study is to examine the level of emotional intelligence among students in a private college, in Subang. Specifically, it looks into the overall level of EQ and seven basic domains of emotional competencies as proposed by Noriah (2001). Thus, the study followed the quantitative nature in which data were collected from the first-year students by means of a self-administered and statistical tests were carried to meet the main objectives of the study. Due to case study, all the first-year students of year 2018/2019 were gathered to answer the questionnaire at a given scheduled period of time.

The study adopted the Malaysian Emotional Quotient Inventory (MEQI) as an instrument to measure the student's level of EI. The inventory consists of 182 items and the inventory is based on adult's version appropriateness. The Malay version of questionnaire was distributed to students who are unable to comprehend the English version. The questionnaire consists of 11 sections (Sections A to K), and each section consists of a number of sub-sections. The first part of the questionnaire looked at the demographic background of the students. Sections A, C, D, F, G, J, and I describe the level of agreement on the given items. The students are required to indicate their agreement by marking (/) in the boxes provided. The five-point scale used suggests level of agreement as follows, strongly disagree, disagree, unsure, agree and strongly agree. Separate instructions are given for Section B, E, H, and K. Students are required to read the instructions carefully before they start any of the section. Overall, the instrument will be testing based on the seven major domains and 29 core-competencies of EQ (Refer to Table 1).

Table 1:	Domain	and	Sub-domains
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Domains	Sub-domains
Self-Awareness	Emotional Awareness, Accurate Self-Assessment, Self-Confidence, Honesty
Self-Regulation	Self-Control, Trustworthiness, Responsibility, Adaptation, Innovation
Self-Motivation	Achievement Drive, Commitment, Initiative, Interest
Empathy	Understanding Others, Helping others, Leveraging Diversity, Service Oriented, Developing
	Other's Potential, Political Awareness, Caring

Social Skills	Influence. Conflict Management, Leadership, Change Catalyst, Building Bonds,
	Collaboration and Cooperation, Team Capabilities, Effective communication
Spirituality	-
Maturity	-

The questionnaires were distributed to 80 first year students with the help of subject lecturers in the period of time. The first year students have been chosen as the sampling population as it is a case study and the need to include all the students since they are still new to the university scenario. It will be more significant to investigate their EQ level as they are still in the phase of going through huge transition after completing high school and enrolling into tertiary education. In collecting the data, the researcher distributed the questionnaires to the students within a given period of time. The students' identity was kept confidential and so were the responses that were given which were treated with care to be certain with the anonymity.

Descriptive analysis was used as the main approach to identify the results of all the research objectives. The gathered data were descriptively analysed using Statistical Package for Social Sciences (SPSS) version 23.0. As for the first research objective, descriptive analysis was used to identify the mean and standard deviation. One sample t-test was used to analyse the second research objective to identify the significant differences between most dominant and least dominant domains. The responses from each item were tabulated according to the respective columns of the scale and reported according to the relevant subskills.

3. Discussion and Conclusion

Respondent(s) **Profile**

This research involves all the 80 first year students from all the school of Megatech in a private college. The profiles of the respondents are tabulated in Table 2 below.

Respondent Profile		Amount	Percentage (%)	
Age	18-20	73	91.25	
-	21-23	7	8.75	
Gender	Male	45	56	
	Female	35	44	
	Total	80	100	
Ethnic Group	Malay	60	75	
-	Indian	15	19	
	Chinese	1	1	
	Others	4	5	
	Total	80	100	

Table 2:	Respondent(s)	Profile
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Based from Table 2, it shows that all the 80 first year students age were grouped between 18 to 20 years old (traditional) and 21 to 23 years old (non-traditional). In terms of gender, the numbers of male students are higher by 12% compared to the female students. Next, comparison in ethnic groups shows that the number of Malay students is the highest with 75% of the total students, followed by 19% of Indian students, 4% of students with mix ethnicity, and the minority of only 1% of Chinese student.

The results were also analysed using descriptive statistics (mean and standard deviation), whereby the mean value is further interpreted based on the EQ Index Interpretation by Noriah (2007) as displayed in Table 3.

Table 3: EQ Index Int	terpretation
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Score	Interpretation
81-100	Above average as the individual possess the competency.
61-80	The individual is aware of the competency and they are doing OK.
41-60	The individual needs to work on by finding the right intervention to improve on the competency.
Less than	The individual will not function effectively due to lacking of competency. A sense of urgency for
40	intervention is needed.

EQ Index Interpretation by Noriah (2007)

The Level of Mean

The results of the level of emotional quotient were analysed by identifying the mean in central tendency. The results are shown in Table 4. The total EI score of students (n=80) average ranged from 73 to 82 for all the major domains: self-awareness, self-regulation, self-motivation, empathy, social skills, spirituality, and maturity among the first-year students' samples from the private college.

	Table 4: M	ean Level of EI	
Domain	Ν	Mean	Std. Deviation
Self-awareness	80	73.5	8.27
Self-regulation	80	74.6	8.75
Self-motivation	80	72.7	8.43
Empathy	80	77.9	9.19
Social skills	80	74.9	10.2
Spirituality	80	81.6	10.1
Maturity	80	81.0	12.7

There were altogether seven major domains of EI that were analysed by the level of means. The lowest mean level was for self-motivation (M=73, SD=8.44) and the highest mean was detected for spirituality (M=82, SD=10.13). By referring to the EQ Index Interpretation by Noriah (2007), all the values of means belonged to the good category. This means that the competency scores are within the upper range (70 – 80). The students are aware of their EI competency and seem to possess good competency levels.

The study also examines 29 core-competencies of EI measured by the MEQI. The 29 subdomains of all the major domains include (a) Self-Awareness: Emotional Awareness, Accurate Self-Assessment, Self-Confidence, and Honesty, (b) Self-Regulation: Self-Control, Trustworthiness, Responsibility, Adaptation, Innovation, (c) Self-Motivation: Achievement Drive, Commitment, Initiative, Interest, (d) Empathy: Understanding Others, Helping others, Leveraging Diversity, Service Oriented, Developing Other's Potential, Political Awareness, Caring, (e) Social Skills: Influence, Conflict Management, Leadership, Change Catalyst, Building Bonds, Collaboration and Cooperation, Team Capabilities, Effective communication, (f) Spirituality, and (g) Maturity.

Domain/Sub-domains	Ν	Mean	Std. Deviation
Self-Awareness	80	73.5	8.27
Emotional Awareness	80	71.2	14.5
Accurate Self-Assessment	80	76.3	10.2
Self-Confidence	80	71.3	11.5
Honesty	80	75.2	10.6

Table 5:	Mean	Level	of EI	Sub-Domains
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Asian Scholars Network 2nd Kuala Lumpur International Conference on Education, Economics and Technology (KLICEET 2020) eISBN: 978-967-2476-07-8 Kuala Lumpur, Malaysia

80	74.6	8.75
80	72.5	9.29
80	74.1	10.8
80	73.1	10.7
80	74.7	11.8
80	78.6	12.4
80	72.7	8.43
80	74.5	13.0
80	61.7	9.00
80	74.3	12.7
80	80.2	13.6
80	77.9	9.19
80	73.4	9.50
80	80.3	10.6
80	78.4	10.9
80	80.4	10.8
80	75.9	12.8
80	77.7	12.4
80	79.6	12.4
80	74.9	10.2
80	68.1	11.3
80	66.5	13.1
80	79.4	13.7
80	75.5	13.0
80	76.8	13.9
80	78.7	12.6
80	77.7	13.3
80	76.4	13.5
80	81.6	10.1
80	81.0	12.7
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Results (Table 5) show that the sample scored low in sub-domains (less than 70) related to commitment (M=61.75, SD= 9.00), influence (M= 68.15, SD= 11.32), and conflict management (M= 66.56, SD= 13.81). The highest mean of sub-domains was in service oriented (M=80.4, SD= 10.83), followed by helping others (M=80.35, SD= 10.67), and interest (M=80.25, SD=13.68).

The Most and Least Dominant Domains

Table 6 shows the result of the t-Test conducted to examine significant difference in each domain for the sample. A one-sample t-Test was run to determine whether EI score for each domain was different to normal.

Table 6: One-Sample t-Test						
Domains	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	95% Confidence Interv of the Difference Upper
Self-awareness	-6.960	79	0.000	-6.44	-8.28	-4.59
Self-regulation	-5.478	79	0.000	-5.36	-7.31	-3.41
Self-motivation	-7.698	79	0.000	-7.26	-9.13	-5.38
Empathy	-1.961	79	0.053	-2.01	-4.06	0.02
Social skills	-4.421	79	0.000	-5.06	-7.34	-2.78
Spirituality	1.447	79	0.152	1.63	-0.61	3.89
Maturity	0.760	79	0.449	1.08	-1.75	3.92

Based from results shown in Table 6, every domain except empathy, spirituality and, maturity shows a statistically significant difference in mean;- self-awareness (t=-6.96, df= 79, p = .00);- self-regulation (t=-5.48, df=79, p = .00);- self-motivation (t=-7.70, df=79, p = .00);- and social skills (t=-4.42, df=79, p = .00). The least dominant domain among the first-year students was self-motivation while the dominant domain was maturity.

Further analyses were carried out using one sample t-Test. The outcome generated was able to tell which domains had significant difference and which can be identified as the most dominant and least dominant domains. The findings showed that the domains with significant differences are empathy, spirituality and maturity. Maturity was found to be the most dominant domain. These findings could indicate that these school leavers had prepared well enough for their tertiary education. This finding reflects the students' used their personal traits to divert their interest in learning by utilising life experience as the source of knowledge.

In contrast, the least dominant domain among the first year students was self-motivation. There could many reasons for why self-motivation was low among the respondents. The students could be going through a transition period between moving from high school to college and they may not be prepared to such transition. Having new people around them in college and the need to blend in whenever they can, could be affecting their self-motivation internally. On top of that, academically, they need to spend more hours in adapting to new course syllabus and learning approaches. This could be a challenging phase for them to cope with their self-motivation.

Demographic Variables

Age

Age of the first year student sample at the time of participating in the research was coded into traditional (18-20) and non-traditional (21-23) age groups. An independent samples t-Test of age and total score as well as age and domain scores were performed. An alpha level of .05 was used for all statistical tests. Independent samples t-Test results shown in Table 7 do not indicate a significant differences in Total MEQI score with age.

Domains -	Mean	t	df	Sig. (2-tailed)	
	Traditional Entry Age (18-20)	Non-Traditional Entry Age (21-23)			
Self-awareness	73.3	76.0	-0.738	77	0.463
Self-regulation	74.8	71.3	0.932	77	0.354
Self-motivation	72.9	71.1	0.500	77	0.618
Empathy	78.2	75.3	0.739	77	0.462
Social skills	75.4	70.3	1.186	77	0.239
Spirituality	81.4	84.0	-0.601	77	0.550
Maturity	82.0	75.0	1.259	77	0.212
Total score	76.9	74.7	0.614	77	0.541

Table 7: Summative Total and Domain Scores Differences Between Age

Non-traditional students had higher mean scores in Self-awareness and Spirituality subscales whereas traditional aged students had higher scores in the Self-regulation, Self-motivation, Empathy, Social skills and Maturity subscales. No significant differences were revealed among

in the overall domains (t (77) = 0.614, p = 0.541) EQ scale scores between students who are traditional and non-traditional age groups.

Gender

An independent samples t-Test of gender and total score as well as gender and domain scores were performed. Independent samples t-Test results shown in Table 8 do not indicate a significant difference in Total MEQI score with gender.

Domains ——	Me	Mean		16	
	Μ	F	ι	df	Sig. (2-tailed)
Self-awareness	74.3	72.6	0.886	78	0.378
Self-regulation	75.4	73.5	0.959	78	0.341
Self-motivation	73.6	71.6	1.037	78	0.303
Empathy	79.3	76.2	1.495	78	0.139
Social skills	77.0	72.2	2.152	78	0.034
Spirituality	82.7	80.1	1.130	78	0.262
Maturity	82.4	79.3	1.084	78	0.282
Total score	77.8	75.1	1.512	78	0.135

Males had higher mean scores in all the domains and overall scores. Further, no significant difference was found in the overall domains (t (78) = 1.512, p = 0.135) EQ scale scores between male and female students.

Ethnic Group

Because of the small number of other minority groups i.e. Chinese (1%) and others (5%), this study recoded the ethnic groups into two which are Malay and Indian ethnic groups. Independent t-Test analyses on the ethic group total score and sub domain scores are shown in Table 9.

Domains —	Me	4	36	S'- (2 4-9-1)	
	Malay	Indian	— t	df	Sig. (2-tailed)
Self-awareness	74.2	72.4	0.769	73	0.445
Self-regulation	75.6	74.0	0.700	73	0.486
Self-motivation	73.9	70.6	1.521	73	0.133
Empathy	79.0	76.3	1.096	73	0.277
Social skills	76.0	75.0	0.282	73	0.779
Spirituality	82.6	79.8	1.061	73	0.292
Maturity	83.0	77.3	1.800	73	0.076
Total score	77.7	75.1	1.323	73	0.190

Table 9: Summative Total and Domain Scores Differences Between Ethnic Groups

Malay students had higher scores in all the domains and overall scores. Further, no significant difference was found in the overall domains (t (73) = 1.323, p = 0.190) EQ scale scores between Malay and Indian students.

Discussion and Conclusion

The present study found no differences in level of emotional intelligence between ages, genders and ethnic groups. Findings from this study show that both traditional aged groups and nontraditional age groups have similar EI profiles. When both groups have similar profiles, it could mean that both groups have similar strength and weakness in EI domains. Similarly, males and females, Malay and Indian students have similar EI profiles. However, non-traditional students had higher mean scores in Self-awareness and Spirituality as compared to traditional students. These findings could indicate that non-traditional students are able to identify with their emotions and are able to evaluate their strength and weakness better than the traditional students.

The current study added significant information to the small body of literature on emotional intelligence among Malaysian higher education college students. As a single case and given that EI can be modifiable through training or intervention, the findings has practical implications on how to enhance the key learning outcomes in the college, including students' academic performance, generic outcomes and students' overall satisfaction with the college experience. It is recommended that to help students develop higher EI levels, training and support could be given that is voluntary rather than mandatory. The support can include skills enhancement program that is made part of their continued student development in order to help each student to become more aware of his/ her own emotions, to understand and evaluate emotions in others, and to manage intra/ inter personal relationship. In addition, policies and procedures, approved guidance, and support documentation can be drafted and placed on the college internet and intranet site readily available for any student to access. Copies can be imported to web site and work places as well as to the college's counselling department to deal with students with low self-motivation and regulation.

The findings of this study can also help shed light on how best to improve the quality of higher education, especially since the early experiences are critical in establishing values, attitudes and approaches to learning that will promote success for and beyond college education (McInnis & James, 1995; Trautwein & Bosse, 2017). Since a major premise of the study was that student retention may be improved through EI skills and positive emotional development, a proactive and systemic strategy to identify and develop emotional intelligence skills can facilitate student learning to more effectively manage the complex transitions essential to college success.

Apart from the above, the study essentially contributes to expand the validity of the Malaysian EI instrument as an indigenous set of EI deemed suitable for a Malaysian culture. Thus, they may help to explain a possible relationship between levels of emotional intelligence and age, gender and ethnic identity.

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Employing An Electrochemical Impedance Spectroscopy Technique To Estimate The Ion Transport Parameters In Corn Starch Based Solid Polymer Electrolyte

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Abstract: The present work discusses the ionic conductivity and transport properties of solid polymer electrolyte (SPE). The SPE incorporates corn starch and sodium iodate (NaIO3) in various weight percentages prepared by a solution casting technique. The ionic conductivity, diffusion coefficient (D), ionic mobility (μ) and number on mobile ions (n) of SPEs were characterized by using an electrochemical impedance spectroscopy (EIS). From EIS, the highest ionic conductivity at room temperature was found to be 1.08 x 10-4 Scm-1 for 3 wt. % of NaIO3 and it is found that the ionic conductivity is dependent on the diffusion coefficient and mobility of freely charge ions.

Keywords: Corn starch, sodium iodate, ionic conductivity, transport properties.

1. Introduction

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Nowadays, the huge production of battery has created many environmental problems which can bring the negative effect to the surrounding as well as human health. It is urge to the researcher for thinking an alternative to overcome this issue. In order to reduce the related problems, natural based product has been chosen to be used in the electrolyte as one of the crucial battery components. For these to be applicable in a large scale, it needs for proper electrolytes which can be seen in solid polymer electrolyte (SPE).

2. Literature Review

An electrolyte behaves as a conductive medium that concentrated with free ions. It can be categorized into liquid and solid electrolytes. According to (Kim et al., 2015; Ben Youcef et al., 2016; Sudiarti et al., 2017; Nik Aziz et al., 2010) there are a few disadvantages of liquid electrolytes such as poor mechanical properties, leakage of solvents and difficulty for storage which limit its usefulness. These drawbacks are believed could be overcame by introduction of solid polymer electrolyte (SPE). The usage of SPE in some electronic devices such as rechargeable batteries, fuel cells, sensors, supercapacitors and solar cells (Shahrudin & Ahmad, 2017; Kadir et al., 2010; Kamarudin & Isa, 2013; Ahad et al., 2012) were driven by their unique features and capability. For example, it is enable to reduce corrosion leakage, lighter, flexible in shape which easy to fabricate and good mechanical properties (Deraman et al., 2013; Chandra Sekhar et al., 2012; Aziz et al., 2017). Generally, SPE is composed of ionic salts that dissolved in a suitable host polymer. The selection of natural polymers as a host likes starch (Ramesh et al., 2011), cellulose (Harun et al., 2011; Samsi et al., 2015), chitosan (Pawlicka et al., 2013) and pectin are appeared to be a noble option. Among these well-known natural

polysaccharides, corn starch based polymer electrolytes are found to be one of the most promising materials for Na-ion batteries (Marcondes et al., 2010).

Numerous works have been extensively studied on biodegradable, low cost and renewable polymer materials to prepare SPE with high ionic conductivity and environmental friendly. However, only a few studies based on starch-solid polymer electrolyte had been reported, such as starch- NaSCN (Tiwari et al., 2013), starch- NH4NO3 (Khiar & Arof, 2009), starch-NH4I (Kumar et al., 2012), starch- LiTFSI (Ramesh et al., 2011) and starch-LiPF6 (Ramesh et al., 2013). Most of the conductivity of the mentioned systems are found to be less than 10-4 Scm-1 with no conduction mechanism had been discussed in their systems which is a crucial part to genuinely understand the characteristic of the studied SPE. Dealing with ionic conductivity of polymer electrolytes is vital in order to alter the structure of the materials which can improve its chemical and physical properties. Therefore, three basic factors that can influence the conductivity in SPE such as diffusion coefficient, concentration and mobility of ions. Besides, common concept to estimate these transport parameters are using an electrical impedance spectroscopy (EIS), Bandara and Mellandar approach and FTIR technique.

SPE films were prepared using a simple method known as solution casting technique and this method was summarized in Figure 1 (Hassan et al., 2018; Hassan & Azimi, 2019). Then, various ratios of sodium iodate (NaIO3) from Sigma-Aldrich in a range between 0-9 weight percentage (wt.%) of salt content as listed in Table 1 were added. The weight percentage was calculated using a formula as expressed in Eq. 1;

wt.%=
$$x/(x+y) \times 100$$
 (1)

where x is the amount of dopant in gram (g), y is the amount of polymer and weight percentage (wt.%) is the varying values in percentage for salt as an ionic dopant.

Samples	Sodium iodate (wt.%)	Sodium iodate (g)	Corn starch (g)
Pure	0	0	1
А	1	0.010	1
В	2	0.020	1
С	3	0.031	1
D	4	0.042	1
Е	5	0.053	1
F	6	0.064	1
G	7	0.075	1
Н	8	0.086	1
Ι	9	0.097	1

 Table 1: Ratios of corn starch SPE films.

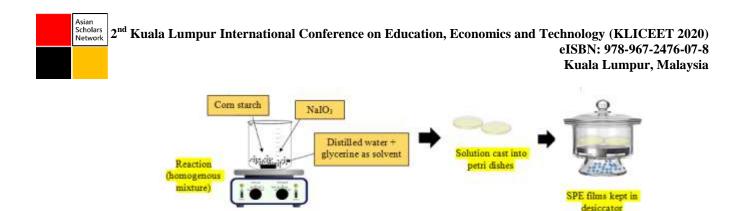


Figure 1: Schematic diagram of SPE preparation process.

As reported from our previous work (Awang et al., 2020), the SPE films were characterized by using electrochemical impedance spectroscopy analysis to determine the electrical and transport properties of the films.

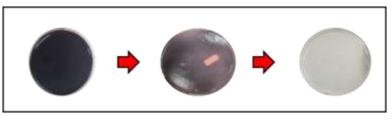


Figure 2: Corn starch-NaIO3 films

Figure 2 shows the images of corn starch-NaIO3 SPE film at room temperature. It can be observed that, after dissolution of NaIO3 into electrolyte, the SPE had transform from white to the dark purple color. Then, the SPE was left dry naturally until it forms a thin film. The dried SPE shifted the color into a pale purple and it took 24 hours for the SPE film to finally turn colourless.

Conduction mechanisms values can be calculated by using the following equation. The values of bulk resistance, Rb for each sample was obtained from the Nyquist plot and conductivity was calculated using Equation 2.

$$\sigma = l/(R_b A)$$
 (2)

Where l is the thickness of the SPE films and A is the surface area contact between electrodeelectrolyte (cm2) with a value of 3.142 cm2.

This is because the complex impedance is a technique applied at various frequencies to investigate the mechanisms of ions transport and charged transfer in both electrode and electrolyte (Cho et al., 2015). It is plotted to determine the bulk resistance, Rb values. Basically, it consists of a title spiked, a depressed semicircle or a combination of a depressed semicircle with title spiked (Kaith et al., 2014). Figure 3 shows a cole- cole plot for selected SPE of corn starch doped with different concentrations of NaIO3. From the plot, the values of Rb was determined at the intersection between the spiked and semicircle.

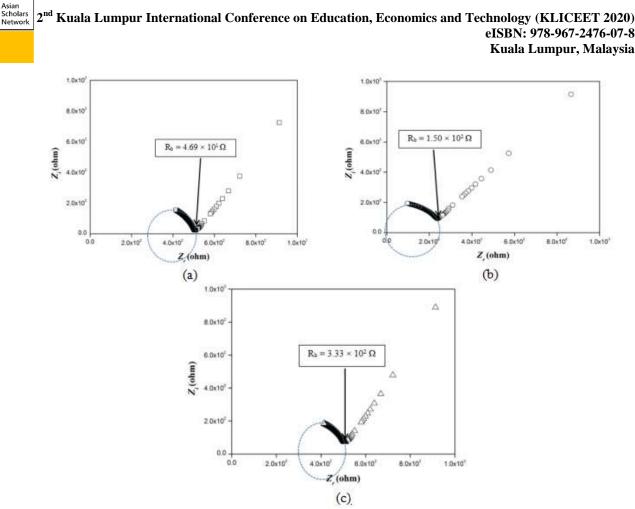


Figure 3: The impedance plot at ambient temperature of different concentration NaIO3 (a) 3 wt.% of NaIO3 (b) 5 wt.% of NaIO3 and (c) 7 wt.% of NaIO3.

In this research, ion transport parameters for corn starch- NaIO3 SPE has been investigated using a non-destructive EIS technique as mentioned by (Shanti, 2011). From our knowledge, there is no report on the preparation and characterization of SPE doped with sodium iodate (NaIO3). Hence, the main purpose of the present work is to study the effect of NaIO3 salt concentration on conductivity and transport properties of starch based solid polymer electrolyte using a new calculation technique which is rarely reported before.

3. Discussion and Conclusion

The capability of an electrolyte to conduct electricity is examine by using EIS technique. Ionic conductivity of corn starch-NaIO3 is shown in Figure 4 while the conductivity and bulk resistance values are tabulated in Table 2. It can be said that, ionic conductivity of SPE films starts to increase until it reach the highest values which happens due to the decreasing value of Rb. But then, it starts to decrease after additional content of NaIO3 into the electrolyte. This behaviour may be affected by overcrowding of ions which can attribute to the formation of ions aggregates (Teoh et al., 2014; Hafiza & Isa, 2017). Besides, the bigger size of contact ions forms will limit the movement of ions in SPE. So, free mobile ions will decrease as well as reduce the number of density free mobile ions, hence decreasing the conductivity (Sim et al., 2016; Hassan & Ting, 2018). In general, it is observed that the ionic conductivity of SPE is related to the number and mobility of ions.

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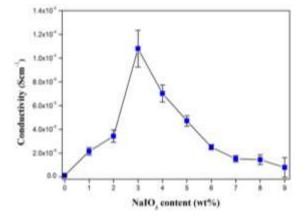


Figure 4: Ionic conductivity of corn starch- NaIO3 films.

Samples	Bulk resistance, $R_b(\Omega)$	Conductivity, σ (Scm ⁻¹)
Pure	$3.00 imes 10^3$	$1.10 imes 10^{-6}$
А	$2.00 imes 10^2$	$2.15 imes 10^{-5}$
В	$1.80 imes 10^2$	$3.43 imes 10^{-5}$
С	$4.69 imes 10^1$	$1.08 imes10^{-4}$
D	$6.20 imes10^1$	$7.03 imes10^{-5}$
Ε	$1.50 imes 10^2$	$4.71 imes 10^{-5}$
F	$2.33 imes 10^2$	$2.50 imes10^{-5}$
G	$3.33 imes 10^2$	$1.52 imes 10^{-5}$
Н	$4.66 imes 10^2$	$1.44 imes 10^{-5}$
Ι	$5.00 imes 10^2$	$7.90 imes10^{-6}$

Table 2: The bulk resistance and conductivity of each samples.

The transport parameters play an important role to explain the charge transfer and ionic transport process in materials. The fundamental of the parameters is diffusion coefficient (D), mobility of the ions (μ) and number density of ions (n). All the transport properties that are related to the ionic conductivity of SPE are recorded in Table 3, while the graph of D, μ and n data against NaIO3 content are plotted using the Origin software as shown in Figure 5. Generally, according to Idris et al., (2009), the ionic conductivity in SPE is related to the number and mobility of ions. However, in this study, diffusion coefficient and mobility give a more significant contribution to the conductivity of SPE films compared with number density.

In general, the dielectric constant indicates the number of charged ions that can be stored by a material. It is also can be used as an indicator to prove that the increase in conductivity is due to the increase in free mobile ions (Rajeswari et al., 2011). According to (Buraidah & Arof, 2011), when the composition of salt increases, the number density of free ions will increase too. So, the charge stored in material also increases. From the result, it can be observed that the D and μ had followed the conductivity trend meanwhile the n shows the opposite trend. This is because the higher rate of diffusion and mobility of charge carriers in SPE can influence the increase of conductivity (Cho et al., 2015). From literature, it may be concluded that the movement of ions is influenced by the addition of salt. Table 4 shows the comparison value of transport properties in this research with other systems. It can be said that, the ionic conductivity of this research are one of the highest among the others. This is due to the higher values of D and μ which can effect the transport properties of ions and contribute to the increase in ionic conductivity.

NaIO ₃ content (wt%)	$\lambda_D(cm)$	$k_2 (\mathbf{F}^{-1})$	$\tau_2 (s^{-1})$	$D(cm^2 s^{-1})$	$\mu (cm^2 V^1 s)$	n (cm ⁻³)
1	$9.10 imes 10^{-6}$	1.47×10^{6}	$2.65 imes 10^{-5}$	$3.12\times 10^{\text{-6}}$	1.22 x 10 ⁻⁴	1.06 x 10 ¹⁸
2	$3.74\times10^{\text{-6}}$	8.15×10^5	$1.22\times 10^{\text{-6}}$	$1.14\times 10^{\text{-5}}$	4.45 x 10 ⁻⁴	3.07 x 10 ¹⁷
3	$1.81\times10^{\text{-6}}$	6.59×10^5	$3.18\times10^{\text{-5}}$	1.03×10^{7}	4.01 x 10 ⁻⁶	3.98 x 10 ¹⁹
4	$2.08\times10^{\text{-6}}$	2.88×10^5	$2.65\times 10^{\text{-6}}$	$1.63\times 10^{\text{-}6}$	6.35 x 10 ⁻⁵	$4.56 \ge 10^{18}$
5	$1.38\times10^{\text{-6}}$	2.43×10^5	$5.30\times10^{\text{-6}}$	3.59×10^{7}	1.40 x 10 ⁻⁵	$1.26 \ge 10^{20}$
6	9.19×10^{7}	2.22×10^5	$3.18\times10^{\text{-6}}$	$2.65\times 10^{\text{-7}}$	1.03 x 10 ⁻⁵	$3.10 \ge 10^{20}$
7	$7.00 imes 10^{-7}$	$1.80 imes 10^5$	$3.94\times10^{\text{-5}}$	$1.24\times 10^{\text{-8}}$	4.84 x 10 ⁻⁷	1.09 x 10 ²²
8	5.35×10^{7}	1.58×10^5	$8.84 imes 10^{-7}$	$3.24\times 10^{\text{-7}}$	$1.26\times 10^{\text{-5}}$	2.69 x 10 ²⁰
9	$5.16 imes 10^{-7}$	$1.04 imes 10^5$	4.65×10^{-7}	5.73×10^{7}	2.23×10 ⁻⁵	1.12 x 10 ²⁰

Table 3: The values of $\lambda D,$ k2, $\tau 2,$ D, μ and n of the corn starch-NaIO3 films.

Table 4: Comparison values of conductivity and transport parameters of this work and other systems.

	Conductivity	Tra	nsport paramete	rs	
Systems	(S cm^{-1})	$D(cm^2 s^{-1})$	$\mu \ (cm^2 \ V^1 s)$	n (cm ⁻³)	References
Corn starch-NaIO ₃	$1.08 imes 10^{-4}$	1.03×10^{-7}	4.01 x 10 ⁻⁶	3.98 x 10 ¹⁹	This present work
MC- NH ₄ I	$5.08 imes 10^{-4}$	$6.15 imes 10^{-6}$	$2.39\times10^{\text{-2}}$	1.32×10^{19}	Salleh et al., 2016
MC-NH ₄ NO ₃	$2.10\times10^{\text{-6}}$	-	$2.70 imes 10^{-6}$	4.86×10^{18}	Shuhaimi et al., 2010
CMC-NH ₄ SCN	$6.48 imes 10^{-5}$	$8.60 imes 10^{-11}$	3.29×10^{29}	1.23×10^{23}	Noor & Isa, 2014
Chitosan acetate-adipic acid	$1.40 imes 10^{-9}$	$6.65 imes 10^{-11}$	2.59×10^{-9}	3.38×10^{18}	Idris et al., 2009
Chitosan acetate- NH ₄ NO ₃	$2.53 imes 10^{-5}$	$1.40 imes 10^{-7}$	$5.30 imes 10^{-6}$	3.00×10^{19}	Majid & Arof, 2005
MC-AF	$6.40 imes 10^{-7}$	$1.19\times10^{\text{-}11}$	4.64×10^{-10}	-	Nik Aziz et al., 2010

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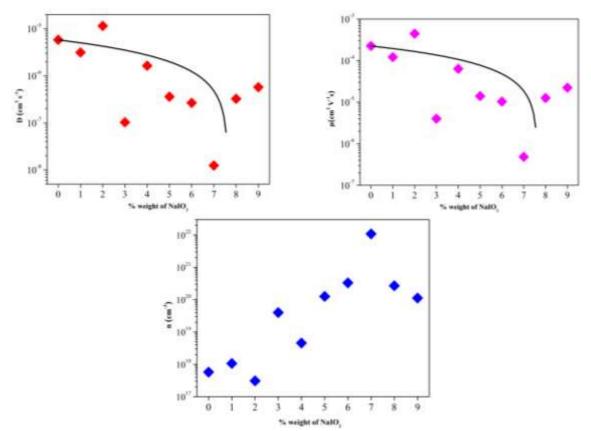


Figure 5: The plot of diffusion coefficient, D, mobility of ion charges, µ and number density of charge carriers, n versus NaIO3 content.

In conclusion, corn starch-NaIO3 solid polymer electrolyte has been prepared using a solution casting technique. The ionic conductivity and conduction mechanisms (D, μ and n) of SPE films were characterized by electrical impedance spectroscopy (EIS) analysis. The ionic conductivity of SPE films increases to the optimum value of 1.08 x 10-4 Scm-1 with the addition of NaIO3 content. The transport properties of SPE films such as mobility, number of mobile ions and diffusion coefficient have been calculated using the EIS method. The decrease in diffusion coefficient and ionic mobility results in the decrease of conductivity due to higher NaIO3 concentration. It may be concluded that the prepared SPE films have the potential to be used as an electrolyte for application in energy storage devices.

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Exposure and Acceptance of RTM Governmental Information Programme Among Urban Young Viewers in The Klang Valley

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Abstract: Television plays an important role, especially in disseminating information and also to enhance the mass communication process. As Malaysia viewers were known to have various kinds of preferable television programs and content, each existing TV station might use their core programme that gives advantages to them in shaping viewers mind and behaviour. This research is conducted to measure the level of exposure and acceptance among young urban viewers in the Klang valley towards RTM governmental information programmes, a programme that is designed to share information on government's campaign agenda and a little bit of political concerns. A quantitative approach has been used where 100 samples from IPTA and IPTS has answered a questionnaire and all the data has been analysed using SPSS. The study found out that the level of exposure and acceptance among the sample was at a low level, due to certain factors, include unattractive programme style and concept and the tendencies of watching more entertainment programme, rather than talk show or factual programme, besides, the challenges from the internet that give various alternatives and easy access for the young viewers to select want they want to watch.

Keywords: mass communication, young urban, governmental, entertainment

1. Introduction

Previously, public dependency towards tools such as television and radio were undeniable. These tools are considered as the most effective tools that are known to enhance communications processes, especially in mass communications and press agent / publicity or public information communication. As early as 1950, the public has been familiarized with television at large and the growth of this media has already shaped and portrayed several aspects of their life including social activities, behaviour, opinion making/decision making and the policy making. Ray (1992), explained that:

"The popular mass entertainment media, first in the form of film and today led by television, have thus become a significant social factor, conveying thematic messages and lessons about whom to emulate and fear in society, what the basic causes of crime are and how crime should be fought. However, society's ability to discern between fact and fiction is often blurred, resulting in inaccurate perceptions of whom to fear, the basic causes of crime, and the appropriate responses."

At present, even though the tools are still in use, the television function has been overtaken by one virtual tool that is far more effective, fast, accessible, portable and advanced, which is the internet or the world-wide-web. This state-of-the-art invention has become popular since the usage of computers which is widely accepted by the millennium generation who thirst for innovations and the modern lifestyle. On top of that, people are competing with each other to be the first to be well equipped with the latest information and up to date news. Thus, a new form of social pressure among the new generation emerges. The first one who acquires the news will have high status but instead of getting compliments for disseminating latest and reliable information, this Y and Z generation are more eager to win more "likes" or "tweets" and also either followers, friends or subscribers. On the negative side, sometimes they tend to be unethical, providing false alarm information, sharing fake quotes, distorted religious verses, and so on which could trigger miscommunication and spark confrontation between cyber users.

Until now, the agencies such as Jabatan Penyiaran Malaysia or popularly called Radio Television Malaysia (RTM) has taken full responsibility in ensuring that all the agenda and government objectives are delivered to the public. However, at present with the various implementation of new technologies and new media such as social media and high-tech applications, the prejudice that RTM is viewed as a bias information source and pro-authority and coupled with the unstable socio-political scenarios which lately have generated a lot of silent majority of anti-government society, it has become a huge challenge to RTM in maintaining its charisma and reputation as the pioneer in local media industry. Alarmingly the volume of viewers among the teenagers and young adults seem to be slowly diminishing.

Therefore, the question arises, is RTM still relevant to the generations Y and Z? If not, then what are the causes? Is it due to its content or is it because of the limitation in producing attractive material or are the pro-government based programmes that are pushing the young audience away? Thus, this current issue led me to study the relevancies of RTM governmental information programmes (GIP) among young viewers, in particular the urban university students studying in Klang Valley. The objectives of the study are to find out the relationship between the exposure and the acceptance of RTM governmental information programmes towards young viewers.

2. Literature Review

Media Exposure

It's undeniable that every modern medium of communication does have some unwanted impact, so does television. Asiah (1991) emphasized that television provides various functions in enhancing communication processes, especially at the macro level and it really has a significant impact towards the audiences. This statement is being supported by a study conducted by Pecora, Murray and Wartella, (2006) that focus on the impact of television on children's social development. The result of the study showed some positive reactions between subject's negative social development and their watching television habits. The major premise of this study is that children that are highly exposed to violence programs on television have the highest tendency of performing or executing violence related activities when they become adolescence. This comes to a conclusion that television has the impact in persuading its subject or target audience depending on the viewing consumption and the content.

Governmental / Political Information Programme

Various programmes such as the morning shows like Selamat Pagi Malaysia, documentary shows like Galeri Nasional and Lensa Siswa, talk shows such as Dialog, Suara Kita Hak Kita, Vasantham, What Say You and Landskap was known for its content that delivered the national agenda and dedicated to all kinds of audience in Malaysia. According to the Deputy Director, RTM Current Affairs Section, Mrs. Rabieyah Binti Jamaludin, this kind of programme was dedicated to serve current and important national issues towards the public, while at the same time accommodate the platform for particular government agencies or ministry in educating the

public regarding certain policies and development plans. Programs like Suara Kita Hak Kita for example were meant to educate the public about consumerism and entrepreneurship and expose them about the government plan and facilities that they have prepared.

While other programs such as Dialog and Landskap also listed as the core programme and decided by RTM management as governmental information programme since they started the campaign in General Election 2013.

Findings

To answer the first research question, the data showed that the amount of exposure to RTM governmental information programmes is low and significantly, it would highly affect the next research questions. A few reasons can determine the low level of exposure among the respondents. One of them is that the concept of the programme was not attractive enough to the young viewers. The monotonous flow of the programme, plus a very old fashion set and dull lighting might be the main reason why young viewers avoid to watch the programme. However, looking at the most watched programme, Selamat Pagi Malaysia, this long running programme in TV1 has a simple touch and manages to attract young viewers by having a young and energetic host, while preparing several slots to expose teenage activities.

Compared to programmes like Dialog and Landskap, which has been named by RTM as their core programme in particular, these two programmes highlight the current issues that focus more on political agenda. Thus, if they tend to get attention and participation from the young viewers, they need to do something in terms of the concept and the style as in the survey done, the highest television programme that has been chosen by the young viewers was the entertainment programme. Sood (1999 & 2002) explained that the concept of edutainment could be applied in order to shape human behaviour and in large scale, it could contribute to change the mind setting, value system and behaviour of particular societies. Thus, the producer of these programmes might implement some of the edutainment ideas in order to attract more young viewers.

Most probably, the acceptance of RTM governmental information programmes has been affected from the result of the television programme exposure level. By logic, the less respondents being exposed to certain programmes, the low level of acceptance of that particular programme content. Looking at the result, all three main programmes (Dialog, Landskap and Suara Kita Hak Kita) showed average between 2.79 to 2.83. This means that either they are not sure of what is the main content or message in the programme or they definitely could not accept the concept or the content framed by the programme. Again, this might be derived from the fact that most of the young viewers nowadays tend to watch more entertainment news, rather than to watch factual or news style programmes. Thus, the amount of acceptance towards RTM governmental information programmes is at a low level.

The impact of this result might affect the idea of injecting propaganda doctrine among teenagers and it seems failed to educate and encourage young in terms of disseminating national agenda and shape their political views. Through the data recorded, the main difference that can be seen is through the programme Selamat Pagi Malaysia, which showed a slight difference in the mean value between male (1.90) and female (2.47), while the rest does not show any significant results. So, we can say that there is a difference in the amount of exposure to the RTM governmental information programme among the young viewers between the

males and females but in a small amount of differences. This might have happened as the respondents showed more numbers of female participants and it does affect the result.

Looking at the other demographic variables, which is levels of education, most of respondents who still in their diploma studies showed high amount of exposure toward Selamat Pagi Malaysia with mean value of 2.64, compared to those who studied in degree level (2.07). This result might also be derived from the high number of diploma students respondents (63 respondents) compared to degree level participants (37 respondents).

The data in the findings showed that the level of acceptance towards the selected programme was significant to Dialog programme and the differences show higher acceptance level towards female respondents with mean value of 14.61. Again, this might be derived from the higher amount of female participants (68 respondents).

Looking at the levels of education, the data showed a similar pattern in three selected programmes where obviously, there are significant differences between diploma students' respondents and degree students respondents. It showed the higher amount in mean value that represents degree students' respondents for each selected programme (Landskap = 15.75, Dialog = 15.62 & Suara Kita Hak Kita = 15.70). Even though their exposure level is a bit low, the acceptance might become high as they might be aware of the programme existence and understand more about the content of the programme.

Overall, the results showed that the relationship between these two variables was at low level in average, which the correlation value shown is .496 for Landskap, a poor level at .278 for Dialog and moderate level for .428 for Suara Kita Hak Kita. That means there is a significant relationship between the exposure to the RTM governmental information programme and the acceptance to the RTM governmental information programme among the young viewers can be considered accurate but in the low level of positive significant amount.

3. Discussion and Conclusion

Several factors might contribute to this problem including a less attractive programme for teenage target audience, same and stagnant programme concept, dull set and unattractive host, same issues that always highlight political concern and some other factors.

Thus, if the level of exposure is low, it is hard for the government, RTM as their main communicating tool to the public to provide and to communicate with the youngsters, in the move of the government to gain young voters support. The failure of attracting young viewers seems like failing in their strategies in gaining votes for the upcoming general elections. This can be shown where, even though some of the respondents might have watched some of RTM programmes and are aware about the programme existence, yet they still feel that the information was not clear enough to be perceived and the content of the designated programme does not succeed to persuade or encourage them to be more responsible citizens.

The exposure and acceptance level of the show the most significant sign was Selamat Pagi Malaysia, a morning show that might have a little bit of fresh concept and style. This long running programme has gone through several transitions according to the theme and trend changes, including injecting elements of modern and relaxed concepts. They also provided a few slots that allowed involvement from young participants such as teenagers and students to perform and promote their activities, which is why most of the respondents are aware of this programme.

Based on the findings and conclusion, a few suggestions could be in order to strengthen the research and also to help RTM in improving and gather more young viewers to watch RTM more. As for young viewers, they prefer more entertainment forms of programmes and tend to dislike factual and straight forward programmes like talk shows and news/documentary. The concept of edutainment could be practiced as the young viewers might get bored easily for having full factual presentation in a certain television show. In the future, RTM might want to think of having the new concepts for their talk show, which have it in open space and invite more youngsters to voice out their opinion. This could be done while having a road tour for a designated programme, while alternately providing space for the young audience to present or to perform their talent, creatively or academically.

Future researchers could conduct more in-depth and specific tests and surveys in searching what would be the best and the most attractive style and concept of television programme by having a small group interviews, or going for a nationwide survey. This would also help other researchers in understanding different kinds of young viewer categories and their preferred programme. RTM should work hand in hand with researcher and other related government or private agencies such as Ministry of Higher Learning, PEMANDU, IPTA and IPTS in discussing and producing more interactive and attractive programme that not only entertain the young viewer, but manage to shape their mind and behaviour to become first class mind generation towards 2050.

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Guest's Decision Making between Peer-To-Peer Accommodation and Hotel

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Abstract: In recent years, sharing economy has been recognized as a new business platform in peer-to-peer accommodation market worldwide. Airbnb is one of the leading sharing economy platform that offers sharing accommodation. There are 308,207 hotel rooms and more than 53,000 of Airbnb listings in Malaysia in year 2019. Both hotel and Airbnb platform are competing between each other in getting guests to use their lodging service and the competition between Airbnb and hotel is getting more intense since the number of both accommodation are increasing from day to day. Therefore, both the Airbnb hosts and hotel operators should know the factors that will influence guests' decisions making in renting an accommodation in order to increase their competitiveness. The objective of this paper is to identify the factors that will affect guests' decision making in renting an accommodation between peer-to-peer accommodation and hotel. Besides, it is also to analyse the priority of guests' preferences in renting an accommodation. A questionnaire survey is conducted through online to identify the perceptions of respondents on the factors that will influence their decision making in renting an accommodation. Frequency analysis and relative importance index are used in this study to analyse the data obtained from the questionnaire survey. As a result, cleanliness and hygiene of accommodation appeared to be the most significant factor which will affect guests' decision making in renting an accommodation between Airbnb and hotel among the other factors with highest relative importance index value of 0.928. This is followed by safety of security of accommodation, price, service quality, functional attributes and amenities of accommodation, location, friendliness and responsiveness of host and staff and lastly the least significant factor which is reputation of hotel brand and host profile with lowest relative importance index value of 0.778. In a nutshell, the findings of this study will beneficial to the hotel operators and Airbnb hosts in improving the competitiveness and attractiveness of their accommodations.

Keywords: Peer-to-peer accommodation, Hotel, Airbnb, Malaysia, Relative Importance Index (RII)

1. Introduction

In this globalized era, there are many accommodation choices for guests or tourists in choosing their accommodation when they are travelling to another place since hotel is not the only accommodation choice anymore. Sharing economy now had been recognized as a new business platform in peer-to-peer accommodation market in worldwide. For example, Airbnb is the most popular and successful peer-to-peer accommodation platform in the world and it had changed the way which people used to book accommodation in the past (Razli et al., 2017). Airbnb is said to be a disruptive innovation to conventional accommodation service provider such as hotel because Airbnb provided more options of accommodation for the people to rent (Guttentag & Smith, 2017). Therefore, both the hotel and Airbnb platform are competing

intensely between each other to attract guests to rent their accommodation. The above statement is supported by the national president of MyBHA (Malaysia Budget Hotel Association), Leong Pui Kun said that Airbnb is the direct competitor to budget hotels (Jarod, 2019). The competition between Airbnb hosts and hotel operators is getting more intense since the number of Airbnb hosts and hotel operators in Malaysia is increasing from day to day. As the result, some of the hotel rooms and Airbnb units that had been registered by the hosts in Airbnb's website cannot be rented out even though during public holiday or weekends. Thus, both of them were now realizing of the importance of the factors that will influence guests' decisions making in renting an accommodation (Birinci et al., 2018). Therefore, this study aims to identify the factors that will affect guests' decision making in renting an accommodation between peer-to-peer accommodation and hotel and to analyse the priority of guests' preferences in renting an accommodation. In order to achieve the objectives, the study has done through some essential steps such as background research, literature review, data collection, data analysis and conclusion. Guest's preferred factors are important in improving the quality of accommodation service of Airbnb and hotel in getting more guests for the accommodation services provided (Tussyadiah, 2016).

2. Literature Review

Peer-to-peer accommodation is presented with the idea of an accommodation provider can rent his or her idle space which is the entire space or part of the space to the accommodation rental guests to stay (Tussyadiah, 2016). Due to advancement of information and communication technology, an idle space is more easily to be rented out to renter as both of them are connected directly through the online platform (Varma et al., 2016). Moreover, peer-to-peer accommodation include of activities of exchange in economic and social aspect. From economic aspect, the process of exchange in economic occurred between an accommodation's host and accommodation's guest when the host will receive a lump sum money from the guest as the rental fee for the accommodation (Tussyadiah, 2016). For social aspect, peer-to-peer accommodation provide a social platform in giving the opportunity for both the accommodation host and guest to be connected in order to establish their social relationship (Tussyadiah, 2016).

In recent year, Airbnb had become the biggest peer-to-peer accommodation platform which the market value had exceed every conventional accommodation provide such as hotel (Liu & Mattila, 2017). Airbnb is a platform that enable a property owner to rent out his or her idle or unoccupied houses and residences to accommodation renters and it will promote the growth of economy directly or indirectly (Levendis & Dicle, 2016). The space which provided by Airbnb to be rented out included of entire house, a private room or shared room (Tussyadiah & Zach, 2017). Airbnb is different from conventional lodging market such as hotel in its booking process through internet, paying method and exchange of product (Kim et al., 2015).

On the other hand, hotel is a building which provides lodging service and customer service for the people who need an accommodation (Jones & Lockwood, 2002). A hotel is contact dependent based since the guest will need to personally come to the hotel and communicate with the staff in booking counter in order to rent a hotel room (Naletova, 2017). Type of hotel can be divided into three which is luxury hotels, midscale hotel and budget hotel (Naletova, 2017). Airbnb is said to be a disruptive innovation to conventional accommodation service provider such as hotel (Guttentag & Smith, 2017).

Decision making is a process before the decision is being made and it considers on how the decision made will help in developing a new method to evaluate what comprises a good process of decision making (Elwyn & Miron, 2010). In the context of decision making in renting an accommodation, it is considered as an evaluation of guests based on the various characteristic and advantages of the accommodation (Tussyadiah & Zach, 2017). Nowadays, accommodation guests focus on tangible factor during the process of decision making in choosing an accommodation because intangible factors are difficult for them to evaluate on the accommodation (Tussyadiah & Zach, 2017). By understood of the factors which affect the process of decision making, they are able to understand what decision will be made by people since the factors which will affect the decision making will influence the results (Dietrich, 2010).

Factors Affecting Decision Making of Guest in Renting Accommodation Between Peer-topeer Accommodation and Hotel

People's preference can be determined as people's common evaluation on the significance of the attributes or characteristics of a service or goods. The characteristic of an accommodation is important for a guest as it will affect the guest's perception on the accommodation (Alén et al., 2015).

Price is an important factor which will affect decision making of guest in renting an accommodation (Woon & Ch'ng 2019). As a consumer, it is normal for them to choose the best "value for money" option (Pappas, 2017). Accommodation guest is sensitive to the price of accommodation (Pappas, 2017). Accommodation guest more likely to choose accommodation which will provide good lodging experience with lower price (Mao & Lyu, 2017). Hiransomboon (2012) said that discount on the accommodation's price will increase the number of backpackers in renting the accommodation. Next, location. accommodation guests are more likely to rent an accommodation which is near to centre city, public transportation, and restaurants (Tussyadiah & Zach, 2016). Majority of accommodation guests tend to rent an accommodation which is located within walking distance to tourist attraction places, convenience stores and food courts (Tussyadiah & Zach, 2016; Han et al., 2016) as they can reach easily to the places above even without transport and it is convenient for them to buy their daily groceries and fill their stomach (Rhee & Yang, 2015). The third factor is functional attributes. Generally, hotel is not similar with Airbnb accommodation in term of the daily operation likes process of check in and check out, type of accommodation offered as well as facility and attributes of the accommodation. The facilities available in a hotel consist of hotel rooms, seminar rooms, swimming pools, gym room and parking and it will affect the decision making of guest in renting a hotel room (Weng, 2018). Nevertheless, Airbnb hosts will include the facilities and shared places available within the vicinity of the accommodation in the description of the accommodation on Airbnb website (Weng, 2018).

Other than that, friendliness and responsiveness of accommodation host and staff. People are the person that provide services or communicate with accommodation guest and they are the basic component in the process of lodging service transaction (Sanib et al., 2013). For peer-to-peer accommodation, the interaction between accommodation host and guest allow a vacant space likes vacant room and vacant house can be fully utilized and rent to accommodation guest (Böcker & Meelen, 2017). For hotel, the staff should be polite, friendly, able to speak and understand various language will help in retain guest and add value on the hotel (Hiransomboon, 2012). Furthermore, the online review and rating feature is the key trust mechanism on accommodation (Guttentag, 2016). Most of the guests will consider on others'

reviews and rating before they make decision to rent an accommodation. A number of researches had proved that the review and rating features can use to reduce accommodation guest's potential risk in renting an accommodation by reviewing the comment by other guests on the accommodation website (Wu, 2014; Park & Lee, 2009). Reputation of hotel brand and host profile will influence on guest's decision-making process on renting an accommodation (Ma et. al., 2017). Ert et. al. (2016) stated that an accommodation can be rent at a higher price and more likely to get higher number of booking if the host shows a more trustworthy profile picture while Weng (2018) stated that a credible brand image will enhance the property's market value and improve financial performance by increasing the rental price, occupancy rate and also the revenue of the property.

Cleanliness and hygiene of accommodation is also a significant factor which will increase guests' satisfaction. The better the cleanliness and hygiene of an accommodation, the higher the satisfaction level of guest when they staying in that particular accommodation (Khoo-Lattimore & Prayag, 2016). Wilkins et al. (2007) stated that the cleanliness of an accommodation is the most priority factor among any other basic lodging factors when the guests are making decision to rent an accommodation. Next, service quality is defined as the effectiveness and efficiency of the service delivered by the accommodation provider (Hiransomboon, 2012). Example of accommodation service delivered to the guests include of the reservation, cancelation policy, check in and out services (Guttentag et al., 2018). An accommodation guest will evaluate the accommodation in terms of the quality of services delivered within agreed time period, efficiency of reservation and transparency of the transaction (Amin et al., 2013). Last but not least, safety and security. The safety of neighbourhood is also emphasized by the guests and the accommodation will get more bookings if it located in a secured neighbourhood (Varma et al., 2016). Female guests will first consider on safety and security factor when they are making decision to rent an accommodation disregard of the purpose of renting such as peep hole, closed-circuit television and brightly lit parking area (Khoo-Lattimore & Ekiz, 2014). Table 1 below shows the factors that will affect the decision making of guests in renting an accommodation which identified in literature review with respective references.

Factors	References
Price	Woon & Ch'ng (2019); Rhee & Yang (2015); Pappas (2017); Mao & Lyu (2017);
	Nicolau (2012); Varma et al. (2016); Razli et al. (2017); Kim et al. (2016); FMT
	Reporters (2017); Issakova (2014); Hiransomboon (2012); Guttentag (2016)
Location	Weng (2018); Tussyadiah & Zach (2016); Rhee & Yang (2015); Khosravi et al. (2014);
	Gutierrez et al. (2017); Tussyadiah (2016); Ren et al. (2016)
Functional	Weng (2018); Guttentag (2016); Khoo-Lattimore & Prayag (2016); Tussyadiah & Zach
Attributes	(2016); Dogru & Pekin (2017)
Friendliness and	Sanib et al. (2013); Böcker & Meelen (2017); Guttentag et al. (2017); Guttentag (2015);
Responsiveness of	Fang et al. (2015); Hiransomboon (2012); Emir & Kozak (2011); Albattat & Amer
Host and Staff	(2016); Rhee & Yang (2015); Birinci et al. (2018); Tussyadiah & Zach (2015);
	Brochado et al. (2017); Tussyadiah (2016); Deloitte (2017); Chong et al. (2016); Amin
	et al. (2013); Zhang & Cole (2016); Priporas et al. (2017)
Online Review and	Guttentag (2015); Lee et al. (2019); Zervas et al. (2017); Wei & Lu (2013); Melian-
Rating	Gonzalez et al. (2013); Wu (2014); Park & Lee (2009); Gao et al. (2018); Zhu et al.
	(2019); King et al. (2014); Liang et al. (2017); Bridges & Vásquez (2018); Guttentag
	(2015); Tussyadiah & Zach (2016); Woon & Ch'ng (2019); Airbnb (2019); Wang &
	Nicolau (2017); Alrawadieh & Law (2019); Ye et al. (2011); Öğüt & Onur (2012);
	Zervas et al. (2017); Deloitte (2017)
Reputation of Hotel	Ma et al. (2017); Edelman & Luca (2014); Ert et al. (2016); Edelman et al. (2017); Wu

Table 1: List of factors and respective references

Brand and Host Profile	et al. (2016); Ert et al. (2016); Xie & Mao (2017); Geron (2013); Johanudin et al. (2015); Weng (2018); Tsou et al. (2015);
Cleanliness and	Khoo-Lattimore & Ekiz (2014); Weng (2018); Hiransomboon (2012); Khoo-Lattimore
Hygiene of	& Prayag (2016); Wilkins et al. (2007); Lockyer (2005); Rhee & Yang (2015); Ren et al.
Accommodation	(2016); Dogru & Pekin (2017)
Service Quality	Hiransomboon (2012); Guttentag et al. (2017); Amin et al. (2013); Emir & Kozak
	(2011);
Safety and Security	Varma et al. (2016); Khoo-Lattimore & Ekiz (2014); Khoo-Lattimore & Prayag (2016);
	Finley (2013); Weng (2018)

3. Research Methodology

Quantitative research approach is adopted in completing this research. The method used in collecting primary data for this research is questionnaire survey. Due to the outbreak of Covid-19, this questionnaire survey was forced to distribute to the respondents through online medium such as Facebook messenger, WhatsApp and email. First, the respondents will need to answer for the section A of the questionnaire survey which is the screening of respondents. After that, only qualified respondents that had passed through the screening section will proceeded to answer for section B and C of the questionnaire survey. The questionnaire survey consists of open listed question, dichotomous question, item list question and Likert skill technique. The research area of this study is focus in Malaysia since it is one of the famous tourist attraction country in Asia and there are many hotel and Airbnb listings in Malaysia.

Sampling Method

In this study, non-probability sampling method will be applied in conducting questionnaire survey. Convenience sampling method will be adopted in distributing of questionnaires to the respondents. Taro Yamane formula was adopted to calculate the sample size of the respondents needed in this research. According to Yamane, the formula to calculate the sample size is $n = N/(1+N(e)^2)$ (Yamane, 1967) where n is size of sample; N is population of sample and e is probability of error. The calculation of sample size for questionnaire survey at 90% of confidence level is shown below:

 $\begin{array}{l} n = 23,238,300/ \left[1+23,238,300 \ (0.1)^2 \right] \\ n = 23,238,300 \ / \ 232,384 \\ n = 100 \end{array}$

By using Taro Yamane formula with 90% of confidence level, the number of respondents needed for the questionnaire survey for this research is 100. In this research, there are 536 respondents took part in the first questionnaire survey (Section A) and 203 respondents were qualified to answer for the second questionnaire (Section B & C) after the screening process. Qualified respondent is a respondent who is aged 18 and above, had both the experience of renting hotel and Airbnb accommodation within three years and he or she must play a significant role when making the decision to rent the accommodation.

4. Data Analysis

In this research, the data analysis methods adopted are frequency analysis and relative importance index. Questions in section A and section B of questionnaire will be analysed by using frequency analysis. By using frequency analysis in this study, a brief image of the overall demographic information of respondents and the number and percentage of qualified respondents for this questionnaire survey will be shown. Moreover, Relative index analysis is chosen in this study as it can ascertain the relative ranking of the factor and it's transformed from all the numerical scores of the identified factor (Rooshdi et. al., 2018). As a result, this ranking allows the researcher to cross-compare the relative importance of the factor as perceived by the respondents (Rooshdi et. al., 2018). This data analysis method will be used to analyse the Likert scale questions in section C of the questionnaire. According to Kumaraswamy and Chan (1998), the formula below is used to calculate the relative important index of each factors:

Relative Importance Index =

For the formula above, w is the weighting given to each variable by the respondents, ranging from 1 to 5. A is the highest weight) and N is the total number of respondents. A higher relative importance index value represents that the particular factor is more noteworthy than other factors with lower relative importance index value.

5. Findings and Discussion

Factors Affecting Decision Making of Guest in Renting Accommodation Between Peer-topeer Accommodation and Hotel

The first objective of this research which is to identify the factors that will affect guests' decision making in renting an accommodation between peer-to-peer accommodation and hotel will be achieved through review of past literature. Table 2 below shows the factors that will affect the decision making of guests in renting an accommodation with respective details.

Factors	Details
Price	Accommodation guests will evaluate the value of an accommodation according to the service that provided by the lodging service provider for the exchange of the monetary paid.
Location	Accommodation guests are more likely to rent an accommodation which is near to centre city, public transportation, and restaurants
Functional Attributes	The facilities available in a hotel consist of seminar rooms, swimming pools and gym room which do not available in most of the Airbnb listings. Airbnb hosts will include the facilities available within the vicinity of the accommodation in the description of their listing.
Friendliness and Responsiveness of Host and Staff	Person that provide services or communicate with accommodation guest are the basic component in the process of lodging service transaction. The interaction between accommodation host and guests allow a vacant space can be fully utilized.
Online Review and Rating	Online rating is considered as an indicator of guests' satisfaction. After completion of each stay, all guests are encouraged to write a review on their experience on the accommodation's website
Reputation of Hotel Brand and Host Profile	Host's demographic information which showed on their profile such as profile pictures, host's name and sex will affect guests' decision making. A credible brand image will enhance the property's market value and improve financial performance.
Cleanliness and Hygiene of Accommodation	The better the cleanliness and hygiene of an accommodation, the higher the satisfaction level of guest when they staying in that particular accommodation.
Service Quality	A guest will evaluate the accommodation in terms of the quality of services delivered within agreed time period, efficiency of reservation and transparency of the transaction
Safety and Security	Accommodation guest looks seriously on personal safety as an issue when choosing an accommodation. The safety of neighbourhood is also emphasized by the guests especially when they rent and stay in an accommodation situated in main city.

Table 2:	List o	of factors	and details
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Respondents' Screening Process

In this research, screening process is carried out to make sure that the data is only obtained from qualified respondents. A qualified respondent is a respondent who is aged 18 and above, had both the experience of renting hotel and Airbnb accommodation within three years and he or she must play a significant role when making the decision to rent the accommodation. There are 536 respondents took part in answering the screening section. If the respondent cannot fulfil one of the requirements in this section, he or she is not allowed to answer for the following questions.

Table 3 shows frequency of respondents' age. There are 488 respondents (91%) from a total of 536 respondents is aged 18 and above while 48 respondents (9%) is aged below 18. This means that 91% of the respondents is 18 and above and they are qualified to proceed to next question. This is because a person must be 18 or above to register an account as a guest or host on Airbnb website. Person who is below 18 cannot use services of Airbnb or it will violate the terms of Service of Airbnb (Airbnb, 2019).

Age of respondents	Frequency	Percentage (%)
18 and above	488	91%
Below 18	48	9%
Total	536	100%

Table 3:	Frequency	of respondents'	age
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Table 4 shows the respondents' experience in renting both hotel and Airbnb. There is a total of 488 respondents who responded to this question. According to the results obtained, 78.1% of respondents (381 respondents) had experience in renting both hotel and Airbnb accommodation. 107 respondents (21.9%) do not have experience in renting both accommodation and they are disqualified in this question. The guest must have experience in renting both hotel and Airbnb accommodation so that they know the difference between both accommodation and the factor affecting them to choose either one accommodation to rent.

Table 4: Frequency of respondents'	experience in renting bot	h hatel and Airbnh accommodation
Table 4. Frequency of respondents	experience in renuing both	ii notel and An Did accommodation

Respondents' experience in renting both hotel and Airbnb accommodation	Frequency	Percentage (%)
Yes	381	78.1%
No	107	21.9%
Total	488	100%

Next, table 5 depicts 344 respondents (90.3%) rented both the hotel and Airbnb accommodation within 3 years while 37 respondents (9.7%) rented both accommodation more than three years ago. The high rate of respondents where they had rented both accommodation within three years (90.3%) is because the Airbnb service had just introduced in few years back and it is still new in Malaysia. A guest must had rented both accommodation within three years because the lodging experience in both accommodation which is more than three years ago is not suitable to apply in this study as it is outdated since consumer's preference is changing from days to days.

Last time respondents rented both the hotel and Airbnb accommodation	Frequency	Percentage (%)
Within three years	344	90.3%
More than three years ago	37	9.7%
Total	381	100%

Table 5: Frequency of last time respondents rented both the hotel and Airbnb accommodation

Table 6 shows that there are 203 respondents (59%) used to play a significant role when making the decision to rent the accommodation while 141 respondents (41%) did not play a significant role in renting the accommodation. A guest must had played a significant role in decision making so that they will know which factor will affect their decision making in renting an accommodation the most by comparing both the accommodations. As a result, only 203 respondents (37.9%) are qualified respondents and they are eligible to answer for section B and section C of the questionnaire, while 333 respondents (62.1%) are unqualified respondents.

 Table 6: Frequency of respondents who play a significant role when making the decision to rent the accommodation

Respondents play a significant role when making the decision to rent the accommodation	Frequency	Percentage (%)
Yes	203	59%
No	141	41%
Total	344	100%

Priority of Factor That Will Affect Guests' Decision Making in Renting an Accommodation between Peer-to-peer Accommodation and Hotel

The second objective of this research is to analyse the priority of guests' preferences in renting an accommodation. There are total of 203 qualified respondents who had passed the screening process (Section A) were involved in answering this section. Table 7 show the overall ranking and relative importance index of the factors that will affect guests' decision making in renting an accommodation between Airbnb and hotel. The most significant factor that will affect guests' decision making in renting an accommodation between Airbnb and hotel is cleanliness and hygiene of the accommodation. This is because the questionnaire survey was carried out during the period of movement control order. Due the outbreak of Covid-19, people nowadays are more focusing on the hygiene of the accommodation they stay. People will not consider to rent an accommodation without sterilization because they scare of the ex-accommodation guest or cleaning staff will carry the Covid-19 or other viruses to the accommodation which they had booked to stay. This had proved by Wilkins et al. (2007) who stated that the cleanliness of an accommodation is the most priority factor among any other basic lodging factors when the guests are making decision to rent an accommodation.

Moreover, people are becoming more emphasize on the safety and security of the accommodation they rent as this factor ranked at 2nd place among the other factors. Nowadays, most of the accommodation guests tend to rent an accommodation which equipped with high security door, closed-circuit television, 24 hours guided by guard and car park with bright lamp (Khoo-Lattimore & Prayag, 2016). The accommodation guests are willing to pay more money for the safety and security features to be added on the accommodation since price factor rank after safety and security factor. After that, they will also consider on the rental price of the accommodation and follow by service quality, functional attributes and amenities of accommodation, location, friendliness and responsiveness of host and staff, online review and

rating. After looking into all the factors mentioned above, they will only consider on the reputation of hotel brand and host profile while they are making decision in renting an accommodation. This is because a hotel or an Airbnb host with good reputation doesn't mean that their accommodation is better than the others. A high reputation accommodation also may fill with bad reviews and low service quality.

Table 7: Priority of Factor that will affect guests' decision making in renting an accommodation with its				
relative importance index				

Ranking	Factor	Relative Importance Index
1	Cleanliness and hygiene of accommodation	0.928
2	Safety and security	0.914
3	Price	0.898
4	Service quality	0.875
5	Functional attributes and amenities of accommodation	0.857
6	Location	0.846
7	Friendliness and responsiveness of host and staff	0.836
8	Online review and rating	0.832
9	Reputation of hotel brand and host profile	0.778

6. Conclusion

In a nutshell, the factors that will influence guests' decision making in renting an accommodation are very important to the people who provide lodging service such as hotel operators and Airbnb hosts. Guest's preferred factors are important in improving the quality of accommodation service and getting more customers for the accommodation services provided. Airbnb hosts should know the factors which can increase guest's satisfaction and guest's intention in renting an accommodation in order to improve their premises and attract guests to rent their accommodation. Moreover, the information is also important to hotel operator to know the competitive advantages of Airbnb so that the hotel operator can improve the competitiveness of hotel. Furthermore, Airbnb hosts and hotel operators should aware of the priority of preferences and requirements of the guests including local guests and foreign guests in order to rent out his or her unit. By knowing the priority of guest preferred attributes in renting an accommodation, both the hotel operator and Airbnb hosts can have better budget allocation to improve their accommodation according to the priority of guests' preference in choosing accommodation. Moreover, they are able to supply the accommodations which most suit the market's needs with real insight by focusing on the priority of guest preferences in renting an accommodation and increase their relative competitiveness in the lodging market. The future research is suggested to increase the number of qualified respondents involved in questionnaire survey and the researcher can narrow down in the research area into a specific location such as Kuala Lumpur, Johor Bahru, Penang and Melaka.

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Influence Of Utilitarian Shopping Value, And Electronic Word Of Mouth On Mobile Shopping: A Conceptual Framework

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Abstract: Advancements in technology allows the integration of smartphone usage and online shopping. Current statistics have shown that there is an increasing number of online consumers. Different consumer age groups shops for different items to satisfy their various needs. Previous studies have shown that these consumers portray utilitarian shopping value and relies on word of mouth in forming purchase intention of a product. Within the online context, consumers also correspond towards utilitarian shopping value and electronic word of mouth to form their online purchase intention. These are further influenced by perceived risk of online purchase, which have been identified as product risk, financial risk and security risk. A framework examining the relationship of utilitarian shopping value and electronic word of mouth on online purchase intention is proposed, and the role of perceived risk in influencing them.

Keywords: online purchase intention, utilitarian shopping value, electronic word of mouth, perceived risk

1. Introduction

The ubiquity of mobile shopping allows consumers to shop at their leisure and convenience, which changes the experience of consumers entirely in comparison to conventional retail experience at a physical store (Ghazali, Mutum, Chong, & Nguyen, 2018). Furthermore, shopping through the internet provides a direct interaction channel where time, location and people are not defined, thus offering several unique advantages such as wider consumer reach, convenience in communication, easy access to information and the ability to quickly compare alternatives

To take full advantage of this new opportunity, companies have begun to venture into mobile platforms to interact and understand customers better. Globally, Asians are at the forefront of the average number of transactions (per person per year) with 22.1 number of transactions annually (KPMG, 2017). Furthermore, it was also reported that, in frequency of online shopping, Generation X shops the most at 18.6 times while Baby Boomers and the Millennials average at 15.1 and 15.6, respectively. However, it should be noted that the Baby Boomers group. on average, spent more per transaction as compared to the other two groups. This was due to the fact that Baby Boomers are more likely to buy healthcare products, wine and household goods and appliances, which are categories of products with tendencies to have a higher price point among all other products commonly sold online The average amount spent per transaction for Baby Boomers is at \$203 while Generation X and Millennials spent \$190 and \$173 respectively. (KPMG, 2017)

The baby boomers, people born between 1946 -1965, are also found to be the second most active category of online shoppers after the Generation X, those born between 1966 - 1981

(KPMG, 2017),Consumption of health care products is significant in the age category of above 50 as 75% of total spending in this category were made by people within this age group.

The situation in Malaysia reflected the global growth as it was reported that the preferred device to access the internet for Malaysians is through a smartphone, which have managed a 93.1% penetration of the market. Furthermore, it was also reported that the percentage of online shopping in Malaysia rose from 48.8% in 2016 to 53.3% in 2018. Similarly, the percentage of internet users aged 50 and above rose from 8.4% in 2016 to 18.1% in 2018 (MCMC, 2018). Furthermore, smartphones were found to be the most common device to access the internet which indicates that companies need to be continuously vigilant as competition increases (MCMC, 2018).

Both the global and local statistics indicates a strong expansion and growth opportunities for health care products, among other products sold online. Health care products encapsulates a wide array of products. These products include exercise equipment, home medical devices, personal care items and, medicine and supplements In Malaysia, health products made for consumption is regulated by the National Pharmaceutical Regulatory Agency (NPRA) and it regulates all types of products related to health. Healthcare products may also include devices used to monitor health. This type of products can be divided into wearables (smart watch, step counter) and non-wearables (glucose monitoring device, heart rate monitor) (Mou & Shin, 2018).

Encouraged by the increasing presence of baby boomers in online shopping and the demand of healthcare products in online stores, it is apparent that retail companies and marketers can benefit from understanding the factors influencing the purchase intention of these health care products.

Despite the many advantages of mobile shopping, some uncertainties exist in terms of the factors contributing towards consumers' online purchase intention. Proliferation of studies on consumer's intention to adopt mobile shopping in Malaysia is available but does not provide a clear understanding on factors that affect adoption intentions of baby boomers in an emerging economy such as Malaysia. Previous researches mainly utilized Technology Acceptance Models (TAM) (Davis, 1989) and Theory of Planned Behavior (TPB) (Icek, 1991) models in exploring consumer behavioral intentions on mobile shopping (Ghazali et al., 2018).Other technology acceptance framework were also found through models such as diffusion of innovation (Rogers, 1995) and unified theory of acceptance and use of technology (Venkatesh, Morris, Davis, & Davis, 2003) As a result, many constructs were added to extend the models, such as compatibility, convenience, connectivity, perceived enjoyment, facilitating conditions, perceived risks and trust (Wong, Tan, Ooi, & Lin, 2015).

Another approach towards exploring models of online shopping can be seen by employing the Stimulus-Organism-Response (S-O-R) framework (Laroche, 2010). Various studies, in an effort to predict behavioral intention, have based its model on the aforementioned model, where factors such as reputation, website quality, consumer's emotion, and perceived risk were analyzed (Kamalul Ariffin, Mohan, & Goh, 2018) (Kim & Lennon, 2013)

1.1 Online Shopping in Malaysia

Online shopping in Malaysia is blossoming due to it being supported by an extensive internet network and growth of internet subscribers within the country. This can be seen from the growth of internet users from 76.9% in 2016 to 87.4% in 2018 (MCMC, 2018)

As such, they are many online shopping platforms for consumers to choose. These online shopping platforms varies from a general marketplace, where a wide variety of products are sold, to a specialized platform, where the focus is on niche category of products. Some of these online shopping platforms are internationally based while others are based in Malaysia.

Website traffic for all these online shopping platforms has been impressive ranging from 400,000 to 4 million visits a month. The top two websites recorded an average of 20 million visits a month (MiDEC, 2018)). The table below compiles the top ten e-Commerce sites in Malaysia.

Name	Description	Estimated Monthly Visitors
Shopee Malaysia	Primarily mobile, diversified online shop also providing regular web shopping experience	20,900,000
Lazada Malaysia	Online department store and marketplace for retailers	20,000,000
Lelong.my	Online marketplace catering to customer to customer and business to customer transactions	3,650,000
Carousell Malaysia	Online platform that allows businesses and individuals to sell their products	2,200,000
Zalora Malaysia	Specialized fashion online store	1,450,000
11 th Street Malaysia	Online department store that allows retailers to sell online.	1,350,000
Go Shop	Multichannel retail experience. Convenience of online shopping with a 24-hour television channel	780,000
Ebay Malaysia	A Malaysian local site from a global e-commerce leader	730,000
Hermo	Specialized e-commerce store for beauty and cosmetic products	470,000
Qoo10 Malaysia	Online marketplace for women and fashion	440,000

Table 1: Top ten e-Commerce website in Malaysia 2018

Out of the 10 listed sites above, two are specialized online stores for fashion, Qoo10 malaysia and Zalora Malaysia. The other eight online stores sell products which falls within the definition of healthcare products in the context of this study.

1.3 Problem Statement

Studies have shown that the omnipresence of mobile shopping enables shopping at any time and venue, does not require physical presence at the stores, time saving and offers a lower price as compared to a physical store (Ghazali et al., 2018) (Wong et al., 2015). The growth of online shopping in Malaysia signifies the importance of mobile shopping and it must not be understated (MCMC, 2018) As online stores grow bigger and caters to the needs of a larger audience, the increased patronage of customers within the baby boomers age cohort cannot be overlooked.

Different age cohort shop for different items online to satisfy their different needs. Healthcare products represents a large portion of items that Baby Boomers typically purchase online (KPMG, 2017). In the process of completing an online shopping, consumers are often directed by two different shopping conditions, hedonic and utilitarian shopping values.

The hedonic shopping value proposes that consumer behaviour towards shopping is driven by the need to seek value according to pleasure and arousal stimulation (Babin, Darden, & Griffin,

1994) . Hedonic stimulation can be exemplified in the design of the website and promotion based on recreational shopping. Consumers who are seeking stimulation and entertainment in their shopping experience are deemed as having hedonic focus (Büttner, Florack, & Göritz, 2014)

Utilitarian shopping value views consumers as efficacious and rational and they shop with a focus on completing a task (Batra & Ahtola, 1991). Shoppers employing utilitarian shopping value, is task-oriented and strives to achieve their goal with optimum efficiency. Research have shown that these types of shoppers evaluated bargain discounts as more attractive than non-monetary promotions (Büttner et al., 2014). Utilitarian goods consumption is more cognitively driven, instrumental, and task-oriented and accomplishes a goal.

It should be noted, however, that both hedonic and utilitarian shopping values are not mutually exclusive and are often found to co-exist in consumer behaviour (Vieira, Santini, & Araujo, 2018). This complementary relationship are due to two kinds of consumer evaluation of a product is cognitively placed on both utilitarian (useful, beneficial) and on hedonic (pleasant, agreeable) dimensions (Batra & Ahtola, 1991). This view is supported by other researchers who also found the positive association between hedonic and utilitarian shopping values and thus helps consumers pursue dual utilitarian and hedonic goals. (Vieira et al., 2018) ((Alba & Williams, 2013).

The baby boomer age cohort also portrays their shopping behaviour according to both dimensions of shopping value, hedonic and utilitarian. However, researchers have argued that people within that age is inclined towards shopping using more utilitarian shopping value. Particularly, this is due to aging customers becoming convenience-oriented in their late life (G. P. Moschis, 1992). Furthermore, in his study on Gerontographics, a segmentation approach of seniors' behaviours, it was suggested that older adults, who experienced similar circumstances in later life are likely to exhibit the same kind of behaviour (G. P. Moschis, 1992).

Thus, it can be clearly said that baby boomers utilises mobile phones for a more functional and utilitarian reasons and thus valorise more utilitarian reasons (Archana Kumar & Lim, 2008). As such, utilitarian shopping value regards online shopping as a mission-oriented and rational shopping experience (Ajay Kumar & Kashyap, 2018).

Communication channel between potential customers is enhanced in the social media age. There is a variation of platform in which users can access to read reviews, social media pages for customer testimonies and even video platform to view the products. These various communication channels are also known as electronic word of mouth (EWOM).

Word of mouth, is acknowledged by researches to influence the behavioural intentions of consumers (Chatterjee, 2001). This form of communication is also more effective over other sources like editorial and advertisements due to perception of reliability (Gruen, Osmonbekov, & Czaplewski, 2006). Hence, it was suggested that this type of communication has a high level of trustworthiness and higher perceived credibility which in turn, makes word of mouth a very persuasive type of communication. The advancement of social media has moved word of mouth from a face to face communication about the product, to the digital age interaction via the internet (Prasad, Gupta, & Totala, 2017).

Consumers in the modern age interacts through various functions of a social media platform. Such platform allows consumers to lodge a complaint, compliment and engage in a discussion with businesses online (Prasad et al., 2017). From a company's perspective, social media is a source of market intelligence and many big organizations participate in blogs and social networking sites to keep track of the market and consumer feedback. (Prasad et al., 2017). Furthermore, these companies uses social media to engage with consumers to disseminate information on their products and services, they are also able to foster online communities and establish online branding (van Doorn et al., 2010). The impact of referrals through social networks are found to be longer and substantial as compared to traditional advertising and they produce a better response elasticity (Trusov, Bucklin, & Pauwels, 2018)

The ability for consumers to gather all sorts of information about a company or product show the prominence of EWOM as a marketing tool. EWOM is any positive or negative statement made by potential, actual or former customers about a product or company which is made available to a multitude people and institutes via the internet (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004)

It was also suggested in a research that, EWOM communications have a strong effect on purchase intention direct or indirectly (Jalilvand & Samiei, 2012). This study intends to examine the effect and influence of EWOM in baby boomers' online purchase intention. In the process of completing an online transaction, consumers are required to evaluate the outcomes of their decision. Positive evaluation of the online transaction provides a greater likelihood of positive actions of the customers. These determinants of positive consumer response in an online environment are different from those in an off-line environment (Kim & Lennon, 2013)

Evaluation of the website to produce responses involves a cognitive process. Cognitive responses describe consumers' internal mental processes and state, and involves memory, knowledge structures, imagery, beliefs and thoughts (Holbrook & Hirschman, 1982). From an online perspective, consumer mental processes revolve on issues of how online information is interpreted to create beliefs and thoughts toward the service or product being provided. One of the consumer cognitive responses that a consumer might experience while online shopping is called perceived risk (Kim & Lennon, 2013).

Customers tend to be worried if they are uncertain that their goals can be met through the purchase that they are going to make. Perceived risk is an outcome of the uncertainty about the potential result of a behaviour and the possible unpleasantness of the consequences (Forsythe & Shi, 2003)

With online shopping, customers are not able to physically examine and feel the product prior to purchase. This causes the perceived risk of online shopping to be riskier as compared to a physical store. This is supported by past researches where it was suggested that perceived risk is a major factor in determining patronage decisions (Van den Poel & Leunis, 1995). It was also suggested that perceived risk is critical in influencing online shopping behaviour (Doolin & Dillon, 2002). Furthermore, it was also inferred by a study that the relationship between perceived risk and purchase intention, is significant in an online context (Kim & Lennon, 2013) Previous research have suggested that perceived risk in the online retailing context can be defined as the subjectively determined expectation of financial, psychological and time risk by an internet shopper in planning to complete a particular online purchase (Forsythe & Shi, 2003). While the opinion above is encompassing and overall dimension of perceived risk,

another research have suggested and emphasized on product, financial and security risks as the most influential type of perceived risk in an online context. (Almousa, 2011)

Perceived risk are found to be powerful at explaining consumer behaviour due to their inherent nature to avoid decision making errors as compared to maximise the opportunity in making purchases (Mitchell, 1999). It has also been used to mediate the relationship between online store environment cues and purchase intention (Chang & Chen, 2008).

In their study, Chang & Chen employed the S-O-R model where perceived risk represented the organism (O). Within the S-O-R model, stimulus is conceptualised as an influencing factor of the internal, organismic state of the individual. The organism is represented by cognitive and affective intermediary states and processes that mediate the relationships between the stimulus and the individual's responses. The response shows the actions of the consumers, whether a positive or negative behaviour of the consumer (Chang & Chen, 2008). The study further recommended the use of both trust and perceived risk as organism within the S-O-R model.

As was discussed earlier, utilitarian shopping value, personal innovativeness and electronic word of mouth are constructs that are capable to influence and affect the decision of an individual. These constructs were also used to as the stimulus within the S-O-R model in previous studies (Peng & Kim, 2015).

The S-O-R model, which is normally used in physical store retail settings to explain the consumer decision making process have been applied to online retail as it emerges as the most rapidly growing form of retailing (Mulpuru, Sehgal, Evans, & Roberge, 2011). A previous studies have explored the relationship among website navigational characteristics, user characteristics, internal state, consumer responses and outcomes in the context of online communication (Richard & Chandra, 2005). Another study have also applied the S-O-R model to understand the relationships among web site characteristics, emotional responses and purchasing behavior of the consumer (Mummalaneni, 2005). Hence, this shows that besides physical retail setting, the S-O-R model can be applied to understand the consumer decision making process in relation to online retail.

1.4 Research Objectives and Research Questions

In sum, the following research questions have been formulated to guide the empirical investigation of this study.:

- 1. How do utilitarian value and electronic word of mouth influence perceived risk and online purchase intentions of online healthcare product customers?
- 2. How does perceived risk mediate the effect of online purchase intention for online healthcare product customers?

Thus, the research objectives of this study are as below: -

- 1. To examine the significant influence of utilitarian values and electronic word of mouth on perceived risk for online healthcare product customers.
- 2. To determine the role of perceived risk as the mediator between utilitarian value and electronic word of mouth and online purchase intentions for online healthcare product customers

2. Literature Review

2.1 Purchase Intention

The purchase intention of customers is defined as the prospective planning to purchase a particular product or services in the future (Kun Shan & Yi-Man Teng, 2011). The purchase intention, from this perspective, leads to an increased performance of the consumer in order to get what he intended to purchase (Chia et al., 2016). Purchase intention and purchase decision are at two different stages of consumer behavior theory with a significant link between these two stages (Han & Kim, 2010). Purchase intention, however, reflects the consumer's foreseeable behavior in short-term future buying decisions (Fandos & Flavián, 2006). Hence, the purchase intention can be seen as a projection of consumer behavior that will have a significant contribution to the configuration of attitudes. (Assael, 1995), proposed that attitudes are developed due to a combination of beliefs, emotional responses and the foreseeable actions of the consumer. Other scholars have pointed out that the cognitive components are the knowledge and beliefs of the consumers regarding the product while the emotions and feelings towards the product forms the affective component (Fishbein & Ajzen, 1975). The cognitive component would be expressed through the consumer's purchase intention.

The advancement of technology moves retailing from a physical store towards online shopping. This is achieved together with the introduction of online banking and is supported by the internet's easy access to information and the social media. Online shopping is a viable option for consumers to shop more conveniently (Mansori, Liat, & Shan, 2012). It has also created new challenges for companies to come out with better products and services to maximize customer satisfaction (Wen, Chen, & Hwang, 2001) Online shopping intention can be defined as the intention of consumers to purchase products and services via the internet or use virtual shopping cart as a means to buy things during an online session (Close & Kukar-kinney, 2010). It was also suggested that online shopping intention is a vital predictor of actual purchasing behavior and that it reveals the desire of consumers to complete a purchase transaction via the virtual stores or websites (Chen, Hsu, & Lin, 2010).

Hence, by examining the literature, it can be said that online shopping intention is derived from purchase intention as supported by studies in online shopping.

2.2 Utilitarian Values

Utilitarian shopping values views consumers as more efficient and rationale, and they shop with a focus on task completion (Batra & Ahtola, 1991). Example of utilitarian products are products which sales are driven by monetary promotions (Chandon, Wansink, & Laurent, n.d.). Research have shown that online shopping is mostly driven by utilitarian shopping value (Delafrooz, Paim, & Khatibi, 2011).

Utilitarian shopping value is found to be present in online shopping and it is also valuable in leading to customer satisfaction (Scarpi, 2012). Satisfaction is also closely related to utilitarian value. Factors such as good value for money, convenience, board selection and availability, information availability and customized products leads to higher utilitarian value (Deng, Lu, Kee, & Zhang, 2010). In measuring utilitarian value, the following five factors were found to be crucial: Information available, accessibility, product availability, searchability and convenience (Ajay Kumar & Kashyap, 2018). These factors are supported by earlier studies where it was shown that convenience is a driver in online shopping (Izquierdo-Yusta & Newell, 2011). Product information is also considered as a major reason towards online

shopping (Kaur & Khanam Quareshi, 2015). Thus, this study adopts the measurement on utilitarian values as proposed by Kumar & Kashyap (2018).

Jiang et al (2013) in his study identified five dimensions of online shopping convenience which includes access, search, evaluation, transaction and possession/post purchase convenience. Furthermore, it was suggested by other studies that convenience is a motivational driver in online shopping Yusta & Newell (2011). Thus, the convenience of online shopping directly relates to product information, accessibility, and product availability online. However, for the purpose of this research, the element of searchability will be omitted due to it reflecting the engagement of customer on shopping website for a long time if their desired product requirement is available (Ajay Kumar & Kashyap, 2018). Hence, utilitarian value will be measured through information available, accessibility, product availability and convenience

2.3 Electronic Word of Mouth

Word of mouth is accepted as one factor that influences behavioural intentions of consumers (Chatterjee, 2001). This type of communication has better effectiveness over other sources like editorial recommendations and advertisements due to the perception of reliability, credibility and trustworthiness (Gruen et al., 2006)

While traditionally word of mouth refers to face to face conversations among consumers about a product, the ubiquity of the internet saw the rise of an internet based communications that is called electronic word of mouth (EWOM) (Prasad et al., 2017). Through the internet, users are empowered and enabled create and share different contents online. This can be done through social networking sites, online review/rating sites and, blogs and video reviews (Krishnamurthy & Dou, 2008).

Electronic word of mouth can be defined as any positive or negative statement made by potential, actual or former customers about a product or company which is made available to multitude of people and institutes via the internet (Hennig-Thurau et al., 2004). Product reviews posted by consumers online is one of the most pertinent ways for EWOM communication. It is also found in a study that online product reviews are increasingly being sought by consumers at pre-purchase information search (Adjei, Noble, & Noble, 2010)

2.4 Perceived Risk

Consumers' perceived risks towards online shopping is critical due to its significant influence on consumer attitudes towards online purchases and online shopping behaviour (Ariff, Sylvester, Zakuan, Ismail, & Ali, 2014). Hence, this negative relationship with purchase intention indicates that a higher level of perceived risk will deter consumers purchasing intention (Kamalul Ariffin et al., 2018).

Perceived risk can be defined as the expectation of losses. The degree of perceived risk will increase if the expectation of losses is higher (Schierz, Schilke, & Wirtz, 2010). On the other hand, perceived risk can also be defined through the perception of consumers on variable and opposing outcomes of engaging in a transaction on a product and service. This includes indecisions and consequences. Indecisions are defined as the probability of unfavourable outcomes while consequences are the importance of losses (Ko, Jung, Kim, & Shim, 2004). In a study on the multidimensional approach towards perceived risk, it was suggested that three types of risk are the most influential. These risks are product risk, financial risk and security

products received not meeting the expectations in terms of product standard and quality. Furthermore, there is also a possibility of a failure to meet the expected performance of what it was originally intended for(Zheng, Favier, Huang, & Coat, 2012). Financial risk refers to the possibility of an online consumer suffering from losses from a purchase that does not perform to its expectations or if the product is not worth the price paid. Any form of monetary loss will deter consumers from completing the online transaction and has strong negative effect on purchase intention (Masoud, 2013). Security risk involves potential losses incurred due to various types of internet frauds, resulting from the works of internet hackers which exposes the frailty of an internet transaction (Soltanpanah, Shafe'ei, & Mirani, 2012). This includes vital information such as credit card information, account number or security password. The perceived risk in this study will be measured through these three types of risk.

Within the S-O-R framework, the organism represents an affective and cognitive intermediary state and processes that mediates the relationship between the stimulus and response. In the context of online retail, cognitive state concerns on factors such as how consumers interpret information provided online and form thoughts and beliefs on the product (Kim & Lennon, 2013). Perceived risk in online retail context can be seen as the subjectively determined expectation of financial performance, psychological and time/convenience risk by a consumer in planning a particular online purchase (Forsythe & Shi, 2003).

Hence, perceived risks were also found to influence consumer emotion. This is in line with previous studies suggesting a causal relationship of cognition influencing emotion (Chebat & Michon, 2003). Furthermore it was also suggested that emotion will arise as a result of consumers' evaluation of the risk associated with shopping online (Kim & Lennon, 2013).

2.5 Stimuli-Organism-Response (S-O-R) Framework

The Stimuli-Organism-Response (S-O-R) framework found its origins in environmental psychology where it was postulated that environmental stimuli(S) leads to the emotional reactions of the organism(O), which in turn, will drive behavioural response(R) (Russell & Mehrabian, 1974). To study human perception of their encountered environments the original S-O-R model included three emotional dimensions: pleasure, arousal and dominance (the PAD Scale). However, it was disputed that the three dimensions of the PAD-Scale can be linked to one joint model of attitude. Hence, pleasure, arousal and dominance can be unified as one measure in Organism (O) (Bakker, van der Voordt, Vink, & de Boon, 2014)

In applying the S-O-R framework in marketing research, studies have examined the response of customers to a situational or environmental stimulus. (Calvo-porral & Lévy-mangin, 2018) The first study to apply this framework examined the impact of store atmosphere on consumers' perceptions and behavior , showing that the pleasure derived from physical environment influence retail outcomes (Donovan & Rossiter, 1982).

From its application in studies of physical retail stores, S-O-R framework has been applied to online stores through various studies. The framework was applied to examine how two dimensions of web aesthetics, formality and appeal, influence online consumers' psychological reactions (Wang, Minor, & Wei, 2011). In a study to investigate how high -technology attributes influence consumer responses, the S-O-R model was applied by the researchers (Lee, Ha, & Widdows, 2011). The S-O-R framework was applied in examining the motivation of customers in completing a social transaction and the impact of technology and online customer experience (Zhang, Lu, Gupta, & Zhao, 2014). Hence, there are a plethora of examples where

the S-O-R framework has been applied in an attempt to understand the relationship between customer behaviour to an environmental or situational stimulus.

This study extends the framework to investigate factors influencing Baby Boomer's online purchase intention of healthcare products, using smartphones. The Stimuli includes utilitarian value and electronic word of mouth. Organism in the framework, which represents the emotional state of the consumers, includes perceived risk. Finally, online purchase intention will be the Response of the consumers.

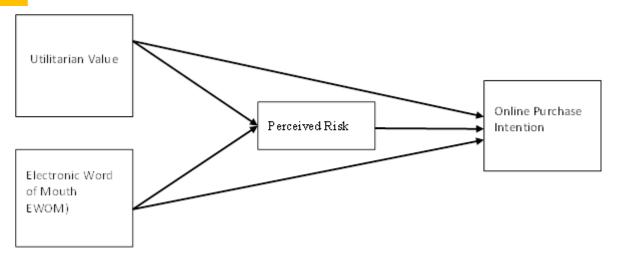
The S-O-R framework is suitable for this study as it provides theoretical support for the conceptual model and secondly, the literature has comprehensively discussed the S-O-R framework in consumer behaviour studies. Thus, this framework provides a comprehensive way to examine the impact of utilitarian value and electronic word of mouth as Stimuli, perceived risk as Organism and the online purchase intention as the Response among Baby Boomers

2.6 Baby Boomers

Baby Boomers are a group of people born in between 1946-1964 (Dinkins, 1993). It can be further divided into two categories of early baby boomers (1946-1954) and late baby boomers (1955-1964). However, these categories do not have a consensus among researchers and demographic scholars and thus, result in a variety of subdivisions (Rahman & Yu, 2018). Baby boomers spending moves from family goods towards personal goods as they age and go through retirement and "empty nest" (Wray & Hodges, 2008) (G. Moschis, Ferguson, & Meng, 2011). Among other personal needs expenditure that baby boomers spend on, healthcare product is a category in which they have the largest share (Young & Tinker, 2017). This is further supported in studies which shows that one of the key-driver of global consumption is health and wellness (Business Lab, 2012). There has been proliferation of mobile phone apps that supports health and fitness initiatives and among other things to monitor calories, heart rate, steps, and access to purchase healthcare products online. Hence, the mobile phone is a vehicle that the technologically proficient baby boomer is well placed to take advantage of (Gretton & Honeyman, 2016)

2.7 Theoretical Framework

The research problem and the literature review are the basis from which the theoretical framework model is created. This research model is based on the Stimulus-Organism-Response (SOR) framework. It identifies three independent variables, utilitarian value, and electronic word of mouth (EWOM), that forms the Stimulus. The organism is represented by perceived risk, which is measured by three types of risk, product, financial and security risk. Finally, the response is online purchase intention which reflects the purchase intention of consumers to acquire healthcare products via mobile phone. The research is conducted within a certain age group, which has been determined to be people born between 1946 to 1964, or otherwise known as the baby boomers.



3. Methodology

3.1 Method for Collecting and Analyzing Literature

Specifically, this research seeks to determine the perceptions and opinions of consumers with respect to their purchase intention of online healthcare products based on variables such as utilitarian value, electronic word of mouth, and the effect of such variable towards their perceived risk of online services.

A quantitative research method aims to assess the structural interactions between the variables of the research. A quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world. This research method is used to describe variables, to examine relationships among variables, to determine cause-and-effect interactions between variables (Burns & Grove, 2005). Furthermore, the research is designed based on the Stimulus-Organism-Response framework which is used to measure the variables in a structured process.

Secondary data played an important part for this study and can be considered as the backbone of the study. Furthermore, it allows the researcher to study closely on the theoretical aims and substantive issues of the study instead of spending most of the time thinking about the problems of collecting new data. The use of secondary data also helped the researcher to establish new relationships between his ideas that were, at the beginning of the research collection, entirely unforeseen (Finn, Elliott-White, & Walton, 2010). Moreover, the use of existing sources helps the researcher to formulate and understand the research problem better (Ghauri & Gronhaug, 2005).

Secondary data will facilitate researchers to familiarize theoretical and substantive issue of the study (Finn et al., 2010). Content analysis is performed from the previous research finding and interpreted to enhance the understanding on purchase intention of online healthcare products.

4. Conclusion

Advancements in the world of retail saw a transformation from relying on the traditional physical shops format towards the concept of online retailing, where business transactions are conducted through the internet These technology advancements introduced significant enhancement of services such as online mobile banking, social media and online shopping

services, which moves online retail from personal computers or laptops to the convenience of a handheld device.

The statistics on online shopping and technological advancements on devices shows a promising prospective for mobile shopping to be at the forefront of alternatives towards traditional shopping. The ubiquity of online shopping promotes attractive proposition such as convenience, time-saving and easy access to information. Based on the current trends, number of participants in online shopping have been increasing and companies began to realize that it is a good alternative to a physical store. Furthermore, the encouraging numbers of baby boomers participating in online purchase indicates that there is a demand for items that they are most often purchased by the group like healthcare products. Hence, in anticipation of the impending boom of mobile shopping of healthcare products, there is a need to study the relationship of factors contributing towards online purchase intention.

Nonetheless, the role of local companies must be a significant implication to ensure consumer participation and support towards online shopping. Thus, it is recommended future research could be directed to examine the difference between the two types of retailers, multichannel and pure online, in terms of consumers' evaluation of utilitarian value, electronic word of mouth, and perceived risk.

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Investigation and Analysis of Middle School Students' Life Stress and Depression Tendency - An Example of the Private Middle School in Taipei City

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Abstract: This study examine the relationship between life stress and depression tendency of middle school students and their current situation. The results of the study found that the subjects' life stress and depression tendency are in an appropriate state. The degree of depression presented by the Patient Health Questionnaire-9 (PHQ-9) showed no significant difference in different genders and grades. In terms of gender, only "Question 2" had a significant difference among the items, female were higher than male; in terms of life stress, female subjects felt significantly higher on "Question 4" than male, and male subjects were "Question 28" is more stressful than female. In terms of grades, the 9th grade students had significant differences in the two questions of "Question 7" and "Question 9", and their feeling degrees were higher than those of the 7th grade students. There was a causal relationship between life stress and depression tendency, and the degree of influence is as high as .84. The results of this study will be used as an important reference factor for future emotion detection. In addition to being a good screening and evaluation tool, it will also help counsellors to develop individual counselling strategies.

Keywords: Middle School Students, Life Stress, Depression Tendency, Patient Health Questionnaire-9 (PHQ-9)

1. Introduction

Social news about youth depression and self-harm often appears. The study found self-harm/ suicide is depression common to show the way (Butcher J. N., Mineka S., Hooley J.M., 2007; Hui-Ching Liu, Shen-Ing Liu, Yu-Hsin Huang, Jin-Jin Tjung and Chun-Kai Fang,2011), and 50% of teenagers who succeeded in suicide had sought medical attention before the incident (Taipei Community Mental Health Center, 2018). In view of this, if the public can understand the causes of depression, it may help reduce the possibility of depression and even suicide.

2. Literature Review

2.1 Depression causes

Research on the causes of depression is mostly based on biological, psychosocial factors (Butcher J. N., Mineka S., Hooley J.M., 2007).

Biological factors can be roughly divided into five aspects: genetic influences, neurochemical factors, hormone regulation system abnormalities, neurophysiological and neuroanatomical influences, sleep and other biological rhythms. Genetic studies have pointed out that people

with relatives who have depression have an individual's chance of having emotional disorders three times that of ordinary people, showing the possibility of inheritance of depression.

Neurochemical studies point out that the origin of depression may come from the secretion of neurotransmitters in the brain. There were more studies on norepinephrine, dopamine, and serotonin. It is believed that abnormal brain manifestations were related to depression.

In the part of sleep and biorhythm, it was observed that patients with depression have less sleep depth than those with non-depression, and the intensity and frequency of rapid eye movements were higher. Many social studies have shown that most people will be more melancholy on cloudy days or in autumn and winter, and their mood will normalize when the sun was full and in spring and summer.

Psychosocial factors were divided into stressful life events, different types of vulnerabilities, Baker's cognitive theory, depression's helplessness theory and despair theory, and the interpersonal effects of affective disorders. Most studies indicate that major life stress events were the influencing factors of depression. 70% of patients with first depressive episodes have recent major life stress events, and only about 40% of patients with repeated episodes have recent major life stress events. Among them, neurotic personality, cognitive quality, early adversity and loss of parents will increase the individual's sensitivity to stressful life events.

Baker's cognitive theory believes that individuals can cause depression because of cognitive biases in their own negative cognitions. Appropriate guidance can help slow down the occurrence of depression. There are patients in the cognitive aspects of depression are more research is helplessness theory of depression, despair and depression interpersonal theory. The interpersonal theory of depression points out that interpersonal distress and social skills deficits usually show up before the onset of depression. Depression can trigger negative feelings, hostility and rejection of others, and also have a two-way relationship with marriage and family life.

According to the above-mentioned research on the causes of depression, it was found that if an individual's depression symptoms were caused by physiological factors, they can be controlled and improved through clinical research and drugs. On the contrary, if it was psychosocial factors, more social research, understanding and discussion were needed to achieve more comprehensive cognition and assistance.

Domestic research has found that young people's awareness of depression has gradually increased and they are more willing to seek help, which shows that the overall society and campuses are in the right direction to promote depression and suicide prevention (Zuo-Gian Yi, 2018).

Taipei Community Mental Health Center (2018) found that most depression symptoms were more obvious under pressure. Therefore, when medical units assist teenagers in assessing their psychological conditions, they often collect life stressful events such as teenagers from families or campuses for reference and judgment.

2.2 Life stress

A survey conducted by the John Tung Foundation in 2018 found that the stressors for teenagers in the six major cities in Taiwan are academic exams, uncertainty about the future, and

interpersonal relationships (Zuo-Gian Yi, 2018). Most studies on the sources of stress for adolescents have found that most of them focus on the challenges of school work, interpersonal relationships and family events. A few studies mention physiological changes during adolescence, deaths of important people, social activities, money and social events (David W. Chan, 1998; K. R. Chou, 2002; Yun-Chen Chiang, 2015).

However, the Taipei City Government Community Mental Health Center (2018) pointed out that even though medical units currently have many scale tools for assessing adolescent depression, it was not easy to rely on medical units to assess and provide preventive assistance before the incident.

From the viewpoint of ecosystem theory, the occurrence of a certain event was not caused by a single factor. The occurrence of the event must be diverse, variable, and multi-faceted. In order to have more clues in evaluating the depression status of students and arranging related counselling strategies, this research uses the Patient Health Questionnaire-9 (PHQ-9), life stress scale, and class advocacy strengthens the individual's self-awareness ability, with the expectation that we can use multi-faceted measurement tools to understand the current life stress and depression tendency of students in each grade in the school, and effectively screen out students who need more care, or guide those in need The assisting students cooperate with the tutoring unit to face and improve the current situation.

Preventing youth depression and suicide/self-harm behaviour requires the joint efforts of families, medical units and campuses. Therefore, in addition to understanding the current depression tendency and life stress of middle school students, this research also hopes to implement a three-level campus counselling system based on the ecosystem theory by understanding the life pressure and depression tendency of middle school students as an early warning mechanism.

3. Discussion and Conclusion

3.1 Establishment of the Life-stress Scale and Patient Health Questionnaire-9 (PHQ-9) *3.1.1 Reliability analysis of the Patient Health Questionnaire-9 (PHQ-9)*

The reliability analysis of the scale Cornbrash's \Box is .84, and the average scores were 5.03, which shows that the internal consistency of the scale was highly stable and reliable(Table 1).

Table 1. The Fattent Health Questionnan	(11-410)		
Items	Μ	SD	Cronbach's α
1. Little interest or pleasure in doing things	.79	.864	
2. Feeling down, depressed, or hopeless	.69	.779	
3. Trouble falling or staying asleep, or sleeping too much	.59	.903	
4. Feeling tired or having little energy	.76	.857	
5. Poor appetite or overeating	.40	.735	
6. Feeling bad about yourself — or that you are a failure or have	.59	.817	
let yourself or your family down			.84
7. Trouble concentrating on things, such as reading the	.67	.848	.04
newspaper or watching television			
8. Moving or speaking so slowly that other people could have			
noticed? Or the opposite — being so fidgety or restless that	.22	.547	
you have been moving around a lot more than usual			
9. Thoughts that you would be better off dead or of hurting	.31	.680	
yourself in some way			

Table 1 : The Patient Health Questionnaire-9 (PHQ-9)(N=410)

3.1.2 Reliability analysis of the Life stress scale

Morganet R. S. (1990) believes that there was roughly three sources of life stress for children and adolescents, namely family, school and interpersonal. Among them, questions 1-9 were stressors at school, questions 10-20 were stressors at home, and questions 21-30 were interpersonal stressors. The reliability analysis of this scale was Cronbach's \Box was .926, and the average scores was 47.54, which shows that the internal consistency of the scores is highly stable and reliable (Table 2).

If the reliability of individual stressors was analyzed, it was found that the reliability of the interpersonal stressor was .887; for the part of the school stressor, if the questions 1, 2 and 6 were deleted, the reliability of the stressor of the school will increase to .84; the part of the family stressor, after deleting questions 10 and 14, the reliability increased to .843. The revised the life stress scale has a reliability of .928. Considering that the subjects also reflect these items when filling in the questionnaire, the researcher considered the difference between the subjects' life background and the original questionnaire, and deleted these five items and sorted them (Table 3).

	Avg.	SD	Cronbach's α
1. A particular teacher	1.94	1.092	
2. Gang characters in the school	1.12	.499	
3. A specific subject	2.51	1.136	
4. Feel that I am not as smart as other students	1.97	1.138	
5. Afraid of failure	2.18	1.273	.824
6. Failed to be selected for a school team or group	1.28	.727	
7. Worried about being fooled or bullied by classmates	1.46	1.041	
8. Unable to meet the expectations of parents or teachers	2.38	1.320	
9. Worried about not being able to enter a good school in the future	2.49	1.277	
10. Worried that I don't know which job I will do in the future	2.11	1.210	
11.Worrying that parents will divorce or remarry	1.34	.942	
12. Hurt by sister or brother	1.10	.451	
13. Hurt by other family members	1.14	.554	
14. Not enough pocket money or living expenses	1.34	.882	
15. Not getting the attention it deserves	1.38	.839	.822 .926
16. Prone to trouble due to lack of discipline	1.18	.569	
17. Not getting enough care and love	1.25	.716	
18. Parents quarrel or fight	1.31	.919	
19. Poor health of family members	1.47	.932	
20. Own poor health	1.45	.903	
21. Lose a close friend	1.71	1.480	
22. Not enough friends	1.42	.946	
23. Rejected by a friend	1.33	.743	
24. Be cheated or betrayed by a friend	1.69	1.114	
25. A friend speaks ill of me behind my back	1.66	1.095	.887
26. Feel unacceptable or unwelcome	1.62	1.108	
27. My parents don't like a certain friend of mine	1.37	.921	
28. I am worried that I have no male (female) friends	1.31	.836	
29. Don't know how to make friends	1.49	.969	

Table 2: Reliability analysis of the life stress scale

30.I don't know how to defend my rights	1.52 .998
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Items	Avg.	SD	Cronba	ich's α
3. A specific subject	2.51	1.136		
4. Feel that I am not as smart as other students	1.97	1.138		
5. Afraid of failure	2.18	1.273	Cronba	
7. Worried about being fooled or bullied by classmates	1.46	1.041	.04	
8. Unable to meet the expectations of parents or teachers	2.38	1.320		
9. Worried about not being able to enter a good school in the future	2.49	1.277		
11.Worrying that parents will divorce or remarry	1.34	.942		-
12. Hurt by sister or brother	1.10	.451		
13. Hurt by other family members	1.14	.554		
15. Not getting the attention it deserves	1.38	.839	.843	
16. Prone to trouble due to lack of discipline	1.18	.569		
17. Not getting enough care and love	1.25	.716		
18. Parents quarrel or fight	1.31	.919		.928
19. Poor health of family members	1.47	.932		
20. Own poor health	1.45	.903		
21. Lose a close friend	1.71	1.480		-
22. Not enough friends	1.42	.946		
23. Rejected by a friend	1.33	.743		
24. Be cheated or betrayed by a friend	1.69	1.114		
25. A friend speaks ill of me behind my back	1.66	1.095	007	
26. Feel unacceptable or unwelcome	1.62	1.108	007	
27. My parents don't like a certain friend of mine	1.37	.921		
28. I am worried that I have no male (female) friends	1.31	.836		
29. Don't know how to make friends	1.49	.969		
30.I don't know how to defend my rights	1.52	.998		

Table 3: Reliability analysis of the revised life stress scale

3.1.3 Factor analysis of the Patient Health Questionnaire-9 (PHQ-9)

This study intends to explore the potential structure of the PHQ-9 through factor analysis, and the suitability of factor analysis through the significance of the Kaoser-Meyer-Olkin (KMO) value and the Bartlett sphere test. The result of factor analysis showed that the KMO values were all greater than .7, and the Bartlett sphere test was significant, indicating that the PHQ-9 was suitable for factor analysis (Table 4).

Table 4: KMO and BartItett's Test of PHQ-9				
Kaiser-Meyer-Olkin measure of sam	pling adequacy	.836		
	Approx. Chi-Square	1129.328		
Bartltett's Sphericity Test	df	36		
	Sig.	.000		

The PHQ-9 of the component matrix after the shaft was divided into two factors. Questions 3, 4, 5, 7, and 8 mostly describe the behavioral performance of self-consciously observable externally, so they are named after the "behavior " factor; while the 4 questions 1, 2, 6, and 9 mostly describe the inner level of self-feelings were named after the "psychological ". The follow-up analysis of this research will also analyze and discuss through these two aspects.

3.1.4 Validity analysis of life stress and depression tendency

The scale used this time uses confirmatory factor analysis to test the constructability of the scale, and the overall model adaptation index is used to check whether the scale is appropriate. The fit estimation shows that: NFI (0.96), NNFI (.91), CFI (.97), GFI (.96), all greater than .90, indicating that the scale has an ideal fit. Therefore, organize the PHQ-9 and life stress scale as shown in Figure 1.

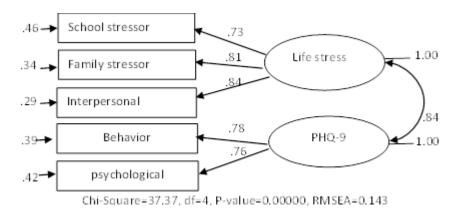


Figure 1: CFA of life stress and depression tendency

3.2 Current status of life stress and depression tendency of middle school students *3.2.1* Current status of life stress of middle school students

The life stress scale survey respondents' conscious stress levels in the past year were "no stress" for 1 point, "slight stress" for 2 points, "moderate stress" for 3 points, and "very high stress". "Stress" was 4 points, and "Extremely heavy pressure" was 5 points.

The survey on the current status of life stress of middle school students in this survey found that the average of the subjects' overall life stress scale was 48.04, and this result ranged from "no pressure" to "slight pressure" (Table 6).

The average of the three questions in the scale is higher than 2, which shows that the subjects feel "slightly stressed" by the stressor at school. These three questions are "a specific subject" (2.52), "worry about not being able to enter a good school in the future" (2.51) and "failure to meet the expectations of parents or teachers" (2.39). This study believes that the main reason was that the research objects are students in private schools. Because in Taiwan, middle school was the most critical moment in the advancement stage, most students or parents will hope that private schools can provide better learning or management, so that students have better competitiveness in entrance examinations.

Table 6: Current status of life	e stress of middle school stu	dents	(1	N=410)	
Items		Ν	%	Avg.	SD
3. A specific subject	no stress	80	19.5	2.52	1 1 4 1
	slight stress	141	34.4	2.52	1.141

	moderate stress	114	27.8		
	very high stress	45	11.0		
	Stress	30	7.3		
	no stress	179	43.7		
	slight stress	122	29.8		
4. Feel that I am not as smart as other students	moderate stress	64	15.6	1.99	1.142
	very high stress	23	5.6		
	Stress	22	5.4		
	no stress	153	37.3		
	slight stress	123	30.0		
5. Afraid of failure	moderate stress	69	16.8	2.21	1.27
	very high stress	26	6.3		
	Stress	39	9.5		
	no stress	300	73.2		
	slight stress	67	16.3		
7. Worried about being fooled or bullied by classmates	moderate stress	22	5.4	1.46	.933
	very high stress	7	1.7		
	Stress	14	3.4		
	no stress	133	32.4		
	slight stress	114	27.8		
8. Unable to meet the expectations of parents or	moderate stress	84	20.5	2.39	1.324
teachers	very high stress	30	7.3		
	Stress	49	12.0		
	no stress	113	27.6		
	slight stress	106	25.9		
9. Worried about not being able to enter a good school	moderate stress	101	24.6	2.51	1.290
in the future	very high stress	47	11.5		
	Stress	43	10.5		
	no stress	343	83.7		
	slight stress	30	7.3		
11.Worrying that parents will divorce or remarry	moderate stress	13	3.2	1.36	.954
	very high stress	6	1.5		
	Stress	18	4.4		
	no stress	382	93.2		
	slight stress	17	4.1		
12. Hurt by sister or brother	moderate stress	6	1.5	1.11	.482
	very high stress	3	.7		
	Stress	2	.5		
	no stress	374	91.2		
	slight stress	17	4.1		
13. Hurt by other family members	moderate stress	12	2.9	1.16	.582
	very high stress	4	1.0		
	Stress	3	.7		
15. Not getting the attention it deserves	no stress	314	76.6	1.38	.840
15. Not gotting the attention it deserves		517	70.0	1.50	.0-10

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	slight stress	60	14.6		
	moderate stress	21	5.1		
	very high stress	5	1.2		
	Stress	10	2.4		
	no stress	352	85.9		
	slight stress	43	10.5		
16. Prone to trouble due to lack of discipline	moderate stress	7	1.7	1.21	.612
	very high stress	4	1.0		
	Stress	4	1.0		
	no stress	345	84.1		
	slight stress	40	9.8		
17. Not getting enough care and love	moderate stress	10	2.4	1.27	.755
	very high stress	8	2.0		
	Stress	7	1.7		
	no stress	340	82.9		
	slight stress	36	8.8		
18. Parents quarrel or fight	moderate stress	16	3.9	1.32	.832
	very high stress	9	2.2		
	Stress	9	2.2		
	no stress	301	73.4		
	slight stress	48	11.7		
19. Poor health of family members	moderate stress	31	7.6	1.52	1.009
	very high stress	18	4.4		
	Stress	12	2.9		
	no stress	296	72.2		
	slight stress	61	14.9		
20. Own poor health	moderate stress	31	7.6	1.48	.926
	very high stress	13	3.2		
	Stress	9	2.2		
	no stress	259	63.2		
	slight stress	74	18.0		
21. Lose a close friend	moderate stress	37	9.0	1.71	1.139
	very high stress	18	4.4		
	Stress	22	5.4		
	no stress	314	76.6		
	slight stress	45	11.0		
22. Not enough friends	moderate stress	27	6.6	1.45	.968
	very high stress	10	2.4	1110	.,
	Stress	14	3.4		
	no stress	317	77.3		
	slight stress	60	14.6		
23. Rejected by a friend	moderate stress	22	5.4	1.35	.785
	very high stress	3	.7	1.55	., 00
	Stress	8	2.0		
	500535	0	2.0		

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	no stress	253	61.7		
	slight stress	81	19.8		
24. Be cheated or betrayed by a friend	moderate stress	37	9.0	1.72	1.143
	very high stress	15	3.7		
	Stress	24	5.9		
	no stress	259	63.2		
	slight stress	75	18.3		
25. A friend speaks ill of me behind my back	moderate stress	38	9.3	1.70	1.124
 5. A friend speaks ill of me behind my back 6. Feel unacceptable or unwelcome 7. My parents don't like a certain friend of mine 8. I am worried that I have no male (female) friends 9. Don't know how to make friends 	very high stress	17	4.1		
	Stress	21	5.1		
	no stress	270	65.9		
	slight stress	73	17.8		
26. Feel unacceptable or unwelcome	moderate stress	28	6.8	1.66	1.134
	very high stress	15	3.7		
My parents don't like a certain friend of mine	Stress	24	5.9		
	no stress	327	79.8		
	slight stress	49	12.0		
27. My parents don't like a certain friend of mine	moderate stress	13	3.2	1.37	.909
	very high stress	6	1.5		
	Stress	15	3.7		
	no stress	342	83.4		
	slight stress	34	8.3		
28. I am worried that I have no male (female) friends	moderate stress	19	4.6	1.31	.840
	very high stress	3	.7		
 7. My parents don't like a certain friend of mine 8. I am worried that I have no male (female) friends 9. Don't know how to make friends 	Stress	12	2.9		
	no stress	295	72.0		
	slight stress	64	15.6		
29. Don't know how to make friends	moderate stress	26	6.3	1.50	.990
	very high stress	9	2.2		
	Stress	16	3.9		
	no stress	290	70.7		
	slight stress	67	16.3		
30.I don't know how to defend my rights	moderate stress	26	6.3	1.53	1.025
	very high stress	8	2.0		
	-	10	1.0		
	Stress	19	4.6		
Family stressors	Stress	19	4.0	1.312	.530
Family stressors School stressors	Stress	19	4.0	1.312 2.180	.530
	Stress	19	4.0		

3.2.2 Current status of depression tendency of middle school students

PHQ-9 has a total of 9 questions. The subjects were asked about the frequency of the question in the past two weeks, divided into four options: "Nothing", "A few days", "Half of the days", and "Almost every day". The options of each question are counted as 0-3 points, "Nothing" was 0 points, "A few days" was 1 point, "Half of the days" was 2 points, and "Almost every day"

was 3 points for statistical analysis. It will help us understand the average and standard deviation of the frequency of occurrence of each item in the subjects in the past two weeks (Table 7).

The average score of the scale was 5.13, which shows that the current junior high school students have some negative emotions, and some negative emotions are normal. This result was consistent with the viewpoint put forward by Butcher J. N., Mineka S., Hooley J. M. (2007). Among the 9 questions, only "I don't feel motivated to do anything or want to do anything at all", the average was .8, which was the highest; the next was "feeling tired or not working" (.77), and the score was not more than 1...

However, in the question of "Thoughts that you would be better off dead or of hurting yourself in some way ", 12 times were selected "Almost every day", and 20 times were "Half of the days". Although only 7.8% of the total, this A message was still worthy of observation and attention by counselors and mentors.

Table 7: Current status of depression	tendency of influence s			,	
Item		Ν	%	Avg.	SD
	Nothing	176	42.9		
1. Little interest or pleasure in doing things	A few days	165	40.2	(N=410 Avg. .8 .7 .6 .7 .43 .63 .69	.861
1. Entire interest of pleasure in doing unings	Half of the days	43	10.5		.001
	Almost every day	25	6.1		
	Nothing	194	47.3		
Easting down depressed or honology	A few days	158	38.5	7	70/
2. Feeling down, depressed, or hopeless	Half of the days	44	10.7	./	.794
	Almost every day	14	3.4		
	Nothing	251	61.2		
3. Trouble falling or staying asleep, or sleeping	A few days	98	23.9	6	004
too much	Half of the days	33	8.0	.6	.905
	Almost every day	28	6.8		
	Nothing	185	45.1		.853
. Feeling tired or having little energy	A few days	155	37.8	77	
	Half of the days	49	12.0	.//	
	Almost every day	21	5.1		
	Nothing	286	69.8		
	A few days	86	21.0	10	
too much Feeling tired or having little energy Poor appetite or overeating	Half of the days	20	4.9	.43	.762
	Almost every day	16	3.9		
	Nothing	230	56.1		
5. Feeling bad about yourself — or that you	A few days	122	29.8		.844
	Half of the days	37	9.0	.63	
	Almost every day	20	4.9		
	Nothing	211	51.5		
7. Trouble concentrating on things, such as	A few days	137	33.4		<i></i>
reading the newspaper or watching television	Half of the days	40	9.8	.69	.859
	Almost every day	22	5.4		

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8. Moving or speaking so slowly that other	Nothing	340	82.9		
people could have noticed? Or the	A few days	54	13.2	22	5 40
opposite — being so fidgety or restless that you have been moving around a lot more	Half of the days	11	2.7	.22	.548
than usual	Almost every day	5	1.2		
9. Thoughts that you would be better off dead	Nothing	321	78.3	.32	
	A few days	57	13.9		.703
or of hurting yourself in some way	Half of the days	20	4.9		.705
	Almost every day	12	2.9		
Behavior				.542	.556
psychological				.612	.629
PHQ-9 scores				5.13	4.707

3.3 The impact of life stress and depression tendency of middle school students

This study believes that under different gender and grade factors, the health status and life stress status of the subjects will also be different, so the T test and single-factor variability analysis were used for statistical analysis.

3.3.1 Differences in life stress and depression tendency of middle school students of different genders

3.3.1.1 A survey of the difference in life stress between male and female in middle schools There was no significant difference between gender on life pressure and all pressure sources. However, only the 4th and 28th questions had significant differences in each item.

The result of question 4 "Feel that I am not as smart as other students" shows that female's feelings are significantly higher than male's. It can be seen that female subjects are more sensitive than men in terms of self-affirmation; Question 28 "I am worried that I have no "Male (female) friends" was that males feel significantly higher than females (Table 9).

Item	Gender	Ν	Avg.	SD	t-value	Р
2 A specific subject	Male	258	2.45	1.213	1 596	.113
3. A specific subject	Female	152	2.64	1.000	-1.380	.115
4. Feel that I am not as smart as other students	Male	258	1.87	1.134	2 814	$.005^{*}$
4. Feel that I all not as small as other students	Female	152	2.20	1.128	t-value - -1.586 - -2.814 - 852 - .185 - -1.280 - -1.110 - 1.194 - 1.286 - 1.778 - 1.020	.005
5. Afraid of failure	Male	258	2.17	1.287	050	205
5. Alfaid of failure	Female	152	2.28	1.241	832	.395
7 Worrigd about being feeled or bullied by elegemeter	Male	258	1.47	.926	195	.854
7. Worried about being fooled or bullied by classmates	Female	152	1.45	.948		.834
⁹ Unable to meet the expectations of perents or teachers	Male	258	2.32	1.338	1 280	.202
3. Unable to meet the expectations of parents or teachers3. Worried about not being able to enter a good school in	Female	152	2.49	1.297	-1.260	.202
9. Worried about not being able to enter a good school in	Male	258	2.46	1.318	1 1 1 0	.268
the future	Female	152	2.61	1.240	-1.110	.208
11 Womening that parameter will diverge on non-amount	Male	258	1.40	1.047	1 104	.233
11.Worrying that parents will divorce or remarry	Female	152	1.28	.767	1.194	.235
12 Hurt by sister or brother	Male	258	1.14	.552	1 296	.199
12. Hurt by sister or brother	Female	152	1.07	.328	1.200	.199
12 Hurthy other family members	Male	258	1.20	.674	1 770	076
13. Hurt by other family members	Female	152	1.09	.370	1.//0	.076
15 Not acting the attention it decoming	Male	258	1.41	.866	1.020	200
15. Not getting the attention it deserves	Female	152	1.33	.795	1.020	.308

Table 8: The difference in life-stress between male and female in middle schools

2nd Kuala Lumpur International Conference on Education, Economics and Technology (KLICEET 2020) eISBN: 978-967-2476-07-8 Kuala Lumpur, Malaysia

16 Prope to trouble due to look of dissipling	Male	258	1.23	.642	1.128	.260
16. Prone to trouble due to lack of discipline	Female	152	1.16	.557	1.128	.200
17. Not getting enough care and love	Male	258	1.26	.737	462	.644
17. Not getting enough care and love	Female	152	1.30	.788	402	.044
18. Parents quarrel or fight	Male	258	1.35	.897	1.053	.293
	Female	152	1.26	.707	1.055	.293
19. Poor health of family members	Male	258	1.56	1.054	1.110	.268
	Female	152	1.45	.926	1.110	.208
20. Own poor health	Male	258	1.50	.967	.502	.616
	Female	152	1.45	.852	.302	.010
21. Lose a close friend	Male	258	1.64	1.104	-1.542	.124
	Female	152	1.82	1.191	-1.342	.124
22. Not anough friends	Male	258	1.43	.981	683	.495
22. Not enough friends	Female	152	1.49	.949	085	.495
22. Dejected by a friend	Male	258	1.35	.786	160	.871
23. Rejected by a friend	Female	152	1.36	.785	162	.8/1
24 Desilende Lea bedare et la color de	Male	258	1.70	1.161	FCC	570
24. Be cheated or betrayed by a friend	Female	152	1.76	1.114	566	.572
	Male	258	1.67	1.131	637	525
25. A friend speaks ill of me behind my back	Female	152	1.74	1.113		.525
26 Easterna and the an unreal arms	Male	258	1.60	1.109	1 225	100
26. Feel unacceptable or unwelcome	Female	152	1.76	1.174	-1.325	.186
27 Margarente der 11 lite e contain faiend of mine	Male	258	1.40	.970	(7)	400
27. My parents don't like a certain friend of mine	Female	152	1.34	.797	.676	.499
20 I am anomial that I have no male (famale) friends	Male	258	1.44	.977	2 0 4 2	$.000^{*}$
28. I am worried that I have no male (female) friends	Female	152	1.11	.463	3.943	.000
29. Don't know how to make friends	Male	258	1.42	.910	2 207	.028*
29. Don't know now to make menus	Female	152	1.64	1.100	-2.207	.028
20 I don't have how to defend our rights	Male	258	1.53	1.074	1.002	024
30.I don't know how to defend my rights	Female	152	1.54	.941	1.083	.934
	Male	258	1.5171	.73098	551	500
Interpersonal stressors	Female	152	1.5566	.68403	551	.582
	Male	258	1.3389	.59397	1 222	102
Family stressors	Female	152	1.2668	.39460	1.333	.183
	Male	258	2.1234	.90727	1 510	007
0.1.1.					-1.718	.087
School stressors	Female	152	2.2763	.84791		
School stressors Life stress scale	Female Male	152 258	2.2763 1.5984	.84791	456	.648

3.3.2 Differences in life stress and depression tendency of middle school students of different grades

3.3.2.1 Investigate whether there were differences in life stress among middle school students of different grades

Statistics in this study show that middle school students of different grades have no significant differences in all dimensions and overall life stress. Examining each item, it was found that in the 9th question, "Worried about not being able to enter a good school in the future", some 9th grade subjects felt significantly higher than 7th grade subjects. It shows that the 9th grade subjects still have certain pressure and expectations in the entrance examination part (Table 10).

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		8	SS	DF	MS	F	Multiple comparison
3. A specific subject SS ₁₀ 521,135 407 1.290 2.777 8. Feel that I am not as smart as other students SS ₁₀ 5.22,135 409 1.299 1.599 4. Feel that I am not as smart as other students SS ₁₀ 2.560 2 1.280 5. Afraid of failure SS ₁₀ 2.560 2 1.280 5. Afraid of failure SS ₁₀ 650.378 409 7. Worried about being fooled or bullied by classmates SS ₁₀ 3.984 2 1.992 8. Unable to meet the expectations of parents or teachers SS ₁₀ 7.16.12 409 .243 9. Worried about not being able to enter a good school in the future SS ₁₀ 660.412 409 .243 11. Worrying that parents will divorce or remarry SS ₁₀ 3.126 407 .464 3.193* Grade 9 12. Hurt by sister or brother SS ₁₀ 1.296 2 .648 .2293 SS ₁₁ 1.296 2 .648 .230 .820 13. Hurt by other family members SS ₁₀ .137.980 407 .339 1.055 SS ₁₁		SSB	7.167	2	3.584		1.00000
SS ₁ 532.302 409 4. Feel that I am not as smart as other students SS _b 4.155 2 2.077 4. Feel that I am not as smart as other students SS _b 528.823 407 1.299 1.599 5. Afraid of failure SS _b 655.378 409 - - 5. Afraid of failure SS _b 358.4 2 1.92 . 7. Worried about being fooled or bullied by classmates SS _b 351.812 407 864 2.304 8. Unable to meet the expectations of parents or teachers SS _b 716.258 407 1.760 .243 9. Worried about not being able to enter a good school in the future SS _b 669.902 407 1.646 3.193* Grade 9 SS _b 4.145 2 2.072 1.646 3.193* Grade 9 SS _b 4.145 2 2.072 1.646 3.193* Grade 9 SS _b 7.15 2 .648 4.145 2 2.072 11.Worrying that parents will divorce or remar	3. A specific subject	-	525.135	407		2.777	
4. Feel that I am not as smart as other students SS _b SS _b 4. Feel that I am not as smart as other students SS _b SS _b SS _b 52. 823. 407 1.299 1.599 5. Afraid of failure SS _b SS _b classmates 656.818 409 1.614 .793 7. Worried about being fooled or bullied by classmates SS _b SS _b stable to meet the expectations of parents or teachers SS _b SS _b school in the future 854 2 427 8. Unable to meet the expectations of parents or teachers SS _b SS _b school in the future SS _b SS _b SS _b school in the future 630.902 407 1.646 3.193* Grade 9: Grade 9. Worried about not being able to enter a good school in the future SS _b SS _b SS _b school in the future SS _b SS _b SS _b SS _b 367. 865 407 9.04 2.293 11.Worrying that parents will divorce or remarry SS _b 12. Hurt by sister or brother SS _b SS _b SS _b 35. 713 2.072 2.820 SS _b 13. Hurt by other family members SS _b SS _b 35. 133.695 407 2.30 2.820 SS _b 13. Hurt by other family members SS _b SS _b 35. 127.454 2.013 358 14. Prone to trouble due to lack of discipline SS _b 15. Not getting enough care and love SS _b 35. 1.378 409 351.813 16. Prone to trouble due to lack of	1 5						
4. Feel that I am not as smart as other students SS _W 528.823 407 1.299 1.599 SS _T 532.978 409 409 S. Afraid of failure SS _W 656.818 407 1.614 .793 SS _T 659.378 409 1.992 .304 .2.304 SS _W 555.795 409 .364 2.304 Response SS _W 355.812 407 .864 2.304 SS _W 717.112 409 .243 .304 Scherts SS _W 717.112 409 .243 Scherts SS _W 669.902 407 1.646 3.193* Grade 9. Schort in the future SS _W 669.902 407 .0464 .293 .293 Strip in the future SS _W 67.865 407 .904 .293 .293 Strip in the future SS _W 137.966 2 .648 .207 .2072 11.Worrying that parents will divorce or remarry SS _W 137.980 407 .339 1.055 .273 .2010					2.077		
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5. Afraid of failure SS _W 656.818 407 1.614 .793 Str 659.378 409 1.992 1.992 7. Worried about being fooled or bullied by classmates SS 351.812 407 .864 2.304 8. Unable to meet the expectations of parents or teachers SS 716.258 407 1.760 .243 9. Worried about not being able to enter a good school in the future SS 717.112 409 .669.902 407 1.646 3.193* Grade 9. 9. Worried about not being able to enter a good school in the future SS 80.412 409 .669.902 407 1.646 3.193* Grade 9. 11.Worrying that parents will divorce or remarry SS 85.8 717.010 409 .2072 12. Hurt by sister or brother SS SS 717.90 407 .339 1.055 SS 8 .175 2 .358 .127 .201 .2820 13. Hurt by other family members SS .138.695 409 .339 1.055 SS .1027 .2.310 .409 .533 <					1.280		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5. Afraid of failure			407		.793	
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classmates SS _T 355.795 409 8. Unable to meet the expectations of parents or teachers SS _B 8.84 2 .427 9. Worried about not being able to enter a good school in the future SS _B 10.510 2 5.255 9. Worried about not being able to enter a good school in the future SS _B 4.145 2 2.072 11.Worrying that parents will divorce or remarry SS _W 367.865 407 .904 2.293 12. Hurt by sister or brother SS _W 367.865 407 .200 2.820 SS _T 71.2010 409 2.030 2.820 .051 2.358 12. Hurt by sister or brother SS _W 357.874 407 .230 2.820 SS _T 13.869 409 .013 .055 .013 .055 13. Hurt by other family members SS _W 288.854 407 .710 .019 SS _T 2.82.274 407 .375 .843 14. Or pote to trouble due to lack of discipline SS _W 28.861 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>2 304</td><td></td></t<>						2 304	
8. Unable to meet the expectations of parents or teachers SS _B .854 2 .427 SS _W 716.258 407 1.760 .243 9. Worried about not being able to enter a good school in the future SS _B 10.510 2 5.255 SS _W 669.902 407 1.646 3.193* Grade 9 9. Worried about not being able to enter a good school in the future SS _B 4.145 2 2.072 11.Worrying that parents will divorce or remarry SS _W 367.865 407 .904 2.293 SS _T 372.010 409 2.012 .648 9 .558 .715 2 .358 12. Hurt by sister or brother SS _W 37.980 407 .339 1.055 SS _T 94.839 409 .358 .027 2 .013 15. Not getting the attention it deserves SS _W .633 2 .316 SS _T 138.695 409 .375 .843 .15. Not getting enough care and love SS _W .131 2 .566 .17. Not getting enough care and love <t< td=""><td>classmates</td><td></td><td></td><td></td><td></td><td>2.301</td><td></td></t<>	classmates					2.301	
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SS _B 4.145 2 2.072 11. Worrying that parents will divorce or remarry SS _B 367.865 407 .904 2.293 SS _T 372.010 409	school in the future				1.040	5.195	Grade 7
11.Worrying that parents will divorce or remarry SS _w 367.865 407 $.904$ 2.293 SS _T 372.010 409 409 12. Hurt by sister or brother SS _B 1.296 2.648 13. Hurt by other family members SS _B 715 2 $.358$ 13. Hurt by other family members SS _w 137.980 407 $.339$ 1.055 SS _T 138.695 409 $.027$ 2 $.013$ 15. Not getting the attention it deserves SS _w 288.854 407 $.710$ $.019$ SS _T 138.695 409 $.633$ 2 $.316$ 16. Prone to trouble due to lack of discipline SS _B $.633$ 2 $.316$ SS _R 153.378 409 $.556$ $.571$ $.991$ SS _R 1.530 2 $.765$ $.843$ SS _R 1.530 2 $.765$ $.87$ 8. Parents quarrel or fight SS _R $.1314$ 407 $.692$ 1.106 SS _R $.999$					2.072		
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12. Hurt by sister or brother SS_B 1.296 2 .648 12. Hurt by sister or brother SS_W 93.543 407 .230 2.820 SS_T 94.839 409 SS_B .715 2 .358 13. Hurt by other family members SS_W 137.980 407 .339 1.055 SS_T 138.695 409 .339 1.055 SS_T 138.695 409 .339 1.055 SS_T 28.884 407 .310 .019 SS_T 288.854 407 .710 .019 SS_T 288.80 409 .375 .843 16. Prone to trouble due to lack of discipline SS_W 232.274 407 .375 .843 SS_T 233.405 409 .556 .571 .991 .587 .375 .843 SS_B 1.302 2.765 .588 .130 2 .765 8. Parents quarrel or fight SS_W 281.614 407 .692 1.106 <t< td=""><td>11. Worrying that parents will divorce or remarry</td><td></td><td></td><td></td><td>.904</td><td>2.295</td><td></td></t<>	11. Worrying that parents will divorce or remarry				.904	2.295	
12. Hurt by sister or brother SS_W 93.543 407 $.230$ 2.820 SS_T 94.839 409 13. Hurt by other family members SS_B $.715$ 2 $.358$ 13. Hurt by other family members SS_W 137.980 407 $.339$ 1.055 SS_T 138.695 409 .013 .015 15. Not getting the attention it deserves SS_W 288.854 407 $.710$ $.019$ SS_T 288.880 409 .013 .019 .019 SS_T 288.854 407 $.710$ $.019$ SS_T 288.854 407 $.710$ $.019$ SS_T 288.854 407 $.375$ $.843$ SS_T 153.78 409 $I6.$ Prone to trouble due to lack of discipline SS_W 232.274 407 $.571$ $.991$ SS_T 233.405 409 $I7.$ Not getting enough care and love SS_W <td></td> <td></td> <td></td> <td></td> <td>C 1 0</td> <td></td> <td></td>					C 1 0		
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13. Hurt by other family members SS _W 137.980 407 .339 1.055 SS _T 138.695 409 407 .339 1.055 15. Not getting the attention it deserves SS _W 288.854 407 .710 .019 SS _T 288.880 409 407 .375 .843 I6. Prone to trouble due to lack of discipline SS _B .633 2 .316 I7. Not getting enough care and love SS _B 1.131 2 .566 I7. Not getting enough care and love SS _B 1.530 2 .765 SS _R 233.405 409 .991 .556 8. Parents quarrel or fight SS _B 1.530 2 .765 8. Parents quarrel or fight SS _B .999 2 .500 9. Poor health of family members SS _B 3.032 2 1.516 20. Own poor health SS _B 3.032 2 1.516 20. Own poor health SS _B .455 2 .228 21. Lose a close friend SS _M 530.423 407 1.30					250		
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			530.878	409			
$SS_W 383.423 407 .942$	22 Not enough friends			2	.051	054	
		SS_W	383.423	407	.942	.034	

Table 10: Investigate whether there were differences in life stress among middle school students of different grades

Asian Scholars Network 2nd Kuala Lumpur International Conference on Education, Economics and Technology (KLICEET 2020) eISBN: 978-967-2476-07-8 Kuala Lumpur, Malaysia

	SST	383.524	409	_		
	SSB	.162	2	.081		
23. Rejected by a friend	SS_W	251.557	407	.618	.131	
	SST	251.720	409			
	SSB	.827	2	.413		
24. Be cheated or betrayed by a friend	SS_W	533.476	407	1.311	.315	
	SST	534.302	409			
	SSB	.513	2	.257		
25. A friend speaks ill of me behind my back	SS_W	515.985	407	1.268	.202	
	SS_T	516.498	409			
	SSB	1.541	2	.771		
26. Feel unacceptable or unwelcome	SS_W	524.654	407	1.289	.598	
-	SS_T	526.195	409			
	SSB	1.117	2	.559		
27. My parents don't like a certain friend of mine	SS_W	336.788	407	.827	.675	
	SS_T	337.905	409			
	SSB	3.348	2	1.674		
28. I am worried that I have no male (female)	SS_W	285.065	407	.700	2.390	
friends	SST	288.412	409			
	SSB	1.026	2	.513		
29. Don't know how to make friends	SS_W	399.465	407	.981	.523	
	SST	400.490	409			
	SSB	1.809	2	.904		
30.I don't know how to defend my rights	SS_W	428.213	407	1.052	.860	
	SST	430.022	409			
	SSB	.294	2	.147		
Interpersonal stressors	SS_W	207.834	407	.511	.288	
1	SST	208.128	409			
	SSB	.470	2	.235		
Family stressors	SS_W	114.211	407	.281	.838	
5	SST	114.681	409			
	SSB	2.712	2	1.356		
School stressors	SSw	319.631	407	.785	1.727	
	SST	322.343	409			
	SSB	.362	2	.181		
Life stress scale	SSw	146.511	407	.360	.503	
	SST	146.873	409			
	1					

Duncan Multiple comparison

 $F^{*}=P<.05$, $F^{**}=P<.01$, $F^{***}=P<.001$

3.3.2.2 Investigate whether there were differences in depression tendency among middle school students of different grades

The results of this study show that there was no significant difference in the depression tendency of middle school students in different grades; there was no significant difference in each sub-item; only the 7th question "Trouble concentrating on things, such as reading the newspaper or watching television." was different. The difference, among which the feeling level of 9th grade students was significantly higher than that of 7th grade students, may be caused by the imminent pressure of 9th grade students facing mock exams and entrance exams. See Table 11 for details.

Table 11: Investigate whether there were differences in depression tendency among middle school students of different grades

		SS	DF	MS	F	Multiple comparison
	SS_B	3.094	2	1.547	2.105	D
Little interest or pleasure in doing things	SS_{W}	299.104	407	.735	2.105	
	SS_T	302.198	409			
	SSB	.128	2	.064	101	
2. Feeling down, depressed, or hopeless	SS_W	257.570	407	.633	.101	
	SS_T	257.698	409			
	SS_B	.977	2	.488	CO1	
3. Trouble falling or staying asleep, or	SS_W	331.013	407	.813	.601	
sleeping too much	SST	331.990	409			
	SSB	3.835	2	1.917	0.447	
4. Feeling tired or having little energy	SS_W	292.614	407	.719	2.667	
	SST	296.449	409			
	SSB	.572	2	.286	10.1	
5. Poor appetite or overeating	SSw	235.584	407	.579	.494	
	SST	236.156	409			
5. Feeling bad about yourself — or that you	SSB	.239	2	.119	4.40	
are a failure or have let yourself or your	SSw	289.917	407	.712	.168	
family down	SST	290.156	409			
7. Trouble concentrating on things, such as	SSB	5.652	2	2.826		~
reading the newspaper or watching	SSw	294.009	407	.722	3.912*	Grade 9 >
television	SST	299.661	409			Grade 7
3. Moving or speaking so slowly that other	SSB	1.514	2	.757		
people could have noticed? Or the	SSw	121.288	407	.298	2 5 40	
opposite — being so fidgety or restless					2.540	
that you have been moving around a lot	SS_T	122.802	409			
more than usual	-					
9. Thoughts that you would be better off dead	SS_B	.897	2	.449	.908	
	SS_W	200.959	407	.494	.908	
or of hurting yourself in some way	SS_T	201.856	409			
	SSB	1.071	2	.535	1 7 7 7	
Behavior	SS_W	125.491	407	.308	1.737	
	SST	126.562	409			
	SSB	.048	2	.024	0.11	
Psychological	SSw	161.666	407	.397	.061	
		161.714	409			
	SST	101./14				
	SS _T			20.481		
PHQ-9 scores	SS _T SS _B SS _W	40.962 9019.926	2 407	20.481 22.162	.924 2.105	

Duncan Multiple comparison

 $F^*=P < .05, F^{**}=P < .01, F^{***}=P < .001$

3.4 The relationship between life stress and depression tendency

Past studies have pointed out that life stress can affect the degree of depression. Studies have also pointed out that life stress causes depression (K. R. Chou, 2002; Butcher J. N., Mineka S., Hooley J. M., 2007). Therefore, this study uses Pearson's correlation coefficient to verify the correlation between the two and uses a structural equation model to understand whether there is a causal relationship between life stress and depression tendency.

3.4.1 Correlation analysis of middle school students' life stress and depression tendency

This study explored the relationship between life stress and depression tendency through Pearson's correlation coefficient analysis. Statistics show that depression tendency status is significantly related to life-stress, with a correlation coefficient of .681.

Among the various dimensions of life-stress and depression tendency, school stressors have the highest correlation (.630), followed by interpersonal stressors (.577) and family stressors (.575).

In the relationship between depression tendency and life stress, the correlation at the behavioral (.612) is higher than the correlation at the psychological (.603).

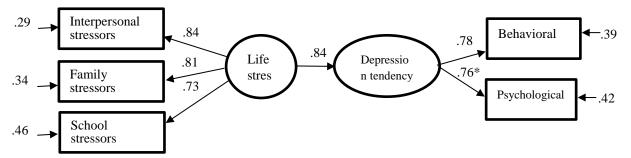
The results of this study indicate that there is a positive correlation between the two, that is, the higher the pressure in life, the higher the depression tendency. The results of this study are similar to those of past scholars.

		Depression tendency	Life stress	Behavioral	Psychologi cal	Interpersona 1 stressors	Family stressor s	School stressor s
Depression tendency	Pearson <i>p-value</i>	1						
Life stress	Pearson <i>p-value</i>	.681 .000	1					
Behavioral	Pearson <i>p-value</i>	.905 .000	.612 .000	1				
Psychologic al	Pearson <i>p-value</i>	.880 .000	.603 .000	.597 .000	1			
Interpersona 1 stressors	Pearson <i>p-value</i>	.577 .000	.919 .000	.517 .000	.508 .000	1		
Family stressors	Pearson <i>p-value</i>	.575 .000	.855 .000	.538 .000	.487 .000	.717 .000	1	
School stressors	Pearson <i>p-value</i>	.630 .000	.817 .000	.546 .000	.580 .000	.603 .000	.549 .000	1

 Table 12: Correlation analysis of middle school students' life stress and depression tendency

3.4.2 The causal relationship between life stress of middle school students and depression tendency

The structural equation model is used to examine the causal relationship between life stress and depression tendency. The model fitting analysis results show that the RMSEA value was .143; NNFI=.91 and CFI=.96 both reach the standard of .90. It means that this model was well adapted (Qiu Haozheng, 2014). The effect analysis shows that the direct effect of life stress on depression tendency and the total effect is .84. Among them, in the part of depression tendency, only the "psychological" has a significant total effect on the depression tendency .763.



3.5 Conclusion and Suggestion

In the future, it can be suggested to collect the current situation of life stress while conducting the study of depression tendency and data collection, which will help the counselor to have a more comprehensive understanding of the research object.

To expand the scope of research to conduct research on public and private middle school students in northern Taiwan. If we can understand the current life stress and depression tendencies of middle school students in general, which is more helpful to understand the current depression tendency of middle school students, and as a reference for counseling in the future.

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Learning Experience of Machining Carbon Fibre CFRP AL2024 Using Design of Experiment (DoE) Approach

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Abstract: The rapid technological changes required that Technical & Vocational Education Training, TVET's trainees continuously update their knowledge and skills especially in the machining sectors. Traditionally, trainees are only trained to be a good machinist through theory and practical sessions however; they do not equipped with the mastery of underlying knowledge and scientific principles. Present teaching approach of machining cannot provide solid solution on these issues. This paper describes the implementation of Design of Experiment (DoE) methodology on machining composite materials via design expert software. The main objective of this paper is to share learning experience of machining CFRP Al2024 and propose the generic approach of implementing DoE in machining as an embedded technique for trainees to re-skilling and continuing professional development. It was revealed that the generic approach established the relation between the cutting parameters and the response variable to perform analysis and optimization correctly.

Keywords: learning experience, design of experiment, TVET

1. Introduction

Transformation of TVET is designed not only to produce highly trained workforce to meet demands in the job market but also holistic manpower who are capable of facing new challenges. The development of technical and cognitive element in TVET is crucial for individual's self-actualization in shaping holistic human capital. However, the enrichment of the technical expects is more crucial. One of this crucial aspects is the quality of TVET curriculum, which needs to be upgraded and harmonized to align with the industry requirements as well as to build capabilities (Rasul et al., 2015).

Design of Experiment (DoE) methodology is one of the approaches to be embedded in enhancing TVET curriculum. DoE is a systematic approach to understand the process and product parameters that affect the response variables. It is defined as a series of tests in which purposeful changes are made to input factors so that the causes for significant changes in the output responses can be identified. It is a mathematical tool that generates, summarizes and evaluates to ensure their feasibility. By doing this, time spent in conducting experiments can be minimized and the quality of experiments can be controlled. In short, DoE approaches is able to minimize trails and save a lot of time and cost (Anderson, 1997). There is a lot of DoE software available in the market such as Design Experts, Mini Tab and statgraphics. DoE is an integrated software which is a set of mathematical and statistical techniques useful for modelling and analyzing of complex process optimization(Gonzales, 1998).There are few types

of DoE, i.e., full factorial designs, fractional factorial designs, Placket Burman designs, response surface designs, Taguchi designs and mixture designs.

Machinists can no longer afford to experiment in a trial-and-error manner. DoE makes our job easier. In any machining training or process beside to obtain accurate dimensions, achieving preferable surface quality and maximized metal removal are also important. Any machining process involves many process parameters which directly or indirectly influence the surface roughness. The surface roughness depends on many factors such as cutting parameters, namely spindle speed, feed rate and depth of cut. A precise of these optimum parameters would facilitate in reducing machining costs and improving product quality.

2. Literature Review

Extensive studies have been conducted in the past to optimize the cutting parameters in machining process to have the best surface roughness (Mohamed et al., 2016). Mohamed et al., (2015) utilized DoE, two level full factorial design to investigate machining parameters optimization for trimming operation of Carbon-Fibre Reinforced Plastic laminated with Aluminum grade 2024 (CFRP/Al2024) using milling machine. They analyzed the influence factors and the interaction between these cutting parameters and determined the optimum machining parameters for minimizing surface roughness. Surface roughness of CFRP is found to be 1.778 μ m and Al2024 is found to be 0.983 μ m at the setting of spindle speed 1860 rpm, feed rate 620 mm/min and depth of cut 0.12mm respectively.

The application of Taguchi methods in optimizing the cutting parameters (depth of cut, cutting speed and feed rate) of end-milling process under dry condition was studied by(Pang et al., 2014). The surface roughness of the machined composite and the cutting forced was measured. Taguchi method was employed to determine the best combination of cutting parameters could provide the optimal machining response conditions, i.e. the lowest surface roughness and the lowest cutting force values. Benyounis & Olabi (2008) stated that Taguchi method was one of the powerful optimization techniques to improve product quality and reliability at low cost.

Based on the research done by (Sait et al., 2009; Benyounis & Olabi, 2008; Tsao & Hocheng, 2004), computational time done by Taguchi design method was at the medium as compared to Response Surface Methodology (RSM) and Factorial design. Rajmohan et al. (2012), performed on the investigation on optimal design of cutting parameters for drilling hybrid matrix composite. The effect of input parameters namely, spindle speed, feed rate and weight percentage on the thrust force and surface roughness was studied in this experiment. They applied RSM and Central Composite Design (CCD) for modelling, optimization and analysis. This investigation proved that the proposed approach could be useful to improve the performance of the process.

The optimization of turning parameters on surface roughness of glass fibre reinforced plastic was carried out by Palanikumar et al.(2004). By using DoE and analysis of variance (ANOVA), the authors concluded that the technique was so convenient and economical to predict optimal cutting parameters. Desai & Rana (2012)studied the optimum drilling parameters, spindle speed and feed rate on CFRP laminates to get optimum cutting conditions. DoE methodology by full factorial design was used in multiple objective optimizations (using software, Mini Tab 16) to find the optimum cutting conditions for defect free drilling.

Haddad et al., (2013) conducted high speed trimming of a multidirectional CFRP using unused and used burrs tools to investigate the influence of the machining parameters (feed speed, cutting speed and cutting distance) on the cutting forces, machining temperature, and the machined surface quality. The experiment was conducted using full factorial design and the ANOVA was used to analyze the experimental results. They found that the machining parameters had a significant influence on the variation of the machined surface quality and the cutting forces.

From the above literature reviews, the utilization of design of experiment (DoE) methodology is very useful in optimization of machining. This research attempts to implement DoE methodology in TVET which focuses on machining composite materials. The use of design expert software to assist the systematic design matrix, analysis and optimization were employed. The main objective of this paper is to propose the generic approach of implementing DoE in machining in order to enhance the knowledge and skills of TVET trainees.

3. Experimental set-up

The material used for this experiment is Carbon Fibre-Reinforced Plastic (CFRP) laminated with Aluminum grade 2024 (Al2024). The lay-up sequence of the unidirectional CFRP prepreg (90/-45/0/45/90/-45/0/45) was adopted to get a symmetric stacking (Zitoune et al., 2010). The trimming process was done via Mori Seiki NV4000 DCG CNC milling machine under dry cutting conditions using KENNAMETAL KCN05 10mm cutting tool. Down milling method was used to produce the optimal surface roughness. Each trimming process was conducted randomly to avoid systematic error. Two level full factorial design was chosen in this experiment. The machining parameter used for trimming process is shown in table 1.Spindle speed, feed rate and depth of cut were the control factors considered in the experiment. The surface roughness was measured using Mitutoyo SJ-301. Figure 1 shows the experiment set-up comprising of marking, fixing and alignment, trimming and measuring surface roughness of the specimens.



Figure 1: Experimental set-up, (a) marking of CFRP/Al2024, (b) fixing, (c) aligning,(d) trimming, (e) measuring of surface roughness

Spindle speed (rpm)	Feedrate (mm/min)	Depth of cut (mm)
10000	23.56	0.01
13500	34.64	0.50

Table 1: Machining Parameters for Trimming

4. Discussion and Conclusion

The replication of the current design was recommended by the software with an addition of three centre points. Thus the total number of 19 experiments was conducted (23 = 8 experiments + 8 experiments + 3 centre points). Table 2 shows the results of surface roughness of CFRP and Al2024.

Expt.	Spindle Speed	Feed Rate	Depth of Cut	Surface Rou	ghness (µm)
No.	(rpm)	(mm/min)	(mm)	CFRP	A12024
1	13500	1000	0.5	0.56	0.34
2	10000	500	0.5	0.66	0.35
3	10000	1000	0.5	0.73	0.54
4	11750	750	0.25	0.49	0.22
5	13500	500	0.01	0.45	0.34
6	10000	1000	0.01	1.04	0.21
7	13500	500	0.5	0.42	0.73
8	10000	500	0.01	0.44	0.28
9	11750	750	0.25	0.49	0.22
10	13500	1000	0.01	0.89	2.02
11	11750	750	0.25	0.60	0.20
12	11750	1000	0.25	1.03	0.55
13	11750	750	0.25	0.75	0.37
14	11750	750	0.5	0.54	0.26
15	11750	500	0.25	0.50	0.42
16	11750	750	0.01	0.43	0.47
17	13500	750	0.25	0.53	0.80
18	11750	750	0.25	0.74	0.36
19	10000	750	0.25	0.82	0.74

Table 2	2:	Surface	roughness	results	of	CFRP	and AL2024
		~~~~~~			~	~ ~ ~ ~	

The analysis of variance (ANOVA) for surface roughness of CFRP and Al2014 was conducted separately. Statistically, the model F-value of 6.29 implies that the model is significant. P-value is less than 0.0500, which indicates that the model is significant. In this case A, B and BC are significant model terms. The analysis shows that spindle speed and feed rate have a significant effect on surface roughness of CFRP. The depth of cut has no significant effect but there is a significant interaction effect between feed rate and depth of cut as shown in table 3.

Source of Variance	Sum of Square (SS)	Degree of Freedom (d.o.f)	Mean Square = SS/d.o.f	F Value	P Value	Remarks
Model	0.063	9	0.070	6.29	0.0182	Significant
A-Spindle speed	0.091	1	0.091	8.19	0.0287	Significant
B-Feed rate	0.25	1	0.25	22.72	0.0031	Significant

#### Table 3: ANOVA for roughness result of CFRP

C-Depth of cut	0.055	1	0.055	4.99	0.0669	
AB	1.513E-003	1	1.513E-003	0.14	0.7243	
AC	0.017	1	0.017	1.49	0.7243	
BC	0.11	1	0.11	9.74	0.0206	Significant
Residual	0.066	4	0.011			
Lack of fit	0.066	6	0.017	497.29	0.0020	Significant

The analysis of variance (ANOVA) for surface roughness of Al2014 shows that the model F-value of 4.60 implies that the model is significant. P-value less than 0.0500 indicate that the model terms are significant. Thus, C and AB are significant model terms. The surface roughness of Al2024 was influenced by the interaction between spindle speed and feed rate. The depth of cut has significant effect, but spindle speed and feed rate are not significant. The ANOVA for surface roughness of Al2024 is shown in table 4.

Source of Variance	Sum of Square (SS)	Degree of Freedom (d.o.f)	Mean Square = SS/d.o.f	F Value	P Value	Remarks
Model	0.42	9	0.046	4.60	0.0384	Significant
A-Spindle speed	0.036	1	0.036	3.59	0.1068	
B-Feed rate	0.016	1	0.016	1.60	0.2531	
C-Depth of cut	0.13	1	0.13	12.94	0.0114	Significant
AB	0.061	1	0.061	6.11	0.0484	Significant
AC	3.966E-004	1	3.966E-004	0.040	0.8489	
BC	4.561E-004	1	4.561E-004	0.045	0.8382	Significant
Residual	0.060	6	0.010			
Lack of fit	0.060	4	0.015	112.32	0.0088	Significant

Overlay plot in figure 2 shows the graphical overview of the proposed factor settings with yellow shaded area meeting the target responses. The yellow zone represents the zone of optimum responses from 0.4 to 0.6  $\mu$ m with the setting 0.255 mm depth of cut. The range of spindle speed for a pre-setting surface roughness value should be in between 12300 to 13500 rpm and the feed rate should be approximately between 560 to 780 mm/min.

The validation experiment was conducted at optimum level of recommendation control factors setting to compare the deviation of predicted value from actual/measured value. In most engineering cases, if the percentage error or difference between predicted and measured value less than 10%, the developed model is accepted. Table 5 shows the deviation of predicted value from the measured value is 3.11% for CFRP and 3.43% for Al2024.

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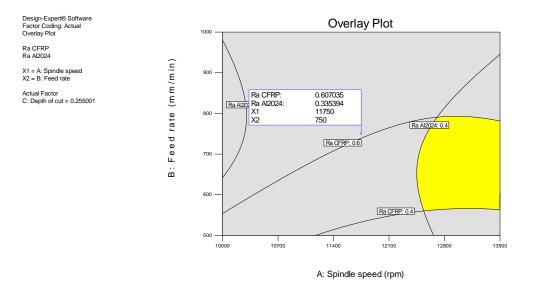


Figure 2: Overlay plot of CFRP/Al2024

Run No.	Spindle Speed	Feed Rate	Depth of Cut	Surface Roughness (µm)					
	(rpm)	(mm/min)	(mm)		CFRP		A12024		
				Actual	Measured	% Error	Actual	Measured	% Error
1	11750	750	0.255	0.594	0.607	2.20	0.320	0.355	4.81
2	11750	754	0.257	0.586	0.610	4.03	0.328	0.335	2.04
				Average % Error		3.11	Average %	Error	3.43

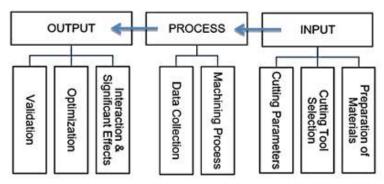


Figure 3: A model of DoE in TVET implementation

The implementation of design of experiment methodology using two level full factorial designs was conducted in machining of composite materials for optimizing of cutting parameters. The DoE methodology applied in this study showed the systematic way of setting optimum cutting parameters and the analyzing the significant interactions of the control factors (spindle speed, feed rate and depth of cut) to produce surface quality of CFRP/AL2024. In conclusion, the implementation of DoE in TVET as part of an enhancement program can be divided into three elements as shown in figure 3. The input parameters can be considered as a primary parameter in ensuring the machining process and data collection can be performed. The process ends up

with validation and optimization of finding the best solution of the controlled variables to meet the specific objectives. This methodology can aid trainees to acquire knowledge and skills in machining more efficiently and enable them to perform analysis and optimization for cutting parameters correctly.

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## Learning Model Development to enhance Creative Ideation using ICTs and Pedagogical Approaches

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**Abstract:** The purpose of this study were: 1) to design a learning model to fostering students' motivation (Intrinsic Motivation and Self-efficacy) and Creative Ideation using ICTs and pedagogical approaches, and 2) to evaluate the effect of the model on students' Motivation and Creative Ideation and compare an experimental group (n = 40) of Educational Technology student in Thailand using live video-streaming with a control group (n = 40) using face-to-face. In each case, the course was offered by the same teacher via two formats. The research instruments consisted of a learning motivation questionnaire, Creative Ideation scale, a students' learning satisfaction questionnaire. The results revealed significantly higher post-test scores and no different for the experimental group and control group. Overall, findings from the study support using ICTs are another option as face-to-face, which can use to enhance Intrinsic Motivation, Self-efficacy and Creative Ideation.

**Keywords:** Creativity, Creative Ideation, Intrinsic Motivation, Self-efficacy, Motivation, ICTs, Social Media, Facebook, Live Video-streaming, Project-Based Learning

## **1. Introduction**

## **1.1 Creativity and Creative Ideation**

Currently, creativity is "one of the most frequently cited 21st-century skills" (Pásztor et al., 2015, p.1). Creativity involves higher-order cognitive processes (Stolaki and Economides, 2018) that include deductive and original thinking (Yilmaz & Goktas, 2016), divergent thinking, (An et al., 2016), critical and analytical thinking (Shubina & Kulakli, 2019), and problem-solving (Mynbayeva et al., 2016). Creativity is related to problem-solving because the latter frequently requires creative ideas (Pásztor et al., 2015).

Creativity, as a behaviour, is often referred to as Creative Ideation which focuses on a process of "creating a number of different original ideas to given open problems" (Fink & Benedek, 2014, p.112). The notion of Creative Ideation is central in terms of understanding creative thinking (Tsai, 2015). Runco et al. (2000–2001) referred to Creative Ideation as ideational behaviour that demonstrates a person's skill with ideas. By studying individuals' creative behaviour, researchers can assess creative skills (Runco et al., 2016). The Runco Ideational Behaviour Scale (RIBS) (Runco et al., 2010) operationalizes the construct of creativity in terms of specific behaviours to show "the individual's use of, appreciation of, and skill with ideas" (Runco et al., 2000–2001, p. 394). All levels of creativity involve ideation and the RIBS is designed to provide the opportunity for individuals to self-report Creative Ideation (Batey et al., 2010). The focus on Creation Ideation as opposed to merely the construct of creativity represents a means to describe an individual's creativity-related actual behaviours, actions and activities (Runco et al., 2001). Measuring ideational behaviour represents a means to "estimate

the potential for creative thinking" (O'Neal et al., 2015, p.145). Use of the RIBS can help individuals self-report frequency of production of ideas and type of ideas (O'Neal et al., 2015).

Not surprisingly, the development of creativity is "one of the most often declared goals of modern education systems" (Pásztor et al., 2015, p.1). Creativity became a skill that "crucial role in education" (Liu et al., 2019, p.249). Creativity can be developed (Stolaki & Economides, 2018; Yilmaz & Goktas, 2016) and must be "nurtured and supported" (Henriksen & Mishra, (2015), p. 2). However, it is only in recent years, that educators have begun to recognize the need for creativity in teaching and learning because of its potential role in increasingly complex societies (Henriksen & Mishra, 2015). Because modern society requires that individuals be creative, universities have an important role to play in developing students' creative abilities (Mynbayeva et al. 2016). Such development, however, also represents a major challenge for higher education (Stolaki & Economides, 2018). Researchers have attempted to identify learning strategies that foster creativity (Mahdi et al., 2015) and understand how creative ideas arise (Henriksen & Mishra, 2015). Some progress has been made for example, in the move from rote learning to activities that focus more on motivational and creative activities with technology (Yilmaz & Goktas, 2016). In general, research has identified the important role of factors such as the learning climate, teacher-student and student-student relationships and the classroom atmosphere in supporting creativity (Richardson & Mishra, 2018).

#### **1.2 Creativity and Motivation**

Motivation is an internal drive for behaving or acting that often considered as a key element for students' success learning (Jovanovic & Matejevicb, 2014), and Motivation has a key role in stimulating creativity as well (Rankin & Brown, 2016). Apiwat (2018) found two components of motivation that positive affect to Creative Ideation are Intrinsic Motivation and Self-efficacy. Shubina & Kulakli (2019) referred to Intrinsic motivation it can reinforce creativity and was a powerful tool to stimulate learning (Rankin & Brown, 2016). The intrinsic motivation is considered to have its roots in the basic internal needs of human (Jovanovic & Matejevicb, 2014), which refers to doing something because it is "inherently interesting or enjoyable" (Ryan & Deci, 2000, p.55) and without any rewards or extrinsic rewards (Fidan & Oztürk, 2015). Amabile (1997) suggests that people would be more creative when they have high-level intrinsic motivation.

Self-efficacy is another component of motivation that has also been linked with creativity. In general, Self-efficacy is a construct derived from Bandura's (1991) Social Learning Theory and refers to confidence in one's behaviours in various contexts (Sangsuk & Siriparp, 2015). Low Self- efficacy can affect a student's ability to engage in learning and can lead to attrition (Mulyadi et al., 2017). In terms of its relationship with creativity, In Social Cognition Theory, Self-efficacy can be developed by four main sources of influence: 1) Through mastery experiences is the most effective of strong self-efficacy 2) Vicarious experiences (Observation by modeling) 3) Verbal persuasion 4) Physiological and affective states (Bandura & Adams, 1977).

#### **1.3** The role of ICTs to promote Creativity

Information and communication technologies (ICTs) offer the possibility of tailoring and adapting learning to accommodate learners' interests as well as develop their creativity, however, they do not do this automatically (Yakovleva & Goltsova, 2016). In order for ICTs to afford these possibilities for learners, they must be applied under particular "special psychological and pedagogical conditions" that develop the learners' motivation to learn

(p.429). Those conditions must also involve the development of students' creativity because creative use of ICTs is an "essential" 21st century skill (Pásztor et al. 2015, p.1). In general, there has been limited attention in the literature to how ICTs can foster creativity in contexts of learning. For example, Stolaki and Economides (2018) found, regarding Facebook and creativity, that there were "very few studies" and that "more work is needed" (p.3).

Stolaki and Economides (2018) argued that attention to Facebook was relevant for learning because students use it in their everyday lives and perceive it "as more informal and user-friendly" compared to learning management systems (p.3). Rashid and Rahman's (2014) investigation of social networking sites such as Facebook with interior design students revealed that the tool supported activity that enhanced their creativity. Use of Facebook has also been associated with motivation. Alsaif et al. (2019) found that students in their study were effective in their use of synchronous and asynchronous Facebook tools for interaction. The authors attributed use of the tools with higher levels of motivation for learning and a shift from "extrinsic to intrinsic study habits" (p.494). Their results are consistent with those of Stone and Logan (2018). Stone and Logan argued that research is needed regarding the use of social networking sites as spaces for more informal learning in which "the learning communities forged can be sustained" after the formal learning has taken place (p.53). One of the advantages in terms of motivating students through use of tools such as Facebook is that, as Miron and Ravid (2015) explained, it allows students to use the same tools for learning that they would normally use in their everyday, social activities.

Live streaming of video with audio and video can provide support for motivation and creativity. Examples of tools that support live streaming are Facebook Live, YouTube Live and, Twitch. Live video streaming (LVS) is "a unique social medium" (Hamilton et al., 2014, p.1315) that supports real-time synchronous (Yu et al, 2018) virtual presence similar to what might be found in small communities (Chen & Lin, 2018). The technology features multiple tools for communication (Yu et al., 2018) including an interactive, text-based exchange of comments or questions in a chat channel (Hamilton et al., 2014) along with emojis so that users can express emotion (Haimson & Tang, 2017). Yu et al. (2018) argued that Live streaming, in comparison with other forms, supports interactive engagement not only with content but with the content provider and other members of the audience. This interactivity can help meet certain psychological needs including socialization, interaction, information, seeking as well as entertainment (Ksiazek et al., 2016). These include information needs as well as a need for relaxation, self-education and interpersonal communication (Chung & Yoo, 2008).

#### 2. Purpose of this study

The study was conducted in three phases as depicted in Figure 1. The first phase focuses on the components of motivation (Intrinsic motivation (IN, Self-efficacy-SE, Self-determination-SD, Grade motivation-GM and Career motivation-CM) most likely to predict Creative Ideation (see Apiwat, 2018). This study is second/third phase of research which focuses on Intrinsic motivation and Self-efficacy to promote Creative Ideation by using pedagogies and ICTs. The objectives for each of the phases were respectively:

• to design a learning model to fostering students' motivation (Intrinsic Motivation and Self-efficacy) and Creative Ideation using ICTs and pedagogical approaches;

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• to evaluate the effect of the learning model on students' Motivation and Creative Ideation.

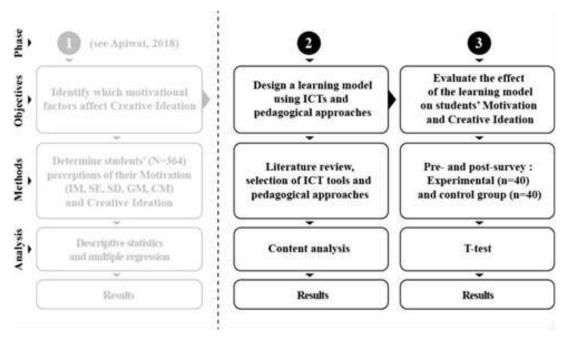


Figure 1: Research design

## **3.** Phase **2**: Design a learning model using ICTs and pedagogical approaches to fostering student' Creative Ideation

Results of Phase 1 revealed that Creative Ideation was predicted by Intrinsic Motivation and Self-efficacy (see Apiwat, 2018). Following identification of these two factors, the researchers identified, from the literature, related approaches to learning that can foster students' engagement in these forms of motivation. Figure 2 summarizes the approaches. Intrinsic Motivation is conceptualized according to Glynn et al.'s (2009) indicators of interest, curiosity, enjoyment, relevance and meaning. Self-efficacy is conceptualized according to Bandura's (1994) dimensions of mastery experiences, vicarious experiences, social persuasion and emotional arousal.

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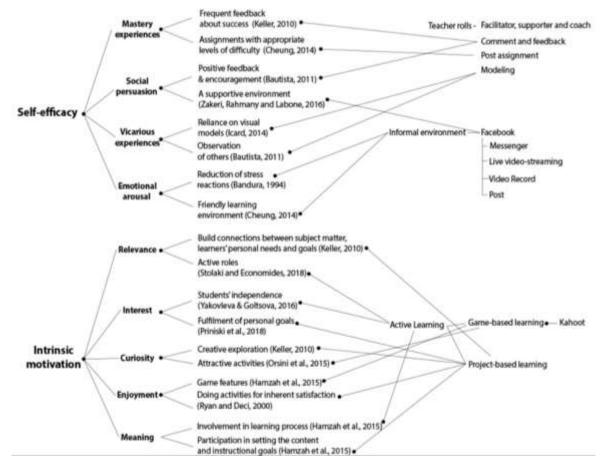


Figure 2: Approach to foster Creative Ideation, Intrinsic motivation and Self-efficacy

The researchers subsequently operationalized these approaches in terms of specific technologies, and pedagogies approaches. At the core of the approach to developing Creative Ideation are Game-based learning and Project-based learning. Game-based learning and Project-based learning are a learner-centered pedagogical approaches that foster learning motivation and engagement of learner in the educational process. Project-based learning offers students control over the learning process, choice and an opportunity to set the content and instructional goal. The teacher's/instructor's role is as a facilitator, supporter, and coach who provides and serves as a model to assist students with their projects. Students engage in team project assignment activities. They do this by communicating and interacting with others. Instead of knowledge being transmitted to them, the students engage in knowledge construction, acquisition, and sharing. The teacher also is competent modeling in the classroom to students observe through behaviour, thinking style, and strategies for problem-solving. Technology's role is to serve as a means to support the roles, and activities that will ultimately lead them to engage in Creative Ideation. Figure 6 summarizes the approach to learning using ICTs and with a foundation of Intrinsic Motivation and Self-efficacy to promote Creative Ideation. The elements are further explained in Phase 3 in relation to how the approach was implemented.

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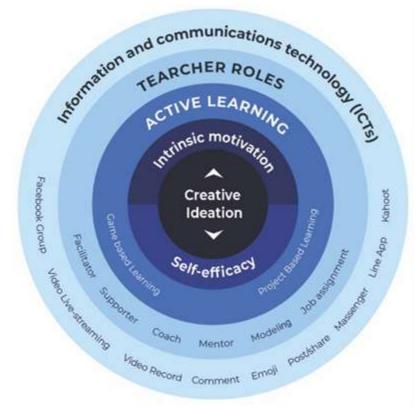


Figure 3: Learning model to promote Creative Ideation

# 4. Phase 3: Evaluate the effect of the learning model on students' Motivation and Creative Ideation

#### 4.1 Methods

#### 4.1.1 Participant and procedure

The participants were 80 undergraduate students in a 16-week Web-based Learning course in year two of a four-year Educational Technology program in a university in Bangkok, Thailand. Participants' demographics were as follows:

		Experimental		Control	
		<i>n</i> =40	%	n=40	%
Gender	Male	6	15.0	15	37.5
	Female	34	85.0	25	62.5
GPA	2.00-2.49	0	0.0	1	2.5
	2.50-2.99	19	47.5	15	37.5
	3.00-3.49	19	47.5	20	50.0
	3.50-4.00	2	5.0	4	10.0

Table 1: Participants'	demographics
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The 80 students were in two separate classes (experimental vs. control) taught by the same instructor during the same semester (first semester academic year 2019). The experimental group (n=40) were taught using Facebook live video-streaming (FLV) for eight weeks. Students in the control group (n = 40) learned in a regular face-to-face settings (F2F). Classes met for four hours, once per week. The course concentrates on a module entitled "Web design

using Wordpress" (www.wordpress.com) for ten weeks. The second module of course focus on Moodle (Moodle.org) and Joomla Content Management System (www.joomla.org). For experimental group, researchers designed and implemented classroom preparation by using Quiz game-Kahoot application (kahoot.com) which is mobile game-based learning application for reviewing knowledge, motivating learner engagement and emotional state to be ready for learning. Ethics procedures conformed to the requirements of the university in which the study was conducted. Students could choose to be in the control or experimental group and thus provided consent based on group choice. Students were made aware that their participation was voluntary and that their non-participation would not affect their course grades. Students in the control group were not required to complete the pre-survey questionnaires, however, all students could be identified based on results.

Week	Experimental	Control	
1	F2F + pre-survey	F2F + pre-survey	
2 - 9	FLV	F2F	
10	F2F + post-survey		

Table 2: Procedures	summary
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During the first and the last time of class (week 10), both groups completed a pre and post-test. The pre- and post-survey were the same, however, students completed the demographic information questionnaire only for the pre-survey. Students were assigned numbers as identifiers for the questionnaires. The pre and post-survey consisted of a questionnaire regarding motivation to learn and another questionnaire related to Creative Ideation. The questionnaires were completed in class and required approximately 40 minutes of students' time. Students were informed that there were no right or wrong answers and that completion was unrelated to their course grade. With regard to course content, there was no difference between the two groups. The difference was in the learning channel and technology for instruction.

#### 4.1.2 Instrument

Part 1 of the questionnaire is learning motivation measurement (Intrinsic motivation and Selfefficacy), and part 2 is Creative Ideation measurement. To assess students' motivation for learning, the researchers used the Science Motivation Questionnaire II (SMQ II) (Glynn et al., 2009). This questionnaire has been validated for use with non-science majors (see Glynn et al.,

2011). The researchers substituted the words science with the word subject (e.g., Learning this subject is interesting). The questionnaire includes 10 items grouped into two factors as follows: intrinsic motivation, and self-efficacy. Participants could respond on a five-point Likert-type scale as follows: never (1), rarely (2), sometimes (3), usually (4), and always (5).

To assess students' Creative Ideation, the researchers relied on the Runco Ideation Behaviour Scale - RIBS (Runco et al., 2001). The scale includes 23 items, all of which describe actual behaviours related to ideation. Students could respond using a 5-point Likert scale with the following options: never (1), rarely (2), sometimes (3), often (4), very often (5). Both questionnaires were translated into the Thai language. The questionnaires were subsequently piloted with 150 students who have the same characteristics as the sample. Results of Cronbach's alpha was show in table 3

Measurement	Sample items	Number of items	α
Intrinsic motivation	I enjoy learning this subject	5	.797
Self-efficacy	I am confident I will do well on this subject	5	.872
Creative Ideation	I often get excited by my own new ideas	23	.922
*a - Cranbash's alpha			

Table 3: Motivation and CI measurement scale, sample items and Cronbach's alpha

 $*\alpha = Cronbach's alpha$ 

#### 4.1.3 Data analysis

The collected data were first analysed by descriptive statistics (percentage, mean and standard deviation), T-tests to determine significance between pre- and post-survey, and Independent samples test to determine a significant difference between the means of two classes (experimental vs. control).

#### 4.2 Results

#### 4.2.1 Intrinsic Motivation, Self-efficacy, and Creative Ideation scores

Intrinsic Motivation, Self-efficacy and Creative Ideation were measured by calculation of presurvey (Week 1) and post-survey (Week 10) scores, standard deviation (SD) as well as t-tests of significance. After ten weeks, the post-survey scores of 2 groups were significantly higher than the pre-survey scores as indicated in Table 4. These results suggest that the learning model was effective in terms of boosting the students' IM, SE and CI.

		Pre-survey		Post-survey			
Group	Factor	Mean	S.D.	Mean	S.D.	Sig.	
Control	Intrinsic motivation	3.7	.52	4.0	.44	.001*	
	Self-efficacy	3.7	.60	3.9	.55	.000*	
	Creative Ideation	3.3	.48	3.7	.53	.001*	
Experimental	Intrinsic motivation	3.3	.50	3.7	.55	.000*	
	Self-efficacy	3.2	.49	3.6	.57	.000*	
	Creative Ideation	3.2	.35	3.4	.41	.001*	

#### Table 4: Result of the t-test analysis (pre- and post-survey)

*p < .05

The results of the t-test between both groups, pre-survey were significantly different at p < 0.05 for IM and SE, but CI was not significantly different at p > 0.05. Post-survey were significantly different at p < 0.05 for IM, SE and CI as indicated in Table 5 below.

Test		Control Experim			mental	
	Factor	Mean	S.D.	Mean	S.D.	Sig.
Pre-survey	Intrinsic motivation Self-efficacy	3.7 3.7	.52 .60	3.3 3.2	.50 .49	.000* .045*

	Creative Ideation	3.3	.48	3.2	.35	.189
Post-survey	Intrinsic motivation	4.0	.44	3.7	.55	.028*
	Self-efficacy	3.9	.55	3.6	.57	.020*
	Creative Ideation	3.7	.53	3.4	.41	.016*

*p < .05

#### 5. Discussion

The originality of this research lies in its formulation of an approach to learning with ICTs that is informed by theories and understanding of motivation and Creative Ideation. According to this approach, technology's role is to provide the tools, resources and digital environments for knowledge construction and sharing. For project-based learning, the technology supports collaboration and communication and facilitates access to resources. Most importantly, unlike traditional forms of learning, the technology is at the service of both the instructor and the students and not only the former. In that regard, the technology supports a learning environment that is centred around the learner. Game-based learning, game activities involve problem-solving spaces and challenges that provide players/learners with a sense of achievement. As learning activity directs attention, reflects intrinsic motivation, stimulates the desire to continue engagement in classroom activities. Kahoot! (kahoot.com), mobile digital game has been used as a practice to engage students for reviewing class content. Creating challenge and fun learning environment which students engaged learning.

For both Intrinsic Motivation and Self-efficacy, that centredness is key. Students set their project goals in terms of meaning and relevance to them. They use the technology to actively, independently and collaboratively investigate, and explore goals that are relevant to them. The technology does not support this experience automatically. However, in this case, the technology is the same as what students are used to in their everyday lives. They are not operating behind a digital institutional wall such as what might be found in a learning management system. They are in a familiar environment, that is personal and social and that connects with their everyday lives. Self-efficacy depends, not only on the technology, but on the instructor. The instructor's role according to this approach is to facilitate use of the tools by students and, as well, to serve as a guide, coach, mentor or facilitator to scaffold their project-based learning experience. The support is not only cognitive but affective as well. The instructor will have to carefully use the tools to communicate and promote enthusiasm and to offer positive, motivating feedback. The instructor can help set the pace and direction such that students are completing tasks and working effectively and successfully towards their goals.

The study is not the first to focus on ICTs and technology. However, studies linking the two are more common at the elementary and secondary levels. For example, Yakovleva and Goltsova (2016) studied motivation with elementary students. Their approach had ICTs more at the centre than in this study. The purpose of their study was "to define pedagogical and psychological conditions" around ICT use for promoting motivation. As in this study, the authors emphasized the importance of having students use the technologies independently. However, in this case, the focus was on lessons and homework. Rashid and Raman's (2014) study focused on ICTs and creativity. Their participants were post-secondary interior design students. The authors relied on the technology to support an online mentoring activity. Like this study, the is used a pre- post- test design to measure gains in creativity. They also used Facebook recognising it as a tool that could motivate students. The authors gathered students'

perceptions of the online mentoring. It was beyond the scope of the present study to identify students' perceptions of their experience. Rashid and Raman reported that students were "more comfortable" with long-distance versus face -to-face interactions. They experienced less anxiety about asking questions and appreciated the anytime/anywhere nature of ICTs. Feedback and positive encouragement came, not only from the mentors but, from peers.

Jahnke and Liebscher (2020) had similar findings in their study of mobile phone use for creativity. They argued that higher education has not paid adequate attention to creativity and there were few studies linking mobile devices with the construct. Their perspective on promoting creativity shared some commonalities with this study in relation to the need for motivation and independence in the learning process. They interviewed 20 instructors in 24 courses about how they integrated creativity using mobile devices. Their results revealed that there was no explicit plan to implement creativity rather the instructors reported that the devices fostered "creativity-friendly learning environments."

#### 6. Conclusion

The risk in using ICTs in learning is that the focus remains largely on the technology itself as opposed to being centred around current knowledge about how best to design learning. Salomon (2000) explained that the expansive growth of technology in contexts of learning has resulted in a loss of focus on the role of education along with a false expectation that technology can automatically reform education. Just as technology does not automatically reform education, it does not automatically represent an innovation. This study has provided an opportunity to gain insight into how innovation can be fostered in contexts of learning. Innovation is more than something new. By definition, it should also represent an advancement over preceding forms. Introducing a new technology in learning, therefore, will not automatically result in innovation unless it can be shown that the learning is improved. In this study, the researchers demonstrated an improvement in students' learning. However, the innovation involved not only the introduction of technology but reliance on theories and constructs related to motivation and to creativity.

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## Perception And Use Of Electronic Trainer Kit (ETK) By Students In The Laboratory Session

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**Abstract:** Electronics Trainer Kit (ETK) is a device that functions as a tool for the teaching and learning process and for testing electronic circuits. With this trainer kit, research in the field of electronic engineering can be carried out easily and the cost of the study is cheaper as these tools have a reasonable price. This trainer is a combination of three instruments in one trainer including the DC power supply, the oscilloscope, and the function generator. This study aimed at investigating the perception and use of trainer kits in the teaching and learning process. The effectiveness of using this trainer kit in educational settings has been evaluated through a survey on students 25 students that had attended Electrical Technology and Measurement course and used this trainer in their practical work in June 2019 session at the Department of Electrical Engineering in Politeknik Mukah. Research data analysis is using the statistic method to find mean score to get the overall rating of the trainer kit and student's perception and the response has been positive, with the total average mean achievement was 4.80 of the correspondence has shown positive feedbacks, indicating the usefulness of the trainer kit. This trainer kit will give students a great deal of practical work in laboratories and improve the teaching and learning sessions in the classroom.

Keywords: Trainer kit, teaching and learning process, practical work.

#### **1. Introduction**

Electronic Trainer Kit (ETK) is a combination of three instruments in one trainer including the dc power supply, the oscilloscope, and the function generator. The power supply is a dc supply with a maximum of 12Vdc. The function generator is ac supply with three variations of wave: sine, square, and triangle with 1 MHz maximum frequency supply. The oscilloscope is a scope display of waveform for circuit analysis in a digital graphic view.

The set is compact and portable so students can begin the practices in the study center and continue with them at home to increase the knowledge acquired. With the help of this trainer, it is possible to cover basic electronics courses in Industrial Training Institutes, Degree Colleges & Vocational Schools. This trainer is suitable to be used in the lab as a teaching aid and demonstrates the principle of electronics law.

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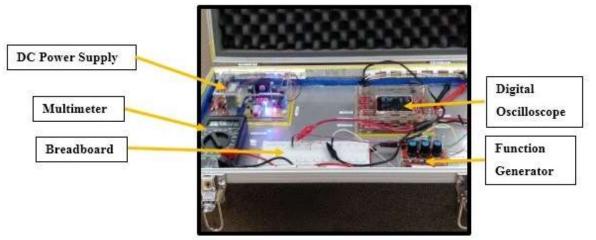


Figure 1: Electronic Trainer Kit (ETK)

#### 2. Literature Review

Dunwill (2016) said that, in the field of knowledge and technology lately develops with rapid development with the advancement of science and technology that produces innovations that lead to a better direction. The advancement of technologies keeps on changing and transforming the teaching method and the setting of the learning process.

K. & B. Ajao, (2014) have stated that the use of electronic trainer board has become increasingly popular in a wide range of applications in teaching and learning method. Arnel M et al, (2015) concluded that after reviewed the appropriate project or technology to facilitate students in conducting electronic engineering studies. Training modules have arisen hand in hand with innovations in laboratory teaching especially in electronics laboratories for they offer actual simulations of the topic being discussed, enabling the students to safely explore their curiosity with these devices.

According to Sahat (2014), many graduate students have not been able to meet the qualifications as required by institutions Technical and Vocational Education and Training (TVET). These symptoms indicate that learning in the education of electronic engineering has not been able to provide a learning experience on the cognitive and psychomotor of students. In learning basic electronics needed a good understanding of the students of this course is the knowledge base that is used to understand how electronic circuits work, therefore the availability of the module as a source of theoretical knowledge and the trainer as a training tool should be considered as a factor that affects the results of learning students.

Intan et al, (2018) said that the electronics trainer is very expensive to obtain and normally available in limited numbers in electronic laboratories. Moreover, due to the limited numbers of units, students need to share the trainers, and this reduces the contact times of each student to use the trainer.

An alternative to overcome this problem, the Electronic Trainer Kit, ETK (as shown in Figure 1) is developed and revised. This research aims to determine the effectiveness of the trainer kit in laboratory.

#### 3. Methodology

#### Questionnaire

Section A of the questionnaire is a survey of the background and biographical information of respondents. The main evaluation of this trainer is in Section B. Question 1 to Question 5 is to determine the effectiveness of this trainer to be used in practical work. Question 6 and Question 7 are to determine how far students can apply knowledge learned in real-life applications. Question 8 and question 9 are to determine the effect of using this trainer in practical sessions in terms of communication and participation. Question 10 and Question 11 are to evaluate the level of difficulty to use this trainer. Lastly, Question 12 to Question 14 is to the relationship between the uses of this trainer to the development of the Final Year Project.

#### Sample

The questionnaire is done on 25 students that had attended Electrical Technology and Measurement course and used this trainer in their practical work in June 2019 session.

#### Data Analysis

The research data analysis is using the statistic method to find mean score for range low, average, and high frequency to get the overall rating of trainer and student's perception of using this trainer in their practical work in Table 1.

#### Table 1: Interpretation of Mean Score

Range of mean score	Frequency, f
1.00 – 2.33	Low
2.34 - 3.67	Average
3.68 - 5.00	High

(Source: Landell, 1997)

#### Results

Table 2: Respondent's Consent

	Respondent's Consent						
Aspects	Strongly Disagree $\frac{1}{f = \%}$	Disagree $\frac{2}{f = \%}$	Neutral 3 f = %	Agree <u>4</u> <i>f</i> = %	Strongly Agree $5$ f = %	Mean Score	
1. The Electronic Trainer		· · ·			Ť		
Kit (ETK) is useful for							
the laboratory session of							
Electrical Technology &	0 = 0	0 = 0	0 = 0	0 = 0	25 = 100	5.00	
Measurement course							
2. I able to apply the							
knowledge learned when							
using ETK.	0 = 0	0 = 0	0 = 0	2 = 8	23 = 92	4.92	
3. The Electronic Trainer							
Kit (ETK) is suitable for							
Electrical Technology &	0 = 0	0 = 0	0 = 0	4 = 16	21 = 84	4.84	
Measurement course.	0				21 01		
4. It is interesting when							
Electronic Trainer Kit							
(ETK) is used in the	0 = 0	0 = 0	0 = 0	0 = 0	25 = 100	5.00	
laboratory session.				~ ~		2.00	

	То	tal Mean Ave	rage			4.80
(ETK) can be applied to the Final Year Project.						
during laboratory sessions using the Electronic Trainer Kit	0 = 0	0 = 0	3 =12	4 = 16	18 = 72	4.60
development skills. 14. With skills learned						
13. The applications of Electronic Trainer Kit (ETK) helps in strengthen the project	0 = 0	0 = 0	2 = 8	4 = 16	19 = 76	4.68
12. The Electronic Trainer Kit (ETK) gives ideas in developing the Final Year Project.	0 = 0	0 = 0	3 = 12	2 = 8	20 = 80	4.68
11. The modules of the Electronic Trainer Kit (ETK) are easy to assemble.	0 = 0	0 = 0	0 = 0	3 = 12	22 = 88	4.88
10. The Electronic Trainer Kit (ETK) is easy to use.	0 = 0	0 = 0	0 = 0	1 = 4	24 = 96	4.96
9. The use of the Electronic Trainer Kit (ETK) in laboratory sessions preparing me to more fully participate in the session.	0 = 0	0 = 0	0 = 0	4 = 16	21 = 84	4.84
8. The Electronic Trainer Kit (ETK) is important in building two-way communications during laboratory sessions.	0 = 0	0 = 0	4 = 12	5 = 8	16 = 64	4.48
7. Usage of Electronic Trainer Kit (ETK) enhances practical skills.	0 = 0	0 = 0	2 = 8	3 = 12	20 = 80	4.72
6. The Electronic Trainer Kit (ETK) helps in laboratory assessment.	0 = 0	0 = 0	1=4	4 = 16	20 = 80	4.76
5. The Electronic Trainer Kit (ETK) is relevant to your knowledge level.	0 = 0	0 = 0	0 = 0	4 = 16	21 = 84	4.84

#### 4. Discussion and Conclusion

The responses from 25 students show a positive impact of using this trainer in practical work with an average mean score of 4.80. This means that this trainer is suitable to be used for practical work and they are satisfied with this trainer.

According to Table 2, Q1 and Q4 were scored 5.00 in mean reading, shows that all students strongly agree that this trainer is useful for laboratory sessions of the Electrical Technology & Measurement course and students felt interested to learn when using this trainer.

According to Q2, with a mean score of 4.92 shows that a lot of students agree that they can apply the knowledge they had learned when using this trainer. This shows a positive impact on

the teaching and learning process and this trainer is very effective to apply practical skills in real life.

Q8 and Q9, with the same reading of mean score 4.68, shows that two-way communication is build up with more discussion and conversation in the laboratory session. Also, students are more participate in that session since they need to do programming work and at the same time; they need to assemble this trainer to work as desired. However, from Q10 and Q11, students felt that they were more fully participated and easier to use in the laboratory session.

From Q12 to Q14, this trainer not only useful in Electrical Technology and Measurement course but also gives ideas in developing Final Year Project and all the skills learned during laboratory sessions using this trainer can be applied in Final Year Project.

This project is successfully developed and used in laboratories session. These electronic trainer kits perfectly suitable for hands tests on experience in construction and testing and it should be useful in supporting repair and testing and also perfectly suitable for tests to implement the basic knowledge for many electronic professions.

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## Spiritualizing New Media: The Use of Social Media for Da'wah Purposes within Malaysian Muslim

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**Abstract:** Da'wah is an act of calling people to the religion of Allah and brings with it abundant rewards and merits for those who perform this noble deed. Da'wah also means to invite non-Muslim to accept the truth of Islam. Social media is a form of electronic communication such as Web sites for social networking and microblogging through which people create online communities to share information, personal messages, ideas and other contents such as videos. To communicate with the guidance of Al-Ouran and As-Sunnah must be preached in Islam as the two are the most reliable sources. The Prophet had used a number of different types of medium to convey his preaches and da'wah. However, Noor Shakirah added that in the 21st century era today, a lot of things had change, the medium and platform to communicate as well had changed. Though there may be an upgraded form of communication today, every Muslim is the communicator of Islam, where the role of dai'e should be portrayed by conveying good messages and giving da'wah according to their own ability. The da'wah can be done either individually or collectively. In this research, the researcher is trying to find the correlation between da'wah and the online world. A survey will be distributed to the targeted social media users in UiTM Shah Alam, with a total of 60 respondents. The students will be selected randomly from each faculty under the cluster and the link to questionnaire will be provided. A non-probability sampling was used for this study. This means that, out of every faculty, a specific number of respondents were selected to participate in the study. This was to give all subsets of the sample frame equal probabilities of selection. From this research, we can conclude that social media is a very effective medium in delivering information as it can reach a large audience in a short period of time. However, in delivering da'wah, it is still not the main initiative because the perception of the messages still can be questioned or doubted.

Keywords: Networking, Electronic Communication, Islamic, Da'wah

#### **1. Introduction**

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> According to Noor Shakirah (2006), to communicate with the guidance of Al-Quran and As-Sunnah must be preached in Islam as the two are the most reliable sources. The Prophet had used a number of different types of medium to convey his preaches and da'wah. However, Noor Shakirah added that in the 21st century era today, a lot of things had change, the medium and platform to communicate as well had changed. Though there may be an upgraded form of communication today, according to Zulkiple (2001), every Muslim is the communicator of Islam, where the role of dai'e should be portrayed by conveying good messages and giving da'wah according to their own ability. The da'wah can be done either individually or collectively. In this research, the researcher is trying to find the correlation between da'wah and

the online world which is social media platforms as how the Muslims today perceive preaches and da'wah through social media platforms.

According to Denis McQuail, the mass media are highly diverse in content and in forms of organization and include a very wide range of activities which could have effects on society. The mass media could be in a form of radio, film, or print. In correlation to mass media, the two popular types of media today are traditional media and new media. Back then, traditional media or also known as old media has been a prominent form of communication. This includes puppetry, storytelling, painting, motifs and symbols. The evolution from traditional media to new media today is being practiced widely as the current form of communication. According to Bailey Socha (2014), new media includes everything that comes off as digital such as the Internet, websites, computer multimedia and games, CD-ROMs and DVDs. In relation to this research, the researcher is finding out just what type of media do Muslims today use as a platform to convey their da'wah. Do they still use the traditional media way of communication or the new media?

According to Natalia (2013) the term da'wah or "Islamic call" means "the call of Allah" to everyone to believe. Thus this meaning implies the equality between da'wah and iman (belief). Da'wah literally, is an Arabic word derived from the root da'a which signifies "to summon", "to call" or "to invite" someone to something great especially a religious belief. Technically therefore, da'wah (invitation) exclusively refers to the act of proselytizing or preaching of Islam to non-Muslims. Conversely, by extension, it could also entail redirecting the affairs of Muslims to the right path and exerting efforts in teaching them the sound knowledge of the Din. Therefore, any person that works or volunteers in the ministry or institution of da'wah is called a da'ie. Furthermore, da'wah can be perceived as the call of every Muslim to unbelievers and it means a peaceful missionary work. Next, da'wah is defined as inviting people to do a good deed in all aspects of life and it is not simply calling people to convert into Islam, but it also focuses on human development so that they will be able to perform their responsibilities as khalifah of the earth. (Fariza & Idris, 2006).

Today, the adoption and use of social media has been widespread in every sense of human life. Muslims are not different from other societies in which the trend of social media adoption and use has increased all the times over past few years. It has brought changes that have considerable implications for the ways of Muslim society interact at the personal and groups level. For an individual Muslim, social media offers the ability to communicate through perceives, ease of use, speed and ubiquity (Kini 2009, Yaros 2011) while at group levels, social media provide opportunity to strengthen alliance and relationship which are often considered as silaturrahim. As a result, this capability of social media might increase accessibility and use in a way that empowers the individual and groups of Muslim users. Instead, social media has been widely adopted and used at individual and group levels, the adoption and use of social media for Islamic activities purposes in particular for da'wah are limited. Most of current adopters and users utilize the social media merely for fun but very few of them used it for da'wah. Da'wah is defined as "inciting people to do good things and hold right guidance; to command the right thing and forbid the wrong one" (Hamid 1996:13).

According to Abdul Qayyum (2015), social media presents a huge opportunity for us to reach out to people who may not know about Islam or Muslims. One of major utilization of social media in Islam is proselytization which is admired by Islamic preachers. Social media is not only utilized by preachers but also used by common Muslims who communicate with each other and also continuing posting Quranic verses and Hadith. Social media increases learning opportunities in Muslim world. They can take lectures given by Islamic scholars online and also contact with them through social media. Preachers can also teach Quran and Sunnah through social media voice and video calling and extend da'wah to Muslims and non-Muslims. Some negative factors of social media include promoting crudity and sloppy statements which are prohibited in Islam. We have to use it for positive purposes especially for the welfare of mankind as recommended by Quran and Sunnah.

#### **1.1 Problem Statement**

Social media has been used widely among Muslims across the world. It has become the platform for online interaction within Muslims and also a contemporary medium for spreading da'wah. Nowadays, new media that act as a tool for disseminating Islamic information have been quite different with the medium that has been used in the previous years (Saed Zurghami, 2011). The method for Islamic teaching and learning before this has been done by following the tradition and Islamic values. It was disseminated carefully from one generation to the next based on Al-Quran and As-Sunnah (Musthafa al-Siba'e, 1993). The Muslims really respect the content of the information. According to Fadzli Adam (2015), In moving towards the main goal of da'wah, the content of the message on the internet are seen to be passed openly and freely to others without censorship and can be performed by anyone by downloading the news independently. This situation will of course, challenged the Islamic concept and integrity of information in Islam. Advice can be delivered in many ways and getting it wrong can be damaging towards other people. Some people like to reprove others publicly and this deemed to open the people's disgrace. Even though they can actually do it privately such as sending others direct message or personal chat. This way, good rapport between both parties can be established. Nobody else will know about the things that they are discussing and people shaming behavior will not occur.

According to Ab Hamid Ali (2015), with the easy access of the internet, explanations regarding our religion can be found easily which may lead towards the problem of the influx of information. The excessiveness of information can create an atmosphere of chaos where users will become skeptical while searching for reliable information. They will not know which information they should trust anymore. Meaning that, too much information will only create another set of problem towards the users. According to Mohd Sani (2009), users will experience a phase where they feel like they are getting squeezed by a hoard of religious information online. Moreover, the overloading information will only trigger anxiety, frustration and confusion.

Islam teaches us manners between teachers and students to ensure appropriate learning and also to take care of the requirements of Syariah in providing education (Saed Zurghami, 2011). However, some social media users clearly do not reflect the teaching and learning manners that are emphasized by Islam (Talib Samat, 2004). We can see this clearly by looking at the language that has been used to reprove people, which is maybe inappropriate. Some people give advice in a negative way by using harsh or rude words. Getting that advice can only make people feel worse and it will be painful for them accept it. Other than that, they even use allegory when reproving others. Instead of opening up, there is a hidden meaning in the message that they deliver.

According to (Zulkiple, 2002), social media users came from variety of educational backgrounds. For users who have a basic knowledge of religion can certainly read and analyzes

the da'wah messages based on their knowledge about Islam. But things are seemed to be different from users who have minimal religious education. This group of people may encounter certain difficulties to assess the da'wah messages. Things are getting serious when nowadays; some individuals are pretending to be an ustaz and ustazah. Assuming to know everything about what they say without actually provide a proper hadith or reference. The validity of the message is unclear. It is hard for people with strong Islam education to believe in what they say, let alone accepting it. But for people who do not have much understanding on Islam, they might as well trust the message that they have received. Based on the evidence stated, it has led us to study on how far da'wah through social media can go depending on its perception, positive and negative factors using social media as a medium of receiving and disseminating da'wah. The problem statement had allign with these research questions and research objectives:

**Research Questions :** 

- i. What is the perception of Malaysian Muslim towards da'wah on social media?
- ii. What are the positive factors using social media as a medium of receiving and disseminating da'wah?
- iii. What is the negative factors using social media as a medium of receiving and disseminating da'wah?

Research Objectives :

- i. To determine the perception of Malaysian Muslim towards da'wah on social media.
- ii. To study the positive factors using social media as a medium of receiving and disseminating da'wah.
- iii. To determine the negative factors using social media as a medium of receiving and disseminating da'wah.

#### 2. Literature Review

#### **About Literature Review**

According to Piela & Lerner (2010), YouTube is viewed as a medium that can attract Generation Y because of its audio and visual elements combine methods seen more innovative and creative in the process of learning. There is no doubt that mass media wields considerable power, so often referred to as the constructed ability of the media to influence the perceptions of others such as the general public and the people at large over certain news or issues. However, an abundance of information available on the YouTube site had raised the perception of Malaysian Muslim towards da'wah on social media. For this research, the researcher used quantitative methods, through the literature review and review by the reference materials used in this study.

The credibility of the source of information is very important in ensuring that the information disseminated to meet perception and objectives of its users and is accepted as a reliable source. The basic source of Islam is the Quran and Hadith. For example, by only using the Internet to make a reference in order to learn about of the verses of the Qur'an, is likely to occur errors of fact (Syed Muhammad Dawilah & Mohd Lutfi 2009). According to Fallow (2005), a credible and authentic information is very important in the era of technology where people now prefer online to find information on a variety of information, including medical and health information, product information and marketing, entertainment, leisure and other information. According to the study of Hanudin Amin (2007), integrity is the center of a system as it is

important for perception of Malaysian Muslims towards da'wah on social media in which users no longer see it a reliable source of information if the information do not have trustworthiness. According to Gaziano (1998), the importance of the perception of Malaysian Muslim towards da'wah has been affirmed by him from the beginning, that the failure of the public to have trust towards news media, also will result the ability of an institution that deliver the message to failure. According to Edelstein Et Al (1989), the reliability needs to be assessed differently and modernity with the passage of the media industry. With the advancement of industry media, the reliability of the media is not only measured by the ability of an institutions, but also the through capacity of the audience. Therefore, members of communication on 21st century has resulted in a new approach to the study of media credibility through the interactive community and active audience that is expected to assess credibility of the media in the personal context (Self, 2009). According to Abdul Rauf (2014), reliability and credibility of a particular information, and the message needs to be examined. This is because, Allah SWT says in Surah Al-Hujurat, verse 6:

"O believers, when it comes to you a wicked person who carries the news, then you have to investigate so that you will not inflict harm on the people because of your ignorance and will cause you regrets for your doings."

Islam upholds the integrity of any information disseminates to the audience and the sources quoted for that purpose (Al-Hujurat, 49:6). It is so important to preserve content reliability as perception of Muslims in order to prevent the spread of false news which can bring harm to the society especially the information related to the religion. (Adam, Anuar, and Ali, A.H., 2014). The need to investigate and ascertain the authenticity of the news should be done more carefully and critically, as well as the aspects of documentation and testimony which aims to ensure that the news has been delivered in a high level of validity (Zulkiple, 2010). According to Azmah & Samsudin (2013), analysis shows that Malaysian Muslim perception toward social media has a significant relationship with medium credibility but not with news credibility. Media consumption shows no significant relationship with both dimensions of media trustworthiness. However, medium credibility is not a significant predictor of participation to express an opinion. Instead, media consumption comes out to be a significant predictor of participation to express an opinion. Media trustworthiness assessments have changed along with the progress and modernization of the communications industry. The work of da'wah itself is to communicate the truth of the divine message to people. The communication system differs from one place to another based on the level of people's civilization.

In the days of the Prophet Muhammad (pbuh), for instance, the work of da'wah was carried out through verbal communication. Today, we witness the advance of communication system, where there is a sophisticated network of direct communication used for all types of purposes such as marketing, information, leisure and education. It is an undeniable fact that these forms of communication may also be regarded as a tool for public opinion maker. Thus, in the midst of this rapid development of technological information, the work of da'wah should take advantage of the system and use it fully to disseminate the divine message (Wa'i, 1995). According to Johnson & Kaye (2004), the phenomenon of internet usage so widely has promoted various studies of media credibility to differentiate the mass media and new media, for freedom and democracy that have introduced new media, allows information and news published professionally even the person is not one of the member. If the previous study finds that television news has more credibility than the press, (Gaziano & McGrath, 1986), while in

the present study was closing the gap with respect to the accuracy of the press review very similar to a television. (Johnson & Kaye, 1998; Flanagin & Metzger, 2000).

According to House (2004), blogs provide a lot of information about other people, those whom a blogger comments on, cites, or links to. By seeing not only whom a blogger links to but what s/he says in the process, we can infer something about their evaluation criteria. By this, it shows that trust is needed to determine how credible the information on the internet is because the person who provide the information need to ensure that she use a trusted information. She also mentioned:

"Since a typical entry consists of links and references to and quotes from other blogs, and discussions often progress quickly, assessments of trust of credibility are made quickly, and get black-boxed as the discussion continues."

According to Noor Shakirah (2006), since years ago, media have played an important role in spreading Islam. Nowadays, with the advent of electronic media, this role has become more extensive. Media has become the heart of information where the sign of success mainly depends on how much effort they have given to take control of the medium during their time. With the help of online media and internet, the whole world has become a global image. Now, education, news and other mediums can be transferred from one end to another in no time. This led to the development in da'wah as many Islamic scholars started a well formed trend which involves the factor of using this global trend. This trend includes online videos of da'wah, website links, different blogs and social media platform in distributing the teachings of Islam. This way, the teaching of Islam's were preached through the channel of Internet and global media where it promoted the factors of showing the positive and enlightened side of Islam. In the new context of socio-political globalization, this must take into account how many citizens of the region are adapting ideological and behavioral guidelines created by Islamic scholars through da'wah in other times in order to adapt them to their needs in the world that surrounds them.

The new information technologies and communication are allowing that these transformations occur very quickly and with a growing degree of influence of IT in different social structures. This globalization of da'wah explain the ideological projection that refers to integrating Islam as instrument of action, mobilization or identification policy. This way it would portray the positivity of Islam and it would also help in reducing the misconception about Islam worldwide. This globalization trend would reach the farthest corner around the world with just the medium of internet, giving a solid ground exposure. Amirul Akhbar (2011) also added that currently, blog has become one of the most popular technologies in broadcasting media on the internet. Blog is a modern media which is created based on technology development to meet the needs of the dynamic nature of new media and independent networks known as the blogosphere. It is apparent how the society has adopted and adapt the acceptance of information as accorded by Hsuan & Huang (2011), nowadays, blog has been considered as the main source of online information where its content can be accessed across boundaries of time and place. Various transactions, economic issues, politics, education, religious and social are taking place 24 hours a day without limits. It has become one of the most popular platforms and is regarded very influential.

According to Syed Muhammad Dawilah Al Idrus (2009), if we look thoroughly, the use of media electronics especially radio and television as the medium for da'wah has been suggested

and proposed by the Malaysian government itself. The programs that are being published are all very well accepted from its own audience. Today, the human civilization keeps on inventing and improvising the technologies into better ones and even better ones, which is working as it is well accepted by the society, as today is also known as the multimedia era. Even Malaysia also has accepted this era very well seeing how a lot of cash flowing out to get to this level of era multimedia. The existence of "Koridor Raya Multimedia" is the further proof how Malaysia has really accepted this multimedia era. On a different note, according to Zulkifli (2008) he stated that social media today is a phenomenon towards the society and it is reported that there are 500 million Facebook users and 100 million Twitter users around the globe, as of 2008. While in Malaysia alone, the figure is 12 million Facebook users, as of 2008 as well, and the number keeps increasing. With the number of users around the world, it can be seen that the potential and impact that can be utilized in relaying da'wah messages on social media platforms. It is apparent how all the social media users are making full advantage in relaying good messages that are worth sharing. Media is a tool that influences all sorts of communication activities. Every individual needs the media as the medium for communication as well as gaining information be it through printed media or electronic media. Today, with the growth of communication technology, communication gets to be accessed and conveyed better with the existence of Internet, it is needed to interact online, also known as cyber communication. Now according to Wakefield and Rice (2008), cyber communication gives the opportunity to all Internet users in the process of learning, working, information, data, sharing opinions and many other things. Hence, parallel to its definition, the dae'i are deemed to utilize and use the cyber world to convey their da'wah and messages through various platforms of social media.

According to Muhammad Shahir (2013), the da'ie especially the Muslims are not supposed to limit the da'wah to only certain types of media that can be used in conveying religious preaches or da'wah in every corner of the world. In fact, 'Jabatan Kemajuan Islam Malaysia' (JAKIM) as well had made used of the social media as part of its da'wah activities with the existence of all these high technologies devices for as long as it does not break any guidelines or laws. Umar and Samsudin (2010) found that the Muslims are using the Internet today to find information in regards of Islamic issues such as the Islam guidelines, how to manage Hajj and Umra, Islamic current issues, the histories and stories of the Prophets as well as looking for advices according to the Islamic ways of things. To that, Chawki (2010) added that the Internet is used as a source to learn and gain more knowledge regarding Islam such as finding the information about beliefs, traditions and festivals. Interestingly, according to Rosmawati (2011), social media has an advantage that is greatly accepted by its users. Rosmawati said, social media offers the creation of a virtual personal in every user profile, as well as a form of communication with lots of activities.

While Siti Eizaleila and Azizah (2010) also further explained that the social network is functioned as a platform for its users to meet new people, maintain the friendship that was built, sharing information and ideas whether it is for personal or business purposes. It seems pretty apparent how well the society has been accepting this modern way of spreading da'wah online through various social media platforms such as Facebook, Twitter, and Instagram just to name a few. This statement can also be backed up just as how the scholars above have stated. The new media today is a very prominent source in accessing information where everyone and anyone can access. When summarized, the positive factors using social media as a medium of receiving and disseminating da'wah measured by the growth, development and advancement of

technology devices. As well as how these technology devices can access various social media platforms.

#### 3. Methodology

The researcher will conduct the research in quantitative approach. According to Cohen (1980), quantitative research is defined as social research that employs empirical methods and empirical statements. This method focuses on fresh data collection in accordance to the problem from large population and analysis of the data. Similar to this have discussed that the quantitative strategy works on objective and measure it through the actions and opinions which helps the researcher to describe the data rather to interpret the data. Typically, empirical statements are expressed in numerical terms. Another factor in quantitative research is that empirical evaluations are applied. Empirical evaluations are defined as a form that seeks to determine the degree to which a specific program or policy empirically fulfills or does not fulfill a particular standard or norm. In a simple definition, Creswell (1994) stated that, quantitative approach is explaining the phenomena by collecting numerical data that are analyzed by statistics. For this research, the researcher is using quantitative survey method that will be delivered across UiTM Shah Alam students targeting at the social media users. For example, Instagram, Twitter, Facebook, Blogger and many more. The survey was used to investigate the phenomenon of the use of social media for da'wah purposes within Malaysian Muslim.

Undergraduate students from the cluster of Social Science and Humanities, UiTM Shah Alam, between the ages of 18 to 27 years old and above. The cluster tends to have students from multiple disciplines, which will provide diversity in student education for a more accurate representation of a campus. There are six faculties under the cluster, namely Faculty of Law, Faculty of Communication and Media Studies, Faculty of Art & Design, Faculty of Music, Faculty of Education and Faculty of Academy of Language Studies (APB. Since all units in the chosen population could not be observed because of factors such as time limitation and financial constraints, a section of the population was selected as a sample from the entire population to represent the whole. According to Merriam (1998), non-probability sampling is the method of choice for most qualitative research. Anthropologists, for example, have long maintained that non-probability sampling methods are logical as long as the fieldworker expects mainly to use his data not to answer questions like 'how much' and 'how often' but to solve qualitative problems, such as discovering what occurs, the implications of what occurs, and the relationships linking occurrences. Thus, the most appropriate sampling strategy is non-probability – the most common form of which is called purposive.

A survey has been distributed to the targeted social media users in UiTM Shah Alam, with a total of 60 respondents. The students will be selected randomly from each faculty under the cluster and the link to questionnaire will be provided. A non-probability sampling was used for this study. This means that, out of every faculty, a specific number of respondents were selected to participate in the study. This was to give all subsets of the sample frame equal probabilities of selection. A self-administrated survey questionnaire will be prepared. The survey method was employed because it is a proven way of effectively answering research questions and it is also an inexpensive way of achieving goals. The students will have the access toward the survey by following the link provided. The questionnaire are made up of 4 sections which is A – Demographic, Profile, B – the perception of Malaysian Muslim towards da'wah on social media, C – the positive factors using social media as receiving and

disseminating da'wah and D – the positive factors using social media as receiving and disseminating da'wah. Each of the items will be represented using a Likert scale and the respondents are required to indicate their agreement: 1 =Strongly Disagree, 2 =Disagree, 3 =Slightly Agree, 4 =Agree, 5 =Strongly Agree.

#### **Tables and Figures**

Tables usually show numerical value or textual information and are almost always characterized by a row-column structure. Any type of illustration other than a table is referred to as a figure. The title should be placed at the top of a table. For figure, the title should be placed at the bottom of a figure.

#### 4. Discussion and Conclusion

A reliability test is required to assess whether the research measurement used produces consistent and stable results, which allow it to be utilized in any future research (Wimmer & Dominick, 2014). The reliability analysis is tested on data collected for determining the use of social media for da'wah purposes within Malaysian Muslim separately as well as combined to see the overall result. The reliability test is made for section B of perception of Malaysian Muslim towards da'wah on social media with 10 items, section C of the positive factors using social media as receiving and disseminating da'wah with 10 items and section D of the negative factors using social media as receiving and disseminating da'wah. Table 1 below shows the Cronbach's alpha of reliability summary for the actual study.

Section	Constructs	Alpha index	
В	The perception of Malaysian Muslim towards da'wah on social media	0.822	
С	The positive factors using social media as receiving and disseminating da'wah	0.804	
D	The negative factors using social media as receiving and disseminating da'wah	0.709	

Table 1: Cronbach's Alpha

The reliability test is made on three sections altogether with a total of 60 respondents. The total alpha value for the perception of Malaysian Muslim towards da'wah on social media is 0.822. Thus, the alpha index for all instruments in this study shows a reliable result value.

Items	Μ	SD
Experience is important	3.7833	.71525
Perception depends on author's expertise	3.6667	.96843
Da'wah give strong influence	3.6167	1.00998
Help to be updated with the latest news	3.3667	.86292
Social media is influential	3.2667	.86095
Depend on social media as the source of information	3.2667	1.02290
Social media is the most trustful platform	2.8833	.97584
Trust message on social media	2.7833	.86537
Message received is useful	2.7333	.89947
Trust any information	2.6000	1.10775

Table 2 : Mean distribution level of the	erception of Malaysian Muslim towards da'wah on s	ocial media
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Thus, the analysis found that the experience is important to measure the perception as social media user. From the overall analysis, almost all social media users' perception about da'wah is depending on the author's expertise and da'wah through social media can really give strong influence to them. In addition, social media helps especially social media users to be updated with the latest news of da'wah, influential to achieve their own objectives and goals, and mostly among them depend on social media as the course of information. However, almost half the number of the respondents do not think that social media is the most trustful platform that can be used to search for information regarding da'wah. Social media users usually trust any message on social media regarding Islam and da'wah. This indicates that the respondents think that not all messages received from the social media is useful and trusted and they are hard to believe any information they received.

Items	М	SD
New media acted as a prominent source	3.9667	.78041
Online sharing of information	3.8833	.71525
Use Internet to improve knowledge	3.8500	.81978
Social media give Muslim scholars opportunity	3.8500	.77733
Blog is useful and beneficial	3.7500	.81563
Techno da'ie make use of technology	3.7000	.86944
Social media is accessible	3.7000	.78762
Technology advancement helped Muslim accept da'wah message better	3.6500	.87962
Blogs that contain da'wah message are acceptable	3.4333	.81025
Read blogs or website to get Islamic information	3.2667	.86095

 Table 3 : The overall level of the positive factors using social media as medium of receiving and disseminating da'wah.

The analysis found that the social media users think that new media today acted as a prominent source in accessing information where everyone can access. From the overall analysis, almost all social media users tend to believe that online sharing of information can promote the increase in Islamic knowledge among the people. Furthermore, social media helps especially social media users use Internet to improve their knowledge that can solely give those benefits in this world. Besides, social media give Muslim scholars and organizations the opportunity to spread Islam globally through the web and various new media platforms such as blog is useful and beneficial to spread da'wah. Almost half the number of the respondents agree that techno da'ie really make use of technology to spread their worth sharing messages. In other words, "techno daie" is actually consists of people with different backgrounds but with similar aims, namely to uphold the teachings of Islam that call people towards truth. The respondents also agree that social media is accessible to all in spreading da'wah. Nowadays, with the advent of electronic media, this role has become more extensive. Media has become the heart of information where the sign of success mainly depends on how much effort they have given to take control of the medium during their time. This can be proven by respondents' thinking towards today's technology advancement has helped Muslims to accept the da'wah messages better. Some of the respondents also agree blogs that contains da'wah messages are acceptable towards them. They personally read blogs or any website portal in order to get Islamic information.

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Items	М	SD
Spreading gossip are supposed to be a sinful act	4.2167	.73857
False da'wah information may be disseminated freely	4.1667	.74029
Defamatory can be spread through social media	4.0000	.78113
Misconception happen when received da'wah	3.9833	.62414
Lack of reliability on the da'wah information	3.9167	.71997
Internet favors to invade privacy	3.8667	.65008
Social media change the character	3.8500	.70890
Usually influenced by the information	3.6833	.67627
Social media had leave negative impact	3.6500	.68458
Prefer to spend time surfing the Internet	3.6333	.75838

 Table 5: The overall level of the negative factors using social media as medium of receiving and disseminating da'wah.

The study indicates that almost all of the respondents agree that Spreading gossip and rumors through social media are supposed to be a sinful act. Besides, sometimes, false da'wah information may be disseminated freely on social media. However, the wrong utilization of Information technology can also lead to some worst forms of impact on the da'wah and ultimately on Islam. The respondents tend to believe a defamatory statement can be spread through social media and misconception do happen when receiving da'wah on social media. Besides, there is a lack of reliability on the da'wah information in social media. Religiosity means that people experience the relationship with religion and their faith. The growing role of information technology in contemporary Muslim societies has been accompanied a process of individualization of religious beliefs, which it has led to greater diversity within Islam, both in the field practices and in its social and political dimension. This individualization faith implies that people have a few more options to select, modify and adapt their ways of believing and express their beliefs. Thus this lead to the invention of Bidd'ah and worsening the situation for Muslim community around the world. Some of the respondents agree that Internet favors us to invade privacy of other people disgrace them by spreading doubtful information, social media have the potential to change the character in a negative way and easily influenced by the information that they have seen in social media.

However, some respondents do not agree that social media had leave negative impacts upon them and spending time surfing the Internet whenever they feel stressed rather than reciting the Quran.

#### 5. Conclusion

Da'wah is an act of calling people to the religion of Allah and brings with it abundant rewards and merits for those who perform this noble deed. Da'wah also means to invite nonMuslim to accept the truth of Islam. Social media is a form of electronic communication such as websites for social networking and microblogging through which people create online communities to share information, personal messages, ideas and other contents such as videos. One of the highlighted problems is that some social media users clearly do not reflect the teaching and learning manners that are emphasized by Islam by looking at the language that has been used to reprove people, which is not quite nice and appropriate.

This research purpose is mainly to study on determining the use of social media for da'wah purposes within Malaysian Muslim. In order to meet the end result, the researcher made a qualitative research for design of the research. It includes the distribution of questionnaires to the respondents. The questionnaire consists of several questions to help achieve the research objectives and acquire more insight about the opinion of use of social media for da'wah purposes within Malaysian Muslim. From this research, we can conclude that social media is a very effective medium in delivering information as it can reach large audiences in a short period of time. However, in delivering da'wah, it is still not the main initiative because the perception of the messages still can be questioned or doubted.

In a nutshell, the researcher has successfully fulfilled the research objectives of the study. However, the researcher faced several limitations throughout the research process. The next part of this chapter provides a detailed explanation on the limitations of the study as well as recommendations for future study.

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### The result online learning on Massive Open Online Course in Digital media Creation on Social networks course

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**Abstract:** This research aimed to 1. Create an effective digital media creation on social networks course, 2. Study learners' academic achievement in the digital media creation on social networks course and 3. Study general information on learning behavior survey and study learners' satisfaction on learning the digital media creation on social networks course. Population in this study were 266 online learners enrolled in KMUTT015: digital media creation on social networks of Thaimooc.org creating by Higher education network of lower central region. Among these, 99 learners passing course criteria accounting for 37.22% were sample in this study. Of 99 learners, 55 answered the learning behavior questionnaire including 67.3% male and 32.7% female, 70.9% were in the age ranged from 18-24 years old followed by 20% in the age of 25-34 years old, 50.9% studying for a Bachelor's degree and 34.5% graduated a Bachelor's degree, 74.5% were students and 18.2% were teachers, lecturer, academic staff, 40% most satisfied the course and 36.4% very satisfied the course.

Keywords: MOOC, Digital media creation, Social networks

#### **1. Introduction**

Asian Scholars Network

> Thai cyber university development project, Office of the Higher Education Commission, Ministry of Education together with Office of the Permanent Secretary, Ministry of Information and Communication Technology have manipulated Thai cyber university development project to be a system and National center of online teaching and learning management system opened to the public (Thai MOOC), Central information technology architect to support "Lifelong Learning Space" (Thai cyber university development project, 2018) under projects to drive economy and digital society named third plan: creating a quality society through digital technology.

> To develop the country towards stability, wealth and sustainability, Thai people in 4.0 era must maintain Thai identity and compete on the world stage meaning that they must be a virtuous person, adhere to the common values of society as the base for self-development to be a person with 3 characteristics; be a learner, innovator co-creator, and a strong citizen, a perseverance, yearning to learn, self-sufficient, skilled, competency, knowledgeable in the process, being able to plan production and marketing, creating things around, life-long learner based on essential knowledge, continuous modern technology, and be aware all the time. They must also take into account morality and ethics to create good things for consumers, society, and surrounding. In addition, the important thing is creating themselves as an entrepreneur generating income from knowledge and professions combined with creativity to accomplish the goals which is consistent with the important educational model and necessary skills in 21st century that focus

on students to study and practice to gain knowledge and skills in technology applications to develop multimedia, have creative thinking and the ability to communicate and work with others with professional ethics, consistent with what affected learners to learn about creative thinking development to use for media design, create new ideas, study and research work and information all around to find media design project ideas via brainstorming to come up with a variety of ideas. Tools and methods were used to encourage thinking outside the box and find the creative conclusion to apply for creating media.

Based on video compositing and visual effect, video editing and compositing course and video production and editing technology course, the content is about multimedia creation, editing, decoration and special effects for media. These courses content is linked in the content section used in teaching and learning. Driving the teaching and learning process that provides knowledge and practical skills in application, having creativity and ability to create concrete media, having skills able to work. As an instructor for these courses, the problem with most learners was that they have skills to use tools and programs at the functional level but they lack confidence in creating creative works beyond the framework of learning. "Instructors have tried to create work problems for students to practice from doing workshop/ working with real situations, work training in the workplace, sub-project model which must have details as follows: accepting jobs directly from customers, dividing the work into groups to plan the work, analyze and solve the problems, taking action, and listening to suggestions from customers (Simulation)." Operational training to create a process for promoting creative thinking and real job skills motivates learners to get used to work and able to face real work in a variety of ways. Learners have skills and creativity to work with others or being creative multimedia producer. Finally, they empower their level to become a creative media producer.

#### 2. Literature Review

Thitima Thambumrung,2017 It was found that, based on the interesting survey results, the OER policy increased from 45% (2012) to 55% (2017) and the institution / project initiated OER activity. Most of them found that at the secondary and higher education levels promoted To support open and flexible learning The benefits of OER are built to reduce the cost of providing learning materials. And continuously improve the quality of learning materials and also help developing countries to access learning materials. But still need to be aware of the reservation of understanding about its use

Which corresponds to Thapanee Thammametha and Faculty, 2017: It said that open online tutoring means teaching in online tutoring methods. It focuses on teaching and learning among many students who study together in an online classroom. Or self-study The media used are in the form of Videos, streaming media, and open resources on the Internet. By organizing activities and assessments, focusing on promoting challenges for learners to learn. Supervising learning with learning activities through tools in the internet. Communication between teachers and learners And students and learners As well as physical assessment in a shared learning context. By the open online tutoring in this research, a Massive Open online Course: MOOC was chosen:

And from the suggestions that Pravinya Suwan Natchhote and the faculty, 2016, found that 1. Cyber University Project The developed MOOC instructional indicator should be introduced as part of ThaiMOOC's implementation and management of the MOOC course, which is defined as a MOOC development and production agreement to develop into a recognized MOOC course. Internationally accepted. 2. A manual for assessment should be established with a checklist consistent with the indicator. In conjunction with the use of developed standards and guidelines to disseminate to course producers. To clearly understand all operating processes. 3. MOOC standards for teaching and learning should be developed. To assess the MOOC courses of Thailand to evaluate the selection of MOOC courses and arrange local language translation into international languages for further ASEAN or international exchange programs. 4. At present, MOOC teaching has been applied in many forms, including innovation, distance teaching that offers educational opportunities to all interested people, including being used as an innovative teaching and learning in higher education. If any institution has a policy to promote MOOC production, this standard and practice should be considered and 5. Standards and Guidelines Related to Copyright and Creative Commons Law There should be training and knowledge to various stakeholders. This is because knowledge and understanding of different backgrounds can have consequences later.

As Chanin Tangpanthong, 2017: It is synonymous with influence on the use and satisfaction of users of online lessons to supplement the teaching and learning through the public open online course. User usability and satisfaction were positively correlated. However, there is little correlation between the learning achievement of the online lesson users. It was also found that user satisfaction only influenced the learning achievement of online lesson users. But its use has no influence on the academic achievement of the users online lessons.

#### Objectives

- 1. to create an effective digital media creation on social networks course
- 2. to study learners' academic achievement in the digital media creation on social networks course
- 3. to study general information on learning behavior survey and study learners' satisfaction on learning the digital media creation on social networks course.

#### **Population and sample**

Population in this study were learners enrolled in KMUTT015: digital media creation on social networks course in opened learning system (Thai MOOC), accounting for 266 persons. Among these, 99 persons were chosen as sample because they finished the course and answered the questionnaire.

#### Methodology

1. Digital media creation on social networks was created as an online course on Thaimooc.org. Before broadcasting, all media for the course were examined by experts for content reliability in meaning, grammar, and spelling. The content was designed using ADDIE model in which learning program development process is from beginning until end. According to the model, learning design includes 5 steps as follow:

1.1 analysis of content, learners, teaching process and Thai MOOC measurement and evaluation

1.2 design for teaching plan, content outline, learning activity, test, measurement and evaluation, media design, and storyboard

1.3 develop teaching media, learning activity, and video clips in Thai MOOC system

1.4 application, public relations via face book and Thai MOOC fan page, learning duration on Thai MOOC

1.5 evaluation, achievement test, and satisfaction assessment form

2. Learners' academic achievement included practice scores during class and post-test, done after finishing the course. They must get total score at least 70% to ensure the certificate.

3. General survey, learning behavior survey, and satisfaction to the course survey were distributed by Thaimooc.org.

#### Results

1. Qualified media for the digital media creation on social media course was created according to standard and MOOC guidelines accepted worldwide to meet effective practice principle and practical consisting of 10 standards and 28 indicators. Standard 1 course outline comprises course description, expected learning outcomes, and course objectives. Standard 2 personnel readiness includes instructors and learners readiness. Standard 3 is about learning design. Standard 4 content includes 5 chapters; chapter 1 production preparation stage, chapter 2 content and video learning style, chapter 3 techniques for filming, composition, image size, camera size and movement, chapter 4 using ready-made program for editing, and chapter 5 guidelines for creating, maintaining, and being responsible for YouTube channels, ethics and laws about online social media usage, YouTube channels creation and caring, making money from having YouTube channels. Standard 5 is about learning media. Standard 6 is communication. Standard 7 is copyright and creative commons. Standard 8 is learners support. Standard 9 is results of learning management. And standard 10 is improvement.

5.2 According to the criteria for grading in this course accounting for 60% from exercises and 40% from post-test, it was found that after generating grade report of Thaimooc.org, 99 out of 266 persons enrolled in this course met the criteria accounting for 37.22%.

Item	Number	percentage
Number of enrolled learners	266	100
Number of learners passing the criteria	99	37.22%

Table 1: Learners	' academic achievement ir	the system
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2. General information, learners' learning behavior, and satisfaction to the digital media creation on social media course were acquired from 55 learners responding to the questionnaire in which they were asked about gender, age, education, status, occupation, reasons for enrollment in this course, plan to pass the course criteria, and satisfaction. The results were as follow;

#### Table 2 : Learners' gender

- Male

- Female

Item	percentage
Male	67.3%
Female	32.7%

From Table 2, it was found that 67.3% of learners were male and 32.7% were female.

#### Table 3: Learners' age

- Less than 13 years old
- 13-17 years old
- More than 65 years old

Item	percentage
18-24 years	70.9%
25-34 years	20.0%

From Table 3, learners' age mostly ranged from 18-24 years old accounting for 70.9% and 25-34 years old accounting for 20%.

Table 4 Learners'Education		
Item percentage		
Studying a bachelor's degree	50.9%	
bachelor's degree	34.5%	

From Table 4, most learners were studying a bachelor's degree accounting for 50.9% followed by bachelor's degree accounting for 34.5%.

#### Table 5: Learners' status or occupation

- Student
- Graduate student
- Teacher, lecturer, academic staff
- Official, government employee, state enterprise
- Private employee
- Private business
- Unemployed

Item	percentage
students	74.5%
teacher, lecturer, educational personnel	18.2%

From Table 5, 74.5% of learners were students and 18.2% were teacher, lecturer, educational personnel.

#### Table 6 : resource to get to know this course - Instructor recommended

- Friend or acquaintance recommended
- Public relation media from the institute of the course
- Public relation media in Face book page of Thai MOOC project Other public relation media in social media

Item	percentage
Instructor recommended	70.9%
Public relation media in Face book page of Thai MOOC project	14.5%

From Table 6, 70.9% of learners were recommended by instructors and 14.5% knew the course from public relation media in Face book page of Thai MOOC project.

#### Table 7: reasons to learn the course

main reasons to take the course (choose the one that is most close to you)

- Interested in learning to develop yourself
- Interested to learn directly with expert or institute
- Instructor recommended or set to study
- Course achievement was used in class
- Course achievement was used in work

Item	percentage
Interested in learning to develop yourself	43.6%
Instructor recommended or set to study	34.5%

From Table 7, 43.6% of learners took the course to develop themselves and 34.5% were asked by instructor.

#### Table 8: plan to pass the criteria

How do you plan to pass the course criteria for the certificate (choose the one that is most close to you)

- No plan (not pass the criteria)
- No plan but pass the criteria
- Plan to learn only the content (not expect the certificate)
- Plan to pass the criteria and can do it
- Plan to pass the criteria but cannot do it

Item	percentage
Plan to pass the criteria and can do it	80.0%
No plan but pass the criteria	12.7%

From Table 8, 80.0% planned to pass the criteria and can do it and 12.7% did not plan but pass the criteria.

Table 9: studying duration time to finish the course How long did you take to finish the course (estimate)?

- Finished within 1-3 days
- Finished within 10 days
- Finished within 30 days
- Finished beyond 30 days

Item	percentage
Finished within 1-3 days	94.4%
Finished within 10 days	3.5%

From Table 9, 94.4% of learners finished the course within 1-3 days and 3.5% finished within 10 days.

#### Table 10 : Participation in discussion Did you participate the discussion in the course?

- Did not participate
- Participate the discussion at least 1 time
- Participate the discussion more than 1 time

Item	percentage
Did not participate	61.8%
Participate the discussion at least 1 time	29.1%

From Table 10, 61.8% of learners did not participate in the discussion and 29.1% Participate the discussion at least 1 time.

#### Table 11: Satisfaction to the course

Overall satisfaction to the course

- Most satisfied
- Very satisfied
- Somewhat satisfied
- Less satisfied
- Least satisfied

Item	percentage
Most satisfied	40.0%
Very satisfied	36.4%

From Figure 11, 40% of learners most satisfied to the course and 36.4% very satisfied to the course.

## 3. Discussion and Conclusion

3.1 Qualified online media was from creation process and Thai MOOC guidelines for teaching and learning standards including 10 standards accepted worldwide as mentioned in Prawinya Suwanatchhot and Samerakan Sophonhiranlak( 2017 .)that media would be qualified if these factors were included; 1. Input factor: factors relating to course teaching and learning in MOOC including course outlines, personnel readiness which was term for the proposal of the course development, 2. Process factor: occurred process and related to input factor including teaching and learning design, content, learning media, communication, copyright, exemption and learners support, 3. Production factor: results of teaching and learning MOOC process including learning management and development which was term of course evaluation.

3.2 According to learners' academic achievement, number of learners passing the course compared to number of enrolled learners in massive online teaching and learning process was higher than the number estimated by THAIMOOC which was probably because of media and learners' motivation. Moreover, factors affecting learning achievement included learners' age, frequency of attendance, duration of learning, content, motivation to learn and academic achievement congruenced with Surapon Boonlue Paitoon Kantunyaluk,(2018). mentioned that factors most influencing learning achievement were 5 learning components; 1. Media and content, 2. Motivation, 3. Learning duration, 4. Frequency of attendance and 5. Learners' gender.

3.3 prominent learners' behavior was achievement factors of learners. Initially, learners would like to get certificate accepted worldwide of THAIMOOC. In addition, learning interest to improve themselves, plan to pass the criteria, and duration time to finish the course within 1-3 days and being able to achieve the goal were also factor supporting learners to achieve the course.

## 4. Suggestion

4.1 Learning process supporting creativity, applying and extending to related course should be include in online teaching and learning such as digital media creation on social networks. Instructors should provide examples of applying content to create real media for learners to

visualize concretely to promote creativity of people interested in the course. There are many forms of the implementation of process and teaching model to promote creativity. Synectics is a teaching and learning form that can promote creativity and can be applied to teaching harmoniously with processes that motivate learners to create creative media.

4.2 Workshop should be included along with learning. This would let learners to get skill in both theory and practice.

4.3 Assignment should be in group. Conditional definition and due date for work submission should be exact. Exchanging knowledge would motivate learners to apply with real work.

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## The Rhetoric Of The Meranaw In Kakawing Speeches: A Critical Discourse Analysis

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**Abstract:** This qualitative study took a serious and more probing look at one of the most interesting and well-developed art forms which is the Meranaw rhetoric specifically ceremonial speeches delivered during weddings. Using Critical Discourse Analysis (CDA) as enunciated by Norman Fairclough (1995), Teun Van Dijk (1998), Swale's (1999) Rhetorical Moves, the study has revealed important findings yielded by linguistic, structural and ideological features. The study reveals that Meranaw speech features varied rhetorical moves, linguistic features and ideological patterns. Most conspicuous of rhetorical moves is the organization, that is, the sequence or order of parts: pamekasan (introductions), moayan a lalag (message of the speech) and kaposan o lalag (conclusion or ending of the speech). The pamekasan (introduction) part is rich lexical items that praises Allah and Mohammed, honorifics such as royal titles and official titles and compliments. The moayan a lalag (messagae of the speech) is rich with use of figures of speech such as metaphor, simile, allusion, antithesis, connotation, emphasis, repetitious of certain lexical items to achieve unity, parallelism, varied pananaroon (proverbs), leitmotifs and repetition. The kaposan a lalag (end of the speech) always ends with a maaf (apology), saying thank you and short version of salaam. The art of Meranaw katharo sa lalag (delivering a speech) is very unique and rich with features. The author recommends its preservation as a distinctly Meranaw verbal art so it will continue to produce and develop verbal art forms and serve as a vital function of language as transmitter of identity and unique ideology including beliefs and values of the Meranaw.

Keywords: Critical Discourse Analysis, Katharo sa lalag, Bangsa

## **1. Introduction**

The Meranaws are known as the people of the lake. They settled around the edge of Lake Lanao, located at the Islamic City of Marawi, Philippines. Renowned Meranaw Poet Datu Tingcap G. Pandi said that the word "Meranaw" is a compound word composed of "mera" which means "peacock" and "naw" which means "awake". In other words, "meranaw" means "an awake peacock". The Meranaws are the largest Moro and cultural minority in the Philippines. Generally, they are Muslims they are regarded as the most traditional Muslims resistant to changes and defensive of their culture in the Philippines as cited in Madale and Cheng 1994).

The Meranaws are known for Katharo sa lalag (delivering a speech) during important events such as wedding, engagement and enthronement. Katharo sa lalag is a public recital by the pananalsila (orators) of the lineages of both the bride's and the groom's families. One reason for the katharo sa lalag (delivering a speech) is to make public the "noble" lineages of both families, and hence to affirm that both are of the same class.

The Meranaw use their language in a very unique or distinctive way and this is evident in the use of the Meranaw language in formal discourse during Kakawing (wedding). During Kakawing (wedding) "maungangens" (orators) who are usually members of royal family deliver speeches that reflects the Meranaw's values.

The researcher sought to identify the rhetorical moves common in the Kakawing speeches, identify the linguistic features common in the rhetorical moves and analyze the values manifested in the identified rhetorical moves of the kakawing speeches. This study aims to shed more light on the Meranaw values and beliefs embedded in the speeches of the maungangen (orators). Such effort has special urgency in the light of the rate at which powerful forces like modernization, technology, globalization, and integration are causing the liquidation or loss of traditional institutions and belief systems, cultural values and practices.

The study used Critical Discourse Analysis specifically Norman Fairclough's (1995) textual analysis and Teun van Dijk's (2004) Social Cognition and Swale's (1999) Rhetorical Moves. Discourse, when viewed as style; a system of address, and verbal art or stories occurs within a sociocultural and historical context, with its variants (Halliday 2006). The study aims at evaluating the linguistic properties and components, core in the texts of the Kakawing (weding) speeches, to assess their import in understanding the values of the Meranaw society.

## 2. Literature Review

## The Meranaw and their Language

Meranaw literally means "People of the Lake." It can be traced to Lanao, a Bisaya-Cebuano equivalent for Ranao which means "lake" (Madale and Cheng 1994: 160; Moalam Abdulrachman 1991: 58). The Meranaws also are one of the ethnic groups in the Philippines who are fair-skinned, probably attributable to Arab and Chinese admixtures. The Meranaws are known for their artwork, weaving, wood and metal crafts and epic literature, Darangen.

The Meranaws take pride in their generally-high level of education and the accomplishments of their fellow Meranaws (Alonto, Abdullah and Zorc, 2009). In terms of sociolinguistics and language attitudes, the Meranaws language (and culture) is likely one of the least endangered in the Philippines. The Meranaws are one of the few Philippine ethnolinguistic groups who in the twenty-first century still resolutely maintain use of their language and wear traditional clothing, even in Manila and other large cities (Lobel and Riwarung, 2011). This unwavering sense of cultural identity is based largely on the Meranaws' Islamic faith (the vast majority of Maranao are devout Muslims) and a centuries-old history of resistance to Spanish, American, and Manila-based attempts to take control of their homeland.

The language of the Meranaw people is also called Meranaw. It is an Austronesian language of the greater Central Philippine subgroup spoken primarily on the southern Philippine island of Mindanao in the provinces of Lanao del Sur and Lanao del Norte, although a considerable number of speakers have migrated throughout the entire Philippines as merchants. It is closely related to Iranun (spoken in both Mindanao and Sabah, Malaysia) and Maguindanaon (Blust, 1991).

The Meranaw language can be traced from the Southern Philippine sub-branch of the Western Austronesian language family, and is closely related to the Illanun language spoken in Sabah and Malaysia. It is also close to Maguindanaon, the language spoken in Mindanao, North Tabasco, South Cotabato, Sultan Kudarat, and Zamboanga del Sur provinces. Thus, a certain degree of syncretism is observed.

There have been studies on Meranaw language using speeches as corpus of the study which aimed of discovering the attitudes, interests, and discursive practices of the interlocutors, such as the study of Pangcoga-Salem(2007) and Norhassan Curo (2008) and rhetoric of Meranaw conducted by Rebekkah Alawi (2002), no studies have been made about Meranaw rhetorical moves using speeches gathered from the field as corpus and to discover its linguistic feature and values embedded from this speeches during kakawing (wedding).

In Pangcoga-Salem's masteral thesis titled "Mga Pahayag Idyomatiko sa mga Piling Pamlalag o Talumpati ng nga Meranao", Lalawi-in M. Pangcoga-Salem (2007) used as specimen texts ceremonial speeches from the book Paninggalan sa Ranao compiled by Jamel S. Macarampat in 2001. Inevitably, social stratification or the Meranaw class system, particularly the aristocracy (pagawidan) represented by the Sultan, was touched upon as part of the explanation of the Sultan taking up the gauntlet and putting himself in the front line in ridu (feud) resolution.

Like the present study, an earlier work, "The Euphemistic Expressions in Meranaw Ceremonial Speeches: their Meanings and Implications" was undertaken by Norhassan Curo. Curo (2008) also used Meranaw speeches as the corpus of the study. The interesting findings of the study are: euphemisms are essential-- sine qua non- of Meranaw ceremonial speeches, and that such expressions are not mere embellishments or exercise in verbal cunning. The study delved into the place of euphemisms in Meranaw discourse. The researcher aimed to identify the euphemistic expressions used in the speeches, to determine the messages conveyed by these expressions and to discover, through interpretation and abduction, the implications of the messages for the Meranaw character and culture. The method of analysis employed in the study and its ultimate purpose show how its findings could be brought to bear in the present inquiry.

The study conveyed much about Meranaw culture and character that can be regarded and prized as indices of Meranaw concern with, or high valuation of delicacy, refinement or finesse which in turn suggests a conscious cultivation of gentility or fine breeding, and sensitivity to the feelings of others. All these serve as testimony to the Meranaw version of gentilesse or courtliness known as kambilang a tao. The study revealed that the Meranaw exercises extreme discipline in his use of language to avoid hurting or offending their fellowmen. One must especially avoid injuring others' maratabat (honor or pride); such an offense or transgression could have dire consequences not only for the offender but for his family or entire clan.

Dr. Rebekah Alawi's dissertation "The Rhetoric and Semiotic of Islamic Wasiat and Christian Sermons: A Model of Dialogical Discourse in Persuasion-Performance Mode" (March, 2002) is another source of intellectual simulation for the present study. The descriptive-analytical-exploratory study was claimed by the author as a "first attempt" in the Philippine scene to apply the dialogic principle, as enunciated by Bakhtin and Boloshinov, to religious discourse, specifically the sermon genre, that is, the Christian sermon and its Islamic counterpart, the wasiyat (sermons) or khutbah.

Alawi explored possible areas of convergences, interfaces, and commonalities between the Christian sermons and the Islamic wasiyat/khutbah to establish what could be considered as 'universals' of the genre. Among her interesting discoveries are: metaphoric language and

narratives as ubiquitous features of the sermon/wasiat genre, thus bearing out assertions made that religious or spiritual rhetoric is fundamentally rhetorical (Lakoff, Johnson, Burke, Brown, and many others) and that a language of indirection distinguishes it from other types of discourse (Augustine and Kierkegaard).

## Meranaw Marriage and Wedding

Arranged marriage is a common practice among the Meranaw. This practice functions to solidify alliances and maintain the cultural and ethnic purity of the tribe. Women, more often than men, bear the burden of being fetishized as a representation of their culture and are pressed into accepting constraints on their autonomy. It is Meranaw women who are made commodities in order to ensure peace in their communities (Saber, 1991)

Ruben Asbury (2010) found out that the practice of arranged marriage is continued because Meranaw prize the purity of their cultural heritage and delineate who is and who is not Meranaw through a variety of ways. Bloodlines and kinship are of the utmost importance, but so is adhering to cultural indicators such as religious belief, cultural knowledge, and tribal language.

In the study of Santos (1973), cited in Abedin (2005), there are five stages of the Meranaw marriage: 1) kapangilay-lay; 2) kapanuksam or kapangakap; 3) kapaniwaka; 4) kambitiyara, and 5) kakawing. The number of stages could vary. For example, Bula (1999) listed in her study only four major stages: kapangilay-lay (inquiring), kapaniwaka (giving of initial gifts), kabaton sa tamok (presentation of the bridal gift or dowry), and the kambitiyara (wedding ceremony)

## Kakawing (Wedding) Speeches

Kakawing (wedding) speeches are speeches delivered during Meranaw weddings, with culturally attributive meanings which originate from a complex interface of figurative language, and composition, linked to a specific knowledge, including culturally recognized awareness of the context they are performed. These speeches are done in Meranaw language. Kakawing (wedding) speeches exemplify the common beliefs and worldviews of the community which justifies studying them. More so, the speeches often reflect, as any creative work does, the conflicts, the current struggles of day to day being of the society, and the vision of what is rational in a collective society affected by urbanization, with the aspirations of the Meranaw society about the world around them. As with other verbal art or spoken discourses, another information is 'implied' (concealed) (Martin & White 2005), and 'unseen or obscured' (John 2014) in the course of interaction.

## **Rhetorical Moves**

The study of genres in terms of rhetorical moves was originally developed by John M. Swales (1981, 1990, and 2004) to functionally describe a part or section of Research Articles. The idea of clearly describing and explaining the rhetorical structure of a particular genre and of identifying each associated purpose is a contribution that can assist beginners and novices who do not belong to a specific discourse community.

Types of discourse are usefully classified as genres, each of which has its own purpose, structure, and conventions. By knowing the genre of a discourse, language speakers or even learners can obtain important clues to its structure (Smith, 2009). In Fairclough's (1995) view, genre is a socially authorized way to use language in connection with a particular type of social

activity, or "the use of language associated with a particular social activity" which can be "... realized in semantic and lexico-grammatical features of texts" (Fairclough, 2010, p. 269). Furthermore, Swales (1990) argues that a genre shows different patterns of similarity, e.g., structure, style, content, and intended audience. Genres are situated in discourse communities in which the members have a common set of communicative purposes.

Weber (2011) investigates the linguistic composition and communicative purpose(s) of the inaugural address. She focuses on similarities and differences/ variations among the movestructures of the respective inaugural addresses and identifies seven so called core-moves or obligatory moves. She also represents a comparison between the Aristotelian structure of a speech and the move-structure of the inaugural address. Based on Aristotelian rhetorical theory, Weber (2011) asserts that the inaugural address is organized into the introduction (prooemium), the statement of the facts (narratio), the argumentation or proof of the facts (pistis), and the conclusion or epilogue (peroratio). Her findings reveal that though presidents all touch on the main topics, their speeches differ in structure, style, and the importance which is put on particular topics they think are worth drawing on in their inaugural address. The results also show that certain topics or communicative functions have been made an integral part of inaugural address which resulted in the identification of the move-structure mentioned.

In another study, Liu (2012) examined thirty-five American presidential inaugural addresses from Washington to Obama in order to locate the features of presidential inaugurals in structure. In Liu's view, genre analysis both reveals the available form-function relationship of a text or discourse and contributes to language learners' understanding, and it is a practical means of studying spoken and written discourse for applied ends.

Dunn, C. (2005) analyzed the Japanese wedding speeches. The study analyzed congratulatory speeches at Japanese wedding receptions to show how the interaction of conventionalization and creative contextualization varies across both different parts of the wedding speech and different categories of wedding speakers. She found out that wedding speeches has demonstrated that there are multiple different types of interplay between conventions, contextual specificity, and speaker creativity even within a single genre. Wedding speeches begin and end with formulaic speech acts that frame the speech as an instance of the wedding speech genre. Yet even these strongly conventionalized sections of the speech allow some latitude for speakers to creatively contextualize the discourse to specific weddings, as when speakers adapt traditional metaphors of marriage to reflect the interests of a particular newlywed couple. By contrast, the body of the speeches is much less tightly structured, yet even the personalized descriptions of the groom and bride are clearly shaped by cultural ideals of gender and personhood.

## **3. Discussion and Conclusion**

This following discussion presents the analyses of Meranaw speeches delivered at weddings.

## 3.1 Rhetorical Moves of kakawing Speech

Rhetorical moves were originally developed by John M. Swales (1981, 1990, and 2004). It refers to a particular rhetorical or linguistic pattern, stage, or structure conventionally found in a text or in a segment of a text (Nordquist, R. 2018). This section identifies the rhetorical moves and linguistic pattern used by the speakers in delivering speeches during kakawing

(wedding). They are Pamekasan (Introduction) Moayan o Lalag (Message of the Speech) and Kaposan o Lalag (Ending of the Speech).

## **Pamekasan** (Introduction)

The introduction of the Meranaw speech during kakawing (wedding) is very lengthy for about forty percent of the speech contains the introductions. It comprises several parts. They are greeting of salaam (peace), kapanabiya (asking for excuse), pagadat (showing respect) and kapangongodasan (asking for permission). Unlike other speeches, the Pamekasan (Introduction) is the longest part of the speech.

## Greetings of Salaam

The speech customarily opens with salutation or greetings in Arabic. The conventional Islamic greetings – "salaam" and praises of Allah (s.w.t.), as Almighty God is referred to, or addressed by the faithful adherents of Islam, and of his messenger, the prophet Mohammed (s.a.w.) or the last "Rasul" (messenger or prophet).

The use of salaam is one noticeable unique feature of the Meranaw speech: it eschews or avoid using the most common Western form of greeting of "good morning" or "good afternoon". Although the Philippines was once colonized by the Americans, Muslim Filipinos or the Bangsamoro (this includes thirteen Muslim groups in Mindanao) take pride in having never been subjugated or conquered by the former. Avoiding English greetings can be surmised as a way of denying or rejecting American influence; it hints at a kind of resistance.

Salaam is more than a greeting for it also signifies including Allah in the important affair – the wedding or solemnization of the union and beginning of life together of the couple. This is shown by using series of superlatives used for God – for example," most gracious" and "most merciful" -- make a set piece, thus formulaic. According to Searle's categorization of speech act, greetings fall into the category or expressive speech acts. The speech act of greeting is particularly appropriate through which we can find out what is valued in a particular culture (Searle, 1969). Thus, the use of salaam and inclusion of Allah and Mohammed signifies that the Meranaws value their religion to include it in their speech.

Opening one's speech with the traditional conventional Islamic greetings immediately distinguishes or identifies the speaker how language is bound up with the speaker's identity. This also helps the speakers to identify themselves with the audience. Burke (1950) called this identification in new rhetoric which is a form of persuasive appeal. Identification is the process by which the speaker associates himself/herself with certain group, such as the target audience (Burke, 1950). By greeting the audience with Islamic greetings, the speakers were able to associate themselves to the audience identity as a Muslim.

## Kapanabia (Asking for Excuse)

The second move of the introduction is kapanabia (asking for excuse). As demonstrated from the data, the speakers seek the permission of the pat a pangampung (four sovereiegn states), duwapulo ago walo a piyakambaya ko kaatoran o taritib (28 legislative houses) and the sapulo ago nem a panurogan sa ranao (royal houses). The speaker also asks for the permission of the national, local, municipal and barangay official who are present during the ceremony. Lastly, they ask for the permission of the audience, specifically the guests and friends, with special mention of the "Who's who" of the society. This is in accordance with the taritib. The panabiya

(asking for excuse) has ideological bases. From the excerpt above, it is stated that asking for permission is mandated by the taritib (custom).

In both these introductory or opening lines, the local royalty or aristocracy receives primary attention and top billing in the announcements made. Thus, the influence, power, or place of the members of the Meranaw nobility are affirmed and reaffirmed.

## Pagadat (Showing Respect)

As it is with *kapanabia* (asking for excuse), so it is with the pagadat (*showing respect*) section. This move manifest taht the social hierarchy is given the prominence due it. The nobles must be first on the speaker's list. A variation on this practice is the mention of the places or inged a mala a kiyasusulbiya-an a bangsa. . .maana so Madamba a go so Bacayawan na Dalama, ago so tendai a Sawir. . ." represented by the principal parties. This is followed by "Ago so duwa pulo ago walo a lokes a piyakambaya a ko atoran a dadawagan sa paar a so tabang a pulangan a bulawan." It is worth noting how the typical pagadat (asking for excuse) the two considered here focuses on lineage or bangsa.

## Kapangongodasan (Asking for Permission)

The kapangongodasan (asking for permission) validates what is affirmed in the kapanabia (asking for excuse) and kapagadat (showing respect): the lionization of people of authority or influence, particularly those with traditional titles (grar). An analysis of these three rhetorical moves of the discourse reveals redundancy which, in Meranaw culture, is accepted practice. What is highly valued – the so-called "matters of consequence" – merit repeated mention or iteration.

## Moayan o Lalag (Message of the Speech)

The data gathered reveals different content of the *moayan o lalag* (message of the speech). This includes teachings about marriage such as the importance of union and rewards one get when you follow Allah's command which is to get married, prayers for the couple and their families, emphasis on family lineage of the two parties (salsila), connections of the speaker to the families, how Meranaw is different from other Moros and customs an laws that Meranaw must observe during wedding. There are also minimum mention about politics such as mention of Marawi Siege and the current situation of the Meranaws during the siege. The content of the speech reveals Meranaw beliefs and values.

## Kaposan o Lalag (Ending of the Speech)

In *kaposan o Lalag* (ending of the speech), the speakers usually end by saying thank you and apology followed by the short version of salaam which is *Assalamao Alaikom warahmatullahi wabarakatu* (May peace be upon you). Below is an excerpt of *kaposan o lalag*.

Ayakaposan ang kai a lalag ko na panalamatan aken ang kai a mbala a mindiamonga sa dairan kapakandarainon sa kiya paka tokawa iran rekami ago giya darodopa aken sangkai a kalilimod, Na pamangni ako rekanopen sa maaf oba aden a dako katarotopi ko kiyapayag o sariyat o lalag ko sabap sa kangodaan akopen a gopen gii sinanad, sa ayamala na sobo so kadnan I daa pawing iyan. Wassalam.

(I am closing my speech by saying 'thank you' to all the families of the couple who honored us by inviting us to this beautiful affair. I humbly offer an apology if I failed to measure up to your expectations, for only God does not commit mistake. Thank you.) In the above-quoted *kaposan sa lalag*, the speaker gives a winning conclusion to his speech with an appeal for understanding, tolerance, and forgiveness for any flaw or imperfection, or inadequacy betrayed in his speech. It also ends with salaam. This shows how in Meranaw culture, self-effacement or humility as opposed to self-regard or over-confidence, is pleasing to the audience. Humility in general is often described as a kind of positive character trait or disposition (Annas, 2011; Battaly, 2009, 2015).

One important feature of the *Kaposan o Lalag* (Ending of the Speech) is the repetitive asking of maaf (apology, pardon) by the speakers before the end of the speech. This apology is not to ask forgiveness for any error actually committed by the speaker but for the error or lapse he may have committed or might commit that he is not aware of. The speaker is aware of his humanity. No matter how competent and gifted he is, he is as vulnerable as any mortal. No matter how meticulous he tries to be, he is not above making lapses or mistakes. So, as a *pangali* or *sanggila* (precautionary move), before a slip happens, he advances his profuse apologies for this. This show of humility has a mitigating or extenuating effect on whatever mistakes may be committed.

*Maaf* is an Arabic word which means "sorry" or "pardon". In Islam, asking apology and accepting apology are a virtue. The Prophet Muhammad (s.w.t.) has said, "O' 'Ali! My intercession shall not reach the person who does not accept the apology from another person --- whether the apology is truthful or untruthful" (Ethical Discourses).

*Goffman* (1971) views apologies as remedial interchanges serving to re-establish social harmony after a real or virtual offense, or in Olshtain and Cohen, terms whether the offense is real or potential (1983, p. 20). Apology is a communicative act in the production of which the person has to act politely, both in the vernacular sense and in the more technical sense of paying attention to the addressee's face wants (Brown and Levinson, 1978, 1987).

Even more in Meranaw society, apologies are associated with face-saving, face-giving, or loss of face. Contrary to study of Kampf Zohar (Public (non-) apologies: The Discourse of Minimizing Responsibility, 2009) who claimed that apologies can undermine the public figure's desired face, and project an image of a person who is lack of capabilities, asking for apology in *Meranaw* culture is seen as positive for it indicates sensitivity to the *Meranaw's maratabat* (pride).

Face is a metaphor for public self-image. Goffman (1967) conception of face focuses on the idea that face is a positive a social value that a person effectively claims for himself. The importance of face for a Meranaw is made explicit in the idiomatic expression or proverbial saying "*satiman i paras*" (literally, one-faced or having only one face) which every individual who values his worth, honor and dignity, and who has self-respect, says of himself. Loss of this one face means loss of everything. Thus, in Meranaw society, facework is paid serious attention. This involves the enactment of specific verbal and non-verbal messages that help maintain and restore face loss, and uphold and honor face gain. Apologies or appeals for forgiveness, understanding, and indulgence are among such verbal messages. This supports Goffman's (1967) idea that such face-loss can be sought to be repaired through a corrective facework-of which the apology is a major part of the interchanges designed to repair this potential damage to face.

# **3.2.** Linguistic Features Common in the Rhetorical Moves of Meranaw Kakawing Speeches

## Linguistic Features of the Speech

The Meranaw Speech has a distinctive characteristics of features unit that serves to distinguish from other speeches. This section is divided into three parts. They are the linguistic features of Pamekasan (Introduction), liguistic features of moayan a lalag (message of the speech) and the linguistic features of the speech found in the whole speech.

## Linguistic Features of Pamekasan (Introduction)

The Pamekasan (Introduction) of Meranaw speech in kakawing is very unique and different from other speeches. Aside from its length, it has unique features which includes praises to Allah, abundant use of honorifics and compliments.

## **Praises to Allah**

All Meranaw speeches contain praises to Allah (s.a.w) and the prophet Mohammed (s.w.t.). Since Meranaws are adherents of Islam, this is not surprising. The redundant use of positive superlative modifiers describing Allah and Mohammed indicates that Meranaw Speech in Kakawing (weding) is an interaction or fusion of Islam and native Meranaw culture. Such combination is known as syncretism. Syncretism is a tendency or effort to reconcile and unite various systems of philosophy, or religious opinion on the basis of tenets common to all, and against a common opponent (Webster Dictionary, 1986; in Rogong-Rasul, 2015; also in Ayo, 2016). More briefly, Syncretism is defined as the fusing of various beliefs and practices, for example, the bringing together of completely different religious and nonreligious motives. Jerry Bentley (1993) argued that syncretism has also helped to create cultural compromise. It provides an opportunity to bring beliefs, values and customs from one cultural tradition into contact with, and to engage different cultural traditions.

## Honorifics

The speech contains different names from different sectors of the society. These include not only members of the family but also guests who have traditional royal titles called grar such as Sulutan, Datu a Cabugatan, Ampuan, Bai a Labi, and Radiamoda, regional and local positions such as congressman, mayor and councilor, and personalities, such as Councilor, Municipal Treasurer, Assemblyman and Barangay Chairman, and others who have prestigious professional titles, for example, Doctors, Engineers, Attorneys and Directors.

According to Sunil Kumar Bhalt (2015), honorific in a language have a very important role in the interplay of respect, familiarity, and formality based on age, familiar relationships, level of personal acquaintance, social hierarchy, status and so forth among the members of the society.

Honorifics are politeness formulas in a particular language which may be specific affixes, words, or sentence structure (Richards et al., 1993). As used in this study, honorifics or polite address forms is usually a title that conveys esteem or respect for personages by virtue of their position or rank used in addressing or referring to a person. Sometimes, the term "honorific" is used in a more specific sense to refer to an honorary academic title. It is also often conflated with systems of honorific speech in linguistics, which are grammatical or morphological ways of encoding the relative social status of speakers. For the Meranaws, the use of honorifics is *de rigueur*; it is more than recognition and conveying esteem or respect for it is also used as a means to show how one values the person and how one honors him.

The Meranaws are a very proud people. They take pride in every achievement of a family member which is considered as an achievement of the whole clan. Thus, tarpaulins usually highlight more than four family names of a person who has achieved or accomplished something notable, such as educational attainment and professional success (Ibrahim, 2018). By using honorifics, Meranaws vaunt the achievements of their members of the family, or relatives.

## Compliments

The data also reveals a number of compliments such as *kababantogan* (famous), *mapamaratia* (believer), *kalilimod a mapiya* (beautiful affair), *Kapipya ginawa* (happiness), *Bilang a tao* (noble), *Malay gagaw* (merciful), *malay limo* (beneficent) and *mapened* (heavy). The compliments are examples of what Yuan (2002) referred to as unbound semantic formulas which refer to expressions that can function independently as compliments.

According to Holmes (1986), a compliment is a "speech act which explicitly or implicitly attributes credit to someone other than the speakers, usually the person addressed, for some good possession, characteristic, skill, etc which is positively valued by the speaker and the hearer. The constant use of compliments in Meranaw discourse implies that the Meranaws are polite and not merely using compliments for flattery. This is what Brown and Levinson (1987) called positive politeness strategy. The Meranaw compliments were used to notice and attend the hearer's face and seek agreement. Furthermore, they are used it is a strategy as speakers notice and attend to the speaker's wants, interests and needs.

## Linguistic Features in Moayan a Lalag (Message of the Speech)

The *moayan a lalag* (message of the speech) contains different figures of speech, proverbs, leitmotifs and emphasize different terms.

## **Figures of Speech**

The *moayan a lalag* (message of the speech) contains figures of speech including metaphor, image, simile, allusion and parallelism. Figures of speech often provide emphasis, freshness of expression, or clarity. The following table lists the figures of speech found in *moayan a lalag* (message of the speech).

LEXICAL ITEM	LINGUSITIC FEATURE	MEANING
Makaselang sa maliwag a angkai a dowakatao	Metaphor	For these two to see the lights
Maluya matimos	Metaphor	Spicy and salty
Inipangilay sa kamapyaan	Metaphor	Searching for good
Myakarongaw so andang a kangiginaway o mga lokes	Image	Opening the window of the old friendship of our ancestors
Na maksisibarat sa bolawan limpiyo na matatangked so linang	Simile	Like gold of the purest kind, and the purity or genuineness of this bangsa is precised
Myakarongaw so andang a kangiginaway o mga lokes	Image	Opening the window of the old friendship of our ancestors
So andang a kangiginaway o mga lokes na iniped iran a gyuto a mga wata iran na ba siran baden mimbala	Allusion	Forged and cherished by their ancestors.
Sabap sa iisa tano. Langon tano mga meranaw, langon tano mga moro, langon tano mga muslim.	Parallelism	Because we are one. We are all meranaw. We are all moros. We are all muslims

 Table 1 Figures of Speech Used in Moayan a Lalag (Message of the Speech)

Makaselang sa liwanag (literally, to see the light) is a metaphor expression that wishes upon the couple finding their way to a bright or well-lighted future together. The expression has the solemnity of a prayer. The speaker hopes that the marriage will bear only good or profit not only for the newlyweds but also for their families.

The metaphor maluya matimos (literally spicy and salty) is used by the speaker to refer to the groom's family and the reason for the inevitability of welcoming them as relations. It is roughly synonymous to the English "through thick and thin". The use of "maluya matimos" underscores the gravity of that family's help. This means they can be counted or relied on under any circumstance. Meranaws highly value this particular trait: kesarigan (one you can trust) or kasanaan (one you can hold). People who have this will stand by and with you, through the worst straits.

Inipangilay sa Kamapyaan (Searching for good) is a metaphor frequently and repeatedly heard in connection with marriage. Literally it means "search" or "quest" for what is good. Thus marriage, is a search for something beneficial, gainful, or profitable. There is no more concrete proof of this than the all-out support the family referred to in the passage provided when the speaker's son ran for office in the city.

The bangsa (lineage) of the bride was compared to a simile "bolawan limpiyo na matatangked so linang" (gold of the purest kind, and the purity or genuineness is precise). This simile describes how expensive their bangsa (lineage) is being compared to a gold which is genuine and precise.

The image myakarongaw so andang a kangiginaway o mga lokes (Opening the window of the old friendship of our ancestors) and the allusion so andang a kangiginaway o mga lokes na iniped iran a gyuto a mga wata iran na ba siran baden mimbala (Forged and cherished by their ancestors refers to the old friendship of their old folks..The "opening of window" (miyakarongaw) is a vivid image for the renewal of friendship or ties. It expresses a nostalgia or yearning for the days of the ancestors when their ties were closer and more binding. Over time, the old ties loosen and members of the same descent or clan or friends tend to drift farther and farther away from one another as new relationships are formed.

The parallelism is what De Beaugrande (1984) describes as repetition of a structure. It is the "reusing surface formats but fulfilling them with different expressions". The example expresses similar thoughts, not identical noun, are expressed in parallel sentence. Using different lexicon, the speaker effectively emphasizes his message-that the Meranaws are one. The use of the pronoun "tano" (we) and of passive voice also gives an effect to the message. As mentioned by Weaver (1967), the passive voice gives emphasis to parts of the sentence which normal word order does not emphasize by moving the grammatical object to the position of subject.

## **Pananaroon** (Proverbs)

Meider (1985) has defined proverbs as short, generally known sentence of the folk which contains wisdom, truth, morals, and traditional views in a metaphorical, fixed and memorizable form and which is handed down from generation to generation. The following table constrains different pananaroon (proverbs) of Meranaw about marriage.

MERANAW	ENGLISH
Tinimbang so perak ago bolawan na mapened so	Money and gold were weighed, gold was heavier.
bolawan. Na tinimbang so bolawan ago montiya na	Gold and diamond were weighed and diamond was
mapened so montiya. Na tinimbang so montiya ago	heavier. Diamonds and clans' relationships were
bangsa na mapened so bangsa na mapapadelem saya sa	weighed and clans' relationships proved heavier and
kangiginaway, na kaseselaye na maana na gyoto so	this includes friendship, honoring, and relationship
kambatabataa.	r,
Giyangkai a masa tano a kandiamonga, na masa a	This affair must be recognized for what it truly is
kapakalaba, na kalilimod a kapakadair, na oras a	it is a time for profit, for mutual gain. It is an
katagompiya, sabap sa maphakarani niyan so	occasion of increase, of accumulation; a time for
miyakawatan a kathotonganaya, na maphakaloto iyan	success, for what is far will be near, darken the light
so miyakalogao a kambata-bataa na kailot iyan so	kinship, to tighten the loose cooperation, to sharpen
miyakaloag a kathatabanga na aya mala na	the dull friendship.
mapakagarang iyan so kiyatepolan a dii kanggiginawai	
Ka so pephaka-watan na an-pephaka rani, na so pekih-	What is far will be near, what drifts to new depths
laod na an-pkhaka sipeg, na so tuma-tankiri na an-maka	becomes shallow, and what faces or turns away will
sangor, na so maater na an-maka sarimpang.	face up front.
Gya a kaptimo tano sii na di moloy a kaposan, a gyay	this affair or gathering will not become an end but
moloy a goris a poonan a ditano di kapagisaisa, ditano	rather the auspicious beginning of stronger or more
di kasambi sambi sa babay, mama a pkasabapan o	binding tree, of becoming one. May the exchange of
kapkalylot o ditano di kanggiginaway.	women and men tighten our friendship.
Na kagiya so manusiya na aya iran den poonan sa	Because men are essentially siblings, even if you
magari, na gamiten kapen na pakarani.	stretch the tie so that it becomes loose, it will always
	find its way back.
Opama o ki-ibarat ta sa kapal na melagi-lagid a	If you compare it to a fleet of ships, they have
umpong iyan kagiya magari-ari so mga datu na magari-	the same direction for men are siblings and the
ari so mga bae na miya bambar na giya tnge-tnged	women are siblings and they procreate and became
minsan a mga bangsamoro a meranao.	cousins of the nation of Meranaws or Bangsamoro.

#### Table 2 Pananaroon (Proverbs) used in Moayan a Lalag

The first pananaroon used analogy ought to make clear what is most precious to the Meranaws: relationships or ties, friendship, mutual regard and honoring. It outweighs everything considered valuable in the world: money, gold, and diamond. Thus the strengthening of ties is the greatest gain from the union of two families/clans through marriage.

The second pananaroon (proverb) is used to describe the nature of marriage. Kandiamonga is a metaphor used for marriage. A metaphor is a figure of speech that describes an object or action in a way that isn't literally true, but helps explain an idea or make a comparison (Underwood, A nd). It literally means "sharing one long table". The image at once conjures up a mental picture of a festive affair – a wedding banquet or feast. It refers to union between man and woman through marriage. The meaning is not limited to the large crowd a wedding gathers and the expansion theme that a union suggests. As stated earlier by a speaker, a marriage brings profit, it is a gain; it is an accumulation or increase. Furthermore, like the long table, the union promises something long term, enduring or lasting. The image of "sharing one long table" also suggests harmonious relationship between the families. It has the same meaning as "breaking bread with…" This is a very intimate act.

Kandiamonga (Marriage) in Meranaw culture is not only a union of the couple but also a coalescing or fusion of the clans of the two parties. Throughout the speech, it is explicitly stated and reiterated by different speakers that the marriage is designed for a greater purpose: to continue the friendship between the two families. The pananaroon make striking example of parallelism for their concentrated emphasis which makes for dignity and gravity. The first parts repeat the structure of noun followed adjective. The second part uses antithesis followed by

noun. Antithesis was defined by Aristotle as a verbal structure that places contrasted or opposed terms in parallel or balanced cola or phrases, and opposites are most knowable when put beside each other (Fahnestock, 2000). By contrasting the verbs used, the idea is emphasized.

According to Cook (1994), Parallelism is applied to sentence which is distinguished by the fact that it casts major ideas in syntactically parallel patterns. The association of the device with oratory is no accident. It can be used to great effect by a speaker. For one thing, it is impressive; it allows the speaker to build climaxes, to engage the audience's interest or attention by the expectation of a pattern to be fulfilled. Another utility or advantage accruing to its use is, it enables the speaker to pack his sentences with ideas without unduly straining their syntax. Furthermore, the excerpt uses a lexical item that makes use of Antithesis to emphasize the message. The second part used antithesis followed by noun- "what is far will be near, darken the light kinship, to tighten the loose cooperation, to sharpen the dull friendship". Antithesis was defined by Aristotle as a verbal structure that places contrasted or opposed terms in parallel or balanced cola or phrases, and opposites are most knowable when put beside each other (Fahnestock, 2000). By contrasting the verbs used, the importance of marriage is emphasized.

The third and fourth pananaroon (proverbs) emphasized the value of friendship and relationship between the two families. The third pananaroon effectively uses antithesis to emphasize the message.

The fifth pananaroon (proverb) uses the lexical item a piece of knotted thread, a metaphor of an ancient tie or bond, whether of friendship or blood relationship, is likened to the knot. It may loosen or even unravel with the passage of time, but through the conscious effort and resolution of the present generation like the families involved in the union or marriage, the separate strands of thread can be pulled to come together again, and old ties are renewed.

The last pananaroon (proverb) uses the simile "Kapal na melagi-lagid a umpong iyan" (Ships that have the same destination) to refer to the kaisasa (oneness) of the Meranaw. Like the ships that have or follow the same direction, the Meranaws also are united and follows one path.

## Leitmotif

Ineluctably, because of the focus on certain themes, signifiers of these themes recur or are strewn all over every text. These signifiers or terms are called leitmotifs. 'Leitmotif', a term borrowed from music, is a recurrent word of phrase, clause or sentence carrying a meaning that is important to the subject. The simple repetition of this key word or expression binds together the parts of a text, or a portion of it. In other words, it is an effective unifying device.

The next table identifies the leitmotifs that were used by the speakers.

Table 5 Table of Letimotifs		
MERANAW	ENGLISH	
Bangsa	Clan	
Taritib o inged a Ranao,	Custom of Lanao	
Pat a pengampong a ranao	Four sovereign states	
Mga lokes	My old folks	
Pagari ko,	My siblings	
Mindiamonga,	Marriage	

 Table 3 Table of Leitmotifs

Kakapayag o lalag,	Delivering the Speech
Kanggiginawayi	Friendship
Kaisaisa o mga lokes tano	Unity
Bulawan	Gold
Benaning/kabinaningan	Yellow/yellowish
Kiyaisa-isa/kapagisa-isa	Unity

According to C. Hugh Holman, leitmotif is "...an intentional and recurrent repetition of a word, phrase, a situation or an idea, 181 [which] tends to unify a work" (par. 19). The term was coined by F.W. Jahns in 1871 to refer to a closely defined theme or musical idea, representing or symbolizing a person, object, or idea which returns in its original or an altered form at appropriate points in a work. (The Grove Concise Dictionary of Music par. 12).

These recurrent words point up the key ideas in the discourse. Added up, they form a picture of what is essential, vital, significant and meaningful in Meranaw culture. Another class of unifying device consists of signposts which aid in pointing out the structure of the text. These pointers include any word or phrase, or even sentence, or any extraneous device that tells the reader what the speaker has just done, or is to do next, or intend to do later.

## **3.3 Values Manifested in the Rhetorical Moves of Meranaw Kakawing Speeches**

Different Meranaw values surfaced from the text including sociocultural, religious and political values. The table below are the values that surfaced in speech.

	Belief in a Common Descent or Lineage: Bangsa
Sociocultural	Kathotonganaya (close family ties).
	Social Stratification
	Kapagaisa isa (Unity) and Katatabanga (Giving Help)
Religious	Marriage at the Age of Puberty as Part of a Divine Design
	Search for Lineage
	Belief in Order: Atoran and Taritib
Political	The Significance of Marriage to the Meranaws
	Respect for Figures of Power/Authority

Table 5 Values Surfaced in Speech

The data revealed different Meranaw sociocultural, religious and political values.

The sociocultural values are belief in a common descent or lineage, kathotonganaya (close family ties) and the value of social stratification specifically the hegemony or dominance and influence of the ruling class (pegawidan), kapagaisa isa (unity) and katatabanga (giving help). For religious values, they are importance of marriage at the age of puberty as part of a divine design and the need for search for lineage for old ties, also known as salsila which is traceable to the pat a pengampong a ranao (four sovereign states of Lanao) as mandated by Islam. For political values, they are belief in order: atoran (code) and taritib (order), the significance of marriage to the Meranaws and respect for figures of power/authority.

The Meranaw Speeches during kakawing (wedding) revealed different rhetorical moves used by the maungangen (orators) lend themselves well to Critical Discourse Analysis (CDA) method. They do reveal a wealth of information about Meranaw culture and society, particularly their values grouped sociocultural, religious and political values. The art of Meranaw kataro sa lalag (delivering a speech) is very unique and rich with linguistic features. Thus, it must be preserved as a distinctly Meranaw verbal art so it will continue to produce and develop verbal art forms and serve as a vital function of language as transmitter of identity and unique ideology including beliefs and values of the Meranaw.

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## Traditional Wood Carving Legacy With Reference To Works Of Master Craftsman, Allahyarham Wan Mustafa Wan Su

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**Abstract:** The art and craft of traditional Malay woodcarving may be forgotten by modern generation and consequently would gradually become one of an extinct craft in Malaysia if lack of effort in saving its legacy. This paper aims to uncover the art and craft heritage of traditional woodcarving and its visual attributes and craftsmanship in the works of a master craftsman, Allahyarham Wan Mustafa Wan Su, who was actively involved in the craft industry before he passed away in 2019. Traditional Malay wood carving is synonymous with the Malay heritage, especially in the Northern Eastern states of Peninsula Malaysia. Safeguarding of this intangible heritage is crucial after the departure of the master craftsman, who had contributed a lot in the woodcarving industry. Therefore, the main objective of this research is to analyse his works in relation to his crafts and styles of craftsmanship. His works and opinions that served as inferential evidences were obtained through face-to-face interviews that was conducted within an informal setting. The interviews focused on the aspect of craft and craftsmanship of woodcarving with particular emphasis on the visual attributes and technique use. Observation and photographic documentation of his works were necessary measures to complement the interviews. Hence, examination on the works produced by the master, which exemplifies his distinctive craftsmanship is also addressed in this paper. The research founds that additional values including artistic and design skills further enrich the products of the master carver, which not only provide stimulus for admiration but also serve as valuable references for the present and future generation of woodcarvers. Thus, from this research, the knowledge about the woodcarving could spread for further research to ensure the future survival of the craft heritage.

Keywords: Wood carving, craft, heritage, Adiguru kraf, Wan Mustafa Wan Su

## **1. Introduction**

Wan Mustafa Wan Su was one of the prominent Malay craftsmen and the government of Malaysia has recognized him as Adiguru kraf Ukiran Kayu (master craftsman of woodcarving) in the year 2007. He has crafted wood carvings with a range of visual qualities in the carvings. It is customary that the works of Malay master craftsmen become sources of admiration as a result of his works, which have intrinsic features manifested through skillfulness and craftsmanship. Application of skills and material-based knowledge influence the credibility of craftsmanship (Adamson, 2009). The ways of carving are distinctive in characters that are inextricably bound to their individual taste and air tangan (skillfulness). This has given advantage for local industrial production of wood craft and has given some positive impact on the market value for Malaysian traditional craft. However, the art and craft of traditional Malay wood carving may be forgotten by modern generation and consequently would gradually

become one of an extinct craft in Malaysia if lack of effort in saving its legacy. This paper aims to uncover the art and craft heritage of traditional wood carving and its visual attributes and craftsmanship in the works of master craftsman, Allayarham Wan Mustafa Wan Su, who was actively involved in the craft industry before he passed away in 2019. Traditional Malay wood carving is synonymous with the Malay heritage, especially in the Northern Eastern states of Peninsula Malaysia. Safeguarding of this intangible heritage is crucial before the retirement or departure of the master craftsman. Therefore, the main objective of this research is to analyse his works in relation to his crafts and styles of craftsmanship. Examination on his works would reveal his legacy in safeguarding the heritage of wood craft and the outcome of this research would serve as valuable references for the related parties.

## 2. Literature Review

## **Traditional Malay Wood Carving**

The wood carving is a form of handicraft that has long existed in parallel with the Malay design. Craft is an application of skills and material-based knowledge to relatively small-scale production (Adamson, 2009). The craft of traditional Malay wood carving is an expression of Malay creativity found in various categories, namely, weapons, daily utensils, transportation, traditional games, architectural components and agricultural tools. As noted by Syed Ahmad Jamal (2007), the use of wood in Malay culture is extensive that from a kris hilt, sail boats and congkak (a traditional game) to wall screens which are all made for accessories of daily uses and living. Its legacy reflects on its unique craftsmanship of traditional Malay craftsmen. In the art of wood carving, craftsmanship refers to the aptitude, skill or quality workmanship in the use of carving tools and hardwood timber species especially chengal, red balau, merbau and sena (Ismail, 2005). The skills of transforming a solid plank or block into a relief and non-relief components are learned through process of apprenticeship. Meanwhile, Wilbur (2008) posits that skillfulness in carving is accumulated over years of practice, thorough knowledge of the wood carving and woodworking trades, and by mastering technique.

In Malaysia, the traditional wood carving is one of art forms that has been in long existence and the exact date that marks the origin of making this art form is unknown. The precise date or age of wooden artefacts still existing today cannot be established with certainty due to lack of accurate written records because most of them were for daily application. However, the art of stone carving among Malays has already been endured by the people of the older generations in 15th century (Syed Ahmad Jamal, 2007). Hard stones are known to have been carved for utilitarian and ornamental purposes in the South East Asia since the ancient civilization, and despite the Hinduism tradition of carving that began centuries before the Islamic Era, it was not until the Islamic period which began in the 14th century that the technology and practice of the Malay wood carving achieved its highest and most extensive development. Later, highly developed techniques of wood carving have been used over the centuries for a variety of functional use and ornamental themes. The development of the art of Malay wood carving has been attributed to the roles of patrons that consequently caused the expansion of the creativity and growth of this wood craft. Also, Ismail (2005) states that the strength of the wood carving lies in a form of artistic dimension and assisted by the abundance of natural resources that stimulate the development of the craftsmen's creativity. The long survival of the wood carving is due to abundance of timber and plant species in the natural environment of Malays apart from well-off imagination and skills of the craftsman and continuous patronage by the wealthy and aristocratic Malays.

The above literatures suggest that the wood carving remains as long-established and long inherited wood craft and it had inspired the craftsmen of past generations to produce not only the functional wares but intricate carvings. Consequently, it has contributed to the development of the art of Malay wood carving in the Malay Peninsula.

## 3. Methods of Research

This study entailed exploratory research that involved analysis of photographic documentation and collection of information form the past semi-structured interviews with the master craftsman. Allahyarham Wan Mustafa Wan Su was from Besut in Terengganu and ran his business at Balai Seni Wanpo, located in Alur Lintang, Besut, in north Terengganu. At the age of late 70s, he was still an active woodcarver and still at the forefront in the carving industry thus, making him as one of the renowned craftsmen not only from Besut, in the north part of Terengganu but also in the nation, especially due to his status as Adiguru Kraf. The term Adiguru Kraf literally means master craftsman, who receives the award of best craftsman and recognition from Malaysian government as a master craftsman once they have fulfilled the specified criteria. Perbadanan Kemajuan Kraftangan Malaysia (PKKM) states that the criteria are: 1) possess high knowledge and skill in the field of craft, 2) his expertise or specialization in the art of craftsmanship, design, product making and production of craft works of Malaysian heritage, 3) play significant roles in the conservation and preservation of heritage craft, 4) serious in the transmission of skillfulness to the apprentice to ensure the continuity of the heritage craft, 5) creative and innovative in ensuring the advancement and increase of quality craft products. These criteria have become drives for local craftsmen to achieve the prestige recognition by the Malaysian government. Many local craftsmen have fulfilled the criteria that put him or her as one of the prominent craftsmen, thus recognized him or her as Adiguru kraf.

Many people know him for his carvings on decorative components of Masjid Jertih, Terengganu. He has strong backgrounds with more than 40 years experiences and contributed immensely in this craft industry. His reputations in the wood carving industry are highly known especially in the North eastern region of Peninsular Malaysia. Hence, he was an expert who possessed vast knowledge about traditional wood carving, which were vital for discovery through interpreting and clarifying concepts and ideas related to the subjects of investigation. The special strength of qualitative inquiry is that it gives an opportunity to learn about what cannot be seen and to explore alternative explanations of what is seen (Rubin and Rubin, 1995).

## 4. Analysis, Findings and Discussion

The main objective of this research is to analyse the works of Adiguru kraf Wan Mustafa Wan Su in relation to his wood carving crafts and styles of craftsmanship. The research determined the master craftsman's methods of sustaining the wood carving for industrial craft production through qualitative research. The study found that most of the profound works produced by the master craftsman have strong adherence to the traditional roots and philosophy of Malay woodcarving. Wan Mustafa preferred producing wood carvings, that were inspired and derived from local plants such as herbs, weeds and climbing legume or creepers. This suggests his fondness to the application of plant-based motif as design elements in the wood carving. He had preferably responded to the visual quality of the plants by preserving it in forms of wood carving with the best way whenever he can. He used two methods of crafting carving motif: (1) close imitation of natural plants from immediate surroundings, and (2) transformation of the

plant motifs that barely resemble their real-life image. Table 1 shows the results of the visual analysis done on his carvings which have been selected from the primary and secondary data.

Sample carvings	Styles of motif depiction	Techniques of carving	Craft methods
Table top panel	Awan larat of flower design	Semi-pierced with relief carving	Imitation of natural plants in stylized form
Window panel	Awan larat of flower design	Perforated with relief carving	Imitation of natural plants in stylized form
Mimbar (pulpit)	Awan larat of flower design	Perforated with relief carving	Imitation of natural plants in stylized form
Mihrab wall	Abstraction of natural elements	Semi-pierced with relief carving	transformation of the plant motifs
Lighting panel	Abstraction of natural elements	Perforated carving	transformation of the plant motifs
Vertical wall panel	Awan larat of flower design	Perforated with relief carving	Imitation of natural plants in stylized form
Horizontal ventilation panel	Awan larat of floral design	Perforated with relief carving	transformation of the plant motifs
Decorative panel	Abstraction of natural elements	Semi-pierced with relief carving	transformation of the plant motifs
Window ventilation panel	Awan larat of flower design	Perforated with relief carving	Imitation of natural plants in stylized form
Wall partition	Awan larat of flower design	Semi-pierced with relief carving	Imitation of natural plants in stylized form

The analysis of Wan Mustafa's works shows that awan larat of flower design had become his favourite choice for his various types of woodcrafts. Depiction of natural plant elements had appeared in different form of wood carvings including table top panel, window panel, mimbar (pulpit), mihrab wall, lighting panel, vertical wall panel, horizontal wall panel, decorative panel, window ventilation panel and wall partition. This method of application of plant elements as carving motifs was not arbitrary and it was done with careful selection and for intended purposes. The styles of depiction represent compositional meaning, for example the depiction of motif in upward growth of a natural plant conforms to explicit and implicit rules that were long established in the past centuries. He was very keen in safeguarding the rules and had been proliferated in his career under this trademark. The following paragraphs discuss his approaches or methods in crafting carving motifs for the selected wood carvings.

## **Crafting of Floral Motif Via Close Imitation**

Wan Mustafa who was popularly known as Wan Po noted that Allah's existence and His attributes may be partly understood through observation of His creation. Nature provides beautiful and attractive floral elements which trigger woodcarvers' attention. They may subsequently think about and be inspired by this beauty in nature, resulting to a generation of carvings with exclusive forms. This is achieved through close imitation of natural plants that invite their attention. The essential characters of a real-life plant were taken into account. Sometimes the shapes of a flower or leave are modified or shorten to accommodate the space or surface of carving. The flower is used as a central and focal element that serves as an identifying feature for the specific carved panel. The application of flower that serves as a principal element and identifying feature is to differentiate between several motifs. Perhaps due to this function, the flower of bunga emas (Wedelia trilobata) as shown in Figure 1 is depicted as a central element in the carving of Wan Mustafa. Bunga Emas is a non-native plant brought

to this country sometimes 30 years ago. Hence, this motif was not popular among the past generation of carvers because they had not seen it. Even though bunga emas is considered as a new motif but its depiction in growth of a natural plant conforms to explicit and implicit rules of traditional carving.



Figure 1: Bunga emas is depicted in a semi-pierced carving

According to Wan Mustafa, a flower is a focal element in Malay carving because of its beauty. Carvers denote carving style as *bunga* (a flower), thus it is logical that flower becomes a central element in a carving panel. Thus, their inspirations are pivoted in their natural surroundings. For example, *bunga melur* (Gardenia jasminoides also known as Gardenia augusta) as shown in Figure 2a is a fragrant flowering and evergreen tropical plant which are available in many areas including house yards, gardens or landscapes. The plant has outstanding ornamental features especially its white blossoms and glossy foliage that are appealing. Hence these properties of the shrub draw woodcarver's attention and inspire him to carve its beauty on wood, for example as apparent in the carved panel shown in Figure 2.



Figure 2: A carved panel depicting a motif of bunga melur

Wan Mustafa explained, "woodcarvers are most attracted to the shape of a particular flower. The flower's physical character becomes the most appealing to them regardless of its colour. Unlike paintings, the craft of wood carvings does not require the use of colour in its composition. In the craft of wood carving, the main emphasis is given on the form of silat (style of carving)". Thus, only plants with beautiful features of blossoms trigger woodcarver's attention and become their creative inspiration. Furthermore, he emphasized that the

woodcarver should be creative in deploying the carving elements like plant motifs and using them in many ways to develop carving as their individual expression.

The study also found that apart from creative inspiration from nature, there are two additional values in the making of carving: (1) artistic value, for example, by carving detailed features, and (2) design value, for example, representation of design concept in carvings as evident in Wan Mustafa's works (Figures 1). This is an example of product with artistic value because to form such carving character demands skilfulness and creativity. It also has design value which is reflected on the compositional elements that represent a concept of growth as in the awan larat pattern. Hence, the flow of the carving has reason apart from its tangible and intangible meanings. In short, carving motif appears in many different forms as observed in the selected wood carving products of Wan Mustafa, ranging from single motifs to extended and complicated pattern. This shows a lively work in woodcraft in both single and complicated design and usually contains recognisable forms although in some cases the types of carving motifs are hardly identified.

## Crafting of floral motif via imagination and transformation

Transformation of the plant motifs that barely resemble their real-life image is another method of carving used by Wan Mustafa. For example, a drawing done by him as shown in Figure 3 illustrates an example of awan larat with a motif of bunga khayalan (imaginative motif) in the traditional method of carving pattern. This type of motif is based on his artistic imagination without copying any plant but the principal character of living plant is maintained. This carving begins from a source hidden in the flower vase. This is one type of awan larat which used the method of sorok punca (hidden source). The carving begins from a source in form of kepala kala (a source) where other plant elements emerge.



Figure 3: Wan Mustafa illustrates a freehand design of awan larat

Wan Mustafa had always cherished the traditional concept of the awan larat and he always retained the concept in his woodcraft. According to him, every flow of the carving elements in this pattern has compositional meaning such as intertwining and gentle movements of stems and leaves are well regulated. In this type of pattern, motifs of plants were represented as identifying elements for the carved panels in two-dimensional format. For example, the use of cempaka (michelia campaca) and melor (gardenia jasminoides), garden herbs with fragrant flowers and glossy leaves (Figure 2) are common as the main motif. From the innumerable images of natural plants, a tradition of creative designs has evolved incorporating flowers, leaves, leave-shoots, branches and flower buds. The elements of a beautiful flower and leaves, for example, became the central or focal objects and were transformed into images with endless forms and patterns. In short, motifs of plats are dominant in his carving products. Nasr (1987) postulates that the works of Muslim artists reveal inspiration they derive from their environment and their strict adherence to the teachings of the Islamic faith.

# Styles of Craftsmanship: Wan Mustafa's Design Approach for Carved Panels of Pulpit in Masjid Jertih

Wan Mustafa Wan Su was a renowned and master woodcarver who has produced a vast collection of woodcarvings, which expresses typical Malay designs with a high quality of craftsmanship. His skilfulness in carving are not only limited to fabricating old traditional Malay woodcarving but also producing woodworks with fresh ideas and concepts, for example, as apparent in the underlying design of the carvings and its motifs at the mimbar (pulpit) of Masjid Jertih, Terengganu. This work is considered as his new dimension in producing wood carving but still maintaining the traditional concept of awan larat that is translated in a new version of composition with Islamic theme. This piece of art work is considered as Wan Mustafa's step forward in his career as a woodcarver. He believed that craftsmanship in the craft of carving should grow and could be developed further. Hence, in this work, he considered producing carved components that have meanings and convey messages to viewers apart from generating a beautiful carving which is appropriate for a praying hall in the mosque. These attributes are evident in the wood carvings found at the mimbar of Masjid Jertih as shown in Figure 4.



Figure 4: The front view of the pulpit and a carved panel with calligraphy motif at the mihrab

Wan Mustafa has chosen bunga kenanga (Cananga Odorata) for panels of pulpit for two reasons. First, this flower was chosen due to its long petal which is suitable to represent the concept intended for the carving. According to Wan Mustafa, the representation of intended meaning and composition would not be fulfilled if other types of flower were chosen as carving motifs. The long petals of kenanga could be manipulated easily according to the design and shape of the panel. Second, bunga kenanga was formally recognized as a state flower of Terengganu. In terms of the layout and orientation of the carving, the motif begins from a flower seed to represent the source which is positioned at the central base of the panel and flows in upward direction with intertwining movements. This is one type of carving, which applied motif of a natural flower as a central theme with an abstract representation.



Figure 5: Carved panels showing carvings of awan larat in a new version

Carving technique applied in a specific panel was not only for visual aesthetic but also to indicate individual style of carving by woodcarvers. For example, the carving techniques shown in Figure 5 represent a gentle character of the floral motifs. This portion of flower petal is folded up to create a gentle character of the plant element which is distinctive in character. This is because beauty in awan larat is achieved through the regulated and gentle shapes of elements from various natural plants. The carving was done with skilful and artistic quality which represents Wan Mustafa's personal approach, identity and style in making this type of woodwork. This quality is required to produce an outstanding piece of woodwork as reflected in his many masterpieces. He liked to produce carvings that look different from those produced by other Malay woodcarvers because he like to be different and that is why many types of his carved panels exhibit distinct characteristics. Both panels are delicate in character, which testify his craftmanship quality in making beautiful carvings with different techniques and compositions but with strong adherence to the Malay wood carving philosophy.

Wan Mustafa also used his artistic imagination to craft several pieces of carvings in different technique, for example, as shown in Figure 6. The motif that was depicted in perforated with relief carving was produced based on his creative idea without imitating living plant. In this panel, the expression of plant elements like leaves, flowers and stems reflect the ones in living plants although the design of motif and its composition is imaginative in nature. It has an artistic value to show that Wan Mustafa has been exploring the possibilities of foliated patterns within lawful expression as guided by his craftsmanship principles.



Figure 6: Perforated carving with artistic imaginative motif in excellent craftsmanship 202

It is apparent that in Wan Mustafa's wood carvings, the elements of composition are classified into two types which include direct imitation and transformation of living plants as based motif. In order to ensure the sustainability of the traditional carving, the physical characters for each composition were formed according to the specified rules in the formation of carving motifs and patterns. As Wan Mustafa noted, "I can use my creativity and imagination with no limit, however, the traditional concept of wood carving is strongly maintained in most of my works. I still keep this value and applied faithfully in my works as prescribed by the previous generation of woodcarvers. I learned a lot about this from my experience and previous apprenticeship". The traditions in craftsmanship could be sustained by continuing the artistic achievements of past glories from the past generations of woodcarvers (Farish and Eddin, 2003).

This paper examines different types of carved components that portray Wan Mustafa's skilfulness and creativity in the craft of wood carving. His main approach was to produce carved components that have traditional meanings and convey messages to the viewers apart from designing carvings for aesthetic purpose. Traditional concept of wood carving including design methods and techniques were applied in most of his works with novel and innovative sense. The plant-based designs found in most of his carvings are particularly distinctive. In fact, all woodcarvers developed wood carvings with distinct characteristics and branding of their own for industrial craft production. He seems to have had an endless and ingenious appetite for exploring the huge range of design possibilities offered by the variety of timber resources and beauty in plant life. He had excelled in visual expression of his woodworks through a wide variety of artistic means according to local taste and demands. This suggests the dominant character and trends of making carved components from the north eastern region of Malay Peninsula as noted from the works produced by Wan Mustafa. These trends of carving perhaps serve as 'a model for imitation' (archetypes) but of course according to the woodcarver's craftsmanship including discretion, skilfulness, ingenuity and creativity. This has become his legacy in the wood carving industry.

## Conclusion

The study found that floral motifs entailed a bigger recognition in Wan Mustafa's woodcarvings as compared to the other types of motifs like geometry and calligraphy. In many cases as evident in many carvings produced by him, the use of awan larat with flower design has culminated into character that is alluring to behold. The plants have pristine beauty apart from its useful properties and medicinal values that evoked a strong character in the woodcarver's eyes. They felt visually triggered by such inviting elements like flowers and leaves in the plants. These elements inspired them to fabricate the panels with creative and innovative design with nearly inexhaustible possibilities of ideas in the carving composition. Successful depiction of plant-based motifs includes both simple and complex compositions depends greatly on the technical ability possessed by the woodcarver. Numerous elements from nature provide an avenue for the craftsman to produce inexhaustible ideas of carving motif, techniques and pattern. It is indeed up to their skilfulness, ingenuity and creativity to produce carvings in this artistic approach whereby the sky is the limit. The works carry not only tangible value of expression but also intangible meanings that is closely related to his craftsmanship. Although widely diverse in his individual inclinations or taste, Wan Mustafa had shared an interest in preserving and protecting the pre-eminence of traditional craftsmanship. Traditions in craftsmanship should be further developed by the younger generation of woodcarvers by referring to the artistic achievements from their counterparts of older generations. Thus, further research is recommended to study on woodcarvings of other master woodcarvers and discover their legacy in the woodcraft industry. Findings from this type of study would benefit the younger generations of woodcarvers for sustainable development of craft industry. Any innovative ideas in the art of wood carving should be encouraged or promoted but need to be carefully guided by the master woodcarvers in order to sustain its heritage value. Only then they can be considered as a legacy of heirloom of traditions and innovations with native and creative design ideas as evident in most of Wan Mustafa's woodcarvings.

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# **Understanding Carbon Emission Accounting for Sustainability**

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**Abstract:** It is not an understatement that the increasing amounts of carbon dioxide and other greenhouse gases are heating up the earth's climate and the inaction could be catastrophic. There is therefore an urgent need to control the levels of carbon dioxide to address the distressing effect of climate change not only to the environment but also to human health. Amidst this looming scenario, our economy is growing at a considerable pace. The challenge before us then is to accelerate economic growth without compromising the environment. This paper provides an introduction to carbon issues, overview the impact of carbon trading on accounting and reporting activities, carbon footprint accounting and its role in business sustainability and the role of accounting professionals in carbon accounting.

Keywords: carbon, emission, accounting, business, sustainability

## **1. Introduction**

Global warming has reached an alarming stage. The earth's climate is changing into a disturbing state resulting to the rise of the sea level, severe floods, increased frequency of storms, scorching heat drought throughout the globe. The Philippine is tagged, as one of the world's most vulnerable to climate change. Based on the 2016 Climate Change Vulnerability Index (CCVI), released by risk analysis company Verisk Maplecroft, the Philippines ranked 13th most climate-vulnerable country, an improvement from the 2015 Index in which it was at 8th place. According to NASA the main cause of current global warming trend is the human expansion of "greenhouse effect" gases such as water vapor, carbon dioxide (CO2), methane, nitrous oxide, chlorofluorocarbons (CFCs) respond physically or chemically to changes in temperature which greatly contribute to the greenhouse effect. The "greenhouse effect" is an essential natural process for the maintenance of life on the planet. The earth receives energy from the sun, a portion of it penetrates the atmosphere and the rest is reflected back into space. The energy that makes it to the atmosphere, a portion is absorbed by the earth's surface and the rest will be reflected back in the atmosphere. Since the atmosphere is more permeable to incoming solar radiation compared to outgoing infrared radiation, a portion of the infrared radiation remains within the atmosphere and this creates greenhouse effect. GHG concentrations in the atmosphere are currently higher than they have been at any time in the past 600, 000 years. Its impacts have led to a significant global concern and substantive policy action.

## 2. Literature Review

The term carbon emission accounting is widely used in various disciplines and is found particularly often in discussing and integrating the aspects of climate change into accounting. Carbon Emission Accounting has been tackled in the social and environmental accounting. Carbon emission accounting is already large, fast growing, rich and varied. There is a mix of critical, philosophical or normative discussions about carbon emission accounting, with specific papers in carbon management accounting, carbon financial accounting, and carbon disclosure and reporting. Nevertheless, there is considerable potential for researchers to broaden their engagement with other subtopics of carbon accounting. Carbon accounting could be emancipatory: attracting new researchers and encouraging greater interdisciplinary cooperation and mutual learning, offering tremendous opportunities for engagement with practice and education, and helping to imagine new accountings that considers the impact of carbon emissio to the financial statements and to the sustainability of the business.

## **3. Discussion and Conclusion**

Government responds to the threat of GCC in a variety of ways including supporting the development of scientific knowledge and developing polices to deal with mitigation and adaptations.

Kyoto protocol is an international treaty on climate change that was adopted in Kyoto, Japan on 11 December 1997 and entered into force on 16 February 2005. There are currently 192 parties (Canada withdrew from the protocol, effective December 2012) to the Protocol and dominates the mandatory carbon market. The Kyoto Protocol implemented the objective of the UNFCCC to reduce the onset of global warming by reducing greenhouse gas concentrations in the atmosphere to "a level that would prevent dangerous anthropogenic interference with the climate system". The protocol is based on the principle of common but differentiated responsibilities: it acknowledges that individual countries have different capabilities in combating climate change, owing to economic development, and ergo puts the obligation to reduce current emissions on developed countries on the basis that they are historically responsible for the current levels of greenhouse gases in the atmosphere. Therefore, members of the convention with industrialized or developed economies receive specific reduction targets. Member states with developing economies are not expected to meet emission targets. The protocol does not manage the way in which members reduce their emissions, so several mechanism have arisen.

Negotiations were held in the framework of the yearly UNFCCC Climate Change Conferences on measures to be taken. This resulted in the 2015 adoption of the Paris Agreement, which is a separate instrument under the UNFCCC rather than an amendment of the Kyoto Protocol. At COP 21 in Paris, on 12 December 2015, Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future. The Paris Agreement builds upon the Convention and – for the first time – brings all nations into a common cause to undertake take ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change, and at making finance flows consistent with a low GHG emissions and climate-resilient pathway. To reach these ambitious goals, appropriate mobilization and provision of financial resources, a new technology framework and enhanced capacity building is to be put in place, thus supporting action by developing countries and the

most vulnerable countries, in line with their own national objectives. The Agreement also provides for an enhanced transparency framework for action and support.

SB 251 Low Carbon Economy Act is Philippine's response to show support to Kyoto Protocol and Paris Agreement. This is an act to promote low carbon economy, establishing for this purpose the emission cap- and trade system in the industry sector to reduce greenhouse gas emissions and protect the climate. This bill introduces the concept of "low carbon economy". This is the idea to pave way for a cleaner environment by limiting the release of greenhouse gases by the industrial and commercial sector.

The negative impact of climate change on economy, social activities people's health has already been emerging and the trend toward a low carbon economy has begun.

There are several mechanism that arose to decrease the GHG emission. One of them is Cap and Trade Schemes. Under this scheme, the governing body begins by setting a cap on allowable emissions. Member firm that do not have enough allowances to cover their emissions must either make reductions or buy another firm's credit. Members with extra allowances can sell them or bank them for future use. In the Philippines setting, under the Low Carbon Economy Act, upon the consultation with the industrial sector, the DENR, in collaboration with DTI shall set a cap on the greenhouse gas emission of companies. To cushion the impact of cap companies, this bill allows them to trade credits with each other. Allowances for greenhouse gas emissions will be issued to the companies, which in turn maybe freely traded by in the market driven system. Companies with excess greenhouse gas emissions may sell their allowances from the market while companies with less greenhouse gas emission may sell their allowances to the market. This trading mechanism allows the pseudo-financial market that allows companies to transact with each other but with an additional benefit of maintaining the target emissions in the company. The emission cap and trade system is constructive and business friendly approach to countering global warming. This world accelerate reducing GHG emissions, encourage use of new climate change-related technologies and ensure benefit to consumers from trading in allowances.

Organizations can trade their excess allowances and must acquire extra allowances if their emission are higher than their allowances. The implication of being unable to buy allowances to cover any excess emissions is more significant because of the penalty for each unit uncovered by purchase allowance, in addition to entities still have to buy carbon emission rights to offset the uncovered emissions. This provides double penalty for failure to either keeping within the emissions level or failing to buy emissions to cover excess emissions.

Carbon emission trading schemes raise the question of whether and how to recognize EUAs (European Union Allowance)as an assets and the obligation to deliver allowances as liabilities. EUAs are free for the companies affected and that, only small amount of the total emission rights are purchased, the valuation of granted allowance is debatable and considering the volume of EUA's for some companies, it has potential significant impacts in their accounts and this creates particular challenges to accountants. Recognition of assets and liabilities with different valuation bases could produce a volatility of results in some companies. Wambsganss and Sanford (1996) argued that it is inconsistent not to recognize granted allowance while purchased allowances are recognized on the balance sheet and as expenses when they are used to compensate for pollution emission. They recommended that granted allowance be treated as

donated assets valued at market at the date of their receipts and this would provide uniform accounting for all allowances regardless of whether they are granted or purchased.

Credits are similar to carbon offsets except that they are often used in conjunction with cap and trade schemes. Firms that wish to reduce below target may fund pre approved emissions reduction projects at other sites or even in other countries. This projects might restore forests, update power plants and factories or increase the energy efficiency of buildings and transportations.

Although standards will continue to evolve, having a clear understanding of today's expectations and producing reliable information around performance should be top priorities for companies today.

However, there is still no current accounting standard in US GAAP that addresses the financial accounting for emissions programs. The Financial Accounting Standards Board (FASB) is working on a joint project with the International Accounting Standards Board (IASB) to address the accounting for carbon emissions schemes. Taking further steps to regulate emissions produced by the nation's largest sources, the EPA is mandating that certain companies report GHG levels.

Such companies will need to account for related cap-and-trade activities associated with the program without specific authoritative accounting guidance. Many companies also may be required to disclose the impact of climate change and the regulation of GHG emissions in their Annual Report on Form 10-K.

The importance of GCC suggests that accounting and reporting should move beyond the conventional accounting to reflect associated GCC on corporate performance and prospects. In addition to financial information, non-financial information will be needed to provide relevant information about the risk and uncertainty associated with GCC. Organization are likely to face differential risks from GCC in the form of regulatory risks and competitive risks. Significant regulatory risks for different companies arise from the possibility that the government decides to auction allowances, to restrict their numbers or to include new sectors, if and when the objective to reduce carbon emission by more than 80% is translated into policy. The competitive risks arise from the likelihood that carbon-intensive products and services become obsolete compared with low emission product and technologies. The users of financial information could be expected to need information for which they can assess the carbon intensity of corporate products and services and estimates the regulatory and competitive risk that a corporation is likely to face.

Further research should examine the interplay how organization tackle carbon emission and how their carbon position and carbon management is disclosed. Research also will be needed to evaluate the relevance of disclosures about carbon exposures and carbon management and to empirically test hypothesis that corporations face risks from GCC and carbon trading schemes. The author concludes that a precautionary approach would need the handling of technical facts as much as social issues (integrated assessment approach) in an interdisciplinary, participatory and transparent fashion. Two consequences of such precautionary/integrated assessment approach are important for accountants and accounting/reporting approaches. First, any account of uncertainty associated with GCC should adopt a participatory approach by way of engaging stakeholders and mapping their different preference according to their different risks windows. Second, technical facts and social issues are incommensurable and this leads to call for attention to potential problems involved in the standardization of accounting and carbon reporting without a sound understanding of the social and scientific causes and consequences involved in GCC. A research should be develop to cope with uncertainty surrounding GCC.

Creating markets on which carbon maybe traded is but one manifestation of the policy response to GCC and it has direct and immediate response on the businesses (if they are included as part of the market). Carbon markets have the effect of putting a price on what was until very recently free and this change have financial consequences on the businesses in the longer term. In particular, this is the process of translating ecological concerns into economic phenomena.

Another scheme to reduce GHG emission is carbon tax which is a market-based policy instrument that can be used to achieve cost-effective reduction in emission. The carbon tax was originally part of package five tax reform proposals along with the increase in coal, tobacco, alcohol and mining taxes, depending on whether the government needs to raise more revenue. Some of these taxes were included in the Tax Reform for Acceleration and Inclusion (TRAIN) law. Carbon tax directly sets a price on carbon by defining a tax rate on the carbon emission. The imposition of tax on carbon dioxide emission can reduce the use of environmentally harmful substances and the amount of wastes generated. The said approach can help correct the market failure that exists in fossil fuel prices, which excludes environmental and social costs in the market prices thereof and will encourage the development of new technologies that reduce pollution. The carbon tax is not a new measure as it is already being implemented in some countries especially those in European Unions as early as 1990s but they have different coverage, tax bases and rates. In order to be effective, the tax should have positive behavioral effects that shall foster change in attitude and awareness of the polluters and shall serve an instrument of innovation in pollution technology. Economic theory suggests that a carbon tax should be set equal to the social cost of the carbon, which is the present value of the estimated environmental damages over time caused by an additional ton of carbon dioxide emitted today. Experts in carbon tax agree that imposing higher tax would lead consumers to change behavior while lower rate may don't do much to change behavior but ca provide funds for mitigation programs. Although carbon tax should be set equal to the social cost of carbon, it can be noted that social cost is not always obvious and not easily accounted. The carbon tax maybe levied at any point in the energy supply chain. However for administrative simplicity, it may be levied at a point where there are few entities subject to tax. For firms their ultimate burden will depend on their ability to pass through abatement and tax cost to their customers and on the ensuing reductions in demand they experience in response to higher product prices. The revenue that could be generated from imposing the carbon tax could be used to finance environmental related programs and projects. The fund may also be used to improve the facilities that are used in monitoring air quality of the country.

The Department of Finance (DOF) is exploring the possibility of imposing a tax on carbon dioxide emissions to help further reduce pollution and promote alternative sources of energy. In an interview, Finance Undersecretary Karl Kendrick Chua said the government is studying the carbon tax to determine if the country is ready to implement the tax scheme. "We are learning as much as we can because it's a new tax. This is a global priority so it's something we want to learn and see if we are ready to propose a carbon tax," Chua told reporters on the sidelines of a workshop on carbon tax.

Another scheme to reduce GHG emission is emission avoidance and it is the most effective carbon management strategy over a multi-decadal timescale to achieve atmospheric CO2 stabilization and a subsequent decline. This prevents, in the first place, stable underground carbon deposits from entering either the atmosphere or less stable carbon pools on land and in the oceans.

Carbon offsets based on energy efficiency rely on technical efficiencies to reduce energy consumption and therefore reduce CO2 emissions. Such improvements are often achieved by introducing more energy efficient lightening, cooking, heating and cooling systems. These are real emission reduction strategies and have created valid offset projects. This type of carbon offset provides perhaps the simplest options that will ease the adoption of low carbon practice. When these practices become generally accepted (or compulsory), they will no longer qualify as offsets and further efficiencies will need to be promoted.

There are many carbon-offset projects that avoid carbon emissions. One of them is energy efficiencies through reduced energy consumption, which is a carbon offsets based on energy efficiency and rely on technical efficiencies to reduce energy consumption and therefore lower CO2 emissions. Another carbon-offset project is renewable energy from displaced energy production, which is an emission avoidance projects that displace the production of high carbon intensity energy to low, or zero emission energies require a greater change in infrastructure and larger capital investments. Fuel emission reductions by cleaner energy production, is another carbon-offset project, which is an option for emission reduction offsets, is the improved disposal of waste methane. When methane capture for power generation becomes business as usual this will no longer work as a carbon offset.

Quantifying carbon emissions is a complex process, which is why researchers at the Centre for Business and Climate Change within the University of Edinburgh are working on ways to improve accounting methods. "It is highly important that we choose the right methods for a particular purpose" Says Dr. Matthew Brander, a Lecturer in Carbon Accounting within the Business School. "There are different forms of carbon accounting, and different methods are appropriate for different purposes. Certain types of methods don't tell us about the system wide consequences of a particular decision. If you use the wrong method, you could end up increasing emissions when your intention is to decrease them"

As carbon emissions programs evolve, it is critical that companies have a carbon management strategy that allows them not only to comply and account for these activities, but to take advantage of acquiring credits and offsets through strategic acquisitions or otherwise.

A new research from Carbon tracker of association of Chartered Certified Accountants reveals that the current financial reporting standards, industry reporting frameworks and non-financial guidelines do alert investors to the risks of reserves associated with climate change. The financial crisis raised ongoing concerns over whether market can alert investors to risks associated with climate change. The investors need more concrete forward looking and integrated information on GHG emissions in order for them to understand better their exposure to climate change risk. . Companies need to start disclosing the following information in their annual reports. The financial reporting standard setting bodies should issue guidance to interpret existing standards so that the preparers of reports and accounts consider the need to include information on the carbon viability of reserves. The stock market regulators and listing authorities should also require information in the annual reports the emission trajectory assumptions of corporate strategy. Threat of global warming has drawn international and national attention. Inadequate representation of the degradation of environment will give a false impression of increase in income to the decision makers while natural wealth is in reality, reducing. Carbon accounting takes into account the carbon emission of a company and considering it will reveal the true income of the company while maintaining a sustainable business without jeopardizing the interest of present and future generation to enjoy Earth.

Carbon accounting and financial reporting methods for carbon assets and liabilities created for cap and trade system controversial. Unresolved questions like; what is the definition of carbon assets? Is this an intangible or tangible assets? Is a free allocated emission right is an asset? If yes, when a firm should recognize it in financial statement and how to measure an asset? What is the nature of the carbon assets is it tangible or intangible asset? This questions are important because how to recognize and measure them can significantly impact financial result.

Carbon Accounting concerns what and how carbon information should be disclosed to external users. A high degree of carbon emission transparency reveal a firm's climate change strategy, carbon footprint, and managerial carbon accountability which allows external stakeholders to monitor and seek improvement in the entity's operations.

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Organizations should engage in practices that promotes environmental sustainability to the extent that there is an appropriate balance between the organization's economic, social and environmental goals. As companies, continue to respond to environmental challenges through a variety of operation changes, professionals agree that the issue of global warming is something that needs to be on radar. So accountants should think more strategically and imagine the kinds of impacts the environment will have on a company in the future.

Carbon responsibility is an important element of business sustainability. It is operationalized through carbon accounting and reporting, which have become inevitable management tools in modern business. International reporting frameworks, legislation and the requirements of stakeholders necessitates thinking about environmental information which business should report. The analysis of distribution of manager's responses shows that most respondents believe carbon information is part of corporate social responsibility. The usefulness of carbon information to stakeholders and the importance of ensuring the quality and quantity of information.

On a corporate level carbon, accounting can support carbon management with two basic approaches carbon accounts for un-sustainability and carbon accounting for sustainability improvements.

The growing awareness not only for carbon accounting but also for the effect of climate change has brought about a drastic, rethink of the way building are now design and run, and with government initiative to lower GHG emission, sustainability has taken greater role in a built environment. Edwards (2005, p.19) recognizes sustainable environment as being "...development that meets the needs of the present without compromising the ability of the future generation to meet their own need". The goal of carbon accounting is to help accurately predict the sustainability of any given-project and report the present carbon existing in the area. Two of the more popular resources for businesses interested in reporting their environmental metrics are the Global Reporting Institutes and the Carbon Disclosure Project. The GRI operates the most used sustainability reporting standards worldwide. The GRI 305adrresses emissions into air, which are the discharge of substances from a source into the atmosphere. . The comprehensive standards give businesses, customers, and stakeholders the information they need to make informed decisions and positive changes. GRI aims to lay the groundwork for broader transformational change to occur, resulting in a more inclusive, sustainable and ore green global economy. The CDP aims to help business quantify and understand their carbon impact so that they can work innovatively and ambitiously to reduce it.

Many of the world's largest companies have recently begun publishing sustainability reports. These reports details business economic, environmental and social impacts empower them to become more sustainable and responsible. Customers and stakeholders are increasingly interested in seeing businesses committed to sustainability reporting. It is a concrete and meaningful way for businesses to demonstrate their commitment. Having a shared language and common standards for reporting sustainability metrics avoid confusion and facilitate understanding. . For these reasons, many business reports their sustainability and carbon footprint data according to standards used by companies worldwide.

If a business is not yet participating in a voluntary carbon reporting program, they may wonder what are the benefits of making such substantial commitment. The benefits are first, demonstrating to customers, who recently value sustainability more and more, that your business is committed to measuring and managing your environmental impact. Another benefit is it provides you an understanding of where improvements in your business can be made and giving the business an incentive to do so. Another benefit is it future-proof your business for long term profitability by preparing to comply with future regulations like carbon caps and pricing.

As organizations plan for climate change's real and inevitable effects, the skills of a CPA will take on a whole new importance. Climate change is more than a business issue. Increased extreme weather events and shifting rainfall patterns have clear impacts on operations and markets. Just as with any other business issue, CPA skills can be used to help organizations adjust and even thrive. Most organizations will move through a set of stages as they adapt to a changing climate. At each stage, CPAs have a role to play. CPAs have roles in climate change adaptation particularly in motivating, planning and implementing the action, assessing the performance and responding to market and stakeholders. Most organizations will begin by identifying how the impacts of climate change affect them and why action is necessary. CPAs can help identify risks and opportunities and make a business plan for action. After identifying the risks and opportunities, business must identify and evaluate possible responses. CPAs can estimate the costs and benefits of alternative approaches and identify how best to pay them. Or a CPA can apply cost benefit analysis method to a carbon reduction project which must extend to an external project. CPAs should incorporate climate change consideration in budgeting property plant and equipment, which may be affected by changing climate. When the organizations will implement the recommended actions, CPAs maybe be involved in project management and financing. As implementation moves forward, organization will need to assess progress and performance. CPAs help set the targets and evaluate the results. CPAs can measure performance against targets. They also measure the impact of climate change on assets. CPAs can dictate that accounting should not only be concern with some costs that are borne by the reporting entity. Carbon accounting addresses the interlinkages between sustainability, emission control and an entity. CPAs can report on organization's climate change risk, actions to address those risk and the result of such actions. Reporting occurs through a voluntary channel (Carbon Disclosure Project) or in sustainability reports and for public companies. Mandatory requirements such as Management Discussing and Analysis which is an appropriate place to discuss climate change-related risks, strategies, opportunities and financial impacts that are both reported in financial statements. CPAs should also consider climate change issues in the application of accounting standards such as asset impairment and the useful life of assets. Accountants are playing an increasing role in the accounting, compliance and reporting requirements of the corporate social responsibility and have considerable expertise in these areas. Organization responses to climate change require diverse skills. CPAs will engage as necessary with engineers, sustainability professionals, climate scientists and others.

The disturbing state of the environment brought about by continued emissions of GHG, particularly carbon dioxide has long been alarming global issue. It is not an understatement that increasing amounts of carbon dioxide and other greenhouse gases are heating up the earth's and the inaction could be catastrophic. We are now seeing a renewed focus on climate change and renewable energy sources. A number of government around the world have implemented schemes to reduce carbon emission levels and promote investments in alternative forms of energy. There are different scheme that exist to help to achieve these goals. The imposition alone of the carbon tax will combat the inefficient use of energy. Imposing it to sectors that emit carbon dioxide would help minimize GHG emissions. At the same time the estimated revenue from the proposed carbon tax could be used to finance environment related problems and projects of the government. Although climate change is irreversible, it is however, not unstoppable. There is now an accepted understanding that governments are no longer the only responsible agent in building sustainable societies. Corporate sectors and private sectors are crucial in creating green growth outcomes and sustainable development.

Carbon Accounting provides us with the tools not only to quantify and measure carbon emission but also to help us make informed decisions in regards to mitigation strategies. How much carbon is being emitted? Who is responsible for these emissions? Which methods should we employ to achieve the greatest carbon reductions? Are there strategies or policies which appear "green" but could actually increase our carbon emissions. Carbon accounting can help us answer all the questions and that it is vital that a standard is developed to provide a framework for carbon emission accounting in addition, give the stakeholders the information that they require.

A standard is needed to allow comparability among the different companies and across all countries. Standard is needed to assure consistency, transparency, and verifiability of financial information. Until the standard setters issue a final standard, management will have to exercise judgement and select an appropriate method for accounting for carbon emission. Regardless of the accounting approach adopted, the need to communicate clearly with stakeholders and other users of the financial report about how the entity's performance and overall value has been, and will be, affected by the relevant scheme is very important and should be the top priority.

There is a clear need for a market to become more "climate literate". Market need a better way of dealing with carbon emission accounting. The regulator of the world's stock market have already established links with reserves reporting bodies, but the disclosure of the GHG data and climate risk analysis not being fully aligned with international frameworks. The reporting of critical data like GHG potential reserve should be integrated into listing requirements. Otherwise, material information will not be supplied to investors in a timely fashion to prevent future impairment of assets.

The government should establish technology neutral policies, which enable cost effective renewable energy to grow and contribute to greenhouse gas emission reduction while ensuring reliable affordable supply of electricity. Financial support should be available for research and technology development. Energy efficient measures have a large potential saving energy and reducing greenhouse gases emission worldwide. Government should set energy efficient standards, encourage manufacturers to provide correct and easy to understand information and take necessary action to raise public awareness.

A review of literature suggest that role of accounting in climate change is still controversial. Following the literature that suggest that accounting should critically engage with business for sustainability, I conclude that carbon accounting has a potential to help even for profit seeking entity to reduce its carbon emissions as firms cannot make profit if it continues to manufacture carbon intensity products.

Global warming is having a significant impact on the environment and business operations. The company's current profitability has been negatively or significantly impacted by environmental issues with the increased cost of inputs highlighted as one of the most consequence. The accounting profession has made a progress on sustainability reporting and integrated reporting. With major exchanges around the world strengthening their requirements for listed companies to disclose their environmental, social and governance obligations. The role of accountants, beyond reporting, in implementing sustainability-related initiatives to address environmental issues for companies. Accountant are key to making appropriate investment decisions. To truly save the world, CPA should see questions about sustainability as being under their remit. Accountant cannot save the planet as long as they are accounting for corporations whose sole legal imperative is profit maximization.

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# Analisis Faktor Tekanan Yang Mempengaruhi Pelajar Kolej Komuniti Negeri Johor Ketika Perintah Kawalan Pergerakan

(Analysis Of Stress Factors Affecting Johor Community College Students During Movement Control Order)

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Abstrak: Pelaksanaan Perintah Kawalan Pergerakan (PKP) telah memberikan kesan yang pelbagai terhadap masyarakat, tidak kira dalam apa jua lapangan sektor yang mereka ceburi. Arahan penguatkuasaan untuk kekal berada di rumah telah menyumbang kepada penutupan semua jenis pengoperasian begitu juga sektor pendidikan. Bagi Institusi Pengajian Tinggi yang berasaskan kemahiran, perlaksanaan PKP ini telah menimbulkan kesulitan yang tersendiri di kalangan pelajar. Hal ini sedikit sebanyak menimbulkan tekanan dalam diri mereka. Justeru, kajian ini akan mengetengahkan aspek tekanan yang dihadapi oleh pelajar Kolej Komuniti Negeri Johor dan melihat faktor tekanan yang mempengaruhi sikap pelajar ketika fasa PKP. Hal ini boleh dijadikan data awalan kepada pihak pengurusan Kolej Komuniti khususnya di peringkat Jabatan Pengajian Politeknik & Kolej Komuniti untuk menyusun pendekatan yang bersesuaian sekiranya berlaku fasa kesulitan tidak terjangka seperti pandemik Covid 19 ini, dalam memastikan kesinambungan proses pembelajaran semasa. Kajian ini menggunakan pendekatan kuantitatif dengan edaran soal selidik yang dijana melalui perisian 'google form' kepada 681 orang responden, yang terdiri daripada para pelajar dari 12 buah Kolej Komuniti Negeri Johor. Analisis kajian ini menunjukkan 98.2% pelajar Kolej Komuniti Negeri Johor dengan penguatkuasaan bersikap positif PKP, atas faktor keselamatan diri. Walaubagaimanapun, perlaksanaan PKP ini juga turut memberikan tekanan pada diri mereka dari sudut pengurusan masa, akademik dan juga motivasi diri apabila penganalisisan secara Regressi telah menunjukkan elemen akademik sebagai kebimbangan dan tekanan yang paling mempengaruhi sikap pelajar ketika berhadapan fasa PKP.

Kata kunci: Perintah Kawalan Pergerakan, Tekanan Pelajar, Kolej Komuniti Negeri Johor

**Abstract:** The implementation of the Movement Control Order (MCO) has had a diverse impact on society, regardless of whatever sector they are involved in. Enforcement instructions to remain at home have contributed to the closure of all operations and the education sector. For skills-based Institutions of Higher Learning, the implementation of the MCO has created distinctive difficulties among students. The MCO slightly puts stresses on themselves. Thus, this study will highlight the aspects of stress faced by students of Johor State Community College and look at the stress factors affecting students' attitudes during the MCO phase. This study can be preliminary data for the management of Community Colleges, especially at the Department of Polytechnics & Community Colleges level, to organize appropriate approaches in unexpected inconvenience phases such as the COVID 19 pandemic, in ensuring the continuity of the current learning process. This study used a quantitative approach with the google form software-generated questionnaire distributed to 681 students as the respondents from 12 Johor State Community Colleges. This study analysis showed that 98.2% of Johor State Community College students were positive with MCO enforcement due to personal safety factors. However, the MCO implementation also puts stresses on themselves from the point of time management, academic, and self-motivation when regression analysis has shown academic elements as the concerns and stresses that mostly influenced students' attitudes when facing the MCO phase.

Keywords: Movement Control Order, Student Stress, Johor State Community College

#### 1. Pengenalan

Penularan wabak coronavirus (COVID-19) yang muncul di penghujung Disember 2019 di Bandar Wuhan, China telah mengakibatkan satu ancaman peringkat global (Chakraborty & Maity, 2020) Pelbagai langkah kawalan dan pencegahan yang telah dijalankan oleh pihak berkuasa Wuhan ketika itu bagi mengurangkan risiko penularan wabak tersebut. Walaubagaimanapun, dalam satu tempoh masa penyakit ini telah mula dikesan di beberapa negara lain, sehingga membawa kepada pengisytiharan wabak ini sebagai pandemik. Jika dilihat pada statistik semasa sehingga 21 Julai 2020 melalui laporan data terbaru daripada Universiti John Hopskin, yang telah mewujudkan Pusat Khas Sumber Coronavirus mengatakan, berlakunya pertambahan lebih 220,000 kes baharu dalam tempoh 24 jam. virus ini telah merebak dan kes terkumpul adalah mencecah sehingga 14.6 juta kes dan mengakibatkan 608000 jumlah kematian (Berita Harian, 21 Julai 2020). Pada ketika ini juga, Negara Amerika, Brazil, India dan Rusia mendahului dari negara yang teruk dijangkiti dengan kes positif.

Peningkatan kes yang pesat telah menimbulkan ketakutan masyarakat di seluruh dunia. Keadaan ini mewujudkan rasa kebimbangan akan kesan yang berlaku saban hari. Sebagai langkah pencegahan, kebanyakan negara telah menguatkuasakan perintah kawalan pergerakan (PKP) dalam usaha memutuskan rantaian wabak ini (Munthali & Xuelian, 2020). Pelaksanaan ini menuntut kepada langkah-langkah ekstrim seperti penjarakan sosial, sekatan melangkaui negeri, larangan terhadap segala aktiviti sosial yang membawa kepada bentuk perhimpunan secara kontak di pelbagai sektor dan penutupan sekolah (Ekienabor, 2020). Hal ini telah menyumbang kepada tekanan masyarakat dalam apa jua sektor yang mereka ceburi.

Walaupun keputusan ini harus diterima oleh semua pihak, ianya tetap menimbulkan pelbagai persoalan kalangan masyarakat berkaitan tempoh masa yang harus dilalui dalam situasi kawalan pergerakan ini. Pengalaman Malaysia, pelaksanaan perintah kawalan pergerakan yang dikuatkuasakan pertama kalinya mengikut Akta Pencegahan dan Pengawalan Penyakit Berjangkit 1988 serta Akta Polis 1967, bermula 18 Mac 2020 sehingga 31 Mac 2020 telah menyaksikan kawalan peraturan terhadap beberapa aktiviti sosial. Tidak sekadar berakhir pada tarikh 31 Mac 2020, malahan fasa tempoh perintah kawalan pergerakan telah disambung beberapa fasa ke hadapan dengan kelonggaran berperingkat sehingga fasa terkini iaitu Perintah Kawalan Pergerakan Pemulihan (PKPP) yang dijadualkan berakhir pada 31 Ogos 2020.

Asasnya, pelaksanaan Perintah Kawalan Pergerakan ini telah memberikan kesan pelbagai terhadap masyarakat, tidak kira dalam apa jua lapangan sektor mereka. Dalam konteks pendidikan misalnya, rentetan daripada penutupan pusat pengajian telah menuntut kepada pelaksanaan pembelajaran secara dalam talian. Tidak sekadar di Malaysia, malahan ianya menjadi alternatif pilihan bagi sistem pendidikan di negara yang terjejas dengan wabak ini (Moawad, 2020) Demikian, medium pembelajaran secara dalam talian telah diketengahkan secara meluas bagi memastikan kesinambungan pembelajaran sedia ada. Walaupun medium ini bukanlah suatu yang asing bagi beberapa aliran pendidikan di negara maju, tetapi bagi segelintir aliran pendidikan yang tidak sinonim dengan medium sebegini sudah pasti akan membangkit beberapa permasalahan terhadap keupayaan berurusan dengan teknologi sedia ada.

Tidak terkecuali, Kolej Komuniti Segamat turut memainkan peranan penting terhadap para pelajar supaya aspek pembelajaran yang sepatutnya diadakan secara bersemuka dapat diselesaikan mengikut penetapan takwim pengajaran dan pembelajaran semasa. Pihak pengurusan kolej juga bersama bahagian pembangunan pelajar sentiasa cakna akan keperluan dan kebajikan para pelajar yang masih berada di kediaman sewa masing-masing dan tidak dapat pulang ke kampung sebelum dikuatkuasakan fasa PKP.

Pengalaman dan situasi ini sudah pasti memberikan tekanan yang pelbagai kepada individu. Tidak kira dalam peranan dan kapasiti apa yang mereka lalui, ianya akan memberikan kesan berbeza terhadap diri. Hal ini turut dialami penduduk global. Penularan wabak ini telah mendatangkan tekanan, kemurungan dan kegelisahan kalangan masyarakat yang harus berdepan dengan ketakutan akan kesan buruk yang mendatang (Wang et.al, 2020). Apatah lagi dalam konteks pelajar, semestinya tekanan yang dialami boleh menyumbang kepada kurangnya motivasi terhadap pelajaran kerana mereka perlu berhadapan dengan tekanan pembelanjaran secara bersendirian tanpa bimbingan secara langsung di institusi pengajian (Thomas, 2020)

Justeru, kajian ini akan melihat aspek tekanan yang dihadapi kalangan pelajar Kolej Komuniti negeri Johor dalam mendepani fasa kesulitan melalui proses pembelajaran dari rumah ketika tempoh Perintah Kawalan Pergerakan (PKP) di musim penularan pandemik ini. Berbekalkan tujuan ini, digariskan tiga persoalan kajian iaitu :

- 1) Bagaimanakah sikap pelajar terhadap Perintah Kawalan Pergerakan?
- 2) Sejauh manakah aspek pengurusan masa, pengurusan dan motivasi kendiri serta pengurusan akademik menyumbang kepada tekanan kalangan pelajar Kolej Komuniti Zon Johor?
- 3) Apakah elemen tekanan yang paling memberi pengaruh terhadap sikap pelajar ketika Perintah Kawalan Pergerakan?

Bagi persoalan kajian ketiga, ianya merupakan persoalan dalm bentuk fasa kuantitatif berserta hipotesis yang mana mengetengahkan hipotesis tertentu iaitu :

Hipotesis 1 : Wujud kesan signifikan antara tekanan masa kepada sikap pelajar.

H0 1a: Tidak terdapat kesan antara tekanan masa kepada sikap pelajar. HA 1b: Terdapat kesan tekanan masa kepada sikap pelajar. Hipotesis 2 : Wujud kesan signifikan antara tekanan pengurusan dan motivasi diri kepada sikap pelajar.

H0 2a: Tidak terdapat kesan antara tekanan tekanan pengurusan dan motivasi diri kepada sikap pelajar.

HA 2b: Terdapat kesan tekanan pengurusan dan motivasi diri kepada sikap pelajar.

Hipotesis 3 : Wujud kesan signifikan antara tekanan akademik kepada sikap pelajar.

H0 3a: Tidak terdapat kesan antara tekanan akademik kepada sikap pelajar.

HA 3b: Terdapat kesan tekanan tekanan akademik kepada sikap pelajar.

Justeru, kesemua persoalan kajian yang diketengahkan ini menggariskan tiga objektif kajian iaitu :

- 1) Mengenalpasti sikap pelajar terhadap Perintah Kawalan Pergerakan.
- 2) Mengenalpasti tekanan yang dialami pelajar Kolej Komuniti Zon Johor dari aspek pengurusan masa, pengurusan kendiri dan pengurusan akademik.
- 3) Menganalisis elemen tekanan yang paling memberi pengaruh terhadap sikap pelajar ketika Perintah Kawalan Pergerakan.

Dapatan kajian ini boleh membantu pelajar dan pihak pengurusan institusi Kolej Komuniti untuk mengenal pasti kesinambungan pengurusan diri dan akademik pelajar ketika berada dalam fasa kesulitan seperti fasa PKP ini. Hal ini membolehkan pihak pengurusan institusi menyusun dan merancang inisiatif tambahan yang boleh membantu para pelajar mengendalikan pengurusan akademik kendiri dengan lebih berkesan tanpa sebarang tekanan, walau berhadapan dengan apa jua fasa kesukaran semasa.

#### 2. Ulasan Kajian Lepas

#### Pandemik COVID-19 dan penguatkuasaaan Perintah Kawalan Pergerakan (PKP)

Wabak COVID-19 di Malaysia bermula sebagai suatu gelombang kecil pada Januari 2020 melalui kes yang diimport. Kemudian diikuti dengan gelombang yang lebih besar melibatkan penghantaran tempatan yang mana akhirnya menggesa kerajaan untuk memilih langkah yang lebih ketat. Pendekatan Perintah Kawalan Pergerakan (PKP) telah dimulakan serta-merta hampir ke seluruh negara sebagai satu cara untuk memutuskan rantaian jangkitan Covid 19. Kawalan ini bermula dengan fasa pertama PKP yang diumumkan oleh Perdana Menteri Malaysia, Tan Sri Muhyiddin Yasin pada 18 Mac 2020 sehingga 31 Mac 2020.

Tidak sekadar berakhir pada 31 Mac 2020, seterusnya dilanjutkan bermula 1 April 2020 hingga 14 April 2020 bagi fasa kedua PKP, 15 April 2020 hingga 28 April 2020 untuk fasa ketiga, dan 29 April 2020 hingga 12 Mei 2020 bagi fasa keempat. Walaubagaimanapun, sebelum berakhirnya tempoh PKP fasa keempat, kerajaan terlebih dahulu telah mewartakan Perintah Kawalan Pergerakan Bersyarat (PKPB) berkuatkuasa 4 Mei 2020, yang akhirnya membatalkan PKP fasa keempat.

Berbekalkan nasihat Kementerian Kesihatan Malaysia, PKPB yang sepatutnya berakhir pada 12 Mei 2020, diteruskan lagi sehingga 9 Jun 2020. Terkini, kerajaan mengambil langkah kelonggaran terhadap kebanyakan aktiviti sosial secara berperingkat, tetapi masih tertakluk

kepada prosedur operasi standard yang ditetapkan apabila fasa ini diteruskan dengan Perintah Kawalan Pergerakan Pemulihan (PKPP) berkuatkuasa 10 Jun 2020 hingga 31 Ogos 2020 (Pejabat Perdana Menteri Malaysia Laman Web Rasmi, 2020)

Akibat daripada pelaksanaan PKP, masyarakat telah menjalani kehidupan luar dari kebiasaan selalu. Menahan diri untuk berada dalam kediaman masing-masing dalam tempoh yang agak lama bukanlah suatu yang mudah untuk sebahagian individu (Eikhwan Ali & Mahirah A Rashid, 2020) Walaupun sebenarnya banyak kelebihan yang boleh diperolehi dengan hanya berada di kediaman masing-masing tanpa sebarang rutin pekerjaan seperti kebiasaannya, kesan turut dirasai dalam pelbagai segmen kehidupan masyarakat. Penutupan sektor-sektor ekonomi, pendidikan, pelancongan dan rekreasi serta pelbagai aktiviti sosial yang lain telah menganggu kesejahteraan emosi dan memberikan tekanan kepada sebahagian masyarakat yang terlibat langsung dan tidak langsung (Eikhwan Ali & Mahirah A Rashid, 2020). Walaupun tekanan ini adalah suatu tindak balas normal dalam mendepani krisis, ianya tetap perlu dipantau supaya tidak membawa kepada masalah kesihatan mental yang lain seperti kemurungan, keresahan, kecelaruan bipolar dan skizofrenia (Eikhwan Ali & Mahirah A Rashid 2020.

#### Tekanan Pelajar

Golongan pelajar khususnya mahasiswa merupakan kelompok sinonim yang akan melalui fasafasa kesulitan dan tekanan dalam proses pembelajaran di institusi. Kehidupan di institusi pengajian menuntut untuk mereka bijak menyeimbangkan pelbagai peranan dan tugas yang perlu dilaksanakan (Mohammad Zaid et.al, 2009) Hal ini semestinya boleh mengundang kepada tekanan diri sekiranya ianya tidak dapat dikendalikan dengan baik (Norazila Mat et.al, 2018) Tekanan dapat didefinisikan sebagai tingkah laku yang menggambarkan perasaan seseorang mahasiswa dan boleh menghasilkan pemikiran negatif terhadap masalah yang dihadapinya (Baqutayan, 2011). Ada pandangan lain pula merumuskan tekanan sebagai suatu ketegangan fizikal dan psikologi yang dialami pelajar disebabkan faktor-faktor yang tidak dapat dikendalikan dan melebihi keupayaan mahasiswa untuk mengatasinya (Norazila Mat et.al, 2018). Melalui definisi-definisi ini, dapat dirumuskan bahawa tekanan merujuk kepada reaksi mahasiswa terhadap sesuatu situasi yang dihadapinya (Norazila Mat et.al, 2018).

Ironinya, tekanan yang kebiasaannya dihadapi mahasiswa lebih kepada tekanan akademik. Pengalaman merasai dunia yang berbeza dari lapangan persekolahan membawa kepada kejutan budaya kalangan mahasiswa kerana keperluan untuk mereka mengadaptasi proses pembelajaran, persekitaran sosial dan cara hidup semasa (Arif Johari & Saodah Ahmad, 2019). Kegagalan mahasiswa untuk menyesuaikan proses adaptasi dan memenuhi keperluankeperluan baharu boleh membawa kepada tekanan yang akan memberi implikasi pada kesejahteraan diri dan kemerosotan prestasi akademik (Dwyer & Cummings, 2001)

Justeru, dalam kesulitan pandemik COVID-19 ini, golongan pelajar tidak terkecuali dari menghadapi tekanan dalam aspek pembelajaran mereka. Melalui kajian-kajian luaran daripada Grubic, Badovinac & Amer, Goothy et.al (2020), Roonie et.al (2020), pandemik ini sangat mempengaruhi motivasi diri dan membawa kepada tekanan pelajar terhadap proses PDP. Tekanan yang mereka lalui ini antaranya akibat keresahan keciciran dalam pelajaran, tekanan kemiskinan keluarga sendiri yang membawa kepada kurangnya aksesbiliti kemudahan internet untuk segala urusan pembelajaran mereka yang harus dijalani sepenuhnya secara dalam talian.

Jika ditelusuri, dapatan kajian lepas yang diketengahkan ini menunjukkan bahawa pandemik ini telah memberikan tekanan yang tersendiri kepada segenap lapisan masyarakat dan individu. Justeru kajian ini cuba mengisi kelompangan yang ada untuk menambahkan lagi dapatan kajian berkaitan tekanan yang dialami oleh pelajar dalam berhadapan fasa kesulitan PKP, umumnya melibatkan pelajar dalam lapangan Institusi Kemahiran, khususnya di Kolej Komuniti Negeri Johor.

# 3. Metodologi Kajian

# 3.1 Reka bentuk Kajian

Reka bentuk kajian merupakan kaedah dan teknik yang digunakan untuk mendapatkan maklumat bagi mencapai objektif kajian. Ianya sebagai panduan kepada pengkaji untuk mencapai objektif kajian dan menjawab persoalan kajian yang dijalankan menerusi beberapa prosedur tertentu (Othman Mohamed, 2001). Kajian ini umumnya menggunakan pendekatan kuantitatif, melalui kaedah tinjauan dengan edaran soal selidik yang dijalankan ke atas sampel kajian bagi mendapatkan maklumat mengenai pemboleh ubah berkaitan. Kajian tinjauan termasuk dalam kategori penyelidikan deskriptif yang perlu kepada pengumpulan data, membuat interpretasi, perbandingan dan merumuskan satu generalisasi terhadap sesuatu fenomena (Van Dalen, 1993)

# 3.2 Populasi dan Sampel Kajian

Populasi kajian ini terdiri daripada pelajar Kolej Komuniti Negeri Johor yang terdiri daripada 12 buah Kolej Komuniti iaitu Kolej Komuniti Segamat, Kolej Komuniti Segamat 2, Kolej Komuniti Ledang, Kolej Komuniti Muar, Kolej Komuniti Pagoh, Kolej Komuniti Batu Pahat, Kolej Komuniti Kluang, Kolej Komuniti Tanjung Piai, Kolej Komuniti Pasir Gudang, Kolej Komuniti Bandar Penawar, Kolej Komuniti Kota Tinggi dan Kolej Komuniti Bandar Tenggara. Populasi seramai 1115 orang ini datangnya dari pelbagai program pengajian di peringkat sijil dan diploma.

Merujuk kepada pendapat Mokhtar (2011) tiada konsep khusus dalam menentukan saiz sampel minimum dalam penyelidikan sosial. Pendapat yang sama dipegang Bailey dengan menyatakan bahawa saiz sampel yang sebenar bergantung pada keadaan populasi dan keperluan penyelidikan. Justeru, menggunakan pendekatan sinonim dalam penentuan saiz sampel kajian, kajian ini telah menggunakan penetapan Krejcie dan Morgan (1970) dengan aras keyakinan 95% yang mana hanya memerlukan sekitar 300 orang responden sahaja.

Namun, kajian ini telah mengambil sampel yang lebih daripada jumlah yang dicadangkan, iaitu seramai 600 orang dan teknik ini turut digunakan dalam beberapa kajian, antaranya Rashidi (2003) dan Ilhaamie (2008) Pemilihan sampel yang memenuhi kriteria ini penting bagi tujuan generalisasi sampel kepada populasi sebenar yang lebih besar.

#### 3.3 Instrumen Kajian

Instrumen bagi kajian ini adalah dengan menggunakan set borang soal selidik yang diadaptasi dan dimodifikasi dari kajian lepas seperti Ummi Kalsom Zakaria (2014), dan seterusnya borang soal selidik ini dijana menggunakan platform 'google form' dan diedarkan kepada semua esponden untuk dijawab. Terlebih dahulu sebelum diedarkan, soal selidik ini telah disahkan oleh dua orang pakar bidang yang melihat kesahan kandungan dan teknikaliti soal selidik tersebut.

Borang soal selidik ini terbahagi kepada empat bahagian utama (A hingga D), tetapi mengandungi bilangan item yang berbeza-beza mengikut kesesuaian dan keperluan objektif kajian. Konstruk di bahagian A untuk melihat sikap responden terhadap penguatkuasaan PKP yang terdiri lima item. Bahagian B pula untuk melihat tekanan responden terhadap pengurusan masa dengan enam item soalan. Manakala di bahagian C untuk melihat tekanan responden terhadap pengurusan terhadap pengurusan kendiri atau motivasi diri dengan lima item soalan. Bahagian terakhir iaitu D dengan tujuh item soalan untuk melihat tekanan terhadap pengurusan akademik atau pembelajaran.

Keseemua item soal selidik tersebut mengkehendaki responden untuk memberikan maklum balas terhadap pernyataan yang disediakan berdasarkan skala likert yang terdiri daripada tahap 1 = sangat tidak setuju sehingga tahap 5 = sangat setuju.

3.4 Analisa Kebolehpercayaan

Bagi memastikan kebolehpercayaan soal selidik yang digunakan, terlebih dahulu dijalankan kajian rintis terhadap 30 orang pelajar di salah satu Kolej Komuniti di Sabah. Seterusnya data dianalisis melalui proses analisa kebolehpercayaan bagi mendapatkan nilai Alpha Cronbach. Hasil menunjukkan kesesuaian soal selidik sebagai instrument kajian dengan nilai 0.8 selari dengan petunjuk interpretasi skor Alpha Cronbach oleh Bond & Fox (2015).

Skor Alpha Cronbach	Interpretasi Kebolehpercayaan
0.9 - 1.0	Sangat baik dan efektif dengan tahap konsistensi yang tinggi
0.7-0.8	Baik dan boleh diterima
0.6-0.7	Boleh diterima
< 0.6	Item perlu dibaiki
< 0.5	Item perlu digugurkan

Jadual 1 : Interpretasi Nilai Skor Alpha Cronbach

#### 3.5 Pengumpulan dan Analisis Data

Data dalam kajian ini yang telah dijana melalui perisian aplikasi 'google form' akan dikemukakan secara automatik kepada penyelidik dan dapatan tersebut akan dianalisis menggunakan perisian Statistical Package For Social Sciences (SPSS). Setelah itu, dapatan tersebut akan dihuraikan secara deskriptif (min dan sisihan piawai) serta statistik inferensi (Regressi Berbilang). Statistik deskriptif iaitu skor min digunakan untuk menjelaskan tahap tekanan pelajar terhadap aspek pembolehubah yang diketengahkan. Bagi tujuan ini, interpretasi skor min yang telah digunakan oleh Nunnaly dan Bernstein (1994) telah diaplikasikan seperti mana ditunjukkan dalam jadual 1.

Skor Min	Interpretasi Skor Min	
1.00 - 2.00	Rendah	
2.01 - 3.00	Sederhana rendah	
3.01 - 4.00	Sederhana tinggi	
4.01 - 5.00	Tinggi	

Jadual 2 : Skor min (Nunally & Bernstein, 1994)

Manakala bagi statistik inferensi, ujian regressi berbilang digunakan untuk melihat kesan serentak beberapa pembolehubah tidak bersandar terhadap pembolehubah bersandar (Rendal et.al, 2006). Dalam kajian ini, analisis terhadap pembolehubah tidak bersandar iaitu tekanan

masa, tekanan akademik, dan tekanan motivasi akan dilihat kesan serta kecenderungannya terhadap pembolehubah bersandar iaitu sikap pelajar.

Justeru ujian ini digunakan untuk menjawab objektif ketiga iaitu melihat elemen tekanan yang paling memberi pengaruh terhadap sikap pelajar ketika Perintah Kawalan Pergerakan, samada dari aspek tekanan pengurusan masa, tekanan pengurusan kendiri dan motivasi atau tekanan pengurusan akademik. Maka dapatan akan mengetengahkan aspek yang mana lebih signifikan dalam mempengaruhi sikap pelajar Kolej Komuniti Negeri Johor ketika perlaksanaan PKP.

Dalam fasa ujian inferensi ini, terlebih dahulu dilaksanakan ujian normaliti Kolmogorov-Smirnov untuk melihat data bertaburan secara normal atau tidak. Kenormalan data diperlukan bagi menjelaskan simentri data yang membentuk lengkongan atau kelok seperti loceng (Rahim Utah, 2013). Apabila data yang diuji mempunyai taburan normal, bermakna ianya telah menepati salah satu syarat untuk menggunakan ujian parametrik seperti mana dalam kajian ini iaitu ujian regressi berbilang. Hasil analisis melalui ujian normaliti yang dijalankan menunjukkan data bertaburan secara normal seperti mana Jadual 3 di bawah :

		MASA	AKADEMIK	MOTIVASI	SIKAP
Ν		610	610	610	610
	Mean	1.2994	1.1855	1.3365	.7497
Normal Parameters ^{a,b}	Std. Deviation	.06387	.11884	.08599	.04009
	Absolute	.096	.066	.078	.388
Most Extreme Differences	Positive	.096	.054	.049	.271
	Negative	074	066	078	388
Kolmogorov-Smirnov Z		2.362	1.620	1.938	9.574
Ap. Sig. (2-tailed)		.000	.011	.001	.000

Jadual 3 :	Ujian	Normaliti	Kolmogorov	Smirnov
	- J			

a. Test distribution is Normal.

#### 4. Analisis Dapatan dan Perbincangan

Dapatan kajian merangkumi keseluruhan aspek demografi responden (N=681) yang mana terdiri daripada 12 buah Kolej Komuniti Negeri Johor. Daripada responden ini, 388 orang (57.1%) didominasi oleh kelompok perempuan dan seramai 292 orang (57.1%) adalah dari kalangan responden lelaki. Responden ini juga keseluruhannya adalah pelajar di peringkat pengajian Sijil Kolej Komuniti (SKK) dan umumnya mereka berada dalam linkungan usia 18 sehingga 20 tahun iaitu sebanyak 593 orang (87.2%). Ini kerana, para pelajar yang berada dalam peringkat pengajian di Kolej Komuniti adalah golongan yang baru sahaja menamatkan pembelajaran di peringkat Sijil Pelajaran Malaysia (SPM). Institusi ini juga menjadi pilihan empat bangsa utama di Malaysia walaupun responden kajian ini didominasi oleh bangsa Melayu seramai 621 orang (91.3%). Bagi lokasi penempatan pula, kebanyakan pelajar adalah datang dari penempatan bandar seramai 416 orang (61.2%), manakala lokasi luar bandar hanya seramai 264 orang (38.8%). Rumusan demografi responden boleh dirujuk dalam jadual 1 di bawah :

Bil	Kategori	N = 681	Peratus (%)
	Institusi		
	Kolej Komuniti Segamat	143	21%
	Kolej Komuniti Segamat 2	35	5.1%
	Kolej Komuniti Ledang	63	9.3%
	Kolej Komuniti Muar	28	4.1%
	Kolej Komuniti Batu Pahat	46	6.8%
1	Kolej Komuniti Kluang	25	3.7%
	Kolej Komuniti Bandar Penawar	39	5.7%
	Kolej Komuniti Tanjung Piai	30	4.4%
	Kolej Komuniti Pagoh	52	7.6%
	Kolej Komuniti Bandar Tenggara	28	4.1%
	Kolej Komuniti Pasir Gudang	171	25%
	Kolej Komuniti Kota Tinggi	20	2.9%
	Jantina		
2	Lelaki	292	42.9%
	Perempuan	388	57.1%
	Umur		
	18-20 tahun	593	87.2%
3	21-25 tahun	82	12.1%
	26-30 tahun	0	0%
	31 tahun ke atas	4	0.6%
	Bangsa		
	Melayu	621	91.3%
4	Cina	9	1.3%
	India	42	6.2%
	Lain-lain	8	1.2%
	Lokasi		
5	Bandar	416	61.2%
	Luar Bandar	264	38.8%

#### Jadual 1 : Demografi Responden

#### 4.1 Sikap pelajar terhadap Perintah Kawalan Pergerakan (PKP)

Dapatan ini ingin melihat bagaimana sikap para pelajar Kolej Komuniti Negeri Johor terhadap penguatkuasaan PKP. Sedia dimaklumi akan penguatkuasaan PKP ini sebagai suatu langkah pencegahan dan usaha untuk memutuskan rantaian wabak covid 19. Walaubagaimanapun, penguatkuasaan ini sudah pasti menimbulkan rasa dan sikap yang berbeza-beza antara individu, termasuklah penerimaan responden di dalam kajian ini. Rumusan dapatan boleh dirujuk di jadual 4 di bawah :

Bil	Item	Peratus %		
1.	. Saya amat bersetuju dengan perlaksanaan PKP			
2.	2. Perlaksanaan PKP adalah sangat baik			
3.	Perlaksanaan PKP sangat penting bagi keselamatan saya	100		
4.	Saya mampu mematuhi arahan PKP	98.8		
5.	Saya merasa terbeban dengan situasi PKP kerana menyukarkan pergerakan dan tidak dapat berjumpa rakan-rakan saya	40.7		

Keseluruhannya, dapatan memperlihatkan sikap positif responden terhadap penguatkuasaan PKP ketika pandemik ini. Rata-rata mereka bersetuju bahawa perlaksanaan PKP ini penting untuk kesinambungan keselamatan diri masing-masing. Sungguhpun perlaksanaan PKP ini menuntut untuk kekal berada di rumah, rata-rata responden masih boleh menerima situasi ini dengan baik walaupun terdapat segelintir daripada mereka sebanyak 40.7% yang merasa terbeban dengan perlaksanaan PKP ini. Ini selari dengan kajian Arina et.al (2020) yang menyimpulkan akan sikap positif rakyat Malaysia terhadap perlaksanaan PKP dan bagaimana mendepaninya dengan keadaan yang cukup baik.

# 4.2 Tahap tekanan pelajar dari sudut pengurusan masa, pengurusan kendiri / motivasi diri dan pengurusan akademik dan pembelajaran.

Bahagian ini akan melihat sejauh mana tahap tekanan yang dialami pelajar dari aspek pengurusan masa, kendiri dan motivasi diri serta akademik. Walaupun dapatan menunjukkan sikap positif mereka terhadap perlaksanaan PKP, tetapi sedikit sebanyak fasa kesulitan ini menimbulkan tekanan tersendiri pada setiap individu. Jika dalam konteks responden ini, dengan peralihan pertukaran mode pembelajaran, pastinya memberikan kesan pada individu pelajar itu sendiri. Rumusan dapatan boleh dirujuk pada jadual 5 di bawah bagi aspek tekanan pengurusan masa :

Bil	Item	Skor	Sisihan	Tafsiran Min
B1	Saya lebih banyak menghabiskan masa dengan melayari internet dan menonton televisyen ketika di rumah	3.76	1.03	Sederhana
B2	Saya perlu mengendalikan pelbagai tugasan dalam tempoh masa yang singkat.	3.25	1.12	Sederhana
B3	Saya melakukan kerja yang lebih daripada kebiasaan normal saya di Kolej.	2.77	1.14	Sederhana
B4	Saya tidak mempunyai masa yang cukup untuk melakukan suatu tugasan yang diberikan.	2.45	1.17	Sederhana
В5	Saya dapat membahagikan masa dengan baik ketika di rumah berbanding di Kolej.	3.52	1.06	Sederhana
B6	Saya akan pastikan setiap tugasan yang diberikan pensyarah dapat diselesaikan.	4.18	0.927	Tinggi
	Nilai Purata Keseluruhan	3.32	1.07	Sederhana Tinggi

Jadual 5 : Tekanan Pengurusan Masa

Bagi aspek tekanan pengurusan masa, dapatan menunjukkan responden turut merasai tekanan dalam menguruskan keseimbangan masa ketika berada di rumah. Ini kerana, pada ketika tempoh penguatkuasaan PKP ini, responden masih berada di peringkat akhir bagi semester sesi Disember 2019 yang sepatutnya berakhir pada bulan hujung April 2020. Hal ini membuatkan para pelajar harus membahagikan masa dengan baik walaupun berada di rumah kerana terdapat banyak tugasan yang perlu diselesaikan mengikut takwim akademik yang telah ditetapkan. Ini dapat dilihat pada item B6 yang menunjukkan skor min yang tinggi (4.18) memberikan petunjuk bahawa berada di rumah tidak mematahkan semangat mereka untuk tetap melakukan tugasan pembelajaran seperti mana kebiasaan mereka di Institusi.

Seterusnya bagi aspek tekanan pengurusan kendiri atau motivasi diri, secara puratanya hanya menunjukkan skor min sederhana tinggi sebanyak 3.12. Ini memperlihatkan keseimbangan mereka dalam mengawal motivasi diri mereka untuk memahami fasa kesulitan yang berlaku.

Jadual 6 : Tekanan Pengurusan Kendiri / Motivasi Diri

Bil	Item	Skor	Sisihan	Tafsiran
C1	Saya kerap berasa bosan sepanjang di rumah.	3.43	1.26	Sederhana
C2	Saya kerap muram dan marah apabila di rumah	2.40	1.20	Sederhana
C3	Saya berasa resah dalam tempoh PKP ini kerana terperap di rumah	2.94	1.33	Sederhana
C4	Saya berasa sangat letih dari segi emosi dan fizikal kerana tiada pergaulan bersama rakan seperti mana di Kolej.	2.90	1.32	Sederhana
C5	Saya berasa sangat tidak sabar untuk kembali semula ke Kolej.	3.97	1.08	Sederhana Tinggi
	Nilai Purata Keseluruhan	3.12	1.23	Sederhana Tinggi

Rumusan dapatan bagi aspek ini dapat dilihat dalam Jadual 6 di bawah :

Responden mengakui akan kebosanan berada di rumah berbanding kebiasaan selalu berada di Institusi bersama rakan-rakan dengan nilai skor min 3.43. Mereka juga bersetuju dengan skor min yang agak tinggi iaitu 3.97 untuk segera kembali ke Institusi berbanding berada di rumah. Walaupun demikian, rasa dan keinginan yang tinggi untuk memulakan kembali pengkuliahan di Institusi tidak lah membawa kesan buruk pada pengurusan emosi mereka kerana item-item yang menjurus pada aspek emosi kendiri hanya mencatatkan nilai sederhana rendah. Ini dapat dilihat pada item C2, C3 dan C4 yang menunjukkan kestabilan emosi para pelajar dalam mengawal rasa resah, marah walaupun berada dalam fasa kekal di rumah, dan jauh dari kebiasaan normal kehidupan sosial di institusi. Dapatan ini menunjukkan perbezaan dengan kajian Kapasia et.al (2020) yang mana dijalankan terhadap sekumpulan pelajar di daerah barat Bhagal India, apabila rata-rata responden menyatakan keresahan dan tekanan melampau dengan situasi pandemik ini kerana tidak dapat meneruskan sesi pembelajaran seperti kebiasaan dan hanya kekal di rumah.

bagi para pelajar dapat dirujuk pada Jadual 7 di bawah.

Manakala bagi aspek tekanan pengurusan akademik yang mana menjadi kebimbangan utama

Bil	Item		Sisihan	Tafsiran
DII			Piawai	Min
D2	Saya kurang memberi tumpuan semasa melaksanakan sesuatu	2.89	1.22	Sederhana
$D_{2}$	tugasan di rumah.	2.89	1.22	Rendah
D3	Saya berpendapat bahawa berlaku peningkatan kelalaian dalam	3.06	1.23	Sederhana
D3	menjalankan tugasan kerana berseorangan	5.00	1.23	Tinggi
D4	Saya tidak bersemangat untuk melaksanakan tugasan Kolej	2.94	1.24	Sederhana
D4				Rendah
	Saya mempunyai peluang untuk menghasilkan kerja yang lebih			Sederhana
D5	baik dengan usaha saya sendiri tanpa pengaruh daripada	3.32	1.09	Tinggi
	rakan. ketika di rumah.			
D6	Kualiti tugasan saya lebih bagus apabila di rumah berbanding	3.02	1.00	Sederhana
20	ketika saya di Kolej.	5.02	1.00	Tinggi
	Saya merasa terbeban dengan perlaksanaan PDP dari rumah			
D7	kerana banyak kekangan terhadap aspek kemudahan dan fasiliti	3.39	1.24	Sederhana
D7	seperti komputer, notebook, internet yang baik serta instrument	5.57	1.27	Tinggi
	lain yang diperlukan untuk amali dan projek			

Jadual 7 : Tekanan Pengurusan Akademik

Nilai Purata Keseluruhan	3.07	1.17	Sederhana Tinggi	
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Jika dilihat, rata-rata pelajar mengakui akan bebanan yang dirasai dengan perlaksanaan PDP dari rumah apabila nilai skor min menunjukkan 3.39 bagi item D7. Asasnya, walaupun para pelajar kurang memberikan fokus dan tumpuan bagi menjayakan sesi pembelajaran dari rumah seperti mana item D1, D2 dan D4 dengan skor min 2.90, 2.89 dan 2.94, tetapi mengekalkan rasa kebertanggungjawaban terhadap akademik itu masih tinggi dalam kalangan pelajar apabila mereka masih boleh menghasilkan mutu kerja yang lebih baik berbanding berada di Institusi. Ini dapat dilihat pada item D5, dengan nilai skor min 3.32. Dapatan ini nyata berbeza dengan kajian Pajarianto et.al (2020) dan Elmer et.al (2020) yang mengetengahkan hasil membimbangkan terhadap responden mereka yang terdiri dari kalangan pelajar-pelajar yang majoritinya berada dalam fasa tekanan dalam menguruskan perihal akademik mereka.

# 4.3 Analisis tekanan yang memberi pengaruh terhadap sikap pelajar ketika Perintah Kawalan Pergerakan.

Selanjutnya, dapatan ingin mengetengahkan apakah elemen tekanan yang paling memberikan kesan terhadap sikap pelajar ketika fasa PKP ini. Menggunakan Ujian Regressi Linear Berganda, faktor peramal yang paling dominan terhadap faktor terikat dapat dirumuskan dalam Jadual 8 dan 8.1 di bawah :

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	.088	3	.029	19.938	.000 ^b
1	Residual	.891	606	.001		
	Total	.979	609			

Jadual 8 : Jadual ANOVA untuk analisis Regressi Keseluruhan

a. Dependent Variable: SIKAP

b. Predictors: (Constant), MOTIVASI, MASA, AKADEMIK

Dalam analisis ANOVA, menunjukkan kesan serentak faktor peramal terhadap faktor terikat apabila ketiga-tiga elemen tekanan iaitu masa, motivasi kendiri dan akademik mempengaruhi sikap pelajar ketika PKP secara keseluruhan dengan nilai F=19.938, p = 0.00 < 0.05. Manakala jika dirujuk pada Jadual 9 pula, yang menilai faktor peramal secara individu terhadap faktor terikat dapat di rumuskan seperti berikut:

	Model	Unstandardized Coefficients		Standardized Coefficients		4	Si a
		В	Std. Err	or	Beta	ι	Sig.
1	(Constant)	.856	.035			24.258	.000
	MASA	.013	.026		.021	.516	.606
	AKADEMIK	101	.014		300	-7.099	.000
	MOTIVASI	003	.02	l	006	130	.896

Jadual 8.1 : Jadual Coefficient untuk analisis Regressi secara individu Coefficients^a

a. Dependent Variable: SIKAP

Jadual Coefficient (pekali) memperlihatkan diantara ketiga-tiga elemen tekanan yang ada, hanya tekanan akademik sahaja yang mempengaruhi sikap pelajar ketika PKP dengan nilai  $\beta$  = -7.099, p = 0.00 < 0.05. Dapatan ini menunjukkan keselarian dengan perbincangan kajiankajian lalu yang telah dinyatakan dalam bahagian sebelum ini seperti Kapasia et.al (2020), Pajarianto et.al (2020) dan Elmer et.al (2020) apabila kebimbangan terhadap aspek akademik sangat mempengaruhi pelajar dalam mendepani fasa kesulitan ini. Hal ini menjadi kerisauan biasa dalam kalangan pelajar kerana aspek akademik adalah perkara utama yang harus dilalui oleh golongan pelajar dalam memastikan kesinambungan kerjaya masa hadapan. Justeru dapatan ini secara langsung menerima hipotesis alternatif HA 3b dan menolak keseluruhan hipotesis 1, 2 dan hipotesis nol H0 3a kerana wujudnya kesan signifikan secara statistik pada tekanan akademik dan sikap pelajar.

# 5. Cadangan dan Kesimpulan

Pandemik yang melanda negara ketika ini sudah cukup menimbulkan kegusaran dalam kalangan rakyat. Hal ini dilalui dan dirasai oleh segenap penduduk dunia. Demikian itu, pelbagai pendekatan diambil oleh Kerajaan untuk setiap aspek kehidupan sosial masyarakat bagi memastikan keselamatan rakyat.

Demikian itu, perlaksanaan PKP adalah langkah selamat yang dikuatkuasakan kerajaan bagi mengawal penularan pandemik ini dengan lebih buruk. Sungguhpun perlaksanaan ini mendatangkan kegusaran, kerisauan dan tekanan pada individu, tetapi inilah norma baharu yang harus dilalui sebagai usaha dan langkah keselamatan diri. Tidak dinafikan ianya menimbulkan tekanan pada individu, khusus dalam konteks pelajar. Justeru dalam konteks ini, beberapa cadangan boleh diteliti di peringkat pengurusan institusi untuk sentiasa bersedia berhadapan dengan fasa kesulitan tidak terjangka seperti situasi ini.

- i. Meningkatkan keupayaan inovatif pensyarah dalam menghasilkan inovasi PDP yang boleh menambahbaik stail pembelajaran konvensional. Pendekatan ini boleh menjimatkan masa dalam proses PDP dan mengurangkan risiko keciciran penyampaian maklumat kepada pelajar sekiranya berhadapan fasa sebegini.
- ii. Menggalakkan médium pembelajaran digital dalam kalangan pensyarah teknikal di Institusi Kemahiran. Walaupun skop pengajaran utama bidang teknikal adalah secara 'hands on', tetapi perkara ini boleh diteroka oleh pensyarah untuk menyeimbangkan sesi pembelajaran di antara dua mode utama iaitu mod bersemua (tradisional) dan mod pembelajaran dalam talian. Ini bagi memastikan sesi pembelajaran tidak tergendala sekiranya berhadapan dengan fasa kesulitan seperti yang berlaku dalam situasi ini.

Secara konklusinya, berdasarkan dapatan kajian yang telah dihuraikan dan dianalisis, keseluruhannya telah merumuskan dan menjawab persoalan dan hipotesis kajian. Justeru, dalam konteks ini, ianya menjadi inisiatif pensyarah untuk mengadaptasi pelbagai kemahiran teknologi yang boleh membantu memudahkan proses PDP supaya dapat mengurangkan tekanan melibatkan akademik dalam kalangan pelajar sekiranya berhadapan dalam apa jua fasa kesulitan yang menghalang dari médium pembelajaran konvensional.

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# Hubungan Tahap Pendidikan Terhadap Pendekatan Dakwah Di Kalangan Warga Uitm Johor Kampus Pasir Gudang

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Abstrak: Kajian ini membincangkan tentang pendekatan dakwah berkesan terhadap warga UiTM Johor Kampus Pasir Gudang. Pada masa kini, masyarakat Malaysia sememangnya telah terdedah kepada pelbagai medium dakwah seperti media massa secara digital mahupun cetak. Kebanyakan daripada mereka telah memiliki tahap pendidikan yang tinggi. Namun demikian tahap pendidikan yang tinggi, tidak menjamin nilai murni dan akhlak mulia dalam diri seseorang. Peningkatan kes-kes jenayah serta krisis moral turut mengundang permasalahan dalam memacu pembangunan modal insan dan negara. Pendidikan formal yang diadakan di sekolah juga sebenarnya belum cukup untuk membentuk diri seseorang menjadi insan yang sempurna dan baik akhlaknya. Sehubungan dengan itu, peranan dakwah dilihat perlu mengambil tempat untuk mengisi kelompongan dalam permasalahan kebejatan sosial dalam kalangan masyarakat di Malaysia. Oleh yang demikian, kajian ini dilaksanakan bagi mencapai dua objektif iaitu pertama; mengenalpasti pendekatan dakwah berdasarkan tema, kaedah dan tempat dakwah di kalangan warga UiTM Pasir Gudang dan kedua; melihat hubungan pendidikan terhadap pendekatan dakwah di kalangan warga UiTM Pasir Gudang. Seramai 305 responden telah dipilih dalam kajian untuk mengenalpasti tarikan utama mereka ke program agama. Dalam kajian ini kaedah kuantitatif telah digunakan untuk mencapai objektif kajian. Dapatan kajian bagi objektif pertama menunjukkan bahawa kebanyakan responden telah memilih tema akhlak diikuti akidah dan seterusnya sirah nabi. Responden juga lebih menyukai kaedah penyampaian berbentuk motivasi, kemasyarakatan dan digital. Mereka juga gemarkan dakwah yang diadakan secara percuma seperti di Pusat Islam, masjid atau surau yang turut menyediakan makanan dan minuman. Dari sudut dapatan kajian bagi objektif kedua, hanya beberapa item sahaja yang mempunyai hubungan di antara pendidikan dengan pendekatan dakwah. Menerusi item tema, Cinta Perkahwinan, Mualamat Ekonomi Islam dan Politik menjadi tarikan warga kampus. Manakala dalam kaedah penyampaian pula, dakwah dalam bentuk pertandingan dan disampaikan oleh selebriti berjaya menarik perhatian mereka. Seterusnya, tempat dakwah yang menjadi pilihan adalah tempat yang mewah, padang dan tempat lapang serta mempunyai tarikan hadiah dan cenderahati. Oleh itu, dapatan kajian ini boleh dijadikan sebagai satu garis panduan dan strategi kepada pendakwah atau da'i untuk menyampaikan dakwah dengan lebih berkesan seterusnya memenuhi citarasa warga kampus. Kajian lanjutan boleh dilakukan pada masa akan datang dengan memperluaskan kaji selidik ini ke kampus-kampus yang lain bagi memantapkan lagi strategi pendekatan dakwah di UiTM khususnya dan kepada masyarakat luar umumnya. Pelan tindakan strategi dakwah warga kampus boleh dibentuk sebagai garis panduan untuk memantapkan program-program dakwah.

Kata kunci: dakwah, pendidikan, hubungan

**Abstract:** This article discusses the preference of effective da'wah among staff and students of UiTM Cawangan Johor, Kampus Pasir Gudang. Malaysians are exposed to various mediums of da'wah such as the mass media, digitally and in print. Most of them already have a high level of education. However, it does not guarantee pure values and noble morals in a person. The increase number of criminal cases and moral crises also invites problems in the development of human and national capital. Formal education in schools is also considered inadequate to shape a person to be a good human being with good morals. Therefore, the role of da'wah is seen to take place in order to void the social depravity among the community in Malaysia. This study was conducted to highlight this issue with two objectives, namely the first, to study the da'wah approach based on the theme, method, and place of da'wah among staff and students of UiTM Pasir Gudang and second, to evaluate the relationship between the respondent's level of education and the da'wah approach. A total of 305 respondents were selected to identify their main attraction to religious programs. In this study, quantitative method is used to achieve the objectives of the study. The findings of the first objective show that most of the respondents have chosen the theme of morality followed by faith and then the Sirah of the prophets. Respondents also prefer delivery methods in the form of motivation, community, and digital. They also like da'wah, which is held for free such as at the Islamic Center, mosque or surau, which also provide food and drink. For the second objective, only a few items have a relationship between the level of education and da'wah approach. Among the most interesting theme are Love of Marriage, Islamic Economic and Politics. Meanwhile, in terms of the da'wah delivery method, the form of competitions and da'wah presented by celebrities managed to attract their attention. Finally, from da'wah places, a more comfortable and exclusive place, field, and open space with free gifts and souvenirs are of interest to the respondents. The findings of this study can be used as a guideline and strategy for dai'e to deliver da'wah more effectively to staff and students of UiTM Cawangan Johor, Kampus Pasir Gudang. Further research can be done by expanding this survey to other campuses to strengthen the da'wah approach strategy at UiTM and to the community. The da'wah strategy action plan can be formed as a guideline to strengthen the da'wah programs.

Keywords: da'wah, education, relationship

#### 1. Pengenalan

Peranan dakwah merupakan satu tanggungjawab penting yang diamanahkan oleh Allah SWT dan ianya disampaikan oleh Rasulullah SAW lebih kurang 1400 tahun yang lalu. Setelah baginda wafat, peranan dakwah ini diwarisi dan diteruskan oleh para ulama'. Penyampaian risalah dakwah ini akan berterusan dan perlu disebarluaskan kepada semua umat manusia sehinggalah hari kiamat (Zain, A. 2019). Dakwah yang berkesan perlulah disampaikan dengan strategi yang bijaksana supaya nilai ilmu seperti aqidah, syariat, akhlak, muamalah dan sebagainya dapat diterapkan dan diaplikasikan dalam kehidupan bagi melahirkan umat Islam yang sejati. Bagi memastikan dakwah yang disampaikan mencapai objektifnya, Allah SWT telah mengajarkan kepada kita beberapa kaedah penyampaian dakwah yang berkesan di dalam al-Quran iaitu:

Maksudnya: "Serulah (manusia) kepada jalan Tuhan-mu dengan hikmah dan pelajaran yang baik dan bantahlah mereka dengan cara yang baik. (Surah Al-Nahl: 125)

Berdasarkan maksud firman di atas, Allah SWT menyeru manusia agar berbuat kebaikan dan mencegah kemungkaran dengan cara berhikmah agar seruan Islam dapat diterima oleh setiap umat manusia. Menurut Ahmad, M. F. H. & Othman, M. K. (2016), pelbagai idea, strategi dan kaedah dakwah perlu diberi perhatian termasuklah meraikan pelbagai latar belakang, kegemaran dan keselesaan mad'u (orang yang diseru) supaya titik pertemuan daripada perbezaan individu dapat disatukan seterusnya matlamat penyampaian dakwah itu dapat dicapai.

Mengenalpasti latar belakang mad'u terutamanya dari aspek tahap pendidikan, kecenderungan tema dakwah yang menjadi pilihan, wajar dikaji dan diambilkira sebelum sebarang program dakwah dianjurkan. Ini kerana, kejayaan sesuatu program dakwah bukan setakat mendapat jumlah peserta yang ramai, tetapi yang paling utama adakah ia berjaya mengubah diri seseorang individu tersebut menjadi insan yang lebih baik serta mampu berkongsi ilmu dan manfaat tersebut kepada orang lain.

Pada masa kini, masyarakat Malaysia sememangnya telah terdedah kepada pelbagai medium dakwah seperti media massa secara digital dan bercetak. Kebanyakan daripada mereka juga telah memiliki tahap pendidikan yang tinggi. Namun demikian tahap pendidikan yang tinggi, tidak menjamin nilai murni dan akhlak mulia dalam diri seseorang. Iman manusia yang bersifat turun naik ditambah pula dengan godaan hawa nafsu dan syaitan kadang-kala menjerumuskan seseorang ke lembah kemaksiatan dan kemungkaran (Mokhtar, A. E. et al. 2017).

Di samping itu, peningkatan kes-kes jenayah serta krisis moral seperti dadah, rasuah dan sebagainya dalam kalangan masyarakat di Malaysia turut mengundang permasalahan dalam memacu pembangunan modal insan dan negara (Jabatan Perangkaan Malaysia, 2019). Justeru, penglibatan seseorang dalam aktiviti dakwah secara konsisten dan istiqamah dilihat mampu meningkatkan iman dan mengembalikan seseorang ke pangkal jalan.

Pendidikan formal yang diadakan di sekolah sebenarnya belum cukup untuk membentuk diri seseorang menjadi insan yang sempurna dan baik akhlaknya. Jadi, seseorang individu perlu mengambil inisiatif dalam usaha meningkatkan ilmu dan akhlak peribadi. Sehubungan dengan itu, peranan dakwah mengambil tempat untuk mengisi kelompongan dalam permasalahan kebejatan sosial dan iman yang rendah dalam kalangan masyarakat di Malaysia.

Oleh yang demikian, kajian ini dilaksanakan bagi merungkai beberapa persoalan iaitu (i) apakah pendekatan dakwah yang bersesuaian berdasarkan kepada tema, kaedah dan tempat dakwah dan (ii) adakah terdapat hubungan antara tahap pendidikan dengan pendekatan dakwah di UiTM Cawangan Johor Kampus Pasir Gudang. Seterusnya, kajian ini ingin mencapai dua objektif berikut:

1. Mengenalpasti pendekatan dakwah berdasarkan tema, kaedah dan tempat dakwah di kalangan warga UiTM Pasir Gudang.

2. Melihat hubungan pendidikan terhadap pendekatan dakwah di kalangan warga UiTM Pasir Gudang.

# 2. Ulasan Kajian Lepas

Pendidikan menurut Islam adalah suatu proses mendapatkan ilmu dan pengalaman bagi membangunkan modal insan secara holistik yang seimbang dari segi jasmani, emosi, rohani,

intelek dan sosial untuk keperluan hidup duniawi dan ukhrawi. Dalam erti kata lain, pendidikan ialah satu proses untuk mengembangkan potensi dalam diri individu bagi mengenali diri dan matlamat kehidupan (Sarju, H. et al., 2010). Dari perspektif Islam, proses pendidikan sebenarnya bermula dari kandungan perut ibu dan berterusan sepanjang hayat serta ianya boleh berlaku secara formal atau tidak formal.

Di Malaysia pendidikan formal mempunyai lima peringkat iaitu pra-sekolah, peringkat sekolah rendah, peringkat menengah rendah, peringkat menengah seterusnya peringkat pengajian tinggi merangkumi Ijazah Sarjana Muda, Ijazah Sarjana dan Doktor Falsafah (Phd). Tahap pendidikan yang baik memudahkan laluan seseorang untuk mencapai kehidupan yang lebih berkualiti. Ini kerana ilmu yang diperolehi boleh dimanfaatkan untuk kegunaan diri sendiri dan memberi sumbangan kepada ummah dalam membangunkan pelbagai aspek kehidupan seperti sosial, ekonomi, komunikasi, kesihatan dan sebagainya (Ahmad, A., 2008).

Di samping itu, tahap pendidikan juga dapat memberi perbezaan kepada penerimaan dan kefahaman individu terhadap sesuatu perkara. Begitu juga halnya dalam kaedah penyampaian dakwah perlu kepada kaedah yang berbeza dan fokus-fokus dakwah terhadap sasaran-sasaran tertentu bagi menjamin keberkesanannya.

Beberapa penulisan dan kajian lepas berkaitan tentang pendidikan dan dakwah telah dilakukan oleh beberapa tokoh ulama' dan akademik contohnya Dr. Yusuf al-Qaradawi. Hassan, Z. (2013) mengulas penulisan tokoh mujaddid Dr. Yusof al-Qaradawi tersebut dalam buku-buku beliau iaitu Rabbaniyyin Laisa Ramadhaniyyin, Mudhakkirat al-Qaradawi, Risalah Ta'lim, Nafahat al-Juma'ah, Al-Din wa al-Siyasah: Taashilun wa Raddu Syubuhat dan Awlawiyaat dan al- Harakah al-Islamiyah fi l-Marhalah alQadimah. Dalam penulisan tersebut, Dr. Yusuf al-Qardawi memberi penekanan terhadap pemerkasaan ciri-ciri seorang pendakwah melalui pembinaan keimanan, pemantapan ilmu untuk mencapai tuntutan fardu ain dan memperluaskan pengetahuan dalam ilmu syarak, penguasaan al-Quran, hafalan, memahami sirah al-nabawiyyah serta menguasai ilmu akhlak.

Menurut Zainal, N. A. S. & Mustari, M. I. (2012), dalam kajian beliau berkaitan dengan penerapan kaedah dakwah di dalam melaksanakan proses pengajaran dan pembelajaran (P&P) di dalam dan luar bilik darjah mendapati tahap pendidikan merupakan satu perkara yang sangat penting dalam penyampaian dakwah. Jika pendidikan ini tidak dapat dilaksanakan dengan baik dan sempurna, maka keseimbangan jasmani, emosi, rohani dan intelek akan menjadi tidak stabil. Maka, kaedah penyampaian dakwah yang digunakan juga perlu berbeza mengikut tahap pendidikan.

Jasmi, K. A. & Tamuri, A. H. (2007) pula menyatakan bahawa teknik syarahan atau khutbah merupakan teknik utama yang digunakan oleh Rasulullah SAW dalam penyampaian ajarannya dan didapati sangat berkesan ekoran daripada penerimaan positif para sahabat dalam dakwah baginda. Kamarudin, M. A. et. al (2019) dalam kajian beliau menambah bahawa dakwah melalui media sosial boleh dilakukan mengikut adab-adab dan tatasusila yang menepati syariat Islam seterusnya memastikan maklumat yang disampaikan adalah benar, tepat, menjaga akhlak, menasihati secara berhemah dan menjaga perasaan mad'u.

Abdul Talib, N. A. et al (2017) pula memaparkan cabaran-cabaran dakwah yang menggunakan medium siber. Antara cabaran yang perlu dihadapi adalah tiada penapisan maklumat oleh pihak berkuasa samada ianya benar ataupun palsu, mencabar konsep mutawatir dari segi

penyampaian ilmu dan fakta, wujud kekangan antara hubungan guru dan murid serta isu integriti pengguna laman sesawang yang digunakan. Namun demikian, menurut beliau, dakwah tetap perlu dilaksanakan dengan lebih praktikal dan menggunakan pelbagai kaedah. Medan siber hanya sesuai sebagai tempat untuk mendapatkan maklumat bukan menjurus kepada percambahan ilmu. Mekanisme pangajaran dan penyebaran maklumat perlu diperhalusi sebaiknya sebelum disebarkan bagi mengelakkan penyalahgunaan penyebaran dakwah. Peranan guru tetap kekal dianggap sebagai pendidik terbaik dalam penyampaian ilmu dan sentiasa relevan sepanjang zaman.

Ismail, M. Z. (2019) menulis mengenai kepentingan membezakan kaedah dakwah kepada remaja dengan mereka yang lebih berusia. Terdapat tiga pendekatan dakwah kepada remaja iaitu a'tifi (pendekatan emosi), aqli (pendekatan mental) dan hissi (pendekatan pancaindera) yang dicadangkan. Dalam pendekatan a'tifi, pendakwah harus bijak mengendalikan emosi remaja bagi mengelakkan perkara-perkara yang sensitif. Manakala, pendekatan aqli pula mengajak remaja berdialog dan berbahas bagi menarik minat mereka dalam dakwah yang disampaikan. Akhir sekali, pendekatan hissi, pendakwah harus bijak menggunakan kaedah yang menarik minat salah satu atau kelima pancaindera mereka seperti memperdengarkan bacaan al-Quran yang menangkap pendengaran mereka dan menunjukkan imej-imej yang baik untuk menarik minat penglihatan mereka.

Beberapa penulisan dan kajian lepas mengenai usaha pendekatan dakwah terhadap beberapa golongan sasaran dilakukan oleh Ismail dan Fariza pada tahun 2015. Menurut Ismail, hasil kajian terhadap 200 golongan sasaran di sektor perkilangan IKS di Kuala Kangsar Perak dalam usaha dakwah menunjukkan pengetahuan agama mereka bertambah sebanyak 2.24 peratus, keyakinan amalan fardhu ain bertambah 2.23 peratus dan peningkatan akhlak 2.23 peratus. Aktiviti yang dilaksanakan ialah kuliah agama dan kelas fardhu ain. Manakala, Fariza Md Sham menyatakan dalam kajiannya bahawa pendekatan psikologi dakwah dalam menangani remaja berisiko adalah menerusi bimbingan secara individu seperti memberi ruang mereka meluahkan perasaan dan masalah. Di samping itu, bimbingan secara berkumpulan boleh dilakukan jika remaja tersebut menghadapi masalah kemahiran sosial, keluarga dan perkahwinan. Kerjasama keluarga remaja berkenaan sangat diperlukan dalam memperbaiki masalah masa depan remaja.

Dalam pada itu, pendakwah juga perlu membuat persediaan yang rapi seperti mendapatkan maklumat latarbelakang berkaitan tahap pendidikan sasaran dakwah, selain perlu memiliki kreativiti dalam penyampaian dakwah agar dakwah yang disampaikan itu memberi impak positif dalam diri mad'u. Manakala Barokah et.al (2019) dalam kajiannya mendapati kaedah penyampaian dan tajuk-tajuk dakwah perlu bersangkutan agar memudahkan penerimaan dakwah terhadap sasaran. Dalam kajiannya, terdapat hubungan antara kredibiliti pendakwah dengan tajuk yang diminati oleh mad'u yang memberi kesan kepada mad'u ke arah yang lebih baik dari sebelumnya.

Begitu juga kajian Aini, Z. et. al (2019) yang membuat penyelidikan berkaitan strategi komunikasi pemujukan pendakwah dalam penyampaian mesej Islam kepada masyarakat orang asli di Selangor. Beliau mengatakan bahawa proses komunikasi dalam penyampaian mesej dakwah terhadap masyarakat memerlukan usaha dakwah yang berterusan sebagai panduan ke arah perubahan positif untuk mengamalkan ajaran Islam yang sebenar.

Daripada sorotan kajian ini, secara kesimpulannya, terdapat keperluan dan kelompangan untuk membuat kajian ini dari aspek mengenalpasti apakah pendekatan dakwah berdasarkan tema, kaedah dan tempat dakwah dan seterusnya melihat apakah terdapat hubungan pendidikan terhadap pendekatan dakwah dalam kalangan warga UiTM Johor Kampus Pasir Gudang.

# 3. Metodologi dan Hasil Dapatan

#### 3.1 Instrumen Kajian

Dalam kajian ini kaedah kuantitatif digunakan untuk mencapai objektif kajian. Instumen kajian ini adalah berbentuk soalan kajiselidik untuk mendapatkan data. Borang soalan kajiselidik direkabentuk untuk mendapatkan maklumbalas mengenai pendekatan dakwah di kalangan warga UiTM Pasir Gudang. Soalselidik ini dibahagikan kepada empat bahagian iaitu bahagian I – demografi responden (4 item), bahagian II – Tema dakwah (12 item), bahagian III-Pendekatan dakwah (12 item) dan terakhir bahagian IV - tempat dakwah (12 item). Soalan yang direkabentuk ini adalah berdasarkan soalan kaji selidik beberapa penyelidik lepas seperti Hashim, N (2019) dan dilakukan pengubahsuaian supaya berpadanan dengan objektif kajian ini. Kebanyakan soalan adalah berbentuk kategori data. Seterusnya, kajian rintis menggunakan soalan kajiselidik yang direka telah dihantar secara rawak kepada 30 pelajar dan dua orang penilai soalan untuk disahkan sebelum diedarkan kepada semua warga kampus UiTM Pasir Gudang secara atas talian atau menggunakan google form. Tempoh masa pengedaran kajiselidik atas talian adalah selama 3 bulan bermula bulan Oktober 2019 dan berakhir pada bulan Disember 2019. Seramai 443 responden kajian telah mengembalikan semula borang kajiselidik untuk dianalisa menggunakan perisian SPSS 26.0.

# 3.2 Hasil Dapatan

Data yang diperoleh menerusi kajiselidik atas talian kemudian dianalisa. Setelah melakukan saringan data, hanya 305 data yang lengkap sahaja digunakan untuk melakukan langkah analisa data. Jadual 1 menunjukkan ringkasan item dan jenis data yang dianalisa.

Bahagian	Item	Jenis data		
Bahagian 1	Demografi			
а	Jantina	Nominal		
b	Pekerjaan	Kategori		
с	Fakulti/ Bahagian	Kategori		
d	Taraf Pendidikan	Kategori		
Bahagian II	Tema			
A1	Akidah	Nominal Dichotomous-Ya-tidak		
A2	Syariat Ibadah	Nominal Dichotomous-Ya-tidak		
A3	Akhlak	Nominal Dichotomous-Ya-tidak		
A4	QuranTafsir	Nominal Dichotomous-Ya-tidak		
A5	Hadis	Nominal Dichotomous-Ya-tidak		
A6	Sirah Nabi	Nominal Dichotomous-Ya-tidak		
A7	Cinta Perkahwinan	Nominal Dichotomous- Ya-tidak		
A8	Muamalat Ekonomi Islam	Nominal Dichotomous-Ya-tidak		
A9	Politik	Nominal Dichotomous-Ya-tidak		
A10	Isu semasa	Nominal Dichotomous-Ya-tidak		
A11	Sains Islam	Nominal Dichotomous-Ya-tidak		

Jadual 1: Diskripsi item dan jenis data pendekatan dakwah

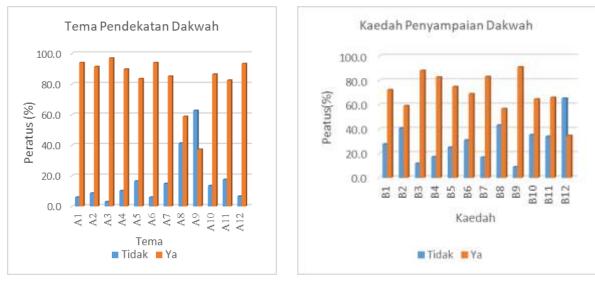
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A12	Hari Kebesaran Islam	Nominal Dichotomous- Ya-tidak		
Bahagian III	Pendekatan dakwah			
B1	Ceramah	Nominal Dichotomous- Ya-tidak		
B2	Forum	Nominal Dichotomous-Ya-tidak		
B3	Kaedah Penyampaian Dakwah Dalam Bentuk Motivasi	Nominal Dichotomous-Ya-tidak		
B4	Bentuk Bengkel Contohnya Pengurusan Jenazah, Tahsinul Solat	Nominal Dichotomous-Ya-tidak		
B5	Penyampaian Dakwah Dalam Bentuk Usrah/Halaqah	Nominal Dichotomous-Ya-tidak		
B6	Penyampaian Dakwah Dalam Bentuk Pertandingan Contohnya Pertandingan Nasyid,	Nominal Dichotomous- Ya-tidak		
B7	Kaedah Penyampaian Dakwah Dalam Bentuk Digital Contonya Canva Dan Video	Nominal Dichotomous- Ya-tidak		
B8	Penyampaian Dakwah Dalam Bentuk Risalah, Pamplet, Flyers	Nominal Dichotomous-Ya-tidak		
B9	Dakwah Dalam Bentuk Aktiviti Kemasyarakatan	Nominal Dichotomous-Ya-tidak		
B10	Penyampaian Dakwah Dalam Bentuk Kaunseling/Personal	Nominal Dichotomous-Ya-tidak		
B11	Kaedah Penyampaian Dakwah Oleh Selebriti	Nominal Dichotomous-Ya-tidak		
B12	Kaedah Penyampaian Dakwah Oleh Orang Yang Saya Kenali Sahaja	Nominal Dichotomous- Ya-tidak		
Bahagian IV	Tempat Dakwah			
C1	di Pusat Islam, masjid, surau	Nominal Dichotomous-Ya-tidak		
C2	di tempat mewah seperti hotel	Nominal Dichotomous-Ya-tidak		
C3	di padang dan tempat lapang	Nominal Dichotomous-Ya-tidak		
C4	di tempat mencabar seperti di dalam hutan atau tanah perkuburan	Nominal Dichotomous-Ya-tidak		
C5	di tempat tertutup seperti dewan	Nominal Dichotomous-Ya-tidak		
C6	di dalam keadaan duduk di kerusi dan meja disediakan	Nominal Dichotomous- Ya-tidak		
C7	diadakan dalam keadaan duduk di lantai	Nominal Dichotomous-Ya-tidak		
C8	diadakan mengasingkan lelaki dan wanita	Nominal Dichotomous-Ya-tidak		
C9	diadakan diberikan kupon dan jam latihan	Nominal Dichotomous-Ya-tidak		
C10	diadakan secara percuma	Nominal Dichotomous- Ya-tidak		
C11	diadakan menyediakan makan dan minum	Nominal Dichotomous- Ya-tidak		
C12	diadakan menyediakan hadiah dan cenderahati	Nominal Dichotomous- Ya-tidak		

Oleh kerana data yang digunakan merupakan jenis nominal dan kategori, output analisis yang bersesuaian terhadap jenis data ini dipersembahkan bentuk jadual kekerapan atau carta seperti carta bar atau carta pai. Dalam kajian ini responden lelaki mendominasi responden wanita dengan perbezaan yang sedikit 5.24% iatu masing-masing adalah 52.8% dan 47.2%. Seterusnya sebanyak 86% responden adalah terdiri daripada pelajar, manakala selebihnya adalah pensyarah (9%) dan staf pentadbiran (4.5%). Sementara fakulti /bahagian dibahagikan kepada 10 kategori iaitu 9 fakulti dan 1 bahagian. Tiga fakulti yang tertinggi adalah FKM (32.3%), FKA (32.1%) dan FKE (11.3%). Manakala taraf pendidikan dibahagikan kepada 6 kategori iaitu PhD, Ijazah Sarjana, Ijazah Sarjana Muda, Diploma, SPM dan lain-lain. Responden yang tertinggi adalah diploma (57.8%), diikuti oleh SPM (26.2%), ijazah sarjana (7.9%), sarjana muda (2.5%) dan PhD (1.6%) dan lain-lain (0.2%), Jumlah peratus data tidak lengkap adalah 3.6%.

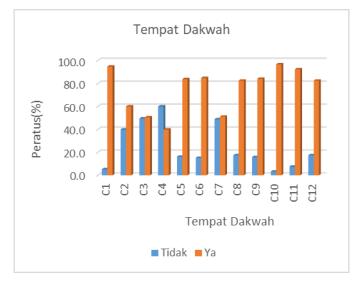
Objektif pertama kajian adalah mengenalpasti pendekatan dakwah berdasarkan tema, kaedah dan tempat dakwah di kalangan warga UiTM Johor Kampus Pasir Gudang. Justeru, analisa

terhadap pembolehubah dakwah di bahagian II (tema dakwah), III (kaedah penyampaian), dan IV (tempat dakwah dilakukan) digambarkan dalam rajah 1(a), (b) dan (c).



Rajah 1(a) Peratus tema dakwah

Rajah 1(b) Peratus kaedah penyampaian



Rajah 1(c) Peratus skor tempat dakwah

Rajah 1(a) menunjukkan carta bar peratus penerimaan tema dakwah. Daripada analisa yang dilakukan, tiga tema dakwah yang tertinggi adalah akhlak (A3) sebanyak 97% dan diikuti oleh tema akidah (A1) dan sirah nabi (A6) yang masing-masing memberikan penerimaan baik yang sama banyak terhadap tema tersebut iaitu 94.1%. Sementara itu, tema dakwah yang terendah pula adalah politik (37.3%). Ini menunjukkan warga kampus UiTM menyukai dakwah yang dapat memperbaiki akhlak dan meningkatkan dalaman diri supaya menjadi hamba Allah yang dikasihi seluruh makhluk. Politik pula dianggap tidak bersesuaian memandangkan suasana di dalam kampus tidak menyerlahkan elemen ini.

Manakala rajah 1 (b) pula menunjukkan carta bar kaedah penyampaian dalam pendekatan dakwah di UiTM Pasir Gudang. Analisa yang dijalankan menunjukkan tiga kaedah penyampaian tertinggi adalah kaedah penyampaian dalam bentuk kemasyakatan (B9) sebanyak

85.6%, kaedah penyampaian Dakwah Dalam Bentuk Motivasi (B3) sebanyak 88.1% dan kaedah penyampaian Dakwah Dalam Bentuk Digital contohnya Canva dan Video (B7) sebanyak 83.2%. Kaedah yang paling rendah pula adalah B12 iaitu kaedah penyampaian dakwah oleh orang yang dikenali sahaja sebanyak 34.7%. Ini menunjukkan penyampaian dalam bentuk kemasyarakatan dan santai menjadi pilihan dalam berdakwah di kalangan warga UiTM. Dapatan ini turut menunjukkan dakwah dalam bentuk digital mula menjadi pilihan dan pendekatan kepada warga UiTM khususnya dalam keadaan Perintah Kawalan Pergerakan yang mula berkuatkuasa sejak Mac 2020. Kaedah dakwah kepada golongan tertentu atau orang dikenali sahaja kurang mendapat sambutan kerana sebagai pendakwah, mereka perlu meluaskan dakwah mereka melalui pelbagai medium atau platform supaya dapat menyebarkan dakwah dan Islam.

Rajah 1(c) menunjukkan carta bar penerimaan tempat dakwah yang boleh dikendalikan. Daripada 12 item (C1-C12), tiga tempat dakwah yang mencapai peratusan tertinggi adalah C10 (96.7%) iaitu pengendalian dakwah yang diadakan secara percuma. Diikuti oleh dakwah di Pusat Islam, masjid, surau, (C1) sebanyak 94.7% dan tempat dakwah turut menyediakan makan dan minum (C11) sebanyak 92.4%. Sementara tempat dakwah yang terendah adalah C4 (34.3%) iaitu dakwah diadakan di tempat mencabar seperti di dalam hutan atau tanah perkuburan. Ini menunjukkan responden berminat agar diadakan di Pusat Islam, masjid dan surau, menyediakan makanan kepada para penuntut ilmu dan seterusnya tidak dikenakan sebarang bayaran untuk mengikuti kuliah atau ceramah.

Bagi mencapai objektif kedua pula iaitu menilai hubungan pendidikan terhadap pendekatan dakwah di kalangan warga UiTM, ujian bukan parametrik Pearson Chi-Square dilakukan terhadap pembolehubah yang dikaji. Jadual 2 menunjukkan nilai chi-square dan nilai signifikan hubungan pembolehubah pendidikan dan dakwah (tema, kaedah dan tempat dakwah).

Bahagian	Nilai chi-	Nilai	Bahagian	Nilai chi-	Nilai	Bahagi	Nilai chi-	Nilai
II	square	Signifikan	III	square	Signifikan	an IV	square	Signifikan
A1	1.581	0.903	B1	6.259	0.282	C1	9.119	0.104
A2	1.418	0.922	B2	8.004	0.156	C2	12.501	0.029
A3	2.935	0.710	B3	2.733	0.741	C3	11.653	0.040
A4	2.086	0.837	B4	4.769	0.445	C4	5.962	0.310
A5	5.043	0.411	B5	5.442	0.364	C5	1.758	0.881
A6	4.453	0.486	<b>B6</b>	11.476	0.043	C6	4.468	0.484
A7	11.239	0.047	B7	3.729	0.589	C7	2.902	0.715
A8	13.093	0.023	B8	8.003	0.156	C8	3.057	0.691
A9	10.055	0.074	B9	1.782	0.878	C9	5.272	0.384
A10	6.285	0.279	B10	3.286	0.656	C10	9.131	0.104
A11	5.238	0.387	B11	11.884	0.036	C11	5.474	0.361
A12	5.074	0.407	B12	7.185	0.207	C12	26.552	0.000

Jadual 2: Nilai Chi-square dan nilai signifikan hubungan pendidikan terhadap pendekatan dakwah

Dalam jadual 2, nilai chi-square dan signifikan dihitamkan untuk memberikan perbezaan dengan nilai-nilai yang tidak signifikan. Daripada jadual 2 tersebut dapat diperhatikan terdapat nilai yang signifikan antara tahap pendidikan dengan pendekatan dakwah dalam ketiga-tiga bahagian. Ini menunjukkan pembolehubah ini mempunyai hubungan antara satu sama lain. Dengan menetapkan nilai signifikan, dan , dapatan analisa ini mendapati dalam bahagian II,

tiga item iaitu Cinta Perkahwinan (A7), Muamalat Ekonomi Islam (A8) dan Politik (A9) mempunyai nilai signifikan masing-masing sebanyak 0.047, 0.023 dan 0.074. Ini menunjukkan ketiga-tiga item tersebut amat mempengaruhi tema dakwah kepada warga UiTM Pasir Gudang. A7 dan A8 menjadi tema yang signifikan dan bersesuaian terutama kepada warga UiTM memandangkan rata-rata responden adalah pelajar dan mereka perlu didedahkan dengan etika percintaan secara Islam supaya tidak terjebak dengan gejala kemaksiatan dan sosial yang membawa kesan negatif sebelum memasuki gerbang perkahwinan. Sementara itu berkenaan tema politik, kebanyakan responden menerima tema ini adalah berikutan dengan kecaknaan para pelajar terhadap isu semasa dan perkembangan politik masa kini.

Dalam bahagian III pula, didapati kaedah penyampaian dakwah dalam bentuk pertandingan contohnya pertandingan nasyid (B6) dan kaedah penyampaian dakwah oleh selebriti (B11) mempunyai hubungan terhadap tahap pendidikan dengan nilai signifikan 0.043 dan 0.036. Ini menunjukkan kaedah dakwah yang berbentuk pertandingan dan disampaikan oleh selebriti diminati oleh warga UiTM Pasir Gudang. Akhir sekali tempat dakwah yang didapati mempunyai hubungan dengan tahap pendidikan adalah di tempat mewah seperti hotel (C2), di padang dan tempat lapang (C3) dan tempat yang menyediakan hadiah dan cenderahati (C12) dengan nilai signifikan 0.029, 0.04 dan 0.00. Ini menunjukkan tempat yang tenang dan lapang serta menyediakan hadiah dan cenderamata menjadi item yang menjadi pilihan utama dalam pendekatan dakwah di UiTM Pasir Gudang.

# 4. Cadangan dan Kesimpulan

Menerusi analisa yang diperoleh ini, secara keseluruhan hanya beberapa item sahaja yang mempunyai hubungan di antara tahap pendidikan dengan pendekatan dakwah dalam kalangan warga UiTM Pasir Gudang iaitu menerusi tema Cinta Perkahwinan, Mualamat Ekonomi Islam dan Politik. Manakala dalam kaedah penyampaian pula, dakwah dalam bentuk pertandingan dan disampaikan oleh selebriti berjaya menarik perhatian warga kampus. Seterusnya, tempat dakwah yang menjadi pilihan warga kampus adalah di tempat yang mewah, padang dan tempat lapang serta mempunyai tarikan hadiah dan cenderahati. Dapatan kajian ini juga boleh dijadikan satu garis panduan dan strategi kepada pendakwah atau da'i untuk menyampaikan dakwah dengan lebih berkesan seterusnya memenuhi citarasa warga kampus. Kajian ini boleh ditambahbaik lagi pada masa akan datang dengan melihat kesan dakwah terhadap tema-tema, kaedah dan tempat dakwah menerusi kombinasi kaedah pengukuran secara kualitatif dan kuantitatif.

Di dalam kajian ini, fokus yang diberikan adalah kepada program dakwah yang dilaksanakan terhadap warga kampus UiTM Cawangan Johor Kampus Pasir Gudang yang melibatkan para pelajar, pensyarah dan staf pentadbiran. Kajian lanjutan boleh dilakukan pada masa akan datang dengan memperluaskan kaji selidik ini ke kampus-kampus yang lain bagi memantapkan lagi strategi pendekatan dakwah di UiTM khususnya dan kepada masyarakat luar umumnya.

Di samping itu, beberapa langkah boleh diambil bagi memastikan penyampaian dakwah dapat sampai ke sanubari setiap warga kampus serta mengaplikasikan ilmu yang diperolehi dalam kehidupan seharian sebagai umat Islam. Pelan tindakan strategi dakwah warga kampus boleh dibentuk sebagai garis panduan untuk memantapkan program-program dakwah. Adalah diharapkan, semoga dapatan daripada kajian ini dapat membantu pihak UiTM Cawangan Johor Kampus Pasir Gudang merangka dan melaksanakan aktiviti dakwah dengan lebih berkesan dalam pembentukan insan yang seimbang di dunia dan akhirat.

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# Kecerdasan Pelbagai Dalam Kalangan Pelajar IPT Berdasarkan Jantina

#### Siti Kausar Zakaria, Mohd Noor Daud

Abstrak: Kajian bertujuan untuk melihat purata dan perbezaan profil kecerdasan pelbagai pelajar Ijazah Sarjana Muda di sebuah fakulti di IPT tempatan berdasarkan jantina. Teori Kecerdasan Pelbagai oleh Howard Gardner (1983, 1992) telah digunakan. Kajian menggunakan kaedah tinjauan secara kuantitatif menggunakan soal selidik sebagai instrumen. Ujian rintis yang dijalankan menunjukkan soal selidik yang dibina dan diubahsuai daripada instrumen terdahulu mempunyai kesahan dan kebolehpercayaan yang tinggi. Sampel kajian terdiri daripada 346 orang pelajar yang dipilih secara rawak berstrata daripada kumpulan jantina. Analisis statistik deskriptif digunakan untuk melihat min profil responden, manakala statistik inferensi iaitu MANOVA digunakan untuk menguji hipotesis kajian. Penganalisisan data menggunakan perisian SPSS versi 17.0. Secara keseluruhannya analisis deskriptif min menunjukkan pelajar lelaki lebih tinggi dalam logik matematik, interpersonal, intrapersonal, visual ruang, kinestetik badan, muzik dan naturalis berbanding pelajar perempuan. Sementara pelajar perempuan lebih tinggi dalam verbal linguistik dan rohani berbanding pelajar lelaki. Analisis MANOVA pula mendapati terdapat perbezaan yang signifikan kecerdasan pelbagai merentas jantina sekaligus menolak nul hipotesis kajian. Kajian merumuskan jantina mempunyai implikasi yang penting kepada kecenderungan pelajar dalam kecenderungan memilih gaya pembelajaran tertentu. Pelajar lelaki lebih cerdas daripada pelajar perempuan dalam kebanyakan aspek kecerdasan pelbagai. Kaedah pembelajaran dan pengajaran yang menumpukan kepada satu-satu kecerdasan menyebabkan potensi, bakat dan kemahiran pelajar merentas jantina sukar dikembangkan sepenuhnya. Kemahiran employability juga berkait rapat dengan kecerdasan pelbagai seperti yang dibuktikan kajian-kajian lepas.

Kata kunci: Kecerdasan Pelbagai, Jantina, Kemahiran employability.

#### 1. Pengenalan

Kecerdasan pada Gardner (1983, 1991) adalah sesuatu yang dimanik iaitu boleh diperkembangkan dan disuburkan. Ini kerana menurutnya kecerdasan yang ada pada setiap individu bukanlah merupakan sesuatu entiti yang wujud secara semulajadi sahaja atau diwarisi daripada faktor genetik semata-mata. Bahkan faktor persekitaran seperti budaya dan persekitaran merupakan faktor luaran yang menjadi perangsang utama kepada pembentukan kecerdasan yang pelbagai.

Gardner (1983, 1991) melihat pandangan umum yang mengatakan kecerdasan merujuk kepada kebolehan dan kemampuan individu dalam mencapai ilmu pengetahuan, mencari sebab musabab dan hubungkait antaranya sebagai pandangan sempit dan tidak berdimensi. Sedangkan kebolehan atau kecerdasan individu sebenarnya bersifat multidimensional. Ini bermakna kecerdasan individu adalah dalam pelbagai bentuk dan bakat.

Beliau mencadangkan, pelajar haruslah menyedari atau peka dengan potensi diri dan cuba memperkembangkannya. Masalah akan timbul jika kecerdasan yang sangat bernilai itu diketepikan dan mereka tidak diberi peluang untuk menonjolkannya.Pelajar yang melihat

kecerdasan sebagai kecerdasan IQ sebagai kecerdasan yang penting dalam pembelajaran menyebabkan kecerdasan diapliaksikan dalam peperiksaan semata-mata dan hanya akan berlatih untuk menjawab soalan peperiksaan, kuiz dan tugasan semata-mata. Sedangkan tujuan pembelajaran adalah untuk melahirkan pelajar yang produktif iaitu boleh memberi sesuatu yang berharga dan bernilai kepada masyarakat sekelilingnya (Green dan Hill 2005). Oleh sebab itulah Gardner (1983, 1991) mengatakan terdapat sembilan kecerdasan yang tidak bergantung pada diri setiap individu.

Perbincangan dan kefahaman tentang konsep kebijaksanaan ini telah memasuki fasa baharu apabila diubahsuai oleh ahli psikologi Harvard, Amerika iaitu Prof. Dr. Howard Gardner. Di dalam bukunya Frames of Mind: The Theory of Multiple Intelligences yang ditulis pada tahun 1983. Gardner mengatakan setiap individu mempunyai sekurang kurangnya lapan kecerdasan atau kebolehan mental yang wujud secara berasingan dan tidak bergantung.

Kecerdasan tersebut ialah verbal-linguistik, logik-matematik, visual-ruang, kinestetik badan, muzik, interpersonal, intrapersonal dan naturalis. Pada tahun 1991, beliau menambah satu lagi kecerdasan iaitu kecerdasan rohani menjadikan kecerdasan pelbagai bertambah kepada lapan entiti yang wujud pada setiap individu. Walaubagaimanapun beliau belum mengiktiraf kewujudan entiti tersebut sehingga kini. Pada tahun tahun 2006, satu kajian yang dijalankan oleh sekumpulan pensyarah Universiti kebangsaan Malaysia (UKM) yang diketuai oleh Siti Rahayah mendapati kewujudan kecerdasan yang kesembilan berkenaan sebagai entiti kecerdasan yang sah. Kecerdasan pelbagai ini ialah kecerdasan logik matematik, kecerdasan verbal linguistik, kecerdasan muzik, kecerdasan naturalis dan kecerdasan rohani.

Ada juga ahli psikologi yang memahaminya dalam dua aspek iaitu penurunan dan pengaruh persekitaran (heredity and environment). Ahli psikologi yang mendokong aspek penurunan (genetik) dalam menentukan kecerdasan dikenali sebagai golongan klasik. Menurut mereka, sebahagian besar kecerdasan dipengaruhi oleh aspek genetik dan tidak boleh dipertingkatkan melalui persekitaran. Mereka juga mempercayai kecerdasan boleh diukur dengan alat ujian. Golongan ini terdiri daripada Alfred Binet (1857-1911), Theodore Simon (1873-1961), Louis Thurstone (1983), Guilfrod (1967-1988) dan Cattel Horn (1963, 1982, 1977) (Ramlah & Mahani 2002). Alfred Binet (1908) misalnya telah mencipta ujian 'umur mental' yang digunakan untuk mengenal pasti tahap kecerdasan daripada segi kemampuan berbahasa, memproses maklumat, daya ingatan dan kebolehan menerima arahan.

Ahli psikologi yang mendokong aspek persekitaran mengatakan persekitaran boleh mempengaruhi kecerdasan telah didokong oleh ahli revisionist. Konsep kecerdasan yang dibawa oleh golongan ini bertentangan dengan golongan klasik. Mereka mempercayai kecerdasan boleh dipelajari melalui persekitaran dan alat ujian kecerdasan sebenarnya bukanlah penentu utama kecerdasan. Kecerdasan yang diwarisi boleh dipertingkatkan melalui persekitaran dan pengalaman. Bagi mereka, kecerdasan adalah kebolehan individu menyesuaikan diri dan menyelesaikan masalah dalam lingkungan sosial dan budayanya serta boleh menghasilkan produk yang bermanfaat kepada dirinya dan orang lain. Ahli-ahli reisionist terdiri daripada Howard Gardner (1983) dan Robert. J. Sternberg (1985, 1996) dan Goleman (1996) (Shahabuddin Hashim et al 2003; Ramlah & Mahani 2002).

Selain daripada itu konsep dan teori kecerdasan dilihat daripada aspek yang berlainan oleh Francis Galton (1822-1911). Beliau mengatakan kecerdasan adalah kebolehan intelek yang

bersifat penurunan. Walaubagaimanapun beliau berpendapat kebolehan ini bersifat umum (g faktor) iaitu kebolehan intelek adalah asas kepada kecerdasan lain seperti kecerdasan muzik, ruang, kinestetik dan sebagainya. Pandangan ini selari dan diperkembangkan lagi olah Charles Spearman (1863-1945) dan David Welsher (1896-1981) yang mengatakan kecerdasan klasik (classic area of intelligence) iaitu kecerdasan intelek memberi ruang dan peningkatan kepada kecerdasan yang lain (Feldman 1997; Nist dan Holschuh 2000). Secara amnya, teori kecerdasan boleh dibahagikan beberapa teori seperti teori triarchic oleh Sternberg (1985, 1986), teori struktur intelek oleh Guilford (1967), teori psikometrik umur mental oleh Simon dan Binet (1986), teori kecerdasan emosi oleh Goleman (1996) dan teori kecerdasan pelbagai oleh Howard Gardner (1983).

Pandangannya yang popular tentang kecerdasan ialah beliau mempersoalkan kesahihan kecerdasan tradisi iaitu intelek (IQ) yang telah memisahkan individu daripada kebolehan dan persekitaran semulajadi mereka. Menurutnya lagi kecerdasan tidak sepatutnya diukur hanya dari sudut intelek kerana kecerdasan intelek (IQ) bukanlah kecerdasan tunggal seseorang individu (Che Su, Nureadayu & Munif Zarrirudin 2011). Oleh yang demikian beliau mencadangkan kecerdasan pelbagai lebih berguna sebagai contohnya membolehkan seseorang individu itu menghasilkan sesuatu produk atau nilai daripada kecerdasan yang dimilikinya serta bermanfaat dan diterima dalam lingkungan persekitaran dan budayanya (Amstrong 2009). Jadi jelaslah disini kecerdasan pelbagai merupakan entiti kognitif yang diterjemahkan melalui pengalaman dan perbuatan yang kemudiannya terbentuklah kecerdasan pelbagai diri.

#### Latar Belakang Kajian

Kesemua kecerdasan ini ada pada semua manusia tetapi berbeza daripada segi kekuatan dan kelebihan. Misalnya, seseorang itu mungkin mempunyai kekuatan pada satu-satu kecerdasan dan lemah dalam kecerdasan lain. Kecerdasan yang kuat dimiliki pada seseorang individu itu menurut Gardner (1983, 1991) perlu digilap dan dihargai sebagai kebijaksanaan yang setanding dengan kebijaksanaan matematik dan bahasa yang secara tradisinya dihargai secara meluas dalam dunia pendidikan (Campbell et al. 1996).

Penilaian terhadap kecerdasan kognitif selalu diberi tumpuan di sekolah-sekolah manakala penilaian terhadap kecerdasan afektif seperti kecerdasan interpersonal dan intrapersonal kurang diberi perhatian. Begitu juga dengan kecerdasan berbentuk kemahiran atau bersifat psikomotor seperti kecerdasan kinestetik dan kecerdasan visual ruang. Keadaan ini tidak bertepatan kerana setiap kecerdasan adalah potensi yang perlu digilap dan jika tidak diberi perhatian boleh menyebabkan berlakunya pengabaian terhadap individu yang memiliki kecerdasan bukan kognitif (Mook 2010).

Perkara yang sering bermain diminda ahli akademik ialah tentang pemahaman tentang kecerdasan. Sebenarnya tiada definisi yang konsisten mengenai kecerdasan. Piaget (1952) mendefinisikan kecerdasan sebagai kebolehan individu untuk berfikir atau menaakul dalam proses untuk menyesuaikan diri dengan persekitaran. Nist dan Holschuh (2000) mengatakan kecerdasan ialah kemampuan seseorang individu untuk mempelajari dan berfikir serta memahami untuk menyelesaikan sesuatu masalah. Secara tradisinya kecerdasan merujuk kepada kemahiran dalam menggunakan bahasa serta kemampuan dalam pemikiran logik matematik. Jika dilihat daripada definisi secara operasionalnya, kecerdasan ditentukan oleh ujian kecerdasan (intelligence test).

Kecerdasan pelbagai pelajar yang diasah melalui aktiviti berpesatuan, pembelajaran luar kuliah yang lebih bersifat amali dan praktikal yang menyamai situasi pekerjaan yang sebenar merupakan alasan yang kuat bagi pihak berwajib universiti untuk tidak memandang enteng setiap aktiviti dan kursus yang ditawarkan. Persekitaran pembelajaran universiti yang menekankan kepelbagaian potensi individu khususnya potensi kerjaya merupakan platform kepada pelajar untuk membiasakan diri dengan alam pekerjaan yang sebenar.

Malah dalam sesebuah organisasi yang hebat sekalipun telah lama mengaplikasikan teori ini dengan cara menyediakan persekitaran kerja yang kondusif yang tidak mengenepikan kecerdasan pekerjanya. Ini kerana potensi dan kecerdasan pelbagai pekerja merupakan satu kelebihan dan harta yang paling berharga buat mereka. Pengetahuan tentang kecerdasan pelbagai juga membolehkan majikan menetapkan peranan tertentu yang sesuai dimainkan oleh pekerjanya. Oleh sebab itulah pengabaian perkara ini boleh memberi kesan buruk kepada produktiviti pekerja, kepuasan, self esteem yang menjadi punca kepada pekerja mencari peluang pekerjaan yang lain. Dengan cara ini, potensi individu dalam sebuah organisasi pendidikan mahupun pekerjaan tidaklah dibekukan begitu sahaja.

Penekanan teori kecerdasan pelbagai yang bermatlamatkan pencapaian akademik yang cemerlang semata-mata dilihat kurang releven untuk diguna pakai dalam konteks pendidikan semasa. Malah di negara-negara maju, aplikasi kecerdasan pelbagai sudah lama digunapakai dalam usaha meningkatkan kemahiran soft mahupun hard bagi tujuan kerjaya sama ada oleh universiti malah organisasi kerjaya yang mementingkan aspek kualiti pekerjanya.

#### Permasalahan Kajian

Teori ini juga dilihat releven dengan bidang yang berkaitan dengan kerjaya dan pendidikan teknikal. Gardner (1991) mengatakan pengetahuan tentang kelebihan dan potensi diri membolehkan seseorang memilih kerjaya yang bertepatan dengan kelebihan yang dimiliki.Gardner (1999) juga telah merevolusikan teorinya untuk diguna pakai dalam bidang pendidikan khasnya berkaitan dengan aspek perbezaan individu.

Kecerdasan pelbagai memiliki perkaitan yang rapat dengan kemahiran kerjaya. Kajian Siti Kausar (2016) menunjukkan kecerdasan interpersonal diikuti intrapersonal, pelajar merupakan kecerdasan pelbagai yang mempunyai perhubungan yang kuat berbanding kecerdasan pelbagai yang lain terhadap kesemua atribut kemahiran insaniah. Analisis regresi pula kecerdasan pelbagai menyumbang (55.6%) kepada kemahiran insaniah. Kecedasan pelbagai yang paling banyak menyumbang ialah kecerdasan interpersonal. Kajian merumuskan kecerdasan interpersonal merupakan indikator yang paling besar berbanding kecerdasan pelbagai yang lain yang menyumbang dan meramal kemahiran insaniah pelajar Ini diikuti dengan kecerdasan interpersonal, namun ianya sangat kecil.

Kajian lepas menunjukkan aspek kemahiran insaniah dan hubungkaitnya dengan jantina kerana timbulnya isu yang menunjukkan graduan perempuan tidak mendahului graduan lelaki dari aspek kemahiran insaniah. Kajian menunjukkan purata graduan lelaki tinggi dalam aspek keupayaan dan kemampuan dalam melaksanakan pekerjaan yang diceburi mereka berbanding graduan wanita. Antara aspek-aspek yang dinilai ialah seperti kemampuan menyesuaikan diri ditempat kerja, kebolehan menyelesaikan masalah dan membuat keputusan, menggunakan ICT, kemahiran komunikasi (Alumni ukm 2012). Kajian diseluruh IPTA mendapati graduan lelaki lebih mudah mendapat pekerjaan berbanding graduan perempuan. Keadaan ini

membimbangkan kerana jumlah kemasukan pelajar perempuan ke IPTA adalah lebih tinggi berbanding pelajar lelaki (Mohd Lazim 2009).

# 2. Definisi Istilah

Dalam kajian ini beberapa istilah akan didefinisikan untuk memantapkan lagi konsep dan teori kajian. Definisi operasional diterangkan seperti di bawah.

#### Kecerdasan Pelbagai

Menurut Kamus Dewan (2000), kecerdasan bermaksud kesempurnaan akal untuk berfikir, mengerti dan lain-lain seperti kepandaian, kepintaran dan kecerdikan. Istilah kecerdasan pelbagai diperkenalkan oleh Howard Gardner (1983, 1992) yang mendefinisikan kebijaksanaan sebagai potensi psikobiologikal untuk menyelesaikan sesuatu masalah atau menghasilkan sesuatu produk yang bermakna atau berharga dalam konteks budaya dan sosialnya. Menurutnya, terdapat lapan kecerdasan pelbagai yang dimiliki oleh semua manusia iaitu kecerdasan logik-matematik, bahasa-linguistik, interpersonal, intrapersonal, muzik, visual-ruang, kinestetik-badan dan naturalis.

#### Teori Kecerdasan Pelbagai Howard Gardner (1983, 1991)

Howard Gardner (1983, 1991) telah memperkenalkan teori kecerdasan pelbagai dengan mengatakan setiap individu mempunyai potensi berbeza-beza secara fitrahnya dan boleh diukur dengan darjah kecerdasan (IQ). Kecerdasan ini ialah kecerdasan logik-matematik, lisan-bahasa, interpersonal, intrapersonal, visual-ruang, kinestetik, muzik, dan akhirnya kecerdasan naturalis. Pada tahun 1991, beliau memperkenalkan satu lagi kecerdasan iaitu kecerdasan rohani. Walaubagaimanapun beliau lagi mengiktiraf kewujudan entiti kecerdasan berkenaan sebagai entiti kecerdasan pelbagai yang tidak bergantung. Sembilan kecerdasan ini dan penerangan bagi setiap kecerdasan tersebut ialah seperti yang berikut:

- a) **Kecerdasan logik-matematik:** Kecerdasan logik-matematik adalah kemampuan dalam menganalisis hubungan sesuatu konsep abstrak dan idea secara logik.. Kecerdasan logik-matematik seperti juga kecerdasan lisan-bahasa yang dihargai dan disanjung dalam dunia pendidikan.
- b) **Kecerdasan lisan-bahasa:** Kecerdasan lisan-bahasa adalah kelebihan berkomunikasi dan mengungkapkan bahasa secara lisan atau bertulis. Kecerdasan lisan-bahasa adalah kecerdasan yang sering dipandang tinggi dan diperlukan dalam dunia pendidikan akademik.
- c) **Kecerdasan interpersonal:** Kebolehan untuk memahami, mempengaruhi dan meramalkan perasaan orang lain untuk menyelesaikan sesuatu masalah.
- d) **Kecerdasan intrapersonal:** Kebolehan untuk memahami, membezakan, dan membina perasaan sendiri dengan tepat. Individu dapat mengenali diri sendiri secara mendalam serta mempunyai tanggapan tentang kekuatan dan kelemahan diri sendiri serta pandai menentukan hala tuju hidup.
- e) **Kecerdasan visual-ruang:** Kecenderungan dalam kecerdasan ini membolehkan seseorang menerima imej dan maklumat visualdan ruang dengan tepat. Mereka juga amat bijak dalam menggambarkan imej visual di dalam memori.
- f) **Kecerdasan kinestetik:** Kebolehan menggunakan sebahagian atau keseluruhan anggota tubuh badan untuk berkomunikasi dan menyelesaikan masalah. Cekap mengintepretasi pergerakan anggota atau tubuh serta cekap memanipulasi objek fizikal dan dapat

mengimbangi antara pergerakan fizikal dengan mental. Kebolehan ini adalah kritikal bagi ahli sukan, koreografer, pendaki gunung, dan lain-lain.

- g) **Kecerdasan muzik:** Kecerdasan muzik pada seseorang membolehkannya memahami, berkomunikasi dan mencipta bunyi-bunyian, rentak dan tempo. Kelebihan ini dimanifestasikan oleh komposer lagu, ahli muzik, penyanyi dan lain-lain.
- h) **Kecerdasan naturalis:** Kecerdasan membezakan, mengklasifisaikan dan menggunakan pelbagai flora dan fauna (Kornhaber et al., 2004).
- i) **Kecerdasan rohani (trancendental):** Menurut Gardner (1991) kecerdasan yang membolehkan seseorang untuk menjawab persoalan metafizikal seperti soal ketuhanan, keagamaan, kehidupan, kematian, dan sebagainya. Menurut Toto Tasmara (2008) kecerdasan rohani merangkumi kecerdasan emosi (EQ), interpersonal dan intrapersonal yang membolehkan individu itu membina hubungan yang baik sesama manusia (hablum min al-nas) dan dengan tuhan (hablum min Allah). Kecerdasan ini amat diperlukan bagi seoarang muslim bagi membina kehidupan yang sempurna dan mencapai tahap ketenangan jiwa yang paling tinggi iaitu al-nafsul mutmainnah.

Pengertian kemahiran insaniah atau generik adalah berbeza mengikut tempat. Kementerian Pengajian Tinggi Malaysia (KPT) menggunakan istilah kemahiran insaniah. Kepelbagaian definisi kemahiran generik adalah disebabkan fokus kemahiran tersebut difahami berdasarkan bidang prefesional yang akan diceburi oleh graduan (Jamaluddin 2009). Zalizan Jelas dan Norzaini Azman (2005) mendefinisikan kemahiran generik sebagai;

...The term 'generic skills' refers to the skills which can support study in any discipline, and which can be potentially be transferred to a range of contexts, in higher education or the workplace, ...(1).

Istilah kemahiran generik yang digunakan di luar negara misalnya di Australia ialah metaskills, iaitu kemahiran atau atribut tertentu yang diserap (embedded) ke dalam kurikulum dan perlu dicapai oleh graduan bagi memenuhi keperluan industri dan ekonomi (Pitman dan Broomhall 2009).Di United Kingdom (UK), kemahiran generik didefinisikan dalam pelbagai istilah iaitu 'score skills', 'transferable skills' dan 'competence skills' yang merujuk kepada kemahiran yang perlu ada diselitkan dalam setiap proses pembelajaran di peringkat pengajian tinggi.

#### Objektif Kajian

- 1. Menganalisis min atau purata kecerdasan pelbagai pelajar mengikut jantina.
- 2. Melihat perbezaan kecerdasan pelbagai pelajar mengikut jantina.

#### Persoalan Kajian

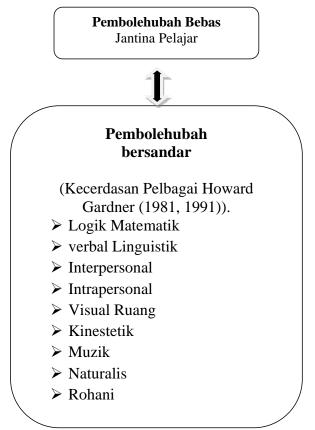
- 1. Apakah min kecerdasan pelbagai pelajar mengikut jantina?
- 2. Adakah terdapat perbezaan signifikan kecerdasan pelbagai pelajar mengikut jantina?

#### Tujuan Kajian

Kajian dijalankan bagi membuat analisis min bagi mengetahui purata kecerdasan pelbagai pelajar mengikut jantina. Kajian juga dijalankan bagi membuat rumusan yang tepat samaada pelajar lelaki dan perempuan berbeza dalam aspek kecerdasan pelbagai.

#### Hipotesis Kajian

HO1 Tidak terdapat perbezaan yang signifikan bagi kecerdasan pelbagai berdasarkan jantina pelajar.



Rajah 1: Kerangka Kajian Kuantitatif (min, perbezaan)

#### Skop dan Batasan Kajian

Skop dan batasan kajian merujuk kepada terbatasnya kajian yang hendak dikaji oleh kekangan masa, tenaga dan kewangan. Oleh yang demikian, kajian ini juga mempunyai beberapa skop dan batasannya dan akan dinyatakan di sini.

Kajian ini dijalankan disebuah univeristi dan tidak dijalankan keatas universiti awam lain. Pengkaji memilih universiti ini kerana memudahkan pengkaji untuk mendapatkan maklumat yang diperlukan dari segi faktor jarak, tempoh masa kajian dan kewangan. Dari segi persampelan pula, sampel kajian ini adalah kesemua pelajar di sebuah fakulti yang mengambil pelbagai bidang pengkhususan.

#### Kajian Lepas Kecerdasan Pelbagai merentas Jantina

Kajian yang mendapati terdapat kesan interaksi jantina terhadap kecerdasan pelbagai di dalam negara ditunjukkan oleh kajian Rosli (2005) dan kajian Ibrahim (2007). Kajian di luar negara ialah seperti kajian kajian Nofal dan Al-Heeleh (2008).

Rosli (2005) mendapati terdapat perhubungan yang signifikan di antara kecerdasan visual ruang merentas jantina. Kajian juga mendapati aspek jantina mempunyai perkaitan dengan kecerdasan domain visual ruang dengan pelajar lelaki lebih cerdas berbanding pelajar perempuan. 169 orang pelajar tingkatan empat di MRSM Kuala Kubu Bahru yang mata pelajaran Biologi telah dipilih sebagai sampel kajian. Instrumen yang digunakan ialah Multiple Intelligence Thomas Amstrong.

Dapatan kajian ini disokong oleh dapatan kajian terkemudian iaitu kajian Ibrahim (2007) yang mendapati skor peratus min pelajar lelaki lebih tinggi dalam visual-ruang (41.85%) berbanding perempuan (39.5%) dan bagi domain lain adalah hampir sama antara pelajar lelaki dan perempuan. Kajian dijalankan ke atas 949 pelajar tingkatan empat daripada sepuluh buah sekolah menengah di dua daerah negeri Selangor bertujuan untuk membina dan mengukur kesahan dan kebolehpercayaan instrumen kecerdasan pelbagai.

Namun demikian kajian Suppiah (2006) mendapati perbezaan kecerdasan pelbagai merentas jantina adalah hanya pada domain interpersonal dan intrapersonal. Kajian di jalankan di tiga buah sekolah menengah di Malaysia bertujuan untuk mengetahui faktor-faktor kecemerlangan akademik dalam peperiksaan awam diantara pelajar lelaki dan pelajar perempuan di tiga buah sekolah menengah di Malaysia. Sampel terdiri daripada 90 orang pelajar. Hasil kajian mendapati pelajar perempuan lebih mendominasi domain interpersonal dan intrapersonal berbanding pelajar lelaki. Domain interpersonal dan intrapersonal dilihat menyumbang kepada kecemerlangan pelajar perempuan iaitu 99 peratus faktor utama kecemerlangan berpunca daripada sifat kepimpinan, semangat yang tinggi, sikap positif, tidak mudah putus asa, dan motivasi untuk berjaya, berpegang kepada agama dan nilai-nilai murni, tidak suka melakukan aktiviti yang tidak berfaedah, tekun. Berlainan dengan pelajar lelaki kurang mempunyai aspekaspek yang disebutkan.

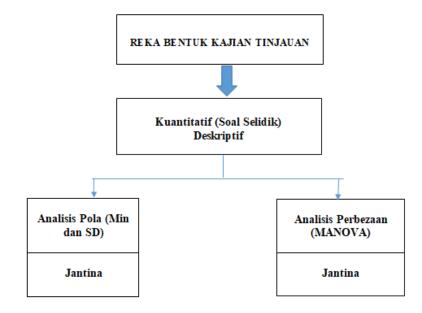
Kajian luar negara ialah kajian di Universiti Jordan/UNRWA oleh Nofal dan Al-Heeleh (2008) mendapati terdapat perbezaan yang signifikan kecerdasan pelbagai merentas jantina. Perbezaan kecerdasan adalah pada kecerdasan logik matematik, visual ruang, dan interpersonal dengan pelajar lelaki lebih kuat dalam domain ini. Manakala pelajar perempuan lebih kuat berbanding pelajar lelaki dalam domain muzik. Sampel kajian adalah seramai 515 orang pelajar tahun 1. Daripada kajian-kajian yang lepas yang dijalankan samaada di dalam luar negara, kajian ini menyimpulkan kecerdasan visual ruang diikuti kecerdasan logik matematik merupakan kecerdasan pelbagai yang kebanyakkannya didominasi oleh pelajar lelaki.

### Metod Kajian

Kajian ini merupakan kajian tinjauan kuantitatif dengan menggunakan kaedah soal selidik.

Secara spesifiknya, kajian tinjauan ialah kajian yang dijalankan untuk menghuraikan ciri-ciri sesebuah populasi, mengkaji sesuatu masalah dan fenomena, mengetahui, menganalisa dan memperakui masalah. Terdapat dua tujuan utama yang digunakan dalam kajian tinjauan iaitu pertama deskriptif bertujuan untuk memperihalkan purata kecerdasan pelbagai berdasarkan jantina. Bagi mencapai tujuan ini persoalan kajian berbentuk 'apakah' telah digunakan. Kedua untuk meninjau perbezaan bagi pembolehubah kecerdasan pelbagai dan jantina Bagi mencapai tujuan ini persoalan kajian berbentuk 'apakah' telah digunakan.

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### 3. Populasi Dan Sampel Kajian

Populasi kajian merupakan pelajar di sebuah fakulti IPTA tempatan iaitu seramai 955 orang yang terdiri daripada 637 perempuan dan lelaki 318 orang. Teknik rawak berstrata digunakan sebagai kaedah persampelan iaitu dengan membahagikan populasi kepada ciri berdasarkan demografi responden iaitu pembahagian populasi kepada kumpulan (*stratum*) jantina. Penyelidik menetapkan saiz sampel berdasarkan jadual menentukan saiz sampel yang dikemukakan oleh Krejcie dan Morgon (1970) dan peratusan sampel berdasarkan Creswell (2008). Jika berdasarkan jadual penentu saiz sampel menunjukkan saiz sampel minimum yang diperlukan ialah 275 orang. Jika menurut stratum jantina, 29 peratus daripada bilangan populasi atau 275 orang sampel bermaksud sampel lelaki adalah seramai 96 orang manakala sampel perempuan seramai 191 orang. Ini ditunjukkan secara terperinci dalam Jadual berikut;

Jantina	Saiz populasi	Saiz sampel /jumlah soal selidik diedarkan.	Peratusan (%) sampel
Lelaki	N=318	96/275	33%
Perempuan	N= 637	191/275	67%
Jumlah	955 (100%)	275/955	100%

Jadual 1: Saiz populasi, saiz dan peratusan sampel berdasarkan stratum jantina.

### Instrumentasi

Kajian ini memilih instrumen kecerdasan pelbagai yang diadaptasi daripada Hafsa (2008), Rusminah (2008) dan Ibrahim (2007) yang merujuk kepada instrumen MyMICA kerana telah terbukti dari segi kebolehpercayaan dan kesahannya melalui kajian-kajian yang dijalankan.

### Kesahan dan Kebolehpercayaan

Bagi tujuan menjalankan korelasi inter-item ini, kajian rintis telah dijalankan keatas 40 orang yang terdiri daripada populasi kajian yang dipilih secara sukarela. Ujian ini juga dijalankan bagi mengenalpasti item-item yang perlu dikekalkan atau digugurkan. Item-item yang mempunyai nilai sepunya yang kurang < 0.3 perlu digugurkan dan diubahsuai. Hasil ujian yang diperolehi mendapati nilai r bagi konstruk-konstruk kecerdasan pelbagai ditunjukkan dalam jadual 3.15, konstruk gaya pembelajaran ditunjukkan dalam jadual 3.16 dan konstruk kemahiran insaniah ditunjukkan dalam jadual 3.17 berikut;

Jadual 2: Nilai korelasi inter-item (r) bagi item kecerdasan pelbagai					
Konstruk	Nilai (r)				
B(1) Logik Matematik (lm1, lm2, lm3, lm4, lm5, lm6, lm7)	.441 sehingga .745				
B(2) Lisan Bahasa (11, 12, 13, 14, 15, 16, 17)	.439 sehingga .743				
B(3) Interpersonal (ie1, ie2, ie3, ie4, ie5, ie6, ie7)	.414 sehingga .695				
B(4) Intrapersonal (ia1, ia2, ia3, ia4, ia5, ia6, ia7)	.418 sehingga .823				
B(5) visual ruang (r1, r2, r3, r4, r5, r6, r7)	.465 sehingga .806				
B(6) Kinestetik Badan (kb1, kb2, kb3, kb4, kb5, kb6, kb7)	.429 sehingga .813				
B(7) Muzik (mz1, mz2, mz3, mz4, mz5, mz6, mz7)	.459 sehingga .845				
B(8) Naturalis (na1, na2, na3, na4, na5, na6, na7)	.500 sehingga .890				
B(9) Rohani (kr1, kr2, kr3, kr4, kr5, kr6, kr7)	.463 sehingga .845				

#### Jadual 3: Jumlah Skor Indek Koefisien Kebolehpercayaan Alfa Cronbach

Elemen	Jumlah Item	Nilai Alfa Keseluruhan
(B) Kecerdasan Pelbagai	7	
B (1) Logik Matematik	7	.877
B (2) verbal Linguistik	7	.881
B (3) Interpersonal	7	.881
B (4) Intrapersonal	7	.901
B (5) visual ruang	7	.847
B (5) Kinestetik Badan	7	.827
B (7) Muzik	7	.886
B (8) Naturalis	7	.841
B (9) Rohani	7	(.641)* .967

Petunjuk: * nilai item sebelum diubahsuai

Berdasarkan jadual di atas menunjukkan elemen kecerdasan pelbagai menunjukkan nilai Alfa Cronbach keseluruhan adalah tinggi iaitu antara .827 sehingga .901. Walaubagaimanapun, bagi item kecerdasan rohani yang bertanda (*) mempunyai nilai kebolehpercayaan yang rendah (.641) dan berubah menjadi tinggi (.967) selepas pengubahsuaian item dibuat dan kajian rintis kedua dijalankan. Elemen gaya pembelajaran juga menunjukkan nilai kebolehpercayaan yang tinggi iaitu antara .715 sehingga .916. Seterusnya elemen kemahiran insaniah pula menunjukkan kebolehpercayaan yang boleh diterima iaitu antara .738 sehingga .903 kecuali bagi item (*) iaitu kemahiran etika dan profesional yang memperolehi nilai yang rendah (.688) dan kemahiran kepimpinan (.625). Nilai kebolehpercayaan kemudiannya meningkat kepada .737 dan bagi kemahiran kepimpinan pula kepada .779 selepas pemurnian item dan kajian rintis dibuat pada kali yang kedua. Secara keseluruhannya kesemua item yang akan digunakan dalam kajian ini mempunyai nilai kebolehpercayaan yang tinggi dan boleh diterima.

### Dapatan Kajian

KP pelajar dihuraikan mengikut sembilan aspek iaitu logik matematik, verbal linguistik, interpersonal, intrapersonal, visual ruang, kinestetik badan, muzik, naturalis dan rohani. Analisis deskriptif yang melibatkan min dan sisihan piawai dijalankan bagi menentukan KP tersebut seperti Jadual 4 berikut;

<b>W</b> 1		Jantina
Kecerdasan pelbagai	L	Р
Logik Matamatik	3.96	3.78
Logik Matematik	.57	.58
verbal Linguistik	3.63	3.72
verbal Linguistik	.58	.55
Interpersonal	4.00	4.00
Interpersonal	.54	.51
T	4.03	3.97
Intrapersonal	.55	.53
	3.69	3.55
visual ruang	.64	.60
	3.71	3.44
Kinestetik Badan	.65	.66
	3.18	3.10
Muzik	.86	.83
	3.54	3.45
Naturalis	.72	.68
	4.77	4.78
Rohani	.51	.53

Jadual 4: Taburan min dan sisihan piawai KP mengikut jantina

L: Lelaki

P: Perempuan

Jadual menunjukkan taburan min dan sisihan piawai bagi setiap konstruk KP (logik matematik, verbal linguistik, interpersonal, intrapersonal, visual ruang, kinestetik badan, muzik, naturalis dan rohani) pelajar mengikut jantina.

Ini menunjukkan min KP logik matematik pelajar lelaki (Min = 3.96, SP = .57) lebih tinggi dari pelajar perempuan (Min = 3.78, SP = .58). Min verbal Linguistik pelajar perempuan (Min = 3.72, SP = .55) lebih tinggi dari pelajar lelaki (Min = 3.63, SP = .58). Min KP Interpersonal pelajar lelaki (Min = 4.00, SP = .54) sama dengan pelajar perempuan (Min = 4.00, SP = .51). Min KP Intrapersonal pelajar lelaki (Min = 4.03, SP = .55) lebih tinggi dari pelajar perempuan (Min = 3.97, SP = .53). Min KP visual ruang pelajar lelaki (Min = 3.69, SP = .64) lebih tinggi dari pelajar perempuan (Min = 3.55, SP = .60). Min KP Kinestetik Badan pelajar lelaki (Min = 3.71, SP = .65) lebih tinggi dari pelajar perempuan (Min = 3.44, SP = .66). Min KP muzik pelajar lelaki (Min = 3.18, SP = .86) lebih tinggi dari pelajar perempuan (Min = 3.10, SP = .83). Min KP Naturalis pelajar lelaki (Min = 3.54, SP = .72) lebih tinggi dari pelajar pelajar

Perbandingan min kecerdasan pelbagai pelajar dikira dari jawapan pelajar kepada item-item dalam kecerdasan pelbagai. Sementara min piawai yang tinggi diperoleh sekiranya nilai min KP pelajar itu lebih tinggi dari min piawai yang ditetapkan. Perbandingan min kecerdasan pelbagai pelajar seperti Jadual 5 berikut;

Kecerdasan Pelbagai	Min Kecerdasan Pelbagai Lelaki	Min Kecerdasan Pelbagai Perempuan	Min Piawai	Keputusan
LogikMatematik	3.96	3.78	3.68 - 5.00	Tinggi
VerbalLinguistik	3.63	3.72	3.68 - 5.00	Tinggi
Interpersonal	4.00	4.00	3.68 - 5.00	Tinggi
Intrapersonal	4.03	3.97	3.68 - 5.00	Tinggi
Visual ruang	3.69	3.55	3.68 - 5.00	Sederhana
KinestetikBadan	3.71	3.44	3.68 - 5.00	Sederhana
Muzik	3.18	3.10	3.68 - 5.00	Sederhana
Naturalis	3.54	3.45	3.68 - 5.00	Sederhana
Rohani	4.77	4.78	3.68 - 5.00	Tinggi

Jadual 5:	Perbandingan	min KP	pelajar d	lengan min	piawai	yang ditetapkan
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Sebagai rumusan kepada KP pelajar, didapati bahawa pelajar lelaki lebih tinggi dalam logik matematik, interpersonal, intrapersonal, visual ruang, kinestetik badan, muzik dan naturalis berbanding pelajar perempuan. Sementara pelajar perempuan lebih tinggi dalam verbal linguistik dan rohani berbanding pelajar lelaki.

### Analisis MANOVA terhadap Perbezaan KP Megikut Jantina

HO1 Tidak terdapat perbezaan yang signifikan kecerdasan pelbagai berdasarkan jantina pelajar.

Analisis MANOVA dijalankan bagi melihat perbezaan KP pelajar berdasarkan jantina, pengkhususan dan tahun pengajian. Sebelum analisis MANOVA dijalankan, pengkaji terlebih dahulu memastikan kenormalan data bagi mengelakkan sebarang outliers yang boleh menganggu ketepatan ujian. Setelah diperhatikan, jumlah sampel yang digunakan adalah banyak dan melebihi had minimum yang diperlukan bagi meneruskan ujian MANOVA. Menurut Chua (20) saiz sampel seramai 25 orang sudah memadai bagi meneruskan ujian MANOVA. Menurut Pallant (2011) outliers tidak memberi kesan yang besar dalam ujian yang menggunakan sampel yang bersaiz besar.

Hasil analisis MANOVA dapat dilihat seperti dalam Jadual 7

Kesan	Nilai Wilks' Lambda	Nilai F	DK antara kumpulan	DK Dalam Kumpulan	Sig	
Kecerdasan pelbagai pelajar	0.921	3.224	1	344	0.001	

Jadual 7: Wlilks' Lambda perbezaan KP pelajar berdasarkan jantina

Jadual 7 menunjukkan bahawa terdapat perbezaan yang signifikan KP pelajar berdasarkan jantina dengan nilai Wilks' = 0.921, F(1,344) = 0.001 (p<0.05). Ini menunjukkan hipotesis nol (Ho1) bahawa tidak terdapat perbezaan yang signifikan KP pelajar berdasarkan jantina adalah ditolak. Bermakna terdapat perbezaan yang signifikan KP pelajar antara pelajar lelaki dengan pelajar perempuan. Perbezaan bagi setiap aspek KP pelajar berdasarkan jantina dengan lebih terperinci bagi setiap elemen kecerdasan pelbagai di analisis dengan menggunakan MANOVA dapat dilihat seperti Jadual 8 berikut.

			- I		1		<b>J</b>		
Kecerdasan Pelbagai	Jantina	Ν	Min	Sisihan piawai	Type III Sum of Squares	Df	Jumlah kuasa dua	F	Sig.
Logik	Lelaki	100	3.96	0.57	2.161	1	2.161	6.387	0.012
Matematik	Perempuan	246	3.78	0.58					
verbal Linguistil	k Lelaki	100	3.63	0.58	0.570	1	0.570	1.806	0.180
	Perempuan	246	3.72	0.55					
Interpersonal	Lelaki	100	4.00	0.54	0.001	1	0.001	.002	0.963
	Perempuan	246	4.00	0.51					
Intrapersonal	Lelaki	100	4.03	0.55	0.291	1	0.291	.999	0.318
	Perempuan	246	3.97	0.53					
visual ruang	Lelaki	100	3.69	0.64	1.458	1	1.458	3.891	0.049
-	Perempuan	246	3.55	0.60					
Kinestetik	Lelaki	100	3.71	0.65	5.045	1	5.045	11.560	0.001
Badan	Perempuan	246	3.44	0.66					
Muzik	Lelaki	100	3.18	0.86	0.360	1	0.360	.511	0.475
	Perempuan	246	3.10	0.83					
Naturalis	Lelaki	100	3.54	0.72	0.593	1	0.593	1.245	0.265
	Perempuan	246	3.45	0.68					
Rohani	Lelaki	100	4.77	0.51	0.011	1	0.011	.041	0.840
	Perempuan	246	4.78	0.53					

Jadual 8: MANOVA perbezaan KP pelajar berdasarkan jantina

Jadual 8 menunjukkan terdapat perbezaan yang signifikan KP matematik pelajar berdasarkan jantina dengan nilai F = 6.387 dan sig = 0.012 (p<0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 3.96 dan sp = 0.57) mempunyai kecerdasan logik matematik yang lebih tinggi berbanding dengan pelajar perempuan (min = 3.78 dan sp = 0.58). Ini menunjukkan terdapat perbezaan yang signifikan kecerdasan logik matematik antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan verbal Linguistik pelajar berdasarkan jantina dengan nilai F = 1.806 dan sig = 0.180 (p>0.05). Dari segi min menunjukkan bahawa pelajar perempuan (min = 3.72 dan sp = 0.55) mempunyai verbal Linguistik yang lebih tinggi berbanding dengan pelajar lelaki (min = 3.63 dan sp = 0.58). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan verbal Linguistik antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan Interpersonal pelajar berdasarkan jantina dengan nilai F = 0.002 dan sig = 0.963 (p>0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 4.00 dan sp = 0.54) mempunyai interpersonal yang sama dengan pelajar perempuan (min = 4.00 dan sp = 0.51). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan Interpersonal antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan intrapersonal pelajar berdasarkan jantina dengan nilai F = 0.999 dan sig = 0.318 (p>0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 4.03 dan sp = 0.55) mempunyai intrapersonal yang lebih tinggi dari pelajar perempuan (min = 3.97 dan sp = 0.53). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan intrapersonal antara pelajar lelaki dan pelajar perempuan.

Terdapat perbezaan yang signifikan kecerdasan visual ruang pelajar berdasarkan jantina dengan nilai F = 3.891 dan sig = 0.049 (p<0.05). Dari segi min menunjukkan bahawa pelajar lelaki

(min = 3.69 dan sp = 0.64) mempunyai visual ruang yang lebih tinggi dari pelajar perempuan (min = 3.55 dan sp = 0.60). Ini bermakna terdapat perbezaan yang signifikan kecerdasan visual ruang antara pelajar lelaki dan pelajar perempuan.

Terdapat perbezaan yang signifikan kecerdasan Kinestetik Badan pelajar berdasarkan jantina dengan nilai F = 11.560 dan sig = 0.001 (p<0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 3.71 dan sp = 0.65) mempunyai kinestetik badan yang lebih tinggi dari pelajar perempuan (min = 3.44 dan sp = 0.66). Ini bermakna terdapat perbezaan yang signifikan kecerdasan kinestetik badan antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan muzik pelajar berdasarkan jantina dengan nilai F = 0.511 dan sig = 0.475 (p>0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 3.18 dan sp = 0.86) mempunyai kecerdasan muzik yang lebih tinggi dari pelajar perempuan (min = 3.10 dan sp = 0.83). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan muzik antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan naturalis pelajar jantina dengan nilai F = 1.245 dan sig = 0.265 (p>0.05). Dari segi min menunjukkan bahawa pelajar lelaki (min = 3.54 dan sp = 0.68) mempunyai kecerdasan naturalis yang lebih tinggi dari pelajar perempuan (min = 3.45 dan sp = 0.68). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan naturalis antara pelajar lelaki dan pelajar perempuan.

Tidak terdapat perbezaan yang signifikan kecerdasan rohani pelajar berdasarkan jantina dengan nilai F = 0.041 dan sig = 0.840 (p>0.05). Dari segi min menunjukkan bahawa pelajar perempuan (min = 4.78 dan sp = 0.51) mempunyai kecerdasan rohani yang lebih tinggi dari pelajar lelaki (min = 3.77 dan sp = 0.51). Ini bermakna tidak terdapat perbezaan yang signifikan kecerdasan rohani antara pelajar lelaki dan pelajar perempuan. Ringkasan analisis Manova adalah seperti berikut.

	Ada perbezaan Hol ditolak, nilai
	Wilks' $\lambda = 0.921$ , F(1,344) = 0.001
Jantina KP	(p<0.05). PL lebih tinggi dalam lm, vr,
	Kinest berbanding PP. PP lebih tinggi
	dalam roh berbanding PL

### Perbincangan

Kajian membuktikan terdapat perbezaan yang signifikan kecerdasan pelbagai berdasarkan jantina, walaubagaimanapun perbezaan hanyalah pada kecerdasan logik matematik, visual ruang dan kinestetik. Pelajar lelaki memiliki kecerdasan yang tinggi dalam logik matematik, visual ruang dan kinestetik berbanding pelajar perempuan. Manakala pelajar perempuan lebih tinggi dalam kecerdasan verbal linguistik berbanding pelajar lelaki. Kajian terdahulu dalam kalangan pelajar Kolej Mid-West menyokong dapatan kajian iaitu perbezaan adalah hanya pada kecerdasan logik matematik dan verbal linguistik dengan pelajar lelaki lebih cerdas dalam logik matematik manakala pelajar perempuan lebih cerdas dalam verbal linguistik (Stark 2004). Oraib (2011) juga mendapati perbezaan yang signifikan merentas jantina dengan pelajar perempuan lebih memiliki kecerdasan verbal linguistik dan kecerdasan interpersonal berbanding pelajar lelaki. Begitu juga dengan Deal (2003) mengatakan wanita lebih memiliki aspek interpersonal yang tinggi berbanding lelaki dalam aspek empati. Walaubagaimanapun

kajian ini mendapati kecerdasan interpersonal pelajar perempuan adalah menyamai kecerdasan interpersonal pelajar lelaki.

Dapatan kajian lain yang mengatakan kedua-dua kecerdasan interpersonal dan verbal linguistik adalah tinggi pada perempuan ialah Abdalla dan Kholoud (2011) yang mendapati pelajar perempuan daripada universiti-universiti awam dan swasta di Jordan lebih cerdas dalam verbal linguistik dan interpersonal. Kajian Rasoal et al. (2012) pula mendapati pelajar perempuan lebih empati dan memiliki kemahiran interpersonal yang tinggi berbanding pelajar lelaki. Walaubagaimanapun kajian Ellen (2012) yang juga mengkaji dalam kalangan pelajar kolej mendapati tidak terdapat perbezaan kecerdasan pelbagai merentas jantina.

Setelah diteliti bolehlah disimpulkan persamaan daripada kebanyakkan dapatan kajian adalah pada kecerdasan verbal linguistik dengan pelajar perempuan lebih mendominasi kecerdasan ini berbanding pelajar lelaki. Kecerdasan interpersonal yang didominasi kedua-dua jantina dilihat tidak memberi pengaruh kepada kecerdasan ini. Imi menunjukkan faktor luaran seperti aspek perhubungan yang kondusif telah memberi kesan yang positif terhadap kecerdasan interpersonal pelajar.

### Implikasi dan Cadangan

Oleh itu pihak universiti khususnya pensyarah seharusnya memberi penumpuan dengan menekankan aktiviti-aktiviti samaada dalam bentuk pembelajaran formal mahupun bukan formal seperti kursus-kursus komunikasi dan percakapan verbal mahupun bukan verbal agar boleh menajamkan lagi kecerdasan verbal linguistik dalam kalangan pelajar lelaki.

Dalam dunia pendidikan tinggi, penekanan dan penghargaan yang tinggi terhadap kecerdasan logik matematik dan verbal linguistik sukar dikikis. Tidak dinafikan kedua-dua kecerdasan ini mempunyai hubungkait generik dengan kemahiran kerjaya yang lain. Penghargaan terhadap hanya kecerdasan nombor, angka dan perkataan ini merupakan satu perkara yang tidak adil terhadap bakat semulajadi manusia yang sebenarnya adalah pelbagai (Campbell et al. 1996). Penekanan terhadap potensi yang pelbagai membolehkan pelajar mempunyai bakat dan potensi yang pelbagai.

Kajian lepas tentang perbezaan kemahiran insaniah merentas jantina walau bagaimanapun menunjukkan pelajar lelaki bukan sahaja lebih menguasai kedua-dua kemahiran ini berbanding pelajar perempuan bahkan dalam dalam kesemua aspek kemahiran insaniah. Kajian dijalankan pelajar prasiswazah daripada tiga universiti awam di dalam negara (Mohd Lazim 2009). Namun bagi aspek kemahiran memahami perasaan dan emosi orang lain serta tidak bias, kajian Boren-cohen (2013) dan Andrew et. al (2008) mendapati perempuan lebih menguasai kemahiran ini berbanding lelaki. Kemahiran sosial merupakan kemahiran yang merangkumi kemahiran komunikasi, kemahiran etika moral dan profesional serta kemahiran kepimpinan merupakan kemahiran yang amat diperlukan dalam apa jua jenis profesion pekerjaan.

Begitu juga dengan kajian (Rasoul et. al 2014) menunjukkan pelajar perempuan lebih menguasai kemahiran sosial seperti empati, bertimbangrasa, mudah menyesuaikan diri dengan orang lain tidak kira latar belakang dan etnik berbanding pelajar lelaki. Secara rumusannya dapatan yang menunjukkan keselarian dan tidak keselarian membuktikan faktor latar belakang yang dibincangkan dalam kajian ini dan dalam kajian lepas bukanlah faktor mutlak yang boleh mempengaruhi tahap kemahiran insaniah pelajar.

#### Rumusan

Pihak universiti khususnya pensyarah seharusnya memberi penumpuan dengan menekankan aktiviti-aktiviti samaada dalam bentuk pembelajaran formal mahupun bukan formal seperti seperti kursus-kursus komunikasi dan percakapan verbal mahupun bukan verbal agar boleh menajamkan lagi kecerdasan verbal linguistik dalam kalangan pelajar lelaki.

Perlunya membangunkan modul kecerdasan pelbagai dalam kalangan pelajar universiti menerusi pendekatan dan peresekitaran yang menepati kepelbagaian kecerdasan pelajar. Kecerdasan dalam diri pelajar universiti haruslah dikembangkan bukan dibekukan. Mengelakkan 'pembekuan' potensi individu pelajar itu tidak seharusnya ditekankan dalam PdP semta-mata bahkan dalam aktiviti-aktiviti yang menjurus kepada bidang kerjaya. Menurut Gardner (1983) perlunya majikan untuk mengetengahkan kelebihan kognitif pekerjanya merupakan alasan yang kukuh kepada aplikasi teori ini dalam bidang pekerjaan.

Bagi pihak pensyarah mereka perlulah memahami kepelbagaian tugas serta peranan yang berbeza dimainkan pelajar dalam aktitviti PdP memerlukan kecerdasan yang pelbagai untuk diselesaikan dan dilaksanakan. Isu yang timbul juga dalam membincangkan teori ini ialah adakah faktor pengalaman dan persekitaran membenarkan kelebihan dan potensi pelbagai ini dapat dibentuk secara adil. Dengan kata lain kelebihan kognitif yang dikurniakan tuhan merupakan sesuatu yang bukan statik tetapi perlu dibangunkan.

Begitu juga dalam sesebuah organisasi kepelbagaian pendekatan yang digunakan haruslah pelbagai seperti latihan, kursus dan bengkel bagi membolehkan anggota pekerja boleh memanipulasikan bakat yang ada untuk produktiviti organisasi. Malah dalam sesebuah organisasi aplikasi kecerdasan pelbagai adalah melalui latihan dan kursus yang disediakan. Tanpa peluang, kesedaran dan kefahaman tentang keunikan pelbagai yang dimiliki individu, teori ini tidak dapat diaplikasikan. Aplikasi teori kecerdasan pelbagai sering digunakan secara meluas dalam bidang pendidikan tetapi diabaikan dalam bidang pekerjaan (Gardner 1983).

Dapatan kajian ini menguatkan lagi kepentingan pengetahuan tentang aplikasi kecerdasan pelbagai adalah melalui latihan dan pembelajaran yang merupakan faktor persekitaran yang membenarkan kecerdasan pelbagai untuk diketengahkan. Pengaruh yang tinggi kecerdasan pelbagai terhadap pembentukan kemahiran soft dalam kalangan pelajar universiti yang merupakan individu akan berkecimpung dalam dunia pekerjaan selepas bergraduat seharusnya diberi perhatian yang serius.

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### Kesan Latihan Kendiri Dinamik Terhadap Konsep Kendiri Dan Perilaku Asertif Dalam Kalangan Pegawai Kanan Polis Trafik

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Abstrak: Kajian ini mengkaji kesan latihan konsep kendiri dinamik terhadap konsep kendiri dan perilaku asertif dalam kalangan pegawai kanan polis trafik. Kajian ini menggunakan reka bentuk kajian eksperimen ujian pra dan ujian pos. Enam puluh orang pegawai kanan polis trafik yang terlibat dalam kajian ini dipilih berdasarkan prosedur persampelan rawak berpadanan. Tiga puluh peserta dalam kumpulan eksperimen telah menjalani latihan konsep kendiri dinamik yang dijalankan dua jam setiap minggu selama lapan minggu berturut-turut. Ujian statistik yang digunakan ialah Ujian-t bersandar dan tidak bersandar dengan menggunakan perisian Statistical Package for Social Sciences (SPSS) versi 20. Kesemua peserta dalam kumpulan eksperimen menunjukkan peningkatan yang signifikan dalam markah mereka selepas latihan berbanding mereka daripada kumpulan kawalan. Terdapat peningkatan yang signifikan mengenai penemuan yang berkaitan dengan konsep kendiri dan perilaku asertif selepas latihan. Ini membuktikan bahawa latihan ini perlu ditekankan dalam usaha untuk meningkatkan konsep kendiri dan perilaku asertif dalam kalangan pegawai ini. Hasil daripada kajian ini akan membantu pegawai kanan polis trafik dalam pembangunan konsep kendiri dan perilaku asertif untuk meningkatkan prestasi kerja mereka yang melibatkan komitmen yang tinggi kepada masyarakat, organisasi dan pemegang taruh.

Kata kunci: Latihan Konsep Kendiri Dinamik, Konsep Kendiri, Perilaku Asertif, Polis Trafik.

**Abstract:** The research investigated the effect of self-concept dynamic training on the of selfconcept and assertive behaviour among senior traffic police officers. This research used a pre and post-test experimental design. Sixty senior traffic police officers involved in this study were chosen based on random matching sampling procedure. Thirty participants in the experimental group had undergone the self-concept dynamic training conducted two hours each week over eight consecutive weeks. Statistical tests used were the dependent and independent t-tests using Statistical Package for Social Sciences (SPSS) version 20.0 software. All the participants in the experimental group showed significant improvements in their scores after the training as compared to those in the control group. There were significant improvements on findings related to self-concept and assertive behaviour after the training. This proves that this training should be emphasized in the effort to improve self-concept and assertive behaviour among these officers. Findings from the study would assist senior traffic police officers in the development of their self-concept and assertive behaviour to improve their work performance which involves a high commitment to the community, organization, and stakeholders.

**Keywords:** Self-Concept Dynamic, Self-Concept, Assertive Behaviour, Traffic Police Officers.

### 1. Pengenalan

Cawangan Trafik Polis Diraja Malaysia yang merupakan salah sebuah agensi penguatkuasa yang undang-undang telah diberi peranan dan tanggungjawab bagi menjamin keselamatannegara turut menerima cabaran persepsi ini. Fungsi Cawangan Trafik PDRM dinyatakan dengan jelas dalam Akta Polis 1967 di bawah Seksyen 21 (1) iaitu :a) Untuk mengatur, mengawal dan mengubah perjalanan lalulintas; b) Untuk menjaga ketenteraman di jalan raya, lebuh raya, lorong, tempat bebas, tempat mudarat dan tempat-tempat yang menjadi kunjungan orang ramai; c) Untuk mencegah gangguan dalam perhimpunan atau perarakan di jalan raya yang difikirkan boleh menyebabkan halangan. Sebagai sebuah negara yang sedang bergerak menuju negara maju pada Tahun 2020, Cawangan Trafik PDRM perlu merancang dan memastikan ahli pasukan lebih bersedia dan lebih komited dalam melaksanakan tugas yang diberikan. Ini bermakna setiap pegawai polis memerlukan konsep kendiri dan tingkah laku asertif yang tinggi bagi membina kerjaya dan meneruskan kehidupan yang bahagia. Yahaya dan Ramli (2009) menjelaskan faktor penting dalam pembangunan konsep kendiri individu adalah dipengaruhi oleh persekitaran dan dengan siapa individu berkenaan berinteraksi. Selain itu konsep kendiri juga terbentuk apabila kita menjalinkan perhubungan dengan orang lain dan menyesuaikan diri dengan alam sekeliling sebagaimana yang diutarakan oleh Doherty (2011). Lindsay (2001) pula menjelaskan asertif adalah lebih merupakan potensi kepada penerokaan peluang kerjaya yang lebih luas jika dibandingkandengan kemahiran peribadi lain, konsep kendiri dalam kalangan pekerja pula dikaitkan dengan kekuatan dan kelemahan individu atau pun personaliti yang ada dalam dirinya. Pierce dan Gardner (2004) pula menjelaskan bahawa alasan utama individu membentuk konsep kendiri dalam persekitaran kerja kerana bukti-bukti menunjukkan bahawa ia berkaitan dengan kehidupan dan kejayaan di tempat kerja. Dapatan kajian Baron dan Byrne (2000) menjelaskan kesan konsep kendiri memainkan peranan penting dalam alam kerjaya. Ini kerana penglibatan pekerja berkenaan akan menjadi produktif dan berkesan melalui modul motivasi berkenaan. Konsep kendiri ini akhirnya akan dapat membangunkan semangat di dalam diri pekerja berkenaan supaya dapat menghasilkan mutu kerja selaras dengan perasaan, persepsi dan pengalaman diri sendiri. Rogers (1951) turut menjelaskan konsep kendiri ialah gabungan daripada penilaian diri sendiri, penilaian seseorang terhadap diri kita sendiri dan penilaiannya mengenai persepsi orang lain terhadap dirinya. Seperti yang diketahui bahawa setiap individu mempunyai pemikiran dan perwatakan yang berlainan. Namun adalah sukar menilai seseorang itu dari sudut dasarnya sahaja tanpa mengenali hati budi masing-masing. Sebagai contoh, jika seseorang individu mempunyai sikap yang baik dan lemah lembut, dia akan dilayan dengan baik oleh orang lain. Oleh itu, konsep kendiri yang positif amat penting dalam setiap individu supaya masyarakat tidak memandang serong terhadap diri seseorang. Selain daripada memiliki konsep kendiri yang positif, tingkah laku asertif juga penting dalam pembangunan sahsiah diri Pegawai Kanan Polis Trafik. Agustiani, (2014) menjelaskan tingkah laku asertif ialah menyatakan pendapat dengan jelas, mengekspresikan perasaan sesuai dengan keadaannya dan menjaga hak-hak orang lain. Pegawai trafik yang mempunyai tingkah laku asertif dalam dirinya adalah pegawai trafik yang bertanggungjawab sepenuhnya ke atas diri mereka sendiri, spontan dalam menyatakan perasaan dan boleh menghormati serta dihormati oleh orang lain. Kegagalan pegawai trafik mengungkapkan keinginan atau meluahkan perasaan boleh menyebabkan mereka hilang keyakinan diri. Ini adalah kerana individu yang memiliki konsep kendiri dan asertif yang tinggi akan berkebolehan untuk berpendirian tegas terhadap pekerjaan, keluarga, jiran tetangga mahupun rakan sekerja. Ini juga saling berkait rapat dengan tahap asertif yang ada dalam diri (Hamdan dan Ummi Habibah, 2008). Kajian berkaitan asertif merupakan satu kajian yang mesti diberikan penekanan kerana tingkah laku seseorang individu dalam membuat sesuatu perbuatan akan dapat dikaji. Ini merupakan faktor yang amat penting kepada kumpulan yang akan membuat keputusan melibatkan kepentingan dirinya dan keseluruhan organisasi yang akan memberikan impak besar kemudianya. Melalui latihan asertif yang dijalankan kemahiran dan pengupayaan individu akan dapat dipupuk dan seterusnya akan berjaya melahirkan individu cemerlang tingkah laku asertif. Tingkah laku ini bukanlah sesuatu sifat semula jadi dalam diri seseorang individu. Asertif pada dasarnya bermaksud melahirkan pendapat dengan tegas. Ini dijelaskan oleh Noraini Ahmad (2001), keupayaan dan kemampuan untuk berani berkata tidak kepada sesuatu tindakan yang mendatangkan kesan negative adalah merupakan tingkah laku asertif. Kemampuan mempertahankan hak individu dengan cara melahirkan pendapat dan meluahkan perasaan dengan yakin dan secara terus tanpa berselindung dengan tidak menafikan hak individu lain adalah merupakan seseorang yang bersikap asertif. Melalui tingkah laku asertif, individu itu akan berani mempertahankan terhadap apa yang berlaku dan berupaya mengurus keadaan dan seterusnya membuat keputusan dengan nilai dan akal yang waras tanpa dipengaruhi emosi. Pembangunan konsep kendiri adalah penting dalam usaha melahirkan pekerja yang berkualiti (Pierce dan Gardner, 2004). Pekerja yang tidak menyukai kerja yang dilakukan akan memberikan kesan kepada organisasi. Isu tingkah laku asertif dalam melakukan kerja dianggap sebagai suatu perkara yang tidak penting. Tingkah laku asertif yang ada pada pekerja dianggap tidak akan mempengaruhi konsep kendiri di kalangan seseorang pekerja kerana apa yang paling penting dalam konsep kendiri adalah faktor ganjaran yang diberikan dan persekitaran organisasi (Plucker dan Stocking, 2001). Pernyataan ini memberi gambaran bahawa tingkah laku asertif dapat mempengaruhi konsep kendiri pekerja yang akan menyumbang kepada produktiviti sesebuah organisasi.

### 2. Tinjauan Literatur

### 2.1 Latihan Kendiri Dinamik

Proses pemindahan ilmu pengetahuan secara sistematik dan berdisiplin yang bertujuan untuk menambah pengetahuan dan kemahiran terkini bagi memenuhi tuntutan dan keperluan semasa adalah merupakan latihan. Pencapaian ini akan dapat diperolehi melalui pendekatan latihan dalam perkhidmatan melalui kaedah pembelajaran contohnya kursus, seminar dan program mente atau mentor, pembimbing rakan sebaya atau yang seumpama dengannya yang menyumbang kepada pembangunan diri dan kecemerlangan organisasi. Pembelajaran berterusan ini melalui proses mendapatkan ilmu pengetahuan sepanjang hayat yang melibatkan tiga elemen utama iaitu latihan, pembelajaran dan pembangunan diri sebagaimana

yang digariskan dalam Dasar Latihan Sumber Manusia Sektor Awam (Petikan dari Pekeliling Perkhidmatan Bilangan 6 Tahun 2005) Ibrahim (2001) menjelaskan latihan adalah satu program pembelajaran yang dirancang. Faizah Yunus (2003) pula menjelaskan proses memperbaiki kemahiran dan sikap serta mendapat pengetahuan baru yang diperlukan untuk mempertingkatkan prestasi tugas di dalam organisasi adalah merupakan latihan.Program sebegini adalah suatu bentuk pelaburan yang dibiayai oleh organisasi atau syarikat bagi melahirkan modal insan yang dapat menyumbang kepada pencapaian organisasi. Walaupun latihan mempunyai pelbagai bentuk, namun matlamat kepada latihan ini adalah untuk meningkatkan kebolehan melakukan tugas serta memperbaiki prestasi kerja dan akhirnya organisasi berkenaan terus relevan. Tennants, Boonkrong dan Robert (2002) pula menjelaskan satu bentuk dan usaha yang berterusan dalam memberi pemahaman kepada ahli baru yang telah lama berkhidmat tentang kemahiran dan keperluan mereka untuk mendapatkan sesuatu pekerjaan adalah merupakan latihan. Bagi Blancard dan Thacker (2004) pula mendefinisikan latihan adalah satu aktiviti yang bersistem dalam memberikan peluang untuk mendapatkan pengetahuan, keupayaan dan kemahiran tertentu bagi melaksanakan aktiviti semasa atau aktiviti akan datang. Kajian ini, menjelaskan, latihan yang dijalankan adalah bertujuan untukmengaplikasikan atau tidak apa yang telah dipelajari semasa latihan dalam kehidupan seharian mereka. Ini adalah kerana Latihan Kendiri Dinamik juga dilaksanakan bagi maksud menambahkan pengetahuan, kemahiran dan kecekapan Pegawai Kanan Polis Trafik PDRM dalam bidang dan tanggungjawab masing-masing selari dengan kehendak kepimpinan dan organisasi serta pemegang taruh. Ini juga adalah selaras dengan penekanan oleh Ketua Polis Negara, "mengambil individu yang betul, meletakkan individu di tempat yang betul, adalah merupakan aset yang paling penting dalam organisasi" Khalid (2013).

### 2.2 Konsep Kendiri

Sebagai makhluk yang bernama manusia ia mempunyai suatu gambaran atau pandangan mengenai dirinya dan inilah konsep kendiri atau imej kendiri. Ianya juga adalah keseluruhan diri yang boleh kita gambarkan termasuklah kesihatan, kekuatandan kelemahan serta tingkah laku. Selain itu, konsep kendiri juga ditakrifkan sebagai bagaimana ia menganggap tentang dirinya sendiri sama ada secara positif atau negatif atau penilaian seseorang keatas dirinya sendiri. Gambaran ini berhubung rapat dengan perasaan kita terhadap kebolehan, perkara yang berlaku dan perkara yang akan berlaku pada diri kita. Ainon Mohd (2003), menjelaskan konsep kendiri ini terdiri daripada imej diri dan estim diri. Seterusnya, tanggapan seseorang terhadap ciri-ciri psikologikal, fizikal, ciri-ciri sosial serta sikapnya, kepercayaan dan fikiran imej diri yang baik menggambarkan diri yang baik adalah merupakan konsep kendiri (Pengenalan Diri). Imej diri adalah anggapan atau persepsi diri kita terhadap 'jenis dan orang

bagaimanakah diri kita ini ?'. Ini akan terhasil dengan kepercayaan kita terhadap diri kita sendiri. Azizi dan Fawziah (2003) menjelaskan bahawa makhluk manusia ini mempunyai pandangan dan suatu gambaran tentang diri mereka sendiri. Gambaran inilah disebutkan sebagai imej kendiri dan konsep kendiri. Berdasarkan apa yang dinyatakan di sini, boleh kita simpulkan bahawa Azizi dan Fawziah (2003) mempunyai pendapat dan pandangan konsep kendiri yang sama dengan Ainon Mohd (2003). Mereka merumuskan bahawa rangkuman gambaran tentang rupa paras seseorang, kesihatan fizikal, kebolehan, kelemahan dan tingkah laku seseorang adalah konsep kendiri. Berbeza sedikit dengan apa yang dikatakan oleh Devito (2004), beliau memberi pendapat bahawa konsep kendiri ialah hasil daripada empat sumber iaitu imej daripada orang lain, perbandingan antara seseorang individu dengan individu lain, budaya dan cara individu tersebut menginterpretasikan sesuatu dan cara pemikiran dan tingkah laku dirinya. Dengan yang demikian seseorang itu perlu memiliki konsep kendiri yang positif dan ini akan memandunya mencapai kesempurnaan kendiri bagi menentukan mutu kehidupan yang lebih cemerlang dan berjaya. Aktiviti meningkatkan konsep kendiri harus dilaksanakan supaya Pegawai Kanan Polis Trafik PDRM Bukit Aman akan dapat menjalankan tugas dan menempuh cabaran dengan lebih cemerlang.

### 2.3 Asertif

Asertif ditakrifkan sebagai kemampuan untuk meluahkan keinginan, perasaan dan kehendak yang dirasakan kepada pihak lain tanpa menyentuh hak dan perasaan orang lain. Rini (2001) menjelaskan asertif adalah suatu kebolehan bagi melahirkan apa yang diingini, difikirkan dan dan dirasakan tetapi masih mampu menghargai dan menjaga hak orang lain. Menurut Alberti dan Emmons (2002) pula, tingkah laku asertif adalah tingkah laku yang membuatkan seseorang itu dapat bertindak demi kebaikan dirinya, mempertahankan haknya tanpa cemas, mengekspresikan perasaan secara selesa dan menjalankan haknya tanpa melanggar hak orang lain. Pratanti (2007) menjelaskan kejujuran adalah penting dalam bersikap asertif terhadap

dirinya bagi meluahkan pendapat, menzahirkan perasaan, serta keperluan secara profesional, tanpa tujuan tertentu dan tidak mengambil kesempatan. Mengambil fade ataupun merugikan individu lain. Pratanti (2007) pula menjelaskan individu yang asertif memiliki ciri-ciri berikut:

- i. Mereka bebas untuk meluahkan perasaan, fikiran dan hasrat
- ii. Mereka merasa tahu hak mereka
- iii. Mereka boleh mengawal amarah dan mampu mengawal emosi.

Noraini Ahmad (2010) menjelaskan asertif adalah kemampuan berani berkata tidak kepada sesuatu tindakan yang menghasilkan impak yang negatif dan sebaliknya. Individu itu dijeniskan asertif apabila individu itu boleh mempertahankan hak-hak persendirian dengan meluahkan pendapat, melahirkan perasaan dan kepercayaan diri melalui ucapan yang dibuat secara ikhlas tanpa menafikan hak orang lain. Asertif merupakan salah satu tingkah laku dalaman yang merangkumi komunikasi langsung, terbuka, bebas, ikhlas dan menunjukkan pertimbangan dan penghormatan kepada individu lain (Mac Neilage dan Adams, 1982). Menurut Burley-Allen (1983), asertif adalah tingkah laku yang menunjukkan penghormatan terhadap diri dan juga individu lain. Tingkah laku asertif pula merujuk kepada kelakuan yang bersikap terbuka dan jujur pada diri sendiri serta individu lain. Selain itu, mendengar dan menerima pandangan individu lain juga tergolong dalam tingkah laku asertif. Memahami keadaan individu lain mereka berupaya berdiri teguh untuk diri sendiri.

### 3. Perbincangan

### 3.1 Latar Belakang dan Status Responden

Dalam kajian ini sampel bagi kumpulan eksperimen Pegawai Kanan Polis Trafik adalah seramai 30 orang dan 30 orang lagi adalah kumpulan kawalan dengan jumlah keseluruhan adalah seramai 60 orang peserta kajian.

Item	Kumpulan	Eksperimen	Kumpulan	Kawalan	Jumlah
	f (n=30)	Peratus (%)	f (n=30)	Peratus (%)	f (n=60)
					Peratus (%)
1. Jantina					
Lelaki	22	73.0	23	77.0	45 (75.0%)
Perempuan	8	27.0	7	23.0	15 (25.0%)
2. Umur					
20 hingga 35 tahun	6	20.0	7	23.0	13 (21.7%)
36 hingga 45 tahun	12	40.0	13	44.0	25 (41.7%)
46 hingga 55 tahun	10	33.0	9	30.0	19 (31.6%)
56 hingga 65Tahun	2	7.0	1	3.0	3 (5.0%)
3. Tempoh Berkhidmat di					
PDRM					
1 hingga 10 tahun	9	30.0	10	33.0	19 (31.6%)
11 hingga 20 tahun	12	40.0	11	37.0	23 (38.4%)
21 hingga 30tahun	8	27.0	7	23.0	15 (25.0%)
31 hingga 40tahun	1	3.0	2	7.0	3 (5.0%)

Jadual 1 : Perbandingan Latar Belakang Majoriti Pegawai Kanan Polis Trafik Mengikut Kumpulan Kajian

4. Tahap Pendidikan					
Tertinggi					
SPM	1	3.0	2	7.0	3 (5.0%)
STPM	11	37.0	11	37.0	22 (36.6%)
Diploma	3	10.0	2	7.0	5 (8.4%)
Ijazah	13	43.0	13	43.0	26 (43.4%)
Sarjana	2	7.0	2	7.0	4 (6.6%)
PhD	0	0	0	0	0
5. Pangkat Sekarang					
Deputi Superitendan Polis	4	13.0	4	13.0	8 (13.3%)
(DSP)					
Assistant Superitendan Polis	13	43.0	13	43.0	26 (43.4%)
(ASP)					
Inspektor	11	37.0	11	37.0	22 (36.6%)
Inspektor Percubaan	2	7.0	2	7.0	4 (6.7%)

### 3.2 Analisis Data

**3.2.1** Ujian t untuk Konsep Kendiri Pegawai Kanan Polis Trafik Dalam Kumpulan Eksperimen antara Ujian Pra Dan Ujian Pos.

Jadual 2: Kesan Latihan Kendiri Dinamik terhadap Konsep Kendiri dalam kalangan Pegawai Kanan Polis Trafik kumpulan eksperimen antara Ujian Pra dan Ujian Pos

Konsep Kendiri	Min	Ujian t	Nilai p	Kesimpulan
Ujian pra	3.1614	-24.994	0.001	Tolak Ho (0.001
Ujian pos	4.3037	-24.994	0.001	<0.05)

Aras signifikan 0.05

µ1 adalah min skor ujian pra

µ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Merujuk kepada Jadual 2, hasil daripada ujian t yang dijalankan mendapati bahawa nilai p adalah rendah dari aras signifikan iaitu 0.05. Gambaran menunjukkan adanya kesan Latihan Kendiri Dinamik kepada konsep kendiri antara ujian pra dengan ujian pos dalam kalangan Pegawai Kanan Trafik Bukit Aman kumpulan eksperimen. Gambaran  $\mu 1 = \mu 2$ , menunjukkan terdapat perbezaan yang digambarkan dalam sampel adalah pada kadar (lebih kurang) sebesar 0.001. Oleh kerana kebarangkalian fakta ini rendah yakni (kurang dari 0.05 atau 5.0%), maka Ho ditolak (yang menyatakan  $\mu 1 = \mu 2$ ). Ini menjelaskan adanya perbezaan min secara signifikan (iaitu  $\mu 1 \neq \mu 2$ ) bagi pemboleh ubah Latihan Kendiri Dinamik antara ujian pra dengan ujian pos yang dikaji. Dengan yang demikian didapati ada perbezaan min antara kedua-dua ujian pra dan pos. Saiz efek pula menunjukkan nilai (d=1.79) melebihi skala Cohen (1988), ini menunjukkan nilai dapatan kajian adalah lebih besar dari skala (d=0.8), dengan ini dapatan kajian menjelaskan bahawa latihan yang dijalankan menunjukkan peningkatan keberkesanan bagi Latihan Kendiri Dinamik kumpulan eksperimen.

# **3.2.2** Ujian t untuk Konsep Kendiri Pegawai Kanan Polis Trafik dalam Kumpulan Kawalan antara Ujian Pra Dan Ujian Pos

#### Jadual 3: Kesan Latihan Kendiri Dinamik kepada Konsep Kendiri dalam kalangan Pegawai Kanan Polis Trafik Kumpulan Kawalan antara Ujian Pra dan Ujian Pos

Konsep Kendiri	Min	Ujian t	Nilai p	Kesimpulan
Ujian Pra	3.0458	0.29	0.77	Ho diterima
Ujian Pos	3.2146			(0.77>0.05)

Aras signifikan 0.05

µ1 adalah min skor ujian pra

µ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Hasil daripada analisis dalam Jadual 3 menunjukkan bahawa nilai p (0.77) menerusi hasil ujian t adalah lebih besar daripada aras signifikan iaitu 0.05. Keadaan ini mengambarkan tidak terdapat kesan Latihan Kendiri Dinamik kepada konsep kendiri dalam kalangan Pegawai Kanan Polis Trafik dalam kumpulan kawalan antara ujian pra dan ujian pos. Memandangkan kebarangkalian berlakunya fenomena ini adalah 0.77 iaitu melebihi paras 0.05. maka tidak wujud perbezaan min yang signifikan. Maka, Ho diterima.

# 3.2.3 Ujian t untuk Konsep Kendiri Pegawai Kanan Polis Trafik Di Antara Kumpulan Eksperimen Dan Kumpulan Kawalan

Jadual 4: Kesan Latihan Kendiri Dinamik terhadap Konsep Kendiri dalam kalangan Pegawai Kanan Polis				
Trafik antara Pos Eksperimen dan Pos Kawalan				

Konsep Kendiri	Min	Ujian <i>t</i>	Nilai p	Kesimpulan
Pos Eksperimen	4.3037	20.544	0.001	Tolak Ho (0.001 <
Pos Kawalan	4.2146			0.05)

Aras signifikan 0.05

µ1 adalah min skor ujian pra

µ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Jadual 4 menunjukkan bahawa nilai p (0.001) menerusi hasil ujian t memperlihatkan dapatan signifikan pada aras 0.05. Ini menunjukkan data adalah kecil. Keadaan ini mengambarkan adanya kesan Latihan Kendiri Dinamik terhadap konsep kendiri dalam kalangan Pegawai Kanan Polis Trafik antara pos kumpulan eksperimen dengan pos kumpulan kawalan. Sekiranya  $\mu 1 = \mu 2$ , perbezaan dalam sampel adalah pada kadar (lebih kurang) sebanyak 0.001 maka kebarangkalian untuk memperolehi perbezaan. Oleh kerana fenomena ini rendah (kurang dari 0.05 atau 5.0%), maka Ho ditolak (yang menjelaskan  $\mu 1 = \mu 2$ ). Ini menunjukkan ada perbezaan min secara signifikan (iaitu  $\mu 1 \neq \mu 2$ ) bagi pemboleh ubah konsep kendiri Pegawai Kanan Polis Trafik pos kumpulan eksperimen dengan pos kumpulan kawalan yang dikaji. Dengan yang demikian telah ada perbezaan min antara kedua- dua ujian pos kumpulan eksperimen tersebut.

# **3.2.4** Ujian t untuk Asertif Pegawai Kanan Polis Trafik dalam Kumpulan Eksperimen antara Ujian Pra Dan Ujian Pos

Jadual 5 : Kesan Latihan Kendiri Dinamik kepada Asertif dalam kalangan Pegawai Kanan Polis Trafik kumpulan eksperimen antara ujian pra dan ujian pos

Tingkah laku Asertif	Min	Ujian <i>t</i>	Nilai <i>p</i>	Kesimpulan
Ujian Pra	4.1189	-13.492	0.001	Tolak Ho
Ujian Pos	5.1944			(0.001<0.05)

Aras signifikan 0.05

µ1 adalah min skor ujian pra

μ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Jadual 5 pula menunjukkan bahawa nilai p (0.001) menerusi hasil ujian t menunjukkan aras signifikan iaitu 0.05 iaitu lebih kecil. Ini mengambarkan terdapat kesan Latihan Kendiri Dinamik kepada tingkah laku asertif dalam kalangan Pegawai Kanan Polis Trafik di antara ujian pra dan ujian pos. Jika  $\mu 1 = \mu 2$ , ini mengambarkan pengkaji telah mendapat perbezaan sekurang-kurangnya perbezaan yang ditunjukkan dalam sampel adalah pada kadar (lebih kurang) sebesar 0.001. Dapatan ini adalah rendah (kurang dari 0.05 atau 5.0%) maka Ho ditolak (yang menyatakan  $\mu 1 = \mu 2$ ). Ini bermakna wujud perbezaan min secara signifikan (iaitu  $\mu 1 \neq \mu 2$ ) bagi pemboleh ubah asertif bagi kalangan Pegawai Kanan Polis Trafik yang dikaji di antara ujian pra dan ujian pos. Oleh itu Ho ditolak. Ini menunjukkan adanya perbezaan skor min di antara ujian pra dan ujian pos. Saiz efek pula menunjukkan nilai (d=1.22) adalah melebihi skala dari Cohen (1988), ini menunjukkan nilai dapatan kajian adalah lebih besar dari skala (d=0.8), dengan ini dapatan kajian menjelaskan bahawa latihan yang dijalankan menunjukkan peningkatan keberkesanan bagi latihan kendiri dinamik asertif kumpulan eksperimen.

# **3.2.5** Ujian t untuk Asertif Pegawai Kanan Polis Trafik dalam Kumpulan Kawalan antara Ujian Pra Dan Ujian Pos.

Jadual 5 : Kesan Latihan Kendiri Dinamik kepada Asertif dalam kalangan Pegawai Kanan Polis Trafik kumpulan kawalan antara ujian pra dan ujian pos

Tingkah laku Asertif	Min	Ujian <i>t</i>	Nilai <i>p</i>	Kesimpulan
Ujian Pra	4.2333	-0.621	0.540	Ho diterima
Ujian Pos	4.2404			(0.540 > 0.05)

Aras signifikan 0.05

µ1 adalah min skor ujian pra

µ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Aras signifikan 0.05, p < 0.05  $\mu$ 1 adalah min skor ujian pra  $\mu$ 2 adalah min skor ujian pos  $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan ujian pos. Paparan Jadual 5 menunjukkan bahawa nilai p (0.540) menerusi hasil ujian t adalah lebih besar daripada aras signifikan iaitu 0.05. Ini menunjukkan tidak terdapat kesan Latihan Kendiri Dinamik kepada asertif, iaitu dalam kalangan Pegawai Kanan Polis Trafik bagi kumpulan kawalan antara ujian pra dan ujian pos. Memandangkan kebarangkalian berlakunya fenomena ini adalah 0.540 iaitu melebihi nilai 0.05, maka tidak wujud perbezaan min yang signifikan. Oleh itu Ho diterima.

# 3.2.6 Ujian t untuk Asertif Pegawai Kanan Polis Trafik di antara Kumpulan Eksperimen dan Kumpulan Kawalan

Jadual 6 : Kesan Latihan Kendiri Dinamik kepada Dimensi Asertif dalam Kalangan Pegawai Kanan Polis Trafik bagi Pos Kumpulan Eksperimen dan Pos Kumpulan Kawalan

Tingkah laku Asertif	Min	Ujian <i>t</i>	Nilai p	Kesimpulan
Pos Eksperimen	5.1944	5.937	0.001	Tolak
Pos Kawalan	4.2404			(0.001<0.05)

Aras signifikan 0.05

 $\mu 1$  adalah min skor ujian pra

µ2 adalah min skor ujian pos

 $\mu$ 1 -  $\mu$ 2 adalah ujian perbezaan ujian pra dan pos

Berdasarkan analisis dalam Jadual 6 menunjukkan bahawa nilai p (0.001) menerusi hasil ujian t menunjukkan lebih kecil daripada aras signifikan iaitu 0.05. Ini menjelaskan adanya kesan Latihan Kendiri Dinamik kepada asertif dalam kalangan Pegawai Kanan Polis Trafik antara ujian pos kumpulan eksperimen dengan pos kumpulan kawalan. Jika  $\mu 1 = \mu 2$ , kebarangkalian kita memperolehi perbezaan sekurang-kurangnya perbezaan yang ditunjukkan dalam sampel adalah dianggarkan (lebih kurang) sebesar 0.001. Pengkaji mendapati fakta ini adalah rendah (kurang dari 0.03 atau 3.0%) maka Ho ditolak (yang menyatakan  $\mu 1 = \mu 2$ ). Keadaan ini menunjukkan ada perbezaan min secara signifikan (iaitu  $\mu 1 \neq \mu 2$ ) bagi pemboleh ubah tingkah laku asertif bagi pos ujian kumpulan eksperimen dan pos ujian kumpulan kawalan yang terlibat. Dengan yang demikian, kedapatan perbezaan min antara ujian pos kumpulan Pegawai Kanan Polis Trafik kumpulan eksperimen dengan ujian pos kumpulan kawalan yang dikaji.

### 4. Kesimpulan

Kajian ini merupakan satu usaha permulaan untuk melihat konsep kendiri dan asertif dalam organisasi Cawangan Trafik PDRM. Terdapat perbezaan min yang signifikan di antara ujian pra dan ujian pos terhadap Latihan Kendiri Dinamik kepada konsep kendiri dan asertif dalam kalangan Pegawai Kanan Polis Trafik. Begitu juga dengan dapatan kajian menunjukkan bahawa terdapatnya perbezaan yang ketara dalam Latihan Kendiri Dinamik dengan konsep kendiri dan asertif. Selain itu, wujud perbezaan keatas peningkatan terhadap kesan latihan kendiri dinamik dalam kalangan Pegawai Kanan Polis Trafik sebelum dan juga selepas mereka menghadiri program Latihan Kendiri Dinamik. Ini menyokong dapatan bahawa Latihan Kendiri Dinamik yang telah dijalankan selama lapan minggu telah memberikan impak tinggi dan besar kepada kumpulan eksperimen Pegawai Kanan Polis Trafik PDRM Bukit Aman. Ini kerana Latihan Kendiri Dinamik yang telah dihadiri oleh mereka membantu mereka berazam untuk membangunkan diri serta mempunyai motivasi yang tinggi. Ini jelas bermakna Latihan Kendiri Dinamik yang dihadiri tersebut telah memberikan kesan yang positif ke atas konsep kendiri dalam kalangan kumpulan eksperimen Pegawai Kanan Polis Trafik PDRM. Dapatan kajian ini menyokong keputusan yang menunjukkan bahawa semua konsep kendiri menunjukkan peningkatan yang ketara sebaik sahaja selesai Latihan Kendiri Dinamik.

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### Peranan Ibu Bapa Dalam Menyampaikan Pengetahuan Seksualiti Kepada Anak Bermasalah Pendengaran

(The Role Of Parents In Imparting Sexuality Knowledge For Children With Hearing Impairment)

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Abstrak: Peranan menyampaikan pengetahuan seksualiti kepada anak-anak merupakan tanggungjawab yang perlu dipikul oleh ibu bapa. Kajian ini bertujuan untuk mengenal pasti peranan ibu bapa dalam menyampaikan pengetahuan seksualiti kepada anak-anak bermasalah pendengaran. Kajian tinjauan ini dijalankan ke atas enam orang ibu bapa yang mempunyai anak-anak bermasalah pendengaran di daerah Besut. Data bagi kajian ini dikumpul melalui temu bual separa berstruktur. Hasil dapatan temu bual telah dibuat transkripsi secara verbatim dan kesimpulan dibuat berdasarkan analisis tema. Dapatan kajian menunjukkan bahawa ibu bapa kurang memberi sumbangan terhadap penyampaian pengetahuan seksualiti kepada anakanak bermasalah pendengaran disebabkan pelbagai faktor. Faktor peranan dan penglibatan ibu bapa, pengasingan fizikal, perbezaan medium komunikasi, persekitaran keluarga, serta sikap dan jangkaan ibu bapa terhadap anak bermasalah pendengaran telah dikenal pasti. Namun begitu, hasil kajian juga mendapati bahawa sikap anak-anak bermasalah pendengaran juga mempengaruhi peranan ibu bapa dalam penyampaian pengetahuan seksualiti kepada mereka. Kajian ini dapat memberi maklumat yang jelas kepada ibu bapa, agar mereka dapat memainkan peranan dalam menyampaikan pengetahuan seksualiti secara berkesan kepada anak-anak bermasalah pendengaran.

Kata kunci: Peranan, ibu bapa, pengetahuan seksualiti, masalah pendengaran

**Abstract:** The role of passing on the knowledge of sexuality to children is a responsibility that parents must bear. This study aimed to identify the role of parents in communicating knowledge of sexuality to hearing-impaired children. The study was conducted on six parents with hearing-impaired children in the Besut district. Data for this study were collected through semi-structured interviews. The results of the interview were verbatim transmitted and the conclusions were based on the theme analysis. The findings show that parents are less likely to contribute to the transmission of sexuality knowledge to hearing-impaired children due to various factors. The role of parental involvement and involvement, physical isolation, communication medium differences, family environment, and parental attitudes and expectations of hearing-impaired children. However, the study also found that the attitude of hearing impaired children also influences the role of parents in communicating their sexuality knowledge to them. This study provides parents with clear information so that they can play a role in effectively communicating the knowledge of sexuality to hearing-impaired children.

Keywords: Role, parenting, sexuality knowledge, hearing problems

### 1. Pengenalan

Pengetahuan seksualiti amat penting kepada anak-anak bermasalah pendengaran dalam membantu mempertingkatkan kemahiran yang diperlukan oleh anak-anak seperti kemahiran berinteraksi dan bersosial, menjaga kebersihan dan kesihatan, serta menjaga keselamatan dan maruah diri. Bilinga dan Mabula (2014) menyatakan murid-murid memerlukan pengetahuan yang mencukupi untuk melindungi mereka daripada risiko seksual. Pengetahuan seksualiti merangkumi pelbagai aspek yang penting kepada seseorang dalam menjalani kehidupan agar disenangi oleh masyarakat iaitu kebersihan, identiti seksual, perhubungan dan keintiman, seksualisasi dan keselamatan serta kesihatan reproduktif. Pendedahan pengetahuan seksualiti bukan bertujuan untuk memberi pendedahan atau menggalakkan anak-anak melakukan aktiviti yang ditegah oleh agama, sebaliknya bertujuan untuk memberi pendedahan agar mereka menjauhi perkara yang boleh memudaratkan diri, keluarga dan individu lain di sekitar mereka. Namun begitu, penyampaian pengetahuan seksualiti dianggap tabo oleh masyarakat di Malaysia (Amrizal, 2018). Malah, masyarakat di China juga menganggap pengetahuan seksualiti sesuatu yang tabo untuk dibincangkan dengan anak-anak (Yu et al., 2017). Anggapan ini menyebabkan sebahagian besar ibu bapa mengelak untuk menyampaikan pengetahuan seksualiti kepada anak-anak mereka. Anak-anak bermasalah pendengaran memperolehi pengetahuan seksualiti daripada pelbagai sumber. Antaranya jalah ahli keluarga guru-guru, rakan sebaya, media massa dan media sosial.

Ibu bapa seharusnya memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak-anak terutama anak bermasalah pendengaran kerana ibu bapa merupakan individu yang paling rapat dan paling banyak menghabiskan banyak masa dengan anak-anak. Sekiranya ibu bapa tidak dapat memberikan tumpuan dan menyediakan bahan-bahan berkaitan maklumat seksualiti yang bersesuaian, maka anak-anak bermasalah pendengaran akan ketinggalan daripada mendapat maklumat berkaitan seksualiti. Hal ini akan menjadikan jurang pengetahuan seksualiti antara anak bermasalah pendengaran dengan anak-anak tipikal yang lain semakin ketara. Oleh itu, ibu bapa seharusnya mencari masa yang berkualiti bersama anak-anak terutamanya anak bermasalah pendengaran untuk menyampaikan pengetahuan seksualiti kepada anak-anak selaras dengan saranan Salimah Othman (2014) yang mengesyorkan ibu bapa perlu mendedahkan maklumat seksualiti yang paling asas seawal usia anak-anak tiga tahun lagi.

### 2. Ulasan Kajian Lepas

### Pengetahuan seksualiti

Salimah Othman (2014) menyatakan pengetahuan seksualiti merangkumi semua aspek yang berkaitan dengan kehidupan. Antaranya ialah maklumat yang berkaitan bahagian tubuh badan (Salimah Othman, 2014; dan Azizah Jaafar et al., 2012). Dalam bahagian ini, Salimah Othman (2014) mencadangkan ibu bapa membimbing anak-anak tentang bahagian anggota badan yang awam dan yang sulit. Berdasarkan pandangan daripada sarjana di atas, ibu bapa perlu membimbing anak bermasalah pendengaran tentang penjagaan kebersihan anggota badan, menjaga anggota badan agar tidak cedera serta memakai pakaian yang bersesuaian agar anggota badan yang sulit terpelihara daripada pandangan pihak lain.

Selain itu, seksualiti juga terdiri daripada aspek identiti mengikut gender (Salimah Othman, 2014; dan Azizah Jaafar et al., 2012). Azizah Jaafar et al. (2012), dan Kong dan Tan (2010) juga menyatakan seksualiti terdiri daripada nilai dan kepercayaan terhadap identiti. Selain itu, aspek ini terdiri daripada ciri-ciri dan sifat-sifat yang menunjukkan persamaan dan perbezaan

antara lelaki dan perempuan, perkembangan serta identiti mengikut jantina (Salimah Othman, 2014). Manakala, Azizah et al. (2012) pula menambah bahawa peranan individu mengikut jantina juga merupakan sebahagian daripada aspek seksualiti. Ini bermakna, aspek identiti seksual merangkumi ciri-ciri, sifat-sifat, peranan serta tahap perkembangan dan perubahan fizikal mengikut jantina.

Aspek lain dalam seksualiti ialah perkara yang berkaitan perhubungan dan keintiman antara individu mengikut etika dan moral yang melibatkan kemesraan dan kasih sayang (Salimah Othman, 2014; Alijah Ujang et al., 2013; Azizah Jaafar, et al. 2012; dan Kong dan Tan, 2010). Aspek perhubungan antara individu yang mengikut etika dan moral merupakan elemen penting agar anak-anak bermasalah pendengaran dapat berhubung dengan masyarakat di sekeliling dengan kemesraan dan kasih sayang tetapi mengikut batasan yang sepatutnya. Hal ini bermaksud, cara berinteraksi dengan orang sekeliling, cara menjalin hubungan sama ada sesama jantina atau antara jantina, batas perhubungan dalam keluarga, dengan rakan-rakan, jiran dan individu yang tidak dikenali.

Seterusnya, Mahzan Arshad (2010) menyatakan seksualiti mengenai aspek yang berkaitan hubungan seks. Namun begitu, Salimah Othman (2014) menyatakan seks hanyalah satu elemen kecil dalam seksualiti. Manakala Alijah Ujang et al. (2013); dan Azizah Jaafar et al. (2012) pula menyatakan seksualiti ialah hal-hal yang berkaitan dengan organ seks dan pembiakan, kelahiran dan penjagaan kesihatan reproduktif. Ini bermakna, hal-hal yang berkaitan penyakit kelamin, cara jangkitan penyakit kelamin dan pencegahannya juga merupakan eleman-eleman dalam seksuatiti. Sehubungan dengan itu, Salimah Othman (2014) mencadangkan agar ibu bapa menerangkan proses kelahiran secara ringkas kepada anak-anak pada peringkat prasekolah dan sekolah rendah.

Berdasarkan pandangan daripada perbincangan di atas, pengetahuan seksualiti dapat disimpulkan sebagai maklumat, kemahiran, pengalaman dan kebolehan membuat keputusan dalam kehidupan secara menyeluruh berdasarkan faktor sosial, budaya, sikap, nilai dan tingkah laku individu serta agama. Pengetahuan ini penting kepada remaja bermasalah pendengaran agar pengetahuan mereka seimbang sebagai insan yang bersikap positif dan berakhlak mulia seterusnya akan disenangi oleh masyarakat.

### Bermasalah pendengaran

Muhammad Sayuti et al. (2016), menyatakan murid bermasalah pendengaran merujuk kepada golongan yang mempunyai ketidakupayaan dari segi deria pendengaran atau pendengaran kurang baik. Masalah ini menyebabkan golongan ini kurang mendapat manfaat daripada percakapan biasa seterusnya berisiko dalam mendapatkan pengetahuan seksualiti. Selain itu, mereka juga tidak dapat mengakses maklumat daripada sumber audio. Hal ini disokong oleh Rose Chikopela et al. (2019) dan Mprah (2013) yang menyatakan halangan komunikasi dalam kalangan komuniti ketidakupayaan pendengaran menyebabkan mereka tercicir daripada mendapat pelbagai maklumat, termasuk maklumat berkaitan seksualiti.

Nik Hassan et al. (2016) menyatakan golongan bermasalah pendengaran menggunakan bahasa isyarat untuk berkomunikasi disebabkan persekitaran pergaulan mereka hanya melibatkan kumpulan mereka sahaja. Medium komunikasi yang berbeza juga menyebabkan golongan ini berisiko mengalami keciciran maklumat berikutan mereka mempunyai halangan dalam komunikasi dengan individu tipikal seterusnya mengakibatkan pengetahuan seksualiti golongan ini adalah rendah kerana sumber untuk mereka mengakses maklumat adalah terhad dan sukar.

Hal ini dibuktikan melalui dapatan kajian Yu et al. (2017), Gomez (2011), Groce et al. (2006), Oyo-Ita et al. (2005) yang mendapati pengetahuan seksualiti murid bermasalah pendengaran adalah lemah. Selain itu, kajian oleh Mprah, Anafi, dan Addai Yeaboah, (2017) tentang pengetahuan kesihatan reproduktif, HIV dan AIDS serta penyakit kelamin kepada golongan ketidakupayaan pendengaran di Ghana menunjukkan pengetahuan seksualiti murid ketidakupayaan pendengaran terutamanya dalam kalangan remaja adalah rendah. Manakala kajian di Malaysia oleh Touko et al. (2010) pula mendapati pengetahuan seksualiti golongan ketidakupayaan pendengaran berkaitan penyakit jangkitan seksual juga adalah lemah.

### Peranan ibu bapa dalam menyampaikan pengetahuan seksualiti

Agama Islam meletakkan tanggungjawab menyampaikan pengetahuan seksualiti kepada ibu bapa. Oleh yang demikian, ibu bapa perlu menerapkan pengetahuan seksualiti dan disusuli dengan didikan agama sebagai persiapan agar anak-anak tidak terjebak dengan tingkah laku sosial yang mengakibatkan mereka terjerumus dalam masalah sosial yang lebih parah. Selain itu, didikan agama yang mantap juga diharapkan dapat membantu anak-anak menjaga kehormatan dan mengawal tingkah laku yang menjurus ke arah tingkah laku seksual serta dapat menjalin hubungan dengan masyarakat mengikut nilai dan budaya setempat. Untuk menangani, tingkah laku seksual anak-anak berkeperluan khas, Fariza et al. (2017) mencadangkan ibu bapa memberi didikan dalam tiga aspek iaitu, fardhu ain, al-Quran dan pengurusan emosi.

Selain itu, ibu bapa perlu menyampaikan pengetahuan seksualiti kepada anak-anak berkeperluan khas mengikut tahap perkembangan mereka agar anak-anak dapat memahaminya dengan jelas (Salimah Othman, 2014). Apabila ibu bapa memainkan peranan aktif dengan menyediakan pelbagai bahan dan menyampaikan dengan kaedah yang bersesuaian kepada anak bermasalah pendengaran, diharapkan usaha tersebut dapat memberi kefahaman dan meningkatkan pengetahuan seksualiti sekaligus dapat menghindari mereka daripada tingkah laku negetif. Peranan ibu bapa dalam mempengaruhi pengetahuan seksualiti anak bermasalah pendengaran diketengahkan dalam kajian ini kerana ibu bapa merupakan agen sosialisasi yang paling berpengaruh bagi murid-murid. Menurut Teori Ekologi Bronfenbrenner (1979), ahli keluarga merupakan individu yang berada dalam sistem yang terdekat dan banyak mempengaruhi pengetahuan murid.

Ibu bapa mampu memainkan peranan mereka dalam menyampaikan pengetahuan seksualiti kepada anak-anak termasuklah anak bermasalah pendengaran kerana pengetahuan seksualiti merangkumi pelbagai aspek kehidupan. Malah, sebahagian besar aspek pengetahuan seksualiti sebenarnya mampu dibimbing oleh ibu bapa kerana ia berkaitan dengan perkara atau peraturan asas dalam kehidupan yang berteraskan agama dan budaya sesuatu masyarakat. Contohnya hal yang berkaitan kebersihan, kesihatan, adab pergaulan dan perhubungan, identiti seksual, keselamatan diri dan sebagainya. Malah, ibu bapa juga boleh membimbing anak-anak tipikal yang lain untuk menyampaikan pengetahuan seksualiti kepada adik-beradik yang mengalami masalah pendengaran.

Berdasarkan hasil kajian-kajian lepas menunjukkan ibu bapa tidak dijadikan sebagai sumber utama murid-murid bermasalah pendengaran mendapatkan pengetahuan seksualiti. Hasil kajian oleh Groce (2006) dan Oyo-Ita et al. (2005) mendapati sumber utama murid bermasalah pendengaran di sekolah menengah mendapat pengetahuan seksualiti ialah media massa. Seterusnya Mprah (2014) mendapati sumber utama pengetahuan remaja ketidakupayaan pendengaran di Ghana ialah pihak sekolah. Walau bagaimanapun, Mprah juga mendapati ahli keluarga merupakan sumber pengetahuan seksualiti murid bermasalah pendengaran selain pihak sekolah. Sehubungan dengan itu, kajian ini bertujuan untuk melihat sejauh mana peranan ibu bapa dalam mempengaruhi pengetahuan seksualiti anak-anak bermasalah pendengaran bagi memastikan mereka mendapat pengetahuan seksualiti yang tepat dalam pelbagai aspek seperti anak-anak tipikal yang lain. Persoalan kajian ini membincangkan tentang sejauh manakah ibu bapa memainkan peranan dalam mempengaruhi pengetahuan seksualiti anak bermasalah pendengaran.

### 3. Perbincangan dan Kesimpulan

Hasil dapatan kajian yang diperolehi daripada 6 orang ibu bapa yang ditemu bual dianalisis dan dibahagikan kepada beberapa tema yang dikenal pasti. Hasil kajian dilihat daripada lima aspek utama iaitu 1) Ibu bapa sebagai pembimbing 2) pengasingan fizikal 3) perbezaan medium komunikasi 4) persekitaran pembelajaran di rumah 5) sikap dan jangkaan ibu bapa.

### 1. Ibu bapa sebagai pembimbing

Pandangan majoriti responden dalam kajian ini menyatakan bahawa ibu bapa berperanan sebagai pembimbing dalam keluarga masih dominan dalam kalangan masyarakat di Malaysia. Hal ini selaras dengan ajaran agama Islam yang meletakkan tanggungjawab membimbing anak-anak dalam pelbagai perkara termasuklah hal-hal yang berkaitan pengetahuan seksualiti merupakan tanggungjawab ibu bapa. Bimbingan daripada ibu bapa bukan sahaja dapat menambah pengetahuan seksualiti anak bermasalah pendengaran, tetapi bimbingan yang berteraskan kasih sayang juga dapat membina hubungan yang akrab antara anak bermasalah pendengaran dengan ibu bapa. Hal ini berdasarkan dapatan daripada temu bual dengan ibu bapa 3, 4, 5 dan 6 yang telah menyatakan ibu bapa mempunyai tanggungjawab membimbing anak bermasalah pendengaran di rumah. Sebagai contoh, ibu bapa 3 menyatakan dia dan isteri sentiasa membimbing anaknya yang bermasalah pendengaran dengan cara menegur cara percakapan, tingkah laku, pergaulan, dan cara berpakaian anaknya secara berulang kali agar anak bermasalah pendengaran akan memahami dan ingat maklumat yang disampaikan seterusnya mengamalkan bimbingan tersebut dalam kehidupan mereka. Kenyataan beliau adalah seperti berikut:

"saya dan isteri selalu menegur anak saya terutama soal jaga kebersihan pakaian dan bilik tidur dia ... sebab, didik anak adalah tanggungjawab saya ... tapi yang banyak tegur anak ibu dia" (ibu bapa 3)

Selain ibu bapa 3, kebanyakan ibu bapa yang ditemu bual menyatakan pembimbing anak-anak yang utama dalam keluarga selalunya dilakukan oleh ibu. Hal ini disebabkan kaum ibu memiliki kaedah yang lebih baik untuk menyampaikan sesuatu perkara kepada anak-anak terutamanya anak bermasalah pendengaran selain mempunyai lebih banyak masa bersama. Sebagaimana responden 4 menyatakan mereka suami isteri sentiasa meluangkan masa untuk membimbing anak bermasalah pendengaran. Walaupun anak mereka tinggal di asrama sejak tahun satu lagi, tetapi mereka selalu melawat anak mereka di asrama untuk meluangkan masa. Setiap kali meluangkan masa, mereka sentiasa memberi nasihat dan teguran kepada anak mereka terutamanya ibu. Malah, mereka memberi perhatian yang lebih kepada anak bermasalah pendengaran berbanding anak-anak lain seperti yang dinyatakan oleh responden ibu bapa 5. Oleh itu, ketidakupayaan anak mereka tidak dijadikan alasan mereka mengelak daripada menjalankan tanggungjawab sebagai ibu bapa. Berikut adalah penyataan yang dikemukakan oleh ibu bapa 4 dan 5.

" bila tengok anak saya bergurau dengan cara kasar dengan kawan-kawannya di asrama, saya terus menegurnya dan cakap cara begitu salah, saya juga tunjuk cara bergurau yang betul" (ibu bapa 4)

"saya sentiasa tegur anak saya yang pekak, saya juga selalu beri perhatian yang lebih pada dia banding dengan anak-anak yang lain" (ibu bapa 5)

Selain itu, responden juga menyatakan ibu bapa memainkan peranan dalam menyampaikan maklumat seksualiti kepada anak-anak agar anak-anak dapat membina hubungan yang baik dengan keluarga terutamanya ibu bapa. Kebanyakan ibu bapa juga bersetuju bahawa ibu bapa sebagai elemen yang paling penting dalam penyampaian pengetahuan seksualiti kepada anak-anak terutamanya anak bermasalah pendengaran. Namun, ada ibu bapa yang mengharapkan pengetahuan seksualiti anak bermasalah pendengaran dimantapkan lagi oleh guru-guru di sekolah melalui pelbagai aktiviti kerana terdapat aspek yang sukar disampaikan oleh ibu bapa. Selain itu, responden menyatakan bahawa guru memiliki kepakaran yang lebih baik selain anaknya yang bermasalah pendengaran lebih banyak menghabiskan masa di sekolah. Hal ini diutarakan oleh oleh ibu bapa 6.

"ada juga bimbing anak saya tentang jaga kebersihan, pakai pakaian yang sopan ... tapi, ada juga yang saya rasa susah nak cakap. Maka, saya harap cikgu-cikgu yang akan ajar di sekolah kerana cikgu lebih mahir ... lagipun anak saya tinggal di asrama " (ibu bapa 6)

Hasil kajian ini mendapati peranan ibu bapa masih kurang dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran walaupun pengetahuan seksualiti penting kepada anak-anak bermasalah pendengaran. Hampir kesemua sampel dalam kajian ini bersetuju bahawa ibu bapa seharusnya memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Dapatan kajian ini juga mendapati kaum ibu lebih banyak memainkan peranan dalam penyampaian pengetahuan seksualiti kepada anak bermasalah pendengan khususnya dalam aspek kebersihan, identiti seksual, perhubungan dan keintiman serta keselamatan. Hal ini selari dengan kajian Erni dan Sitti Nur Djannah (2015); dan Suryati (2012) yang mendapati anak-akan lebih selesa berbincang dengan ibu dalam halhal yang berkaitan dengan aspek-aspek tertentu. Peranan kaun ibu lebih menonjol dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran dikaitkan sifat keibuan dan penyabar. Oleh itu, adalah penting sekiranya ibu bapa memberi perhatian dan memikirkan akan kesesuaian kaedah yang digunakan dalam menyampaikan pengetahuan seksualiti dan penyediaan bahan yang bersesuaian kepada anak bermasalah pendengaran. Walau bagaimanapun, asuhan, didikan, kasih sayang dan perhatian daripada ibu bapa adalah penting kepada anak-anak terutama anak-anak bermasalah pendengaran kerana mereka sukar mendapat maklumat daripada pihak lain disebabkan perbezaan cara komunikasi.

### 2. Pengasingan fizikal

Pengasingan fizikan menyebabkan ibu bapa kurang memainkan peranan menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Hal ini disebabkan kebanyakan anak-anak bermasalah pendengaran tinggal di asrama kerana jarak rumah yang jauh dari sekolah mengakibatkan mereka telah menghabiskan sebahagian besar masa kanak-kanak dan remajanya di asrama. Malah, ada anak bermasalah pendengaran mula tinggal di asrama semenjak berusia 6 atau 7 tahun sehingga sekolah menengah. Senario ini menyebabkan masa anak bermasah pendengaran bersama-sama ahli keluarga adalah terhad kerana mereka jarang berjumpa dan tidak dapat menghabiskan masa bersama dalam tempoh yang panjang. Secara tidak langsung, ibu bapa kurang memberi pendedahan terhadap pengetahuan seksualiti. Ibu

bapa 1 dan 3 menyatakan bahawa pihaknya sedar akan tanggungjawab mendidik anak bermasalah pendengaran, namun disebabkan halangan iaitu anak bermasalah tinggal di asrama sejak awal persekolahan lagi menyebabkan beliau tidak dapat merealisasikan tanggungjawab tersebut sepenuhnya. Pernyataan yang dibuat oleh ibu bapa 1 dan 3 ialah :

"anak saya tinggal di asrama masa umur 6 tahun hingga sekolah menengah, dia balik sebulan atau dua minggu sekali, jadi tak banyak yang saya ajar pada dia" (ibu bapa 1). "anak saya jarang berhubung dengan saya sejak dia belajar di Johor ni ... jadi, tak banyak sangat saya ajar dia" (ibu bapa 3).

Selain itu, ibu bapa 1, 4 dan 6 menyatakan sikap anak bermasalah pendengaran yang sentiasa mengasingkan diri daripada ahli keluarga menyebabkan penyampaian maklumat seksualiti tidak dapat dilakukan dengan baik. Pengasingan fizikal masih wujud dalam kalangan anak bermasalah pendengaran walaupun mereka pulang ke rumah pada musim cuti sekolah. Sikap anak bermasalah pendengaran yang lebih banyak menghabiskan masa bermain gajet telah menjarakkan lagi hubungan antara mereka. Selain itu, anak bermasalah pendengaran juga lebih gemar menghabiskan masa bersama rakan-rakan berbanding ahli keluarga. Pilihan anak bermasalah pendengaran untuk bersama-sama rakan mungkin disebabkan mereka lebih mudah berinteraksi dan menganggap rakan lebih memahami serta mempunyai hobi yang sama. Sikap anak bermasalah pendengaran yang lebih gemar menonton televisyen dan bermain gajet apabila pulang bercuti pada musim cuti sekolah atau cuti hujung minggu merupakan salah satu faktor pengasingan fizikal. Mereka lebih selesa bermain gajet dan menonton televisyen untuk merehatkan diri dan fikiran kerana telah penat belajar dan mengulang kaji pelajaran pada masa persekolahan di asrama. Pengasingan ini juga menyebabkan masa mereka bersama keluarga adalah terhad dan hubungan antara ibu bapa dengan anak bermasalah pendengaran kurang mesra seterusnya menyebabkan ibu bapa mempunyai masa yang terhad untuk berbual-bual dan melakukan aktiviti bersama-sama. Secara tidak langsung, masa untuk ibu bapa menyampaikan pengetahuan seksualiti adalah terhad. Berikut ialah pernyataan yang diberi oleh ibu bapa 1,4 dan 6.

"Sejak masuk sekolah menengah ni, anak saya banyak main telefon ... banyak duduk dalam bilik ... saya jarang bercakap dengan anak saya yang pekak" (ibu bapa 1).

" Bila dah besar, pada masa cuti sekolah dia banyak keluar dengan kawan dia yang pekak juga, saya dan dia jarang dapat berbual lama-lama" (ibu bapa 4)

" Anak saya lebih banyak tengok tv jika dia balik masa cuti, jadi kami jarang dapat bercakap dengan dia" (ibu bapa 6)

Selain itu, ibu bapa 3 pula menyatakan bahawa kesibukan bekerja walaupun pada masa cuti sekolah menyebabkan mereka tidak dapat meluangkan lebih banyak masa untuk berbincang perkara yang berkaitan pengetahuan seksualiti bersama anak-anak termasuk anak bermasalah pendengaran. Oleh hal yang demikian, mereka berharap anak bermasalah pendengaran akan mendapat lebih banyak maklumat berkaitan seksualiti daripada guru-guru di sekolah.

" saya sibuk kerja walaupun masa cuti sekolah, jadi saya tidak dapat selalu memberi bimbingan kepada anak, saya harap cikgu yang akan bimbing dia ... yalah dia banyak tinggal di asrama" (ibu bapa 3)

Dapatan kajian menunjukkan bahawa ibu bapa telah memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran, tetapi peranan ibu bapa perlu

dipertingkatkan lagi pada masa hadapan. Ibu bapa kurang memainkan peranannya dalam menyampaikan pengetahuan seksualiti bukan disebabkan sikap ibu bapa sahaja, tetapi sikap anak bermasalah pendengaran sendiri yang menyebabkan penyampaian pengetahuan seksualiti kurang berkesan.

### 3. Perbezaan medium komunikasi

Hasil temu bual juga mendapati beberapa orang ibu bapa menyatakan cabaran utama yang dihadapi dalam penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran ialah komunikasi. Walaupun mereka banyak belajar Bahasa isyarat daripada guru di sekolah, malah pihak sekolah telah membekalkan buku bahasa isyarat, namun mereka susah mengingatinya. Mereka mengakui hanya mengetahui beberapa perkataan sahaja dalam bahasa isyarat iaitu perkataan asas yang menyebabkan mereka tidak dapat berinteraksi dengan anak bermasalah pendengaran secara efektif. Permasalahan ini menyebabkan penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran adalah terhad. Menurut ibu bapa 2, mereka bukan sahaja menghadapi kesukaran untuk berinteraksi tetapi mereka juga sukar memahami perkara yang disampaikan oleh anak bermasalah pendengaran mereka.

"saya tak tahu bahasa isyarat... saya rasa anak saya juga tidak faham apa yang saya cakap, macam mana saya nak ajar anak saya kalau saya tak banyak tahu bahasa isyarat" (ibu bapa 2).

Apabila menjelaskan cabaran dalam penguasaan kod tangan, ibu bapa menyatakan mereka menghadapi kesukaran mempelajari dan mengingati bahasa isyarat. Ketidakcekapan berbahasa isyarat ini menyebabkan mereka menghadapi masalah untuk menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Selain itu, mereka juga menghadapi masalah untuk menjawab persoalan anak bermasalah pendengaran disebabkan tidak dapat memahami perkara yang diutarakan oleh anak bermasalah pendengaran. Hal ini dijelaskan oleh ibu bapa 1 seperti pernyataan di bawah.

"saya tak faham apa yang anak saya tanya ... lepas tu tak tahu nak jawab apa ... jadi saya kurang ajar anak kerana tak pandai sangat bahasa isyarat " (ibu bapa 1).

Walaupun menghadapi halangan komunikasi dengan anak bermasalah pendengaran, ada juga sesetengah ibu bapa yang cuba sedaya upaya untuk menyampaikan maklumat seksualiti kepada anak bermasalah pendengaran dengan pelbagai kaedah seperti meminta bantuan daripada anakanak tipikal yang lain, tunjuk cara yang betul bagi setiap perbuatan yang ingin diterapkan. Namun begitu, mereka tidak pasti sama ada maklumat yang disampaikan difahami atau sebaliknya oleh anak bermasalah pendengaran disebabkan tidak mahir berbahasa isyarat seperti yang dinyatakaan oleh ibu bapa 5.

### "saya tanya isteri atau anak-anak yang lain apa anak saya yang pekak tu cakap, kadangkadang anak saya yang lain juga tak faham apa yang adik dia cakap ...." (ibu bapa 5).

Walaupun terdapat beberapa halangan yang menyebabkan ibu bapa kurang memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran, namun mereka masih memainkan peranan menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran agar anak-anak tidak keciciran maklumat mengenainya. Hal ini kerana, penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran boleh dilakukan melalui pelbagai cara dan boleh disampaikan secara tidak formal. Rasa

tanggungjawab yang timbul dalam kalangan ibu bapa mencetuskan idea tentang kaedah-kaedah untuk menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Keazaman dan motivasi yang wujud dalam diri ibu bapa mendorong mereka mencari peluang dan alternatif bagi menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran termasuklah menggunakan pihak lain iaitu anak-anak tipikal yang lain agar penyampaian lebih berkesan menunjukkan ibu bapa berusaha menjalankan tanggungjawab mereka.

Sementara itu, ibu bapa 6 menyatakan masalah komunikasi juga menyebabkan bimbingan terhadap anak bermasalah pendengaran sangat terhad dan kurang berkesan kerana beliau hanya akan bercakap secara lisan dengan anak bermasalah pendengaran sambal menunjukkan objek yang dimaksudkan atau menunjukkan perlakuan yang betul. Namun begitu, beliau tidak pasti sama ada maklumat yang disampaikan itu difahami atau sebaliknya oleh anak bermasalah pendengaran memandangkan anak mereka masih lagi melakukan perbuatan yang sama walaupun telah ditegur dengan kerap.

"bila tengok anak saya pakai baju yang tidak kena, saya cakap salah dan tidak boleh pakai ... saya tunjuk baju yang dia patut pakai ... begitu juga bila saya tengok anak saya cubit atau pukul adiknya, saya cakap salah, tapi saya tak tahu sama ada dia faham atau tidak teguran saya sebab dia tetap ulang perbuatan salah yang telah ditegur" (ibu bapa 6)

Walaupun menghadapi beberapa halangan, ibu bapa masih boleh membimbing anak bermasalah pendengaran dalam aspek-aspek tertentu yang mereka yakin untuk menyampaikannya memandangkan pengetahuan seksualiti merangkumi pelbagai aspek. Dalam kontek anak bermasalah pendengaran, penyampaian pengetahuan seksualiti juga harus mengambil kira tahap perkembangan dan kematangan anak-anak. Menurut Abd. Rahim (2010), penerapan pengetahuan seksualiti harus mengambil kira kesediaan anak-anak, nilai murni dan etika. Selain itu, Gomez (2011) mencadangkan agar contoh-contoh tingkah laku seksualiti yang salah juga dibincangkan dan tingkah laku yang betul harus dinyatakan. Ibu bapa perlu lebih prihatin terhadap penyampaian pengetahuan seksualiti kerana pengetahuan seksualiti bukan sahaja dapat memberi peluang kepada anak-anak menjaga keselamatan dan kesihatan, malah dapat mengurangkan risiko anak-anak menjadi mangsa seksual. Sepertimana Francavillo (2009) yang menyatakan pengetahuan seksualiti dapat menyelamatkan murid-murid daripada menjadi mangsa seksualiti dan risiko penderaan seksual. Selain itu, penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran adalah bertujuan agar mereka memahami perkara yang berlaku di sekeliling seterusnya mereka menjauhi perkara yang memudaratkan diri (Rose Chikopela et al. 2019). Ibu bapa boleh mengaitkan pengetahuan seksualiti dengan ajaran agama Islam agar anak bermasalah pendengaran memahami dan akur dengan bimbingan yang diberikan.

Ibu bapa harus memberi perhatian terhadap pengetahuan seksualiti sebagai suatu topik yang serius khususnya kepada anak-anak bermasalah pendengaran agar anak bermasalah pendengaran tidak mengekspolarasi sendiri maklumat berkaitan seksualiti. Penyampaian pengetahuan bukanlah sesuatu yang sukar kerana boleh diserapkan melalui pelbagai cara seperti pemberitahuan, teguran, menunjukkan tingkah laku yang sesuai untuk diaplikasikan oleh anak bermasalah pendengaran. Malah, kepelbagaian kaedah boleh diaplikasikan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran seperti demonstrasi, tayangan video dan penyediaan bahan bacaan bergambar untuk menyampaikan pengetahuan seksualiti.

### 4. Persekitaran pembelajaran di rumah

Majoriti ibu bapa datang dari keluarga berpendapatan rendah di kawasan luar bandar. Peruntukan kewangan yang terhad untuk menyediakan keperluan dan bahan bacaan tambahan menyebabkan mereka lebih mementingkan untuk menyediakan bahan-bahan yang dianggap penting sahaja seperti buku latihan sekolah anak-anak dan mengabaikan pembelian bahan bacaan lain seperti penyataan daripada ibu bapa 4.

"saya hanya beli buku yang penting sahaja sebab kami orang miskin ... buku lain saya pon tidak tahu ada di kedai" (ibu bapa 4).

Manakala ibu bapa 5 menyatakan ketiadaan bahan bacaan tambahan di rumah selain buku teks yang disediakan oleh pihak sekolah juga menyebabkan peranan ibu bapa dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran adalah kurang berkesan. Kesedaran untuk menyediakan bahan-bahan pembelajaran dalam kalangan ibu bapa masih rendah menyebabkan mereka tidak menyediakan sebarang bahan bacaan di rumah walaupun mereka boleh mendapatkan bahan-bahan tersebut secara percuma di mana-mana agensi seperti di klinik kesihatan, dan Agensi Anti Dadah Kebangsaan. Pernyataan daripada ibu bapa 5 ialah :

"di rumah tidak ada buku lain ... anak-anak baca buku sekolah saja, anak saya yang pekak tak bawa balik buku ke rumah ... jadi mereka tidak membaca di rumah" (ibu bapa 5).

Namun begitu, ada juga ibu bapa iaitu ibu bapa 3 yang prihatin dalam memastikan anak bermasalah pendengaran mereka mendapat pelbagai maklumat dengan menyediakan bahanbahan yang bersesuaian untuk menambah pengetahuan anak-anak mereka terutamanya anak bermasalah pendengaran. Mereka berusaha mendapat pelbagai risalah dan poster daripada jabatan-jabatan tertentu yang menyediakan bahan berkaitan secara percuma. Pernyataan beliau tentang hal ini ialah:

# "Saya dan isteri ada menyediakan beberapa bahan yang berkaitan seperti buku, risalah dan poster yang diperolehi di klinik, Agensi Anti Dadah Kebangsaan dan sebagainya" (ibu bapa 3)

Selain itu, ibu bapa juga lebih banyak menghabiskan masa dengan bekerja menyebabkan mereka kurang prihatin dengan penyampaian maklumat seksualiti kepada anak-anak. Aktiviti membaca bersama-sama di rumah juga tidak dijadikan amalan oleh kebanyakan responden menyebabkan anak-anak kurang membaca pelbagai bahan. Jawapan responden terhadap perkara ini ialah :

# "saya sibuk kerja, tak ada masa nak tengok anak-anak baca buku ... balik kerja penat ... tak sempat baca buku dengan anak-anak" (ibu bapa 4).

Walaupun anak-anak bermasalah pendengaran tinggal di asrama, ibu bapa perlu mencari peluang menyampaikan pengetahuan seksualiti kepada anak-anak bermasalah pendengaran kerana peranan ibu bapa juga mampu merangsang minat anak bermasalah pendengaran agar prihatin terhadap maklumat yang disampaikan jika mereka dibimbing dengan kaedah yang bersesuaian. Sehubungan dengan itu, ibu bapa perlu menguasai bahasa isyarat agar interaksi dua hala dapat dilakukan seterusnya pengetahuan seksualiti disampaikan secara efektif kepada anak-anak bermasalah pendengaran. Dalam hal ini, Gomez (2011) menyatakan ibu bapa yang menguasai bahasa isyarat dapat berkomunikasi dengan berkesan dan dapat menyampaikan maklumat seksualiti secara efektif kepada anak-anak. Hasilnya, peranan yang dimainkan oleh ibu bapa membantu anak bermasalah pendengaran memahami, mempraktikkan dan mendapat

pengetahuan seksualiti yang tepat. Sekiranya ibu bapa kurang memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran, dikhuatiri anakanak akan mendapatkan maklumat daripada sumber lain seperti rakan sebaya dan media sosial yang kesahihanya belum dipastikan lagi. Sekiranya anak bermasalah pendengaran mendapat maklumat yang kurang tepat, anak-anak akan mengamalkan apa yang diperolehinya. Hal ini menyebabkan mereka terlibat dengan pelbagai masalah sosial yang lain seperti buli, kecelaruan identiti, pergaulan bebas, dan masalah seksual.

### 5. Sikap dan jangkaan ibu bapa

Pandangan masyarakat yang beranggapan pengetahuan seksualiti adalah suatu topik yang tabo dan merupakan perkara yang tidak perlu didedahkan juga menyebabkan ibu bapa kurang memberi perhatian terhadap perkara ini. Ibu bapa 1 berpandangan pengetahuan seksualiti akan diperolehi melalui pengalaman sama ada pengalaman sendiri atau pengalaman orang lain apabila mereka sudah matang atau mencapai umur dewasa. Pandangan ini menyebabkan ibu bapa tidak memberi penekanan terhadap pengetahuan seksualiti kepada anak bermasalah pendengaran. Pernyataan ibu bapa 1 ialah :

"ish, malu la ... tak perlu ajar, dia akan tahu sendiri bila dia besar nanti" (ibu bapa 1).

Bagi ibu bapa 2, 4 dan 6 pula, tugas menyampaikan pengetahuan seksualiti adalah tugas guru di sekolah. Pandangan ini menyebabkab ibu bapa bersikap lepas tangan dan mereka kurang memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran. Ibu bapa berpandangan sepatutnya anak-anak akan belajar topik ini daripada guru di sekolah kerana guru mempunyai kemahiran dan kepakaran berkaitan seksualiti memandangkan guru-guru telah dilatih dan diberi kursus yang berkaitan. Mereka juga berpandangan guru-guru lebih mahir menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran dan guru dapat menyampaikan dengan cara yang lebih efektif. Pernyataan daripada ibu bapa 2, 4 dan 6 adalah seperti berikut:

"Cikgu yang perlu ajar, cikgu tahu cara nak ajar dengan betul sebab cikgu ada kelulusan, cikgu juga pandai bahasa isyarat ... saya tak ajar ... lagipun tajuk tu tak sesuai ibu bapa yang ajar" (ibu bapa 2).

"di sekolah cikgu sudah ajar ... cikgu dapat ajar lebih baik sebab cikgu sudah mahir" (ibu bapa 4).

" dia boleh belajar di sekolah .. cikgu boleh ajar, cikgu pandai bahasa isyarat ... cikgu pergi kursus jadi dia pandai nak ajar" (ibu bapa 6).

Selain itu, ibu bapa 4 dan 5 menyatakan anak bermasalah pendengaran sukar menerima dan memahami maklumat yang disampaikan menyebabkan pengetahuan seksualiti tidak perlu disampaikan sehingga anak-anak bermasalah pendengaran matang. Anak bermasalah pendengaran juga cepat lupa maklumat yang disampaikan dalam jangka masa yang singkat menyebabkan ibu bapa mengambil keputusan menyerahkan tanggungjawab menyampaikan maklumat seksualiti ini kepada guru-guru. Berikut ialah pandangan daripada ibu bapa 4 dan 5 tentang kesukaran memberi kefahaman kepada anak bermasalah pendengaran.

"budak pekak ni susah, cakap banyak kali pon tak faham .. lepas cakap buat balik, biar la dulu ... bila dia sudah besar dia faham sendiri" (ibu bapa 4).

"ada juga la cakap benda-benda yang senang, tapi anak pekak ni susah faham ... lepas cakap, buat lagi, cekap lagi, buat pulak ... lama-lama buat tak tahu je, biar guru yang cakap, mungkin cikgu tau cara nak bagi dia faham" (ibu bapa 5).

Salah faham tentang kepentingan pengetahuan seksualiti menyebabkan ibu bapa kurang menitikberatkan topik ini. Hal ini kerana mereka berpandangan bahawa topik ini tidak penting dalam pembelajaran anak-anak di sekolah kerana topik ini tidak diuji dalam peperiksaan awam. Oleh yang demikian, mereka tidak memberatkan topik ini kepada anak-anak termasuk anak bermasalah pendengaran. Sehubungan dengan itu, mereka lebih bermotivasi untuk membimbing anak-anak dalam mata pelajaran yang diuji dalam peperiksaan awam sahaja. Hal ini dinyatakan oleh ibu bapa 2 seperti pernyataan di bawah.

"tajuk ini tak penting, sebab tak periksa ... saya lebih suka anak-anak saya belajar tajuk yang ada periksa sahaja ... anak pekak ni perlu belajar apa yang masuk periksa pun susah, jadi, saya tak suruh dia baca benda lain" (ibu bapa 2).

Selain pandangan dan sikap kurang prihatin ibu bapa, sikap anak bermasalah pendengaran juga menyebabkan ibu bapa kurang memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada golongan ini. Hal ini dinyatakan oleh ibu bapa 5 dan 6. Sikap anak bermasalah pendengaran yang tidak mengambil berat maklumat yang disampaikan menyebabkan ibu bapa merasa kecewa dan berputus asa untuk terus menyampaikan maklumat seksualiti. Hal ini mungkin juga dapat dikaitkan dengan anak bermasalah pendengaran tidak memahami maklumat yang disampaikan menyebabkan mereka bersikap sambal lewa apabila ibu bapa menyampaikan sesuatu maklumat. Kesukaran memahami maklumat yang disampaikan anak bermasalah pendengaran mengulangi perbuatan yang dilakukan walaupun telah ditegur banyak kali oleh ibu bapa.

"Anak pekak ni susah kalau nak cakap sesuatu, sebab dia buat tak tahu saja, kalau dia tengok tv atau buat apa-apa, dia buat tak tahu bila kita cakap apapun ... perangai dia pelik sikit, kalau dia cakap itu, itulah ... kita kena ikut cakap dia, cakap kita dia tak peduli" (ibu bapa 5)

" banyak kali saya cakap pun, sama juga ... anak pekak ini tetap buat perkara yang dia biasa buat, contohnya main kasar, pakai baju yang kurang sesuai, hentak-hentak kaki, baling barang ... cakap banyak kali tak boleh buat pun, dia buat juga ... lama-lama saya rasa bosan nak tegur lagi ... lagi tegur, lagi buat" (ibu bapa 6).

Bagi menyampaikan pengetahuan seksualiti dengan berkeyakinan dan berkesan, ibu bapa seharusnya mempunyai persediaan dari segi mental. Ibu bapa juga harus membuka minda bahawa pengetahuan seksualiti bukan sahaja berkaitan hal-hal berkenaan seks semata-mata, tetapi pengetahuan seksualiti adalah semua perkara yang berkaitan dengan kehidupan seharihari seperti pergaulan, kesihatan, cara hidup, keselamatan dan sebagainya. Sehubungan dengan itu, ibu bapa perlu mengubah perspepsi negatif tentang pengetahuan seksualiti. Selain itu, ibu bapa perlu mempunyai maklumat dan kaedah penyampaian yang baik agar mereka dapat menyampaikan maklumat seksualiti dengan yakin. Adalah lebih baik sekiranya ibu bapa menghadiri kursus yang dianjurkan oleh pelbagai agensi berkaitan seksualiti untuk meningkatkan pengetahuan kerana ibu bapa perlu menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran walaupun sukar memandangkan golongan ini sukar mengakses maklumat daripada pelbagai sumber lain. Daripada perbincangan di atas, dapatlah disimpulkan bahawa peranan ibu bapa dalam penyampaian pengetahuan seksualiti kepada anak bermasalah pendengaran adalah sangat penting dalam aspek kebersihan anggota badan, cara berpakaian yang sesuai mengikut jantina, cara percakapan dan bertingkah laku beradab dengan orang di sekeliling terutamanya orang tua dan sebagainya. Dapatan kajian secara keseluruhannya menunjukkan ibu bapa telah memainkan peranan dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran, namun peranan mereka masih boleh dipertingkatkan sama ada dari segi tanggungjawab menyampaikan maklumat seksualiti, persekitaran pembelajaran di rumah serta sikap dan jangkaan ibu bapa. Penyampaian pengetahuan seksualiti yang diterapkan secara tidak formal dan santai mampu mengeratkan hubungan antara ahli keluarga. Kemahiran komunikasi dan sosial dapat diperkembangkan melalui interaksi dua hala yang wujud semasa penyampaian pengetahuan seksualiti. Oleh yang demikian, berdasarkan dapatan yang diperolehi, pengkaji mencadangkan agar ibu bapa memainkan peranan maksima, menyediakan persekitaran pembelajaran yang kondusif untuk membantu menambah pengetahuan seksualiti anak-anak serta mempunyai jangkaan positif terhadap anak bermasalah pendengaran kerana implikasinya bukan sahaja kepada anak bermasalah pendengaran dalam mendapatkan pengetahuan seksualiti, tetapi turut melibatkan pembelajaran secara keseluruhannya. Hasil kajian ini mempunyai implikasi terhadap peranan ibu bapa dalam menyampaikan pengetahuan seksualiti kepada anak bermasalah pendengaran sekaligus dapat meningkatkan kemahiran sosial dan penjagaan keselamatan diri anak-anak bermasalah pendengaran.

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