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## **Table of content**

<b>A STUDY ON THE RELATIONSHIP BETWEEN CHARACTERISTICS OF A TEAMWORK AND EMPLOYEE JOB SATISFACTION AT JABATAN PENDIDIKAN NEGERI SEMBILAN (JPNS)</b>	<b>1</b>
<b>A REVIEW: ROBOTIC EDUCATION IN INDUSTRIAL REVOLUTION 4.0 ERA</b>	<b>5</b>
<b>LECTURERS READINESS FOR E-LEARNING: TEACHING &amp; LEARNING PREPARATION</b>	<b>9</b>
<b>A CONCEPTUAL FRAMEWORK FOR CONDUCTING TRAINING NEEDS ANALYSIS BASED ON CUDBAS METHOD FOR POLYTECHNICS LECTURER</b>	<b>12</b>
<b>PERSONAL FINANCIAL MANAGEMENT AMONG STUDENTS IN COMMERCE DEPARTMENT POLYTECHNIC UNGKU OMAR</b>	<b>22</b>
<b>DECONSTRUCTING VISUAL MEANINGS IN A REVISIONIST TEXT: AN ALTERNATIVE PEDAGOGICAL STRATEGY IN THE NEW NORMAL</b>	<b>27</b>
<b>FACTORS AFFECTING STUDENTS' ACHIEVEMENT IN POLITEKNIK UNGKU OMAR</b>	<b>30</b>
<b>THE AWARENESS OF TAKAFUL INSURANCE AMONG LECTURERS AND STUDENTS IN POLITEKNIK UNGKU OMAR (PUO)</b>	<b>37</b>
<b>MISREPRESENTATION OF MODERN MEDICAL ELEMENTS IN MALAY DRAMA SCENES: SUGGESTION TOWARDS A SOLUTION</b>	<b>42</b>
<b>THE LEVEL OF FINANCIAL MANAGEMENT OF DIPLOMA IN BANKING AND FINANCE (DKB) STUDENTS IN POLITEKNIK UNGKU OMAR</b>	<b>46</b>
<b>THE EFFECT OF ONLINE SHOPPING TOWARDS CONSUMER BUYING BEHAVIOUR</b>	<b>50</b>



<b>A STUDY ON ORGANIZATIONAL SUPPORT, TACIT AND EXPLICIT KNOWLEDGE TOWARDS INNOVATIVE WORK BEHAVIOUR: AN EMPIRICAL EVIDENCE OF PUBLIC SECTOR</b>	<b>53</b>
<b>THE LEVEL OF FINANCIAL MANAGEMENT OF DIPLOMA IN BANKING AND FINANCE (DKB) STUDENTS IN POLITEKNIK UNGKU OMAR</b>	<b>58</b>
<b>FACTORS INFLUENCING CONSUMERS' DECISION IN ONLINE SHOPPING</b>	<b>63</b>
<b>WORK FROM HOME: THE IMPACT AND THE CHALLENGES TOWARDS EMPLOYEES DURING COVID-19</b>	<b>65</b>
<b>FROM CONSENSUS TO CONFLICT: THE EXPERIENCE OF PAN-MALAYSIA ISLAMIC PARTY (PAS) IN POLITICAL COALITION</b>	<b>68</b>
<b>IMPLEMENTATION OF HOTS IN DEBATE STRATEGY TO IMPROVE THE ABILITY OF SPEAKING ARABIC AMONG STUDENTS</b>	<b>91</b>
<b>CONSUMER PROTECTION IN LIFE INSURANCE INDUSTRY AND ITS CHALLENGES IN INDONESIA: A QUALITATIVE EXPLORATORY STUDY</b>	<b>106</b>
<b>COMPREHENSIVE PERFORMANCE MEASUREMENT SYSTEM AND MALAYSIAN FOOTBALL PLAYERS SATISFACTION</b>	<b>123</b>
<b>PSYCHOLOGICAL CAPITAL ELEMENTS: A STUDY ON JOB PERFORMANCE OF PUBLIC UNIVERSITIES ADMINISTRATOR IN MALAYSIA</b>	<b>137</b>
<b>THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR IN MALAYSIA PUBLIC SECTOR: EMPLOYEE RETENTION AS A MEDIATOR</b>	<b>148</b>
<b>FACTORS INFLUENCE VEGETABLES AND FRUITS BUYING INTENTION DURING PANDEMIC CRISIS COVID-19</b>	<b>163</b>

<b>STUDENTS' PERCEPTIONS TOWARDS THE IMPORTANCE OF LEARNING SUPERWRITE: ALPHABETIC WRITING SYSTEM FOR OFFICE PROFESSIONALS AT MARA UNIVERSITY OF TECHNOLOGY</b>	<b>174</b>
<b>IRRADIATED PEANUT INK FOR CONSUMER PRODUCT- A REVIEW</b>	<b>188</b>
<b>NATURAL FIBRE USED AS A REINFORCEMENT IN CONCRETE- A REVIEW</b>	<b>198</b>
<b>WATERPROOF CHARACTERISTICS OF PACKAGING MATERIAL-A REVIEW</b>	<b>205</b>
<b>EFFECT OF COBALT FERRITE (<math>\text{CoFe}_2\text{O}_4</math>) IN SUGARCANE BAGASSE PAPER VIA RADIATION EXPOSURE- A REVIEW</b>	<b>211</b>
<b>THE INFLUENCE OF PART TIME EMPLOYMENT ON STUDENT ACADEMIC PERFORMANCE</b>	<b>219</b>
<b>INSTRUMENTATION OF THE ABSTINENCE'S LIKELIHOOD SCALE IN DRUG ADDICTION (ALSDA-ACREDA)</b>	<b>227</b>
<b>POLYTECHNIC ENGLISH LECTURERS' BELIEFS ABOUT USING MOBILE APPS IN TEACHING COMMUNICATIVE ENGLISH</b>	<b>247</b>
<b>THE RELATIONSHIP BETWEEN SPIRITUALITY AND QUALITY OF LIFE OF FLOOD VICTIMS IN MALAYSIA</b>	<b>259</b>
<b>CORPORATE REPUTATION ANTECEDENTS AND OUTCOME ASSOCIATED WITH HIGHER EDUCATION INSTITUTIONS IN MALAWI: THE MODERATING EFFECT OF STAKEHOLDER GROUPS</b>	<b>269</b>
<b>A DEVELOPMENT OF MULTI WAY WI-FI SOCKET (MWWS) FOR DIGITAL HOME</b>	<b>286</b>
<b>FORMALISTIC APPROACH ANALYZE MALAY ARTEFACT (<i>KUKURAN</i>) INTO ITS ZOOMORPHIC CLASSIFICATION</b>	<b>293</b>

<b>HUBUNGAN ANTARA PENGURUSAN DAN PENTADBIRAN, RAKAN SEKERJA, KRITERIA KECEMERLANGAN DENGAN KESEDIAAN TERHADAP PERUBAHAN: SATU KAJIAN TINJAUAN DI KOLEJ KOMUNITI KEPALA BATAS PULAU PINANG</b>	<b>304</b>
<b>KAJIAN PERSEPSI PESERTA PSH TERHADAP KURSUS PENSIJILAN PROFESIONAL DI KOLEJ KOMUNITI KEPALA BATAS</b>	<b>328</b>
<b>KEPERCAYAAN RAKYAT DALAM BUDAYA MATERIAL: TINJAUAN ETNOGRAFI SOSIO-BUDAYA MELAYU BRUNEI.</b>	<b>354</b>
<b>KESAN KIT INOVASI KAKP (KATA ADJEKTIF KATA PENGUAT) DALAM PENGUASAAN AYAT ADJEKTIF MENGGUNAKAN KATA PENGUAT UNTUK BAHASA MELAYU MURID TAHUN 5</b>	<b>380</b>
<b>KESESUAIAN PROGRAM BAHARU BAGI KOLEJ KOMUNITI DI DAERAH SEBERANG PERAI UTARA, PULAU PINANG</b>	<b>419</b>
<b>TAHAP MINAT DAN KESESUAIAN PROGRAM SIJIL TEKNOLOGI PEMROSESAN MAKANAN (CERTIFICATE IN FOOD PROCESSING TECHNOLOGY) DAN SIJIL EDAGANG (CERTIFICATE IN ECOMMERCE) BAGI KOLEJ KOMUNITI DI DAERAH SEBERANG PERAI UTARA (SPU)</b>	<b>432</b>
<b>E-COMMERCE IN PANDEMIC ERA: ANALYSIS TOKOPEDIA USE AS MEDIA TRADING FOR COMMUNITIES FACEBOOK GROUP</b>	<b>446</b>
<b>COVID-19: TAHAP KESEDIAAN PENSYARAH MELAKSANAKAN PENGAJARAN DAN PEMBELAJARAN DALAM TALIAN (PDPDT) DI PNS</b>	<b>462</b>
<b>THE NEW THEORY OF LOCAL COMMERCIAL BANK AND BANK LENDING BEHAVIOUR IN MALAYSIA</b>	<b>474</b>
<b>KEFAHAMAN DAN PRAKTIKAL SOLAT DALAM KALANGAN</b>	<b>489</b>
<b>PELAJAR POLITEKNIK NILAI</b>	<b>489</b>

<b>IMPAK KRISIS KEWANGAN GLOBAL TERHADAP KESTABILAN PERBANKAN ISLAM DI MALAYSIA</b>	<b>502</b>
<b>KAJIAN TAHAP PENGETAHUAN DAN AMALAN HIBAH DI KALANGAN KETUA KELUARGA PELAJAR DIPLOMA KEWANGAN DAN PERBANKAN ISLAM</b>	<b>510</b>
<b>DI POLITEKNIK NILAI NEGERI SEMBILAN</b>	<b>510</b>
<b>KEUSAHAWANAN SOSIAL: KAJIAN USAHAWAN KG BUKIT CHERAKAH, SHAH ALAM DAN PERSATUAN OKU BAKTI MALAYSIA</b>	<b>540</b>
<b>THE IMPACT OF CONTENTS, MEDIA AND POSTING TIME ON ONLINE CONSUMER ENGAGEMENT</b>	<b>560</b>
<b>THE DETERMINANTS OF LIQUIDITY RISK: EVIDENCE FROM CONVENTIONAL AND ISLAMIC BANKS IN MALAYSIA</b>	<b>570</b>
<b>THE STUDY OF SAFETY AND HEALTH CULTURE OF WORKING ORGANIZATION THROUGH ACADEMIC INSTITUTION IN TVET PLATFORM</b>	<b>583</b>
<b>POLYTECHNIC ENGLISH LECTURERS' BELIEFS ABOUT USING MOBILE APPS IN TEACHING COMMUNICATIVE ENGLISH</b>	<b>591</b>
<b>KAJIAN TERHADAP KESEDARAN PEMBELAJARAN KONVENSIONAL KEPADA PEMBELAJARAN E-PEMBELAJARAN PELAJAR-PELAJAR PASTRI DAN KULINARI KOLEJ-KOLEJ KOMUNITI MALAYSIA</b>	<b>609</b>

## A STUDY ON THE RELATIONSHIP BETWEEN CHARACTERISTICS OF A TEAMWORK AND EMPLOYEE JOB SATISFACTION AT JABATAN PENDIDIKAN NEGERI SEMBILAN (JPNS)

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### Abstract

*Teamwork is an increasingly popular way of achieving greater organizational flexibility, as well as other benefits such as reduced costs of supervision, faster lead times, innovation, more effective decision-making, better customer service, and enhanced employee morale. Most investment and financial advisory companies have reorganized employees into teams to serve clients better and make better investment. This trend toward teamwork is, in fact, increasingly common in many industries. More than half of U.S organizations polled in one survey use teams to a high or very high extent to conduct their day-to-day business. The purpose of the study is to identify the relationship between characteristics of a teamwork and employee job satisfaction. There is also some supported literature review for two elements in characteristics of a teamwork which are team member diversity and communication. To measure this data, questionnaires was pre-*

*pared for data collection. The questionnaires were distributed to 234 staff from all departments at Jabatan Pendidikan Negeri Sembilan (JPNS) and data was analyzed by using SPSS software. The results of the research were collected through three methods which were descriptive analysis, reliability analysis and correlation analysis. The process of interpreting and analyzing the findings were presented in this paper. Results indicated that there is a positive relationship for both team member diversity and communication toward employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).*

### Keywords

job satisfaction, teamwork, team member diversity, communication

### 1. Introduction

Teamwork is an increasingly popular way of achieving greater organizational flexibility, as well as other benefits such as reduced costs of supervision, faster lead times, innovation, more effective decision-making, better custom-

er service, and enhanced employee morale. Most investment and financial advisory companies have reorganized employees into teams to serve clients better and make better investment. This trend toward teamwork is, in fact, increasingly common in many industries. More than half of U.S organizations polled in one survey use teams to a high or very high extent to conduct their day-to-day business.

According to Rico (2011) over the last forty years, teams have come to be considered as a central element in the functioning of organizations. Teamwork has also being applied in doing a research especially scientific research. A study of almost 20 million research publications reported that the percentage of journal articles written by team rather than individuals has increased substantially over the past five decades.

According to Benrazavi (2007), teamwork has also been known as a motive of job satisfaction as almost all work on job satisfaction and team performance matters.

(Gladstein & Bresman, 2007; Hackman, 2002; Tannenbaum et al. 1992; Williams, 1998). He also states that lack of communication and collaboration among supervisors and the working teams led to dissatisfaction and it will contributed to lack of motivation to work in teams and the intention to leave one's team or even his job. (Poon, 2004). To achieve the employee job satisfaction when working in a team is very hard to accomplish. The members within the team have their individual factors to gain satisfaction in a teamwork which includes the reward when the job is completed, the communication between team members and leader, size of the team and duration of the task to be completed. Therefore, the aim of this study is to examine the issue of the relationship between characteristics of teamwork and employee job satisfaction.

## 2. Statement of Problem

In spite of working in a team, it may contribute many benefits toward the organization such as reduced costs of supervision, faster lead times, innovation, more effective decision-making and better customer service, teams are not always effective as individual as working alone. People join groups to fulfil their personal needs. Team diversity is one of the characteristics that play a role towards employee job satisfaction.

Stanford (1999) said that most people think that diversity is demographic, a matter of color, gender and age. However, diversity is also based on informational differences a person's education and experiences as well as on values or goals that can influence what one perceives to be the mission of something as small as a single meeting as large as a whole company. How does team diversity affect employee job satisfaction? Team diversity can affect employee job satisfaction because every individual's satisfaction vary such as they do not want to work in team with different genders or sometimes working in a team with a wide age difference can also contribute to less job satisfaction. Why

does age and gender have an affect on employee job satisfaction when working in a group? This research paper will find out the reasons of the problem stated.

Communication is an integral aspect for people to begin a conversation. As a team, each member needs to communicate with each other to make sure the information will be received clearly. Otherwise, the job satisfaction of each employee will not be achieved. How does communication between team members will have an effect on employee job satisfaction? Effective communication can help employees decrease their morale problem and feel satisfied that they are in the loop and part of them. However a lack of communication can cause confusion between team members. Andrea (2014) said poor communication skills create business problems such as team communication issues and people problem, losing the trust of co-workers and cooperation of team members. All this issue can bring dissatisfaction. Therefore this research paper will identify the problem of communication toward employee job satisfaction.

Consequently, this study is conducted to study the relationship between characteristics of teamwork and employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

## 3. Research Objective

This study focuses on the relationship between the characteristics of teamwork and employee job satisfaction. There are several objectives that should be taken into consideration in carrying out this study. All these objectives are mentioned as follows:

To identify the level of employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

To identify the relationship between team member diversity and employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

To identify the relationship between communication and employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

## 4. Research Question

What are the level of employee job satisfaction at Jabatan Pendidikan Negeri Sembilan?

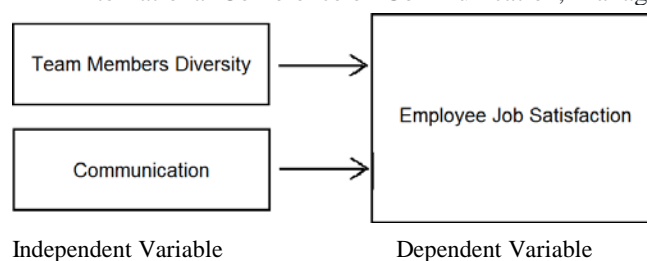
What are the relationship between team member diversity and employee job satisfaction?

What are the relationship between communication and employee job satisfaction?

## 5. Research Framework

Characteristic of Teamwork





**Figure 1. Theoretical Framework**

Source: Raheel, Hafizullah & Zulqarnain (2011)

Figure 1 shows the dependent and independent variable of the study on the relationship between characteristics of teamwork and employee job satisfaction as cited from Raheel, Hafizullah, Murad & Zulqarnain (2011). The paper will study on how does team member diversity and communication would be related with employee job satisfaction in Jabatan Pendidikan Negeri Sembilan (JPNS).

## 5. Findings and Results

The results of data analysis generated by using SPSS Statistics 20.0 data analysis software which collected from respective respondents. Frequency distribution and correlation are used to test the relationship between independent and dependent variables. The findings of the research are based on the statistical calculation. The results of data analysis are based on the responses received from the questionnaires at JPNS. The finding also answered the research questions proposed by the researcher.

### 5.1 Descriptive Statistic for Job Satisfaction

#### Research Objective 1:

To identify the level of employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

5.1.1. What are the level of employee job satisfaction at Jabatan Pendidikan Negeri Sembilan?

**Table 1. Descriptive Statistic for Job Satisfaction**

QUESTION FOR JOB SATISFACTION			SD
I feel comfortable when working together in this department	140	3.59	.748
I like the people I work with	140	3.57	.680
When I did a good job in department, I received a full recognition for it.	140	3.44	.712

Based on the table 5.1.1 it states that the highest mean for the level of job satisfaction was “I feel comfortable when working together in this department” with (Mean=3.59, Std. Deviation=.748). Moreover, second highest mean for the level of job satisfaction among employee is “I like the

people I work with”, with (Mean=3.57, Std. Deviation=.680). However, for the lowest mean was “When I did a good job in department, I received a full recognition for it” with (Mean=3.44, Std. Deviation=.712). It shows that employees in JPNS were satisfied and comfortable when working together in a team or in a department. They also like working together with their colleagues in department.

#### Research Objective 2:

To identify the relationship between team member diversity and employee job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

5.1.2. What are the relationship between team member diversity and employee job satisfaction?

**Table 2. Correlation between Teamwork Diversity and Job Satisfaction**

		Team Member Diversity	Job Satisfaction
Team Member Diversity	Pearson Correlation		
	Sig. (2-Tailed)		
	N	140	
Job Satisfaction	Pearson Correlation	.365**	
	Sig. (2-Tailed)	.000	
	N	140	140

Based on the findings as shown in Table 5.2.1, the correlation coefficient between team member diversity and job satisfaction are positively correlated with the value of ( $r=.365$ ,  $p<0.05$ ). The researcher found that, there is a positive relationship between these two variables. As the value is below 0.4, it shows a weak relationship between team member diversity and job satisfaction as stated in table Pearson Correlation. However, based on the finding and hypothesis, (H1) is accepted.

#### Research Objective 3:

To identify the relationship between communication and job satisfaction at Jabatan Pendidikan Negeri Sembilan (JPNS).

5.1.3 What are the relationship between communication and employee job satisfaction?

**Table 2. Correlation between Communication and Job Satisfaction**

Communication		Job Satisfaction	
Communication	Pearson Correlation		
	Sig. (2-Tailed)		
	N	140	
Job Satisfaction	Pearson Correlation	.750**	
	Sig. (2-Tailed)	.000	

	N	140	140
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As indicated in Table 5.1.3 above, the study found that there is a significant and positive relationship between communication and job satisfaction at Jabatan Pendidikan Negeri Sembilan. The correlation value between these two variables is ( $r=.750$ ,  $p<0.05$ ) and considered as a strong relationship. Thus, hypothesis (H2) is accepted.

## 5. Conclusion and Recommendation

The first research question is to identify the level of employee job satisfaction at Jabatan Pendidikan Negeri Sembilan. The finding shows that, the highest mean for teamwork diversity was "I feel comfortable when working together in this department" with (Mean=3.59, Std. Deviation=.748). It shows that employees in JPNS were satisfied and comfortable when working together in a team. When people are treated by team members while working together, it can increase their motivation even if they worked on their own (Walton, 2014). Employee will be more productive when they feel that they are dynamic and essential part of team. As a person becomes comfortable in the work place, his or her performance improves, providing value to the organization (Hughes, 2012).

The second research question is to identify the relationship between team member diversity and employee job satisfaction at Jabatan Pendidikan Negeri Sembilan. The finding shows that, between these two characteristics, team member diversity gets lowest value which is ( $r=.365$ ,  $p<0.05$ ). It is commonly assumed that differences between workers create distance and that breeds discontent and dissatisfaction (Anon, 2005). This weakness might happen because employee does not really satisfied with differences of characteristics among current team member in the department such as the difference between gender, age's gap and also difference level of education.

The relationship between two characteristics of a teamwork which is team member diversity and communication is positively correlated. In addition, among these characteristics, communication gets strong relationship which is ( $r=.750$ ,  $p<0.05$ ). Good communication between employee help you decrease morale problems and stay satisfied as part of the team. By understanding how good communication may affect the whole organization, it will help to build stronger job satisfaction. When people are regularly communicate with an effective manner, they are much more engaged with the company or in a team and have a more positive attitude towards their work (Weal, 2014). If they was no good news to share, they would at least share the reality of their current situation. People tend to communicate less when they having a problem but in actuality, they need to communicate even

more (Folkman, 2013). Employee feel empowered if they able to receive upward communication like feedback. If employers or managers are able to listen to employees and respond, this leads to an increase in employee job satisfaction.

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## References

- Adams, S., (2014). Most American are unhappy at work. *Forbes Entrepreneurs*. Retrieved from <http://www.forbes.com/sites/susanadams/2014/06/20/most-americans-are-unhappy-at-work/>
- Panther, J. G., *Digital Communications*, 3<sup>rd</sup> ed., Addison-Wesley, San Francisco, CA (1999).
- Ali, Sobia. & Farooqi. (2014) Effect of Work Overload on Job Satisfaction: Effect of Job Satisfaction. Employee performance and Employee Engagement International Journal of Multidisciplinary Sciences and Engineering, Vol5, No.8, August 2014
- Anitha, R.D. (2011). A Study of Job Satisfaction of Paper Mill Employess with Special References to Udumalpet and Palani Taluk
- Bass, A., (2015). Why is team communication important when in team. *Livestrong.com*. Retrieved from <http://www.livestrong.com/article/105939-team-communication-important-teams/>
- Bellanger, C., (2014, September 3). 3 reasons why you need diversity in the workplace. *Right Hand HR*. Retrieved from <http://www.rhhr.com/3-reasons-for-diversity-in-workforce/>
- Campbell, D. G., (2011) Diversity and job satisfaction: reconciling conflicting theories and findings. *International Journal of Applied Management and Technology*, 10(1), 1-15. Retrieved from <http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1002&context=ijamt>
- Folkman, J. (2013, Nov 27). Seven ways to increase employee satisfaction without giving a raise. *Forbes Entrepreneurs*. Retrieved from <http://www.forbes.com/sites/joefolkman/2013/11/27/seven-ways-to-increase-employee-satisfaction-without-giving-a-raise/>
- Kuch, S. (2012, August 27). High Performance or Social Loading: How does The Team Size Impact The Results? Retrieved from: <http://www.henkeldiversity.com/2012/08/27/high-performance-or-social-loading-how-does-the-team-size-impact-the-results/>
- Manzoor, HafizUllah, Murad & Zulqarnain (2011). Effect of Teamwork on Employee Performance. *International Journal of Learning & Development* 1(1).

Retrieved from [www.macrothink.org/journal/index.php/ijld/article/view-File/1110/861](http://www.macrothink.org/journal/index.php/ijld/article/view-File/1110/861)  
 Jayanthi, M. (2014). Diversity Challenges: From Multicultural Perspective. Academia. Retrieved from [https://www.academia.edu/9660350/Cultural\\_Diversity\\_Companies\\_A\\_study\\_on\\_Multicultural\\_Team](https://www.academia.edu/9660350/Cultural_Diversity_Companies_A_study_on_Multicultural_Team)

Redmund, B. R. (2015). Job Satisfaction: Work Attitudes and Job Motivation Home. Retrieved from <https://wikispaces.psu.edu/display/PSYCH484/11+Job+Satisfaction>  
 Salkind, N. J. (2014). Exploring Research (8th ed.). United States of America: Pearson Education Limited.  
 Schneider, M., "Guidelines for Bias-Free Writing," PhD Thesis, Indiana University, Bloomington, IN (1995).

## A REVIEW: ROBOTIC EDUCATION IN INDUSTRIAL REVOLUTION 4.0 ERA

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### Abstract

*Robotic education allows students to learn by immersive learning in different ways with the goal of attracting the students. In the Era of Industrial Revolution (IR 4.0), learning methods using robotic elements will become necessary. This paper aims to review the efficacy of robotics in education and to define future technology research in education perspectives. Besides, we also present challenges that arose in the field as a part of the overview. In order to fortify the retrieval of all relevant studies, we are using a review protocol consisting of both automatic and manual searches. Based on the findings, robotics education is practically effective and improved the understanding of the subject studied. From the overview, robotic education engaged well and works effectively in STEM. Other than that, robotics education develops skills which are highly demanded in IR 4.0 era. In other views of this, we also look forward to future research perspectives on robotic education and propose that more comprehensive intervention studies could be performed to investigate the convergence of robotics and other educational fields.*

### Keywords

Robotic education, industrial revolution, future learning, effectiveness education.

### 1. Introduction

Robotic is one of the important fields in era industrial revolution (IR 4.0). It has been vastly used to replace hu-

man in the workplace. Alternatively, robot can perform some of the toughest job that can't be done by human. Robots are widely regarded as devices capable of implementing complex series of actions. Realizing that the robotic field is enormously important in a modern living era, most of the teachers and researchers adapting robotic in a learning session.

Robotic education is one of the interactive learning that can encourage effective knowledge transfer process. Robotics has also attracted the interest of many teachers, practitioners and researchers as an alternative to support learning in different subjects [1]. Robotic education can be applied to various kind of study, such as science, technology. Engineering. Math (STEM), linguistics etc. According to [2], they use robotics as a tool to STEM learning, and the positive results from students involved in successful physics activities of robotics have tremendous potential to offer learning experiences to students. Notwithstanding, robotic becomes more important and widely used; studies on this robotic education field are still at the middle level. Since then, this paper will discuss the elements in robotic education that can guide another researcher on this field.

The main contribution of this paper is to explore the relevant experience of education robotics with theoretical support for education. A systematic literature review allows us to design and conduct:

- (a) find potential advantages by using robotics as an educational instrument;
- (b) Summarize proof of the application of educational robotics and focus on learning theories;

(c) Suggest future directions for research into the educational use of robots based on the literature reviewed.

## 2. Robotic Education Challenges and Barrier

Robotic is the complex field which has to be deeply known before applied. Therefore, before develop robotic education, teacher or researcher need to clearly understand the robotics theory and programming. The development of robotics is faced with hardware and software Challenges [3]. Some of the challenges with educational robotics were related to time, money, and fear of technology [4]. The robotic education is not as perfectly significant as when the robotic knowledges is not up to the standards. The challenges of robotic education may affect in the student roll. Student's background has also affected the applicability of robotic education. Developer or teacher has to see the education, thinking and exposure level of robotic student before the education system applied. Teachers are required to have the expertise, ability to adapt to new technologies and global challenge [5].

In other side, barrier of robotic education needs to be analyzed before the robotic education is implemented. First of all, the bigger of robotic education barrier is the lack of knowledge, skill and teaching strategies. Teacher's fear of losing control is one of the barriers while using robotics. Similarly, lack of required knowledge to build programs is also a reason behind the activation of the robots[6]. Facilities are among the obstacles as the robotics equipment need higher capital. Higher education institute need high budget to encourage robotic education.

In conclusion, challenges and barriers facing the use of robotics in education to facilitate learning are relevant to teachers, schools, students and robots themselves in most respects. In this study, these difficulties and barriers are discussed and suggestions are made to resolve them. It is evaluated to allow more participation for teachers and researcher in teaching school subjects using robotics.

## 3. Robotic Education Research Area in Era IR 4.0

In this Industrial Revolution (I.R 4.0) era, the researches related to robotic education becomes increasing. This shows that researchers are aware of the importance of this field in future. From the paper reviewed, there are several classification of study areas on this field. The main area is classified to three main ideas. Figure 1 shows a research area chart based on the reviewed done on this study. The first classification is a conceptual study. The purpose of conceptual study is to expose or to recommend a robotic concept that purposely used in teaching and learning. In spite of reviewing on robotic

education, this kind of research does not involve any data analysis [7], [8], [9] and [10]. Second type of study in this area is an empirical research which has been carried out using a set of questionnaires. A distributed questionnaire asking a related question on robotic issues. [11],[12], [13] and [14] has conducted a social study on robotic using this methodology. The results obtain been analyzed and shows several founding in this robotic area. Third classification of research is a study on hardware or software in robotic education development. The study was conducted to determine the effectiveness of the hardware or the software. This kind of research are rarely done because the research is very deep and specialized in this field. [15], [2], [16], [17], and [18] use robotic hardware as a tools in their robotics education. Lastly, the other classification on this research is a reviewed paper. A set of paper related to this field been reviewed and summarize. Besides, a researches finds out the study purpose, methodology, results and discussion on other paper and summarize them into one review paper. Review paper has been done by many researchers such as [10], [19], [20], [21], [22] and more.

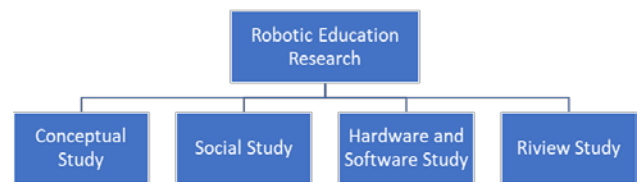


Fig 1. Research area of robotic education

## 4. Potential Advantages by Using Robotic as A tool in education.

As we know, there are a lot of advantages of teaching and learning using robotic education. The most frequent finding is teaching and learning using robotic education is more effective learning session. Robots have the potential to be the next effective add on to traditional education [10]. [23] study about effects of educational robots on learning stem and the result shows that robotics helps students to learn STEM subjects and robotics promotes students' interest toward STEM subjects. [24] study the effectiveness of integrating educational robotic activities into higher education computer science curriculum and the result prove that robotic education indicates that there are benefits which can be gained from such activities and educational robotics is a promising tool in developing engaging study curricula.



The second advantage of robotic education is robotic education is more interactive learning compared to conventional method. When we apply robotic education into our teaching and learning session, the process will become interactive. This will make the session becomes attractive and make the students engaged in the class. Students also motivated to engage in the class because they can see and touch the robot practically especially to autism students[25]. Results showed that sensory rewards provided by the robot elicited more positive reactions than verbal praises from humans. The robot was of greatest benefit to children with a low level of disability.

## 5. The Applications of robotic Education

Robotic application is a wide field and it is applied in education system. Robotic education application applied to all stages of education from pre-school to the tertiary level education. Most educators and developers have concerns about the essential applications for education robots. According to the [26], from figure 2, the result graph shows the general application robotics. They find the following to be the top five essential applications for educational robots: language education, robotics education, teaching assistance, social skill development and special education, and guided learning through feedback.

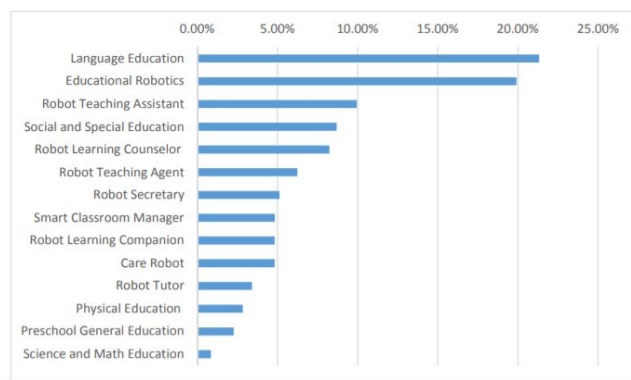


Figure 2. The ranking list of the 14 general applications [26]

## 6. Future Direction of Robotic Education

From the study conducted, research related to robotic education is still in the early stages, especially research areas that use hardware as a tool in the robotic education system. The study also found that researchers focus more on review papers and concept papers only than studies on the development of robotic education. Therefore, the future direction of robotic education, researchers need to give more research to hardware development and integrating

software as a tool of robotics education in successful robotics education in the real world. Further research should also be conducted taking into account the effectiveness of the hardware developed as well as applied in the real world.

## 7. Conclusion

Research findings have demonstrated the potential for incorporating educational robotics into physics teaching and learning. The review result indicate researcher need to do more studies in robotic education. This is because the application of robotic education in the real world is still in its infancy and requires detailed study.

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## References

- N. Spolaôr and F. B. V. Benitti, "SC," *Comput. Educ.*, 2017, doi: 10.1016/j.compedu.2017.05.001.
- H. Goh and B. Ali, "Robotics as a tool to stem learning," vol. 2, no. 1999, pp. 66–78, 2014.
- Y. He and L. Liang, "Application of robotics in higher education in industry 4.0 era," *Univers. J. Educ. Res.*, vol. 7, no. 7, pp. 1612–1622, 2019, doi:10.13189/ujer.2019.070715.
- and D. Suhartono, "EduRobot: Intelligent
- V. Rishelline and A. Flores, "Effects of using educational robotics at the elementary school level," 2006.
- V. G. Finance and I. Complete, "Industrial Revolution 4.0," no. May, pp. 0–15, 2015, doi: 10.24114/jh.v10i1.
- B. S. H. Alsoliman, "The Utilization of Educational Robotics in Saudi Schools: Potentials and Barriers from the Perspective of Saudi Teachers," *Int. Educ. Stud.*, vol. 11, no. 10, p. 105, 2018, doi: 10.5539/ies.v11n10p105.
- A. Causo and I. Chen, "A Review on the Use of Robots in Education and Young Children A Review on the Use of Robots in Education and Young Children," no. April, 2016.
- M. U. K. Umam, C. Budiyo, and A. Rahmawati, "Literature review of robotics learning devices to facilitate the development of computational thinking in early childhood," *AIP Conf. Proc.*, vol. 2194, no. December, 2019, doi: 10.1063/1.5139865.
- E. Yadegaridehkordi, N. F. B. M. Noor, M. N. Bin Ayub, H. B. Affal, and N. B. Hussin, "Affective computing in education: A systematic review and future research," *Com-*

- put. Educ.*, vol. 142, no. August, p. 103649, 2019, doi:10.1016/j.compedu.2019.103649.
- M. E. Karim, S. Lemaignan, and F. Mondada, "A re-view: Can robots reshape K-12 STEM education?," *Proc. IEEE Work. Adv. Robot. its Soc. Im-pacts, ARSO*, vol. 2016-March, 2016, doi:10.1109/ARSO.2015.7428217.
- F. N. Aksu and G. Durak, "Robotics in education: Examining information technology teachers' views," *J. Educ. e-Learning Res.*, vol. 6, no. 4, pp. 162–168, 2019, doi:10.20448/journal.509.2019.64.162.168.
- G. Nugent, B. Barker, N. Grandgenett, and V. I. Adamchuk, "Impact of robotics and geospatial technology interventions on youth STEM learning and attitudes," *J. Res. Technol. Educ.*, vol. 42, no. 4, pp. 391–408, 2010, doi:10.1080/15391523.2010.10782557.
- S. Kanbul and H. Uzunboyulu, "Importance of coding education and robotic applications for achieving 21st-century skills in north cyprus," *Int. J. Emerg. Technol. Learn.*, vol. 12, no. 1, pp. 130–140, 2017, doi: 10.3991/ijet.v12i01.6097.
- B. Cavas, T. Kesercioglu, J. Holbrook, and M. Ran-nikmae, "The Effects of Robotics Club on the Students' Performance on Science Process & Scientific Creativity Skills and Perceptions on Robots, Human and Society," pp. 40–50, 2012.
- W. Budiharto, A. D. Cahyani, P. C. B. Rumondor, and D. Suhartono, "EduRobot: Intelligent Humanoid Robot with Natural Interaction for Education and Entertainment," *Procedia Comput. Sci.*, vol. 116, pp. 564–570, 2017, doi:10.1016/j.procs.2017.10.064.
- P. Shakouri, A. Ordys, and G. Collier, "Teaching model predictive control algorithm using starter kit robot," *Eng. Educ.*, vol. 8, no. 2, pp. 30–43, 2013, doi: 10.11120/ened.2013.00018.
- P. Baxter, E. Ashurst, R. Read, J. Kennedy, and T. Belpaeme, "Robot education peers in a situated primary school study: Personalisation promotes child learning," pp. 1–23, 2017.
- W. Wiedmeyer, M. Mende, and D. Hartmann, "Robotics Education and Research at Scale: A Remotely Accessible Robotics Development Platform," pp. 3679–3685, 2019.
- D. Karahoca, A. Karahoca, and H. Uzunboyulu, "Procedia Computer Robotics teaching in primary school education by project based learning for supporting science and technology courses," vol. 3, pp. 1425–1431, 2011, doi: 10.1016/j.procs.2011.01.025.
- O. Mubin, C. J. Stevens, S. Shahid, A. Al Mahmud, and J.-J. Dong, "a Review of the Applicability of Robots in Education," *Technol. Educ. Learn.*, vol. 1, no. 1, 2013, doi: 10.2316/journal.209.2013.1.209-0015.
- B. Zhong and L. Xia, "A Systematic Review on Exploring the Potential of Educational Robotics in Mathematics Education," *Int. J. Sci. Math. Educ.*, vol. 18, no. 1, pp. 79–101, 2020, doi:10.1007/s10763-018-09939-y.
- S. E. Jung and E. Won, "Systematic Review of Research Trends in Robotics Education for Young Children," pp. 1–24, 2018, doi:



# LECTURERS READINESS FOR E-LEARNING: TEACHING & LEARNING PREPARATION

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## Abstract

*The pandemic Covid-19 situation disrupting classes and activities on campus, the only option available for students to resume learning is to go online. This now not solely en-sures the safety of students and lecturers, however additionally ad-dresses the difficulty of schooling continuity for students, es-pecially at some point of the Movement Control Order (MCO) period and, if need be, beyond. This research paper deals with determinants that influence the readiness of lecturers in preparation of Teaching and Learning towards e-learning. The study is descriptive in nature and in Kolej Komuniti Chenderoh, Kuala Kangsar and Politeknik Ungku Omar, Ipoh, simple random sampling technique is implemented to obtain 150 samples each from lecturers. The questionnaire used for this study is made up of three determinants influencing the readiness of lectures towards e-learning.*

## Keywords

Institutions' Infrastructure, Lecturers' Competencies, Lecturer's Attitude.

## 1. Introduction

Across the globe, the spread of novel coronavirus COVID-19 has led to profound changes in social interaction and organization, and the education sector has not been immune. While the student appears to be at a decrease mortality hazard class compared to older adults, pandemic precautions referred to as 'social distancing' or 'physical distancing' have tried to decrease interpersonal contact and thereby decrease the kind of community transmission that should advance shortly in dense social networks like the university campus (Weeden & Cornwell, 2020). While public health officials mostly agree that the ordinary chance of COVID-19 is first-rate fought with measures of social distancing, the specific acts of instituting emergency eLearning protocols do now not alter the pandemic itself, but only not directly by way of limiting face-to-face study room interactions.. A pandem-

ic response that securitizes face-to-face instruction may well be appropriate as a measure to support broader social distancing, but there is a cost to removing face-to-face education from the realm of normal discourse. ELearning companies and political commentators in favor of mandatory eLearning programs as a means of public austerity have already sought to normalize emergency eLearning protocols (Murphy, 2020).

### *Institutions' Infrastructure*

Computer networks and servers, provision of students with emails, access to Wi-Fi, computer rooms, online libraries. In addition, this study also noted that digital courseware, curricular and reference materials, management systems for content development, and student portals across all departments and faculties as necessary to enhance and develop eLearning within the institution. Various platforms dedicated for the use of eLearning should also become part of the institutional infrastructure. (Gaebel et al., 2013) reported that nearly all institutions provided students with email accounts, access to Wi-Fi, computer rooms and online libraries. Some have viewed primary elements such as reputable websites and servers as section of infrastructure readiness for eLearning. Others, as discussed above, would consider interactive online learning systems as basic elements of eLearning. Azimi (2013), colleges had official websites, considering websites as an important aspect of eLearning infrastructure. In many parts of this world, such levels of infrastructure would be considered as inadequate or 'not ready' for eLearning. Students' access to internet, online courseware, and internet facilitated learning platforms are considered as necessary components for readiness. However, amount of infrastructure would be effective for eLearning, unless the teaching staff could engage students in eLearning.

### *Lecturers' Competencies*

Acknowledged that for the instructors to be good facilitators for online learning, they must have the technological skills and competencies of basic computer operation and technical issues relating to internet usage, such as web searching and conferencing and managing a learning management system. Many lecturers who do not consider themselves to be well skilled in using Information and Communication Technology (ICT) feel that technologies are not helpful in their teaching and personal work. The level of ICT skills and knowledge of the key participants differed significantly in a large institution line. Young scholars, having grown up with ICT, had an advantage however it could take time for the older generations to get used to the new ICT and LMS.

#### *Lecturer's Attitude*

According to Ncube, Dube and Ngulube (2014), eLearning can assist the university to advance its academic goals but it is important to note that these goals may be influenced by the lecturers' attitudes toward eLearning. It was found that positive attitudes have strong impacts on the success of the adoption of eLearning in higher education institutions. Understanding lecturers' attitudes will be useful for the school administrators to have strategic plans to support and motivate them to participate in the adoption of eLearning with willingness. Al-alak and Al-nawas (2011) examined the relationship between lecturers' attitudes towards the adoption of eLearning system. Alabdullaziz et al. (2010) investigated lecturers' and learners' attitudes toward eLearning. Both research research located tremendous relationship between the lecturers' attitudes toward eLearning. Lecturer attitudes was concluded to have superb impacts on the success of the implementation of eLearning in the zone of higher schooling (Al-aka & Alnawas, 2011; Alabdullaziz, Alanazy, Alayahya & Gall, 2010).

#### *Lecturer Readiness*

An obvious characteristic of eLearning lecturers is to have the technical knowledge of using and supporting eLearning platforms and networks (Salmon, 2003). Furthermore, elements such as familiarity with gaining knowledge of administration systems, willingness to adopt new technology in teaching, ability and willingness to strengthen and supply e-content for teaching are considered as issue of technical readiness of facilitators (Eslam-inejad, Masood, & Ngah, 2010). According to Salmon (2003) the key role of the eLearning facilitator is to generate on line interaction, main to establishing of know-how by the learners. In this aspect, it is also necessary that lectures be geared up to facilitate mastering thru modelling (Salmon, 2003). In this role the facilitators need to understand and be able to act as leaders, who

generate group interactions. Furthermore, Sutton (2004) argues online facilitators of learning need to be good listeners who provide timely feedback and encourage learners to build relationships, and let learners feel comfortable about participating in online discussions and sharing information. In order to be ready to grant eLearning, lecturers need to practice teaching through a constructivist view of gaining knowledge of. They also need to understand how learning could occur on networks, collaboratively. Esterhuizen, Blignaut, & Ellis (2013) argue that con-structivism is the most desired and fine way of using on line learning technology in order to support students in the course of collaboration, reflection, and dialogue. Anderson and Van Weert (2002), the process of trans-forming from normal to constructivist to facilitate eLearning entails interplay and nurturing facilitators' and their belief in the fee of eLearning. Thus, for lecturers to be prepared for eLearning, they ought to be geared up for teaching in the constructivist paradigm of educating.

#### *Research Framework*

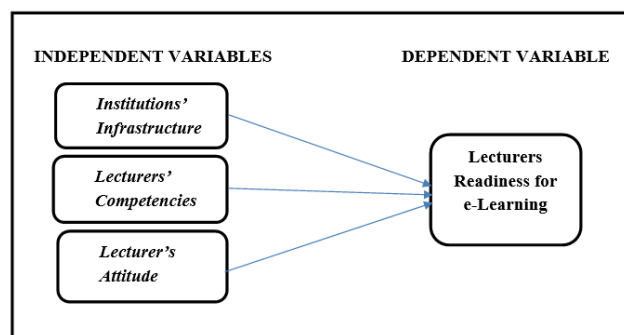


Figure 1: Research Framework

#### *Research Questions*

- RQ1. What is the relationship between institutions' infrastructure and lecturers' readiness for e-learning?
- RQ2. What is the relationship between lecturers' competencies and lecturers' readiness for e-learning?
- RQ3. What is the relationship between lecturers' attitude and lecturers' readiness for e-learning?

#### *Research Objectives*

- RO1. To identify the relationship between institutions' infrastructure and lecturers' readiness for e-learning.
- RO2. To identify the relationship between lecturer's competencies and lecturers' readiness for e-learning.
- RO3. To identify the relationship between lecturers' attitude and lecturers' readiness for e-learning.

## 2. Research Methodology

The target participants in this situation are Kolej Komuniti Chenderoh and Politeknik Ungku Omar lecturers in Perak.

## 3. Data Analysis

### 3.1 Demographic Information

Table 1: Profiles of Respondents

Respondents Demographic		Frequency	Percentage
Gender	Female	71	47.3
	Male	79	52.7
Race	Malay	74	49.3
	Indian	24	16.0
	Chinese	50	33.3
	Others	2	1.3
Age	25-30 years old	34	22.7
	31-40 years old	53	35.3
	41-50 years old	33	22.0
	More than 50 years old	30	20.0
Income	RM2,500 - RM3,500	76	50.7
	RM3,501 - RM4,500	39	26.0
	RM4,501 - RM5,500	35	23.3

### 3.2 Correlation Coefficients Analysis

Table 2: Pearson Correlation Coefficients

Variables	Lecturers' Readiness	Institutions' Infrastructure	Lecturers' Competencies	Lecturers' Attitude
Lecturers' Readiness	1			
Institutions' Infrastructure	0.609**	1		
Lecturers' Competencies	0.690**	0.584**	1	
Lecturers' Attitude	0.691**	0.607**	0.635**	1

Table 2 stated that shows all independent variables have a positive association with lecturers' readiness for eLearning according to Pearson Correlation Coefficients.

## 4. Discussion and Conclusion

We do not certain how long this pandemic is going to persist. It is possible to elevate out instructing and getting to know online, save and besides for hands-on sensible lessons that require use of specialized amenities and high-end equipment for students and researchers. Lecturers need to consider choice varieties of module delivery, or create a simulated environment for practice, anyplace

possible, as a contingency diagram to cater for the MCO period and until it's safe to return to campus.

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## References

- Alabdullaziz, F., Alanazy, M. M., Alyahya, S., & Gall, J.E. (n.d.). Instructors' and learners' attitudes toward e-learning within a college of education. 34th annual
- Al-alak, B. A., & Alnawas, I. A. (2011). Measuring the acceptance and adoption of e-learning by academic staff. *Knowledge Management & E-Learning: An International Journal (KM&EL)*, 3(2), 201-221.
- Anderson, J. and van Weert, T. (Eds). 2002. *Information Communication Technology in Education: A Curriculum for Schools and Programme of Teacher Development*. Paris, UNESCO
- Azimi, H. M. (2013). Readiness for implementation of e-learning in colleges of education. *Journal of Novel Applied Sciences*, 2(12)
- Easton, S. S. (2003). Clarifying the instructor's role in online distance learning. *Communication Education*, 52(2), 87-105.
- Eslaminejad, T., Masood, M., & Ngah, N. A. (2010). Assessment of instructors' readiness for implementing e-learning in continuing medical education in Iran.
- Esterhuizen, H.D., Blignaut, S. and Ellis, S. (2013) Looking Out and Looking In: Exploring a Case of Faculty Perceptions During ELearning Staff Development. *The International Review of Research in Open and Distance Learning*.
- Gaebel, M., Kupriyanova, V., Morais, R., & Colucci, E. (2013). ELearning in European higher education institutions: Results of a mapping survey conducted in October-December 2013. Retrieved from [http://www.eua.be/Libraries/Publication/eLearning\\_survey.sfb.ashx](http://www.eua.be/Libraries/Publication/eLearning_survey.sfb.ashx)
- Krishnakumar, R., & Rajesh, K. M. (2011). Attitude of teachers' of higher education towards e-learning. *Journal of Education and Practice*, 2(4)
- Murphy, M. P. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 1-14.
- Ncube, S., Dube, L., & Ngulube, P. (2014). E-learning readiness among academic staff in the Department of Information Science at the University of South Africa. *Mediterranean Journal of Social Sciences*, 5(16)
- Salmon, G. (2003). Strategic perspectives: an introduction. In: Littlejohn, A. ed. *Reusing online resources: a sustainable approach to eLearning*. London: Kogan
- Shattuck, K. (Ed.). (2014). *Assuring quality in online education: practices and processes at the teaching, resource, and program levels*. Stylus Publishing, LLC.
- Sutton, M.C. (2004). *Multiliteracies in ELearning: The Design and Development of Multiliteracies Pedagogies in the Australian Vocational Education and Training Sector*. Malaysian Journal of Distance Education Volume 6

# A CONCEPTUAL FRAMEWORK FOR CONDUCTING TRAINING NEEDS ANALYSIS BASED ON CUDBAS METHOD FOR POLYTECHNICS

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### Abstract

Training Needs Analysis can be considered as the most important phase in ensuring the effectiveness of the planned training. It needs to be approached systematically and formally by following certain steps. This desk study was done as an effort to develop a conceptual framework for conducting TNA based on CUDBAS approach. CUDBAS is the acronym for Curriculum Development Based on Vocational Ability Structure and originated in Japan. CUDBAS can be applied in various areas including developing training curriculum, course scheduling, assessment, and training development. It is also suitable to be used in company or organization interested in improving the quality and production according to the specific needs of the organization and company. This study begins by reviewing the existing literature focusing on the levels of TNA, common methods used to determine TNA, and the common techniques used to conduct TNA. This study moves on to mapping the levels of TNA with the CUDBAS approach. It then moves on to identify the methods and techniques for conducting TNA that suits with CUDBAS approach. Findings of this study have shown that all levels of TNA namely, organizational analysis, task analysis, and individual analysis can be applied to the CUDBAS approach which consist of four stages. In this study, focus groups and advisory committees are considered as the suitable methods to conduct TNA for stage one to three (organizational and task analysis) and questionnaire for stage three (individual analysis). Job analysis is considered as the suitable techniques to conduct TNA for stage one while SWOT Analysis, Organizational Scanning, and Balanced Scorecard for stage two. Stage three which involved two levels of analysis considered job analysis as the suitable technique for

task analysis and Performance Review / Appraisal and Versatility Chart / Analysis for individual analysis. SWOT Analysis, Organizational Scanning, and Balanced Scorecard are considered as suitable techniques for stage four which involved decision making activities. As a conclusion, CUDBAS approach is suitable to be applied in all levels of TNA with the selection of methods and techniques recommended in this study in this paper.

### Keywords

Training needs analysis, CUDBAS

### 1. Introduction

People in organizations are valuable assets that help the organisation to achieve its corporate strategies and objectives successfully. They are the source of getting the work done effectively and efficiently, and the source of innovation. In order for an organisation to achieve its goal, it needs to consider the important role of its people. It needs a highly competent, skilled and trained work-force. The importance of training for improving an organization's performance has long been recognised. Due to current exponential growth in technology and its effects on the economy and society at large, the need for training has become more evident than ever (McClelland, 2002). Improving the skills and knowledge of the workforce through training is now one of the most important agendas of most organizations in both developed and developing countries. CUDBAS is the acronym for Curriculum Development Based on Vocational Ability Structure and originated in Japan. It is a method of structure-based curriculum development based on vocational abilities namely, skills, knowledge, and attitudes. CUDBAS can be applied in various areas including developing training curriculum, course scheduling, assessment,



training development, and more. It is also suitable to be used in company or organization interested in improving the quality and production according to the specific needs of the organization and company.

CUDBAS is one of the new elements that can help increase the level of TVET. It is an acronym from the progression of the curriculum structure of vocational ability by Prof. Dr. Kazuo Mori in 1990 in Japan. CUDBAS will provide detailed direction related to the knowledge, skills and attitudes of workers to do job. In addition also CUDBAS also assists organizations in identifying and launching the work process, reduce costs in training and upgrading the quality of skills of workers also reduces waste production caused by human error.

## Background Problem

CUDBAS is a new approach to implementing TNA for skills training and industries in Malaysia. CUDBAS product consists of (i) CUDBAS Chart, (ii) Short Term Training Schedule, (iii) Ability Check List and Ability Map, and (iv) Yearly Training Plan. TNA can be considered the most important phase in ensuring the effectiveness of the planned training (Goldstein and Ford, 2002; Salas and Canon-Bowers, 2001). It needs to be approached systematically and formally by following certain steps. The needs at organizational level should first be analyzed, followed by operational level and individual level analysis. Therefore, this study is important to identify the TNA levels covered in CUDBAS and the suitable methods and techniques for conducting TNA using CUDBAS.

## Research Objective

The main goal of this study is to develop a conceptual framework for conducting TNA based on CUDBAS approach with more emphasis given on TVET and industrial needs. Based on the potential significant contributions in the area, the main objectives of the work presented in this study can be broadly summarised as follows; i. To conduct critical literature review on the theories of TNA, ii. To determine the levels of TNA involved in CUDBAS approach, iii.

To identify the methods for TNA that suits with CUDBAS approach, iv. To identify the techniques for TNA that suits with CUDBAS approach, v. Develop a conceptual framework that integrates the findings of the TNA in CUDBAS approach.

## Significance of the Study

The present study is significant for two particular reasons; i. This study supports continuing efforts by CIAST (Centre for Instructor and Advanced Skill

Training) to introduce and improve the implementation of CUDBAS in Malaysia. ii. This study will allow director / manager of Human Resource, the key person involved in making TNA decisions, TNA consultants, trainers, and educators to significantly increase their knowledge about TNA especially on CUDBAS method.

## Scope of the Study

The scope of this study is the present study limited itself to only the six research questions that were raised; this study is limited to the study of TNA theory which involved the levels of TNA, methods in determining TNA, and techniques in conducting TNA and this study is also limited to the study of CUDBAS method which consists of four stages.

## 2. Literature Review

This chapter analysis critically the literature and identifies the issues related to training and TNA. It briefly explains the concepts of TNA and discusses the various TNA models that have been dominant in the literature for over four decades. It also presents the methods, sources of data involved in performing analysis, and criteria when choosing data collection methods. Various findings from previous studies are provided to demonstrate the reality of TNA. Overall definitions of TNA offered by many authors indicate clearly that TNA is done by organizations to achieve their strategic objectives. The definition by Brown (2002) states that TNA is an ongoing process of gathering data to determine what training needs exist so that training can be developed to help the organization accomplish its objectives. According to Rothwell (1994), TNA is a broad systematic examination of conditions conducted for the purpose of identifying general differences between what people should know or do and what they actually know or do.

Pearce (1997) defined TNA as an essential and simple procedure that follows certain steps to decide what is required for doing the job, and assess what the individual can do. According to Gould (2004), TNA is the initial step in a cyclical process which contributes to the overall training and educational strategy of staff in an organization or a professional group. The cycle commences with a systematic consultation to identify the learning needs of the population considered, followed by course planning, delivery and evaluation.

The TNA is a vital phase in planning training that will successfully close the gap between the actual and desired situations. It ensures that the right remedy is applied to the right problem. Since limited budgets are available for training, the preferred areas of training must be those ensuring that the anticipated outcome

will be achieved, as well as maximum gains for the professionals and their organization (Sims 1990). In some contexts, as described below, needs analysis is crucial (McConnell, 2003). TNA methods are divided into two broad categories based on the types of data produced - quantitative data and qualitative data. Jamil (2006) suggests that quantitative methods are only suitable when data needs to be collected from a large percentage of the population. Qualitative methods, however, highlight the primary definition of something. Methods used include focus groups, on-site observations and reviews of the literature or records. According to Jamil (2006), these methods are best used when analysts need to explore the data they discovered quantitatively in detail.

### 3. Research Method

Desk research is the collection of secondary data from internal sources, the internet, libraries, trade associations, government agencies, and published reports. It is frequently carried out at the beginning of a study as a stage-gate to see if more costly primary research is justified (Hague, 1988). Desk research is very effective and can be conducted in starting phase of market research as it is quite quick, cheap, and most of the basic information could be easily fetched.

Desk research refers to secondary data or that which can be collected without fieldwork. To most people it suggests published reports and statistics and these are certainly important sources. In the context of this study the term is widened to include all sources of information that do not involve a field survey. This most certainly will include searching libraries and the internet.

Primary data is most generally understood as data gathered from the information source and which has not undergone analysis before being included in the needs assessment. Primary data is collected directly from the affected population by the assessment team through field work. Primary data is most often collected through face to face interviews or discussions with members of the affected community, but can also be gathered through phone interviews, radio communication, email exchange, and direct observation.

Secondary data is information which has typically been collected by researchers not involved in the current assessment and has undergone at least one layer of analysis prior to inclusion in the needs assessment. Secondary data can comprise published research, internet materials, media reports, and data which has been cleaned, analysed and collected for a purpose other than the needs assessment, such as academic

research or an agency or sector specific monitoring reports.

Secondary data analysis can be literally defined as 'second-hand' analysis. It is the analysis of data or information that was either gathered by someone else (e.g. researchers, institutions, other NGOs, etc.) or for some other purpose than the one currently being considered, or often a combination of the two. If secondary research and data analysis is undertaken with care and diligence, it can provide a cost-effective way of gaining a broad understanding of research questions. Secondary data are also helpful in designing subsequent primary research and, as well, can provide a baseline with which to compare your primary data collection results. Therefore, it is always wise to begin any research activity with a review of the secondary data (Novak 1996).

### 4. Finding

This section deals with the description of data collected from the existing literature in order to answer the six research questions that were raised in this study.

#### **RQ 1 : What are the levels of analysis found in the existing TNA studies?**

Table 4.1 shows the summaries of the levels of TNA found in the existing studies. All the three levels of TNA namely, organizational analysis, operational analysis, and individual analysis were inter-related and organizational objectives served as an overarching umbrella cascading down to the lower levels. These three analyses need not be done in any particular order, but in general, companies will conduct an organizational analysis first because this assessment decides whether or not training is aligned with business strategies. Task analysis and person analysis are generally done together because it is difficult to determine whether performance deficiencies are a training problem without understanding the tasks and the work environment (Noe, 2008)

**Table 4.1: Literature Related To The Levels of Training Needs Analysis**



Level of Analysis	Description	Related Literature
<b>Organizational Analysis</b>	To ascertain whether organization has achieved its objectives (examines company-wide goals and problems to determine where training is needed)	<ul style="list-style-type: none"> <li>- McGehee and Thayer (1961)</li> <li>- Miller and Osinski (2002)</li> <li>- Brown (2002)</li> <li>- Noe (2005)</li> <li>- Harnisch (2007)</li> </ul>
<b>Operational / Task Analysis</b>	To identify type and level of job knowledge, skills, attitude and working capabilities (examines tasks performed and KSA required to determine what employees must do to perform successfully)	<ul style="list-style-type: none"> <li>- McGehee and Thayer (1961)</li> <li>- Harrison (1997)</li> <li>- Marchington and Wilkinson (2000)</li> <li>- Brown (2002)</li> <li>- Goldstein and Ford (2002)</li> <li>- Harnisch (2007)</li> <li>- Cekada, 2010</li> </ul>
<b>Individual / Person Analysis</b>	To determine whether employee requires competency training or otherwise (examines knowledge, skills and current performance to determine who needs training)	<ul style="list-style-type: none"> <li>- McGehee and Thayer (1961)</li> <li>- Moore and Dutton (1978)</li> <li>- Latham and Wexley (1991)</li> <li>- Brown (2002)</li> <li>- Stone (2002)</li> <li>- Goldstein and Ford (2002)</li> <li>- Jamil (2006)</li> <li>- Harnisch (2007)</li> </ul>

## RQ 2: What are the levels of TNA found in the CUDBAS activities?

The first stage of CUDBAS involves activities to develop CUDBAS Chart. Table 4.2 presents the mapping between activities in the first stage of CUDBAS and the levels of TNA namely, organizational analysis, task analysis, and individual analysis. Based on the table shown, all seven activities in this stage are related to Task Analysis.

**Table 4.2: Mapping Between Activities In The First Stage of CUDBAS and The Levels of TNA**

Activities In Developing CUDBAS Chart	Organizational Analysis (OA)	Task Analysis (TA)	Individual Analysis (IA)
Discuss a job profile		√	
Write ability cards (Knowledge, Skills, and Attitude)		√	
Sort ability cards		√	
Arrange ability cards		√	
Arrange duty cards		√	
Paste cards onto A0 paper		√	
Input the data to CUDBAS format		√	
	OA involves observing an organisation's internal and external environments as a whole to identify whether it has achieved its targets and objectives.	TA is concerned with analysing a particular job in order to identify the type and level of knowledge, skills, and attitude that are required to do the job efficiently and effectively	IA focuses on the employee to determine whether he or she requires any training in order to acquire the competency that is required

The second stage of CUDBAS involves the activities to develop Short Term Training Schedule. Table 4.3 presents the mapping between activities in the second stage of CUDBAS and the levels of TNA. Based on the table shown, all six activities in this stage are related to Organizational Analysis.

**Table 4.3: Mapping Between Activities In The Second Stage of CUDBAS and The Levels of TNA**

Activities In Developing Short Term Training Schedule	Organizational Analysis (OA)	Task Analysis (TA)	Individual Analysis (IA)
Stick on stick-note on CUDBAS Chart	√		
Write the Ability card number and the degree of importance on the colour stick-note	√		
Prepare Subject Organization Chart	√		
Prepare Subject List	√		
Prepare Training Time Allocation Table	√		
Develop a training schedule	√		
	OA involves observing an organisation's internal and external environments as a whole to identify whether it has achieved its targets and objectives.	TA is concerned with analysing a particular job in order to identify the type and level of knowledge, skills, and attitude that are required to do the job efficiently and effectively	IA focuses on the employee to determine whether he or she requires any training in order to acquire the competency that is required

The third stage of CUDBAS involves activities to develop Ability Check List and Ability Map. Table 4.4 presents the mapping between activities in the third stage of CUDBAS and the levels of TNA. Based on the table shown, five activities in this stage are related

to Task Analysis and two activities are related to Individual Analysis.

**Table 4.4: Mapping Between Activities In The Third Stage of CUDBAS and The Levels of TNA**

Activities In Developing Ability Checklist / Map	Organizational Analysis (OA)	Task Analysis (TA)	Individual Analysis (IA)
Create Ability Checklist		√	
Review the ability statements and modify them		√	
Modify Ability Checklist		√	
Do self assessment to check and modify the checklist if necessary		√	
Evaluate others to check and modify the checklist if necessary		√	
Distribute the Ability Checklist to subject persons and collect them			√
Input the results and make an Ability Map			√
	OA involves observing an organisation's internal and external environments as a whole to identify whether it has achieved its targets and objectives.	TA is concerned with analysing a particular job in order to identify the type and level of knowledge, skills, and attitude that are required to do the job efficiently and effectively	IA focuses on the employee to determine whether he or she requires any training in order to acquire the competency that is required

The fourth stage of CUDBAS involves activities to develop Yearly Training Plan. Table 4.5 presents the mapping between activities in the fourth stage of CUDBAS and the levels of TNA. Based on the table shown, all six activities in this stage are related to Organizational Analysis.

**Table 4.5: Mapping Between Activities In The Fourth Stage of CUDBAS and The Levels of TNA**

Activities In Developing Training Plan	Organizational Analysis (OA)	Task Analysis (TA)	Individual Analysis (IA)
Fill in the expected level in the map	√		
Determine the target trainees	√		
Determine the type of training	√		
Write in abilities which needs OJT training in the Training Schedule Plan	√		
Write in the other training type than OJT to the Training Schedule Plan	√		
Write the Training Plan	√		
	OA involves observing an organisation's internal and external environments as a whole to identify whether it has achieved its targets and objectives.	TA is concerned with analysing a particular job in order to identify the type and level of knowledge, skills, and attitude that are required to do the job efficiently and effectively	IA focuses on the employee to determine whether he or she requires any training in order to acquire the competency that is required

Table 4.6 shows the total of activity of CUDBAS which consist of four stages according to the levels of TNA. Based on the table shown, twelve activities of CUDBAS are related to both organizational analysis and task analysis while three activities are related to individual analysis. The finding shows that all three levels of TNA namely, organizational analysis, task analysis, and individual analysis are covered in the activities of CUDBAS.

**Table 4.6: Total of Activity of CUDBAS According To The Levels of TNA**

Stage of CUDBAS (Product)	Organizational Analysis	Task Analysis	Individual Analysis	Total
First Stage (CUDBAS Chart)	-	7	-	7
Second Stage (Short Term Training Schedule)	6	-	-	6
Third Stage (Ability Check List and Ability Map)	-	5	2	7
Fourth Stage (Yearly Training Plan)	6	-	-	6
TOTAL	12	12	2	26

### RQ 3: What are the common methods to determine TNA found in the existing studies?

Data collection and analysis are essential parts of TNA. As shown in Table 4.7, the commonly methods used to determine TNA found in the existing studies are surveys, focus groups, performance appraisals, interviews, observations, tests, assessment centres, document reviews, and advisory committees.

**Table 4.7: Data Collection Methods Found In TNA Studies**

Surveys / Questionnaire	<ul style="list-style-type: none"> <li>- May be in the form of surveys or polls of a random or stratified sample or an entire population.</li> <li>- Can use a variety of question formats: open-ended, projective, forced-choice, priority ranking.</li> </ul>
Focus Groups	<ul style="list-style-type: none"> <li>- Can be formal or informal.</li> <li>- Widely used method.</li> <li>- Can be focused on a specific problem, goal, task or theme.</li> </ul>
Interviews	<ul style="list-style-type: none"> <li>- Can be formal or casual, structured or unstructured.</li> <li>- May be used with representative sample or whole group.</li> <li>- Can be done in person, by phone, at the work site, or away from it.</li> </ul>
Performance appraisals	<ul style="list-style-type: none"> <li>- May be conducted informally or systematically.</li> <li>- Conducted by manager, appraisal developed by Human Resource.</li> <li>- Should be conducted on a regular basis and separately from merit discussions.</li> </ul>
Observations	<ul style="list-style-type: none"> <li>- Can be technical, functional or behavioural.</li> <li>- Can yield qualitative or quantitative feedback.</li> <li>- May be unstructured.</li> </ul>
Tests	<ul style="list-style-type: none"> <li>- Can be functionally oriented to test a board, staff or committee member's understanding.</li> <li>- Can be administered in a monitored setting or "take home"</li> </ul>
Assessment centres	<ul style="list-style-type: none"> <li>- For management development.</li> <li>- Require participants to complete a battery of exercises to determine areas of strength that need development.</li> <li>- Assess potential by having people work in simulated management situations.</li> </ul>
Document Reviews	<ul style="list-style-type: none"> <li>- Organizational charts, planning documents, policy manuals, audits, and budget reports, employee records.</li> <li>- Also include meeting minutes, programme reports, and memos.</li> </ul>
Advisory Committees	<ul style="list-style-type: none"> <li>- Secure information from people who are in a position to know the training needs of a particular group.</li> <li>- Supply data gathered from consultants by using techniques such as interviews, group discussions, and questionnaires.</li> </ul>

Source: Adapted from Brown (2002)

Based on the literature, it appears to the researcher that there is no specific method that can be identified as being the best. In fact, it is not a question of 'either / or' but of which method is appropriate for a particular purpose at a specific time and in a certain circumstance. Each method has special characteristics that can affect the type and the quality of information obtained. For example, an interview can reflect the interviewer's biases, while a questionnaire can have sampling biases if only a few participants return the survey. It is, therefore, preferable to use more than one method to help validate the data, as different types of information are obtained with the different methods.

### RQ 4 : What are the methods for TNA that suits with CUDBAS approach?

In the fourth stage of CUDBAS, all activities are focused to develop Training Plan which consists of Expected Ability Map, Training Method (On-Job Training, Off-Job-Training, Self-Job-Training, and Self Development), Training Schedule Plan, and Training Plan. Table 4.11 shows the data collection methods for determine TNA at the fourth stage of CUDBAS which involves organizational analysis level. There is no data collection activity at this stage. All activities are focused to training plan which carried out by the

key person of the organizations. Table 4.8 presents the summary of the data collection methods for TNA that suits to CUDBAS approach which consist of four stages.

**Table 4.8 : Summary Of Data Collection Methods For TNA Based On The Levels Of TNA And The Stages Of CUDBAS**

Stage of CUDBAS (Product)	Level Of TNA	Data Collection Methods
First Stage (CUDBAS Chart)	Task Analysis	Focus Groups / Advisory Committees
Second Stage (Short Term Training Schedule)	Organizational Analysis	Focus Groups / Advisory Committees
Third Stage (Ability Check List and Ability Map)	Task Analysis	Focus Groups / Advisory Committees
	Individual Analysis	Survey / Questionnaire
Fourth Stage (Yearly Training Plan)	Organizational Analysis	None

**RQ 5: What are the common techniques to conduct TNA found in the existing studies?**

This study makes a distinction between methods and techniques used for TNA data collection. Jamil (2006) defines methods as the instruments that analysts can use to collect data for TNA purposes and techniques as the procedures by which TNA can be conducted and the analysts may need to adopt some of the TNA methods to carry out the techniques. Table 4.9 shows the techniques used to conduct TNA found in the existing literature according to the levels of TNA.

**Table 4.9 : Techniques Used To Conduct TNA Found In the Literature**

ORGANIZATIONAL LEVEL	
Organizational Scanning	The process of the management collecting information about what goes on in an organization. They collect information on issues concerning events and trends, as well as how the outside world interacts with the organization as a whole, for the sole benefit of helping the management to lay down strategies (Choo & Auster, 2001).
Balanced Scorecard	This technique was developed by Kaplan and Norton in 1996. It is used for measuring business performance based on four points of view namely, financial, customer-related, internal activities (or processes) and learning and growth.
SWOT Analysis	SWOT analysis, an abbreviation for Strengths, Weaknesses, Opportunities and Threats, is a well-known technique within management. When this technique is used to decide upon strategies, it is used in the initial stages of the decision-making process and as a precursor to strategic, and various kinds of applications (Craig, 1994).
PEST Analysis	PEST stands for Political influence, Environmental influence, Social influence and Technological influence. PEST is a technique for analysing the macro-environmental factors that affect organizations (Mullins, 1999).

OPERATIONAL LEVEL	
Job Analysis	Job Analysis involves collecting information on a particular job at two levels: i) what would or does the job involve; and ii) what knowledge, skills and attitudes are needed by the employee to carry out the job (Harris, 1997).
Competency Analysis	Competency analysis enables organizations to not only discover the knowledge, skills, and attitudes, but also the values and personal characteristics necessary for both current and future organizational demands (Nog, 2005).
Skills Inventory	A skills inventory involves a comparison of the skills and knowledge required to do a particular job with the skills actually possessed by the current job holder (Jamil, 2006). Documents such as job descriptions are needed to make comparisons (Jamil & Som, 2007).
INDIVIDUAL LEVEL	
Performance Review/Appraisal	Individuals' performances can be reviewed by their supervisors, subordinates, themselves, or colleagues. Generally, at the end of any performance appraisal, supervisors can identify the strengths and weaknesses of the appraised employee and recommend areas that the employee needs to improve and develop (Jamil, 2006).
Repertory Grid Analysis	This technique is used to identify training needs on an individual level. Companies use this technique to identify and compare between good performers and poor performers (Jamil, 2006).
Versatility Chart / Analysis	This technique involves filling in a simple matrix listing employees' names and tasks. In addition, interview or observation data can be gathered on employees to identify their knowledge, skills, and attitudes; a self-assessment method can also be used (Osborne 1996).
Diary Analysis	Techniques used to conduct TNA that involves employees recording their behaviour, thoughts, feelings, hopes and difficulties (Osborne, 1996). Diary analysis could be categorized into structured or unstructured forms (Jamil, 2006).

**RQ 6 : What are the techniques for TNA that suits with CUDBAS activities?**

Table 4.10 shows the summary of the techniques for conducting TNA based on the levels of analysis of TNA and the activities in all stages of CUDBAS from stage one to stage four. The recommended techniques to be applied in CUDBAS approach are shown according to each stage of CUDBAS.

**Table 4.10: Summary Of The Techniques For Conducting TNA Based On The Levels Of TNA And The Stages Of CUDBAS**

Stage of CUDBAS (Product)	Levels Of TNA	Data Collection Methods	Recommended Techniques
First Stage (CUDBAS Chart)	Task Analysis	Focus Groups / Advisory Committees	Job Analysis
Second Stage (Short Term Training Schedule)	Organizational Analysis	Focus Groups / Advisory Committees	SWOT Analysis / Organizational Scanning / Balanced Scorecard
Third Stage (Ability Check List and Ability Map)	Task Analysis	Focus Groups / Advisory Committees	Job Analysis
	Individual Analysis	Survey / Questionnaire	Performance Review / Appraisal and Versatility Chart / Analysis
Fourth Stage (Yearly Training Plan)	Organizational Analysis	No data collection (Decision making)	SWOT Analysis / Organizational Scanning / Balanced Scorecard

## 5. DISCUSSION AND CONCLUSION

### 5.1 Discussion

The overview of the findings from this desk research which presented in chapter four is as follows:

The analysis shows that the levels of TNA which found in the existing studies are organizational analysis, operational analysis, and individual analysis;

The analysis revealed that all three levels of TNA are covered in the activities of CUDBAS;

The analysis also revealed that the common methods for data collection found in the existing studies are surveys / questionnaire, focus groups, interviews, performance appraisals, observations, tests, assessment centres, document reviews, and advisory committees;

The analysis shows that the data collection methods for TNA that suits to CUDBAS approach are focus groups, advisory committees, and survey / questionnaire;

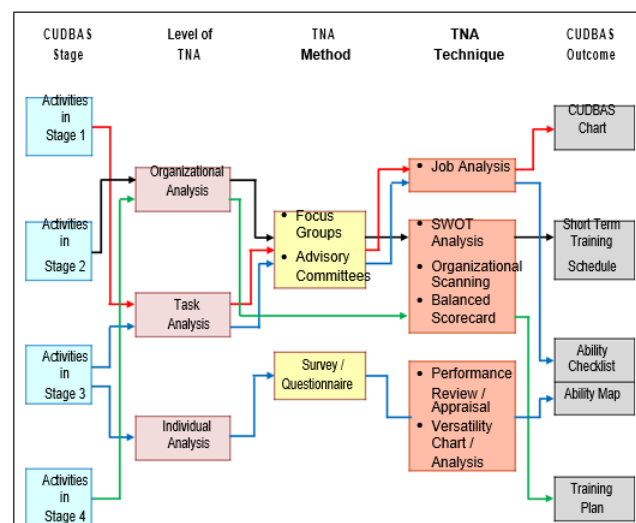
The analysis also shows that the common techniques for conducting TNA found in the existing studies for:

- organizational level – organizational scanning, balanced scorecard, and SWOT analysis;
- task level – job analysis, competency analysis, and skills inventory;
- individual level – performance review / appraisal, repertory grid analysis, versatility chart / analysis, and diary analysis.

The analysis reveals that the techniques for TNA which suits with the activities in the first stage of CUDBAS is job analysis and for the activities in sec-

ond stage are SWOT analysis, organizational scanning, and balanced scorecard. Recommended techniques for task analysis in the third stage is job analysis and for individual analysis are performance review / appraisal, and versatility chart / analysis. For the final stage of CUDBAS, SWOT analysis, organizational scanning, and balanced scorecard are recommended.

Figure 5.1 shows the conceptual framework for conducting training needs analysis based on the activities in each stage of CUDBAS. The conceptual framework consists of CUDBAS outcome for each stage and the levels of TNA that involved. All levels of analysis in TNA namely organizational analysis, task analysis, and individual analysis are shown in the framework according to each stage of CUDBAS. Data collection method and techniques to conduct the TNA are also included in the framework.



**Figure 5.1: Conceptual framework for conducting TNA using CUDBAS approach**

### 5.2 Conclusion

In order for training to be able to contribute to the achievement of organizational objectives, TNA must first examine the context of the organization, and this is known as Organizational Analysis. In the first level of analysis, needs analysts will have to examine all components of the organization. The three steps involved in this level include specification of goals, determination of training climate and identification of external and legal constraints that would affect training efforts (Goldstein and Ford, 2002).

In the time being, a method of analyzing tasks/abilities which reliably prescribes the training procedure nearly doesn't exist. From the literature review, it is suggested to build a method that may begin with a provisional set of categories of relatively specific training methods and conditions and an essential step to test the value of providing



specific methods and conditions in training for the real environment. The most important is the tasks / abilities analysis may have to resolve the problem to encode capabilities in their particular trainee population. It will often be apparent during task analysis that the same performance may be achieved in different ways.

Based on existing literature, procedure is easier to train than principles and indeed may be supported by job training or no need training at all. A group may be achieving better performance by following the procedures that attempting to work from first principle. On the other hand, the cost of producing good procedural guides may be tough. In this situation, we may apply CUDBAS to produce good procedural guides with minimum cost. Obviously, the procedural training is more economic and significant especially in TVET environment. Analysis of TNA not only with the content of training but also towards conditions and method of training as well to recognize factors that may affect the optimum design

## References

- Altschuld, J.W. and Lepicki, T.L. (2010) "Needs Assessment" in *Handbook of Improving Performance in the Workplace: Selecting and Implementing Performance Interventions*, eds. R. Watkins and D. Leigh, John Wiley & Sons, Inc., San Francisco, CA, pp. 771-791.
- Amos-Wilson, P. (1996) "Management training in UK NGOs: a small survey", *Journal of European Industrial Training*, vol. 20, no. 1, pp. 15-19.
- Beck, L. (1983) "Assessment Centers" in *Human Resource Development: The Theory and Practice of Need Assessment*, ed. F.L. Ulschak, Prentice-Hall, Virginia, pp. 165-178.
- Brown, J. (2002) "Training Needs Assessment: A Must For Developing An Effective Training Program", *Public Personnel Management*, vol. 31, no. 4, pp. 569-579.
- Buckley, R. and Caple, J. (2009) *The Theory and Practice of Training*, 6th edn, Kogan Page, London ; Philadelphia.
- Cekada, T. (2010) "Training needs assessment: Understanding what employees need to know", *Professional safety*, vol. 55, no. 3, pp. 28-33.
- Clarke, N. (2003) "The politics of training needs analysis", *Journal of Workplace Learning*, vol. 15, no. 4, pp. 141-153.
- Cosh, A., Duncan, J. and Hughes, A. (1998) *Investing in training and small firm growth and survival: an empirical analysis for the UK 1987 – 1997*, Research Report edn, DfEE Publications, England.
- Craig, M. (1994). *Analysing Learning Needs*. Hampshire: Gower.
- Elbadri, A. N. A. (2001). Training practices of polish companies: an appraisal and agenda for improvement. *Journal of European Industrial Training*, 25 (2), pp. 69-79.
- Goldstein, I.L., 'Training', in Slack, N. (1997) *Operational Management. The Blackwell Encyclopedia of Management*, vol. IX, Cambridge: Blackwell, 1997, pp. 573-581.
- Goldstein, I. L., & Ford, J. K. (2002). Training in organizations. *Wadsworth*: 22; 50; 83; 208.
- Gould, D., Kelly, D., & White, I. (2004). Training needs analysis: an evaluation framework, *Nursing Standard*, 18 (20), pp. 33-6.
- Gupta, K., Sleezer, C.M., & Russ-Eft, D.F. (2007). *A practical guide to needs assessment* (2nd ed.). San Francisco, CA: Pfeiffer Publishing.
- Harnisch, O. (2007) *Analysis of senior management training needs in international hotel companies-A field study*, London Metropolitan University, Birkbeck College.
- Harris, M. (1997). *Human resource management: a practical approach*. Philadelphia: Harcourt Brace College Publishers.
- Herbert, G.R. and Doverspike, D. (1990) "Performance Appraisal in the Training Needs Analysis Process: A Review and Critique.", *Public Personnel Management*, vol. 19, no. 3, pp. 253-270.
- Holton III, E.F., Bates, R.A. and Naquin, S.S. (2000) "Large-Scale Performance-Driven Training Needs Assessment: A Case Study.", *Public personnel management*, vol. 29, no. 2, pp. 249-267.
- Iqbal, M.Z. and Khan, R.A. (2011) "The growing concept and uses of training needs assessment: a review with proposed model", *Journal of European Industrial Training*, vol. 35, no. 5, pp. 439-466.
- Jacobs, R. L., & Washington, C. (2003). Employee development and organizational performance: a review of literature and directions for future research. *Human Resource Development International*, 6 (3), 343-354.
- Jamil, R. (2006) *Training needs analysis practices: a survey on large scale companies in manufacturing industry in west Malaysia*, Monograph (Project Report) edn, Faculty of Management and Human Resource Development, Skudai, Johor, Malaysia.
- Jamil, R. and Som, H. (2007) "Training Needs Analysis: Practices of Top Companies in Malaysia", *International Review of Business Research Papers*, vol. 3, no. 3, pp. 162-175.
- Kissack, H.C. and Callahan, J.L. (2010) "The reciprocal influence of organizational culture and training



and development programs: Building the case for a culture analysis within program planning", *Journal of European Industrial Training*, vol. 34, no. 4, pp. 365-380.

Marchington, M. and Wilkinson, A. (2000) *People Management and Development*, 2nd edn, CIPD, London.

McConnell, J. (2003). *How to identify your organisation's training needs: a practical guide to needs analysis*. American Management Association, AMACOM. USA.

McCoy, C.P. (1993) *Managing a small HRD department: You can do more than you think*, Jossey-Bass Publishers, San Francisco.

McGehee, W., & Thayer, P. W. (1961). *Training in business and industry*. New York, John Wiley & Sons.

McArdle, J. (1998). *Community development. Resource Manual*, 11, H3a-H3e.

Miller, J.A. and Osinski, D.M. (2002) *Training needs assessment*, White Paper edn, Society For Human Resource Management (SHRM), USA.

Moore, M.L. and Dutton, P. (1978) "Training needs analysis: Review and critique", *Academy of Management Review*, vol. 3, no. 3, pp. 532-545.

Mullins, L. J. (2007). *Management and organizational behaviour* (7th ed.). Essex: Pearson Education.

Noe, R. (1999). *Employee training and development*. Irwin, McGraw-Hill.

Noe, R. (2010). *Employee Training and Development*, 5th edn, McGraw-Hill, New York, NY.

Noe, R. (2005) *Employee Training and Development*, 3rd edn, McGraw Hill, Singapore.

Noe, R. A., Hollenbeck, J. H., Gerhart, B. & Wright, P. (1997). *Human resource management*, 2nd edition. McGraw-Hill.

Osborne, D. (1996) *Staff Training and Assessment*, Cassell, London.

Ostroff, C. and Ford, J.K. (1989) "Assessing training needs: Critical levels of analysis" in *Training and Development in Organisations*, ed. I.L. Goldstein, Jossey-Bass Publishers, San Francisco, pp. 25-62.

Roberts, G.E. (2002) "Employee performance appraisal system participation: A technique that works", *Public Personnel Management*, vol. 31, no. 3, pp. 333-342.

Rossett, A. (1987) *Training needs assessment*, Prentice Hall, USA.

Salas, E. and Cannon-Bowers, J.A. (2001) "The science of training: A decade of progress", *Annual Review of Psychology*, vol. 52, no. 1, pp. 471-499.

Salas, E., Tannenbaum, S.I., Kraiger, K. and Smith-Jentsch, K.A. (2012) "The Science of Training and Development in Organizations What Matters in Practice", *Psychological Science in the Public Interest*, vol. 13, no. 2, pp. 74-101.

Stone, R. (2002) *Human Resource Management*, 4th edn, Wiley Art Department, Milton, Australia.

Taylor, P.J., Driscoll, M.P.O. and Binning, J.F. (1998) "A new integrated framework for training needs analysis", *Human Resource Management Journal*, vol. 8, no. 2, pp. 29-50.

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### Abstract

*Finances are one of the main reasons that students drop out of studies. By practicing proper money management techniques, students can feel confident about their ability to manage finances into their adult life, save money and avoid debt down the road. This research was conducted among commerce department students to observe the awareness on managing their personal finance. This helps to raise a better understanding on the personal financial management amongst students in Commerce Department, Polytechnic Ungku Omar. This research includes knowledge of finance, behavioral finance as well as parental socialization of students' awareness of personal financial management. The objective of this research are to study the awareness of personal financial management among students and to identify whether the financial knowledge, financial behavior, and parental socialization are the factor that affect awareness of personal financial management in Commerce Department, Polytechnic Ungku Omar. The data collection method were used are the Pearson Correlation Coefficient Analysis which measures the strength of two variables by measuring it through the division of two variables. Other methods were taken too which is descriptive by distributing questionnaires among commerce department students. The respondents comprised of 300 respondents among commerce department students.*

**Key Words:** Knowledge of Finance, Lecturers' Competencies, Lecturer's Attitud affect awareness of personal financial

### 1.0 INTRODUCTION

Financial management refers to the efficient and effective management of money (funds) in such a manner as to accomplish the objectives of the organization. Financial institutions, the student loan community, financial professionals and educators have identified personal management education as a priority even among households and university students.

The personal financial management among students in commerce department Polytechnic Ungku Omar is the major study of this research. With the expansion of educational services in Malaysia, university and college students become one of the most important market segments for two reasons. First, this group has a high purchasing power especially with the availability of educational loans. The convenience of educational loans is designed to address the financial constraints among students to enable them to concentrate on their studies. Second, this is the segment of the population who has the potential of earning a greater income than any other segment of the population. It is hypothesized that knowing students' financial problems can help educators develop appropriate programs to prepare them to manage their money while in college and provide them with basic financial management skills before entering the labor force.

In order reflecting with the financial education with the management of the students, this study was conducted and aim at analyzing the factors that influences the personal financial management among the students. This research is conducted based on Commerce Departments Polytechnic Ungku Omar students

from all programs. We would want to observe the awareness on financial management among students. They must be several factors influence the financial decision for students. This issue brought the researcher to conduct this research in order to investigate the factors that influence the students.

## 1.1 Research objective

### 1.1.1 General

To study the awareness of personal financial management among students in commerce department Polytechnic Ungku Omar.

### 1.1.2 Specific

1.3.2.1 To identify whether the financial knowledge affect awareness of personal financial management in commerce department Polytechnic Ungku Omar.

1.3.2.2 To identify whether the financial behavior affect the awareness of personal financial management in commerce department Polytechnic Ungku Omar.

1.3.3.3 To identify whether the parental socialization affect the awareness of personal financial management in commerce department Polytechnic Ungku Omar.

## 1.2 Research Question

In fulfilling the objectives of this research, the following research questions were developed as follows:

1.4.1 Does financial knowledge influence the awareness of commerce department students with personal financial management in Polytechnic Ungku Omar?

1.4.2 Does financial behavior influence the awareness of commerce department students with personal financial management in Polytechnic Ungku Omar?

1.4.3 Does parental socialization influence the awareness of commerce department students with personal financial management in Polytechnic Ungku Omar?

## 1.3 Research Framework

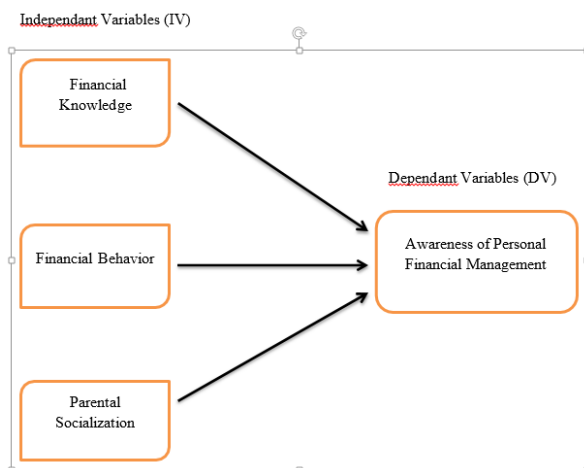


Figure 1.1

Research framework awareness of personal financial management.

## 2.0 LITERATURE REVIEW

According to Mason and Wilson (2006) financial awareness is a meaning-making process in which individuals process the information and make decisions with the knowledge of the financial consequences of that decision by use a combination of skills, resources, and contextual knowledge. This means an individual who is aware of the importance of financial management is smarter in making a decision based on the knowledge that he has.

Another surveyed by Mahdavi and Horton (2012) found another factors that have a relationship with financial awareness and also the background of the parents as father education is closely related to financial literacy his daughter. So parents play an important role in promoting awareness within their children to be more aware of personal financial management.

(Lyons et al. 2006) found that once in college, there are students who will be sitting in a rental house. At this time, students will be responsible for his financial monthly. In this case, the financial knowledge is very important to them so there is no shortage of students while studying.

According to Masud Jariah, AR Husniyah, P. Laili and Sonya Britt (2015), students need to understand the financial behavior because it will be important consumer segment when they graduate. To conclude, the financial behavior also important in this era.

According to Mohamad Fazli Sabri (2012) family involvement is an important aspect of increasing the students' knowledge and experience about managing their money while away from family or parents. The more knowledge the children have about personal finance as college students.

## METHODOLOGY

This study was conducted by distributing questionnaires. To obtain this information, survey forms were used and distributed to the respondents.

## RESEARCH INSTRUMENT

This study distributed of 300 questionnaires to respondents. The construction of the instrument is taking into considerations few aspects such as: (a) does not contain two different elements in order to avoid confusion to the respondent; (b) easy to understand through the use of simple terms and short sentences. (c) Not prejudice to avoid insulting reactions or sensitive; (d) respondent is competent in answering the questionnaire; and (e) can answer in a short period of time to avoid boredom among respondent.

## METHOD OF DATA ANALYSIS

The study involves 300 respondents comprising of all semester students from commerce department. Data were analyzed using the program Statistical Package for Science (SPSS) version 23.

## DATA ANALYSIS AND FINDINGS

### 4.4 MEANS OF VARIABLE

#### 4.4.1 Financial Knowledge

Based on the table 4.5 below, shows the frequency, percentage and mean of financial knowledge. The item 2 use is “I compare prices when shopping for purchase” shows the highest mean score which was 3.33. This can be explain that the students in commerce department always make the comparison before they purchase goods when shopping which was 58.3% (F=175).

Table 4.5: The Frequency, Percentage and Mean on the financial knowledge

No	Item	Frequency(%)				Mean
		Strongly Disagree	Disagree	Agree	Strongly Agree	
1.	I read to increase my financial knowledge.	8 (2.7%)	62 (20.7%)	168 (56%)	62 (20.8%)	2.95
2.	I compare prices when shopping for purchases.	1 (0.3%)	11 (3.7%)	175 (58.3%)	113 (37.7%)	3.33
3.	I do budget spending.	1 (0.3%)	34 (11.3%)	192 (64%)	73 (24.3%)	3.12
4.	I do track spending.	2 (0.7%)	44 (14.7%)	196 (65.3%)	58 (19.3%)	3.03
5.	Investment are really helpful for us in future.	-	19 (6.3%)	189 (63%)	92 (30.7%)	3.24
Overall mean						3.15

#### Financial Behavior

Based on the table below, the highest mean was 3.20 which is an item 2 use is “I should have an emergency fund that covers two to six months of my expenses”. This mean that students always have plan for an emergency fund to cover their expenses.

Table 4.6: The Frequency, Percentage and Mean on the financial behavior

No.	Item	Frequency (%)				Mean
		Strongly Disagree	Disagree	Agree	Strongly Agree	
1.	I avoid spending more money than I have.	3 (1%)	31 (10.3%)	187 (62.3%)	79 (26.3%)	3.14
2.	I should have an emergency fund that covers two to six months of my expenses.	2 (0.7%)	26 (8.7%)	183 (61%)	89 (29.7%)	3.20
3.	I regularly set aside money each month for savings	2 (0.7%)	37 (12.3%)	190 (63.3%)	71 (23.7%)	3.10
4.	It is important to spend time planning for personnel finances.	-	22 (7.3%)	204 (68%)	74 (24.7%)	3.17
5.	Personnel savings will be a primary source of my income after retirement.	1 (0.3%)	32 (10.7%)	186 (62%)	81 (27%)	3.16
Overall mean						3.17

#### Parental Socialization

Based on the table 4.7 below, the highest mean is an item 1 use is “My parents are good example for me when it’s comes to money management” that shows the students was agree which these statement. In conclusion, the overall mean score of the parental socialization is the highest score which is 3.35.

Table 4.7: The Frequency, Percentage and Mean on the parental socialization

No.	Item	Frequency (%)				Mean
		Strongly Disagree	Disagree	Agree	Strongly Agree	
1.	My parents are good example for me when it's comes to money management.	1 (0.3%)	9 (3%)	173 (57.7%)	117 (39%)	3.35
2.	It's good when my parents control my spending	3 (1%)	140 (13.3%)	164 (54.7%)	93 (31%)	3.16
3.	I always talk about money management with my parents.	4 (1.3%)	61 (20.3%)	161 (53.7%)	74 (24.7%)	3.02
4.	My parents are proud of me for saving.	1 (0.3%)	30 (10%)	200 (66.7%)	69 (23%)	3.12
5.	It's a good thing to ask my parents to keep hold of my money sometimes to help me save.	2 (0.7%)	27 (9%)	174 (58%)	97 (32.3%)	3.22
Overall mean						3.19

### 4.5 Overall Mean

The table below shows the overall mean for our independent variables. From the analysis it shown that the parental socialization is the highest mean among the other independent variables which is 3.19.

Table 4.8: The overall mean

Independent variables	Overall mean	
Financial knowledge	3.15	Lowest
Financial behavior	3.17	Moderate
Parental socialization	3.19	Highest

Mean Interpretation Style based on Bradford (2006)

1.00 – 1.49	Strongly Disagree
1.50 – 2.49	Disagree
2.50 – 3.49	Agree
3.50 – 4.49	Strongly Agree

## PEARSON CORRELATION COEFFICIENT

Table 4.9: Pearson correlation coefficient of Awareness of Personal Financial Management with the Financial Knowledge, Financial Behavior and Parental Socialization.

Correlations

		Awareness of Personal Financial Management	Financial Knowledge	Financial Behavior	Parental Socialization
Awareness of Personal Financial Management	Pearson Correlation	1	.396**	.440**	.345**
	Sig. (2-tailed)		.000	.000	.000
	N	300	300	300	300
Financial Knowledge	Pearson Correlation	.396**	1	.499**	.286**
	Sig. (2-tailed)	.000		.000	.000
	N	300	300	300	300
Financial Behavior	Pearson Correlation	.440**	.499**	1	.410**
	Sig. (2-tailed)	.000	.000		.000
	N	300	300	300	300
Parental Socialization	Pearson Correlation	.345**	.286**	.410**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	300	300	300	300

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

Table 4.9 refers to the computation of the Pearson correlation coefficients to obtain an understanding of the relationship between the dependent variables and the independent variables. Overall our correlation value are above  $r = 0.3$ .

Otherwise, there have positive relationship between the awareness of personal financial management with the financial knowledge ( $r = 0.396$ ), financial behavior ( $r = 0.440$ ) and parental socialization ( $r = 0.345$ ).

## DISCUSSION AND CONCLUSION

*Discussion 1: To identify the financial knowledge towards the awareness of personal financial management.*

The analysis made shows the highest number of respondents agreed that financial knowledge affects the awareness of personal

financial management. It can be shown by the highest number of students that agreed (from 3<sup>rd</sup> semesters).

*Discussion 2: To determine the financial behavior towards the awareness of personal financial management*

From the analysis, we find out that financial behavior would affect the awareness of personal financial management. In addition, this can be proved by the analysis made whereas respondents majority with 71.3% agreed to financial behavior would be a factor that affects student awareness.

*Discussion 3: To identify parental socialization towards the awareness of personal financial management*

Majority of the respondents strongly agreed that parental socialization would affect an individual's awareness of personal financial management. This is proved by the highest number of mean from the question answered.

## CONCLUSION

In conclusion, the property which can contribute to Waqf is not limited to only immovable property but it also can be a movable property such as cash. Collaboration between waqf agencies and islamic financial institutions indirectly encourage the community to practice charity deeds required in Islam. This seems to be more important in attracting people to be involved in waqf contribution. Finally, may all these efforts will directly influence the socio-economic well being of the Malaysian society resulting from the utilisation of the funds collected under Waqf agencies.

## REFERENCES

- Lewis Mandell and Linda Schmid Klein (2009). The Impact of Financial Literacy Education on Subsequent Financial Behavior. Volume 20, Issue 1 2009.
- Masud Jariah, AR Husniyah, P. Laili and Sonya Britt (2015). Financial behavior and problems among university students: Need for financial education. Volume 3, Issue 1.
- Daniel Eisenberg, Sarah E Gollust, and Jennifer L Hefner (2007). Prevalence and Correlates of Depression, Anxiety, and Suicidality Among University Students. American Journal of -Orthopsychiatry Copyright 2007 by the American Psychological Association 2007, Vol. 77, No. 4, 534–542.



- Mason, C., & Wilson, R. (2000). Conceptualizing financial literacy. Research Series Paper 2000:7. Business School, Loughborough University, London.
- Cude, Brenda, et al. "College students and financial literacy: What they know and what we need to learn." Proceedings of the Eastern Family Economics and Resource Management Association (2006): 102-109.
- Lusardi, Annamaria, and Olivia S. Mitchell. "The economic importance of financial literacy: Theory and evidence." *Journal of Economic Literature* 52.1 (2014): 5-44.
- Mahdavi, Mahnaz, and Nicholas J. Horton. "Financial knowledge among educated women: Room for improvement." *Journal of Consumer Affairs* 48.2 (2014): 403-417.
- Shim, Soyeon, Bonnie L. Barber, Noel A. Card, Jing Jian Xiao, and Joyce Serido. 2010. "Financial Socialization of First-Year College Students: The Roles of Parents, Work, and Education." *Journal of Youth and Adolescence* 39 (12): 1457-70.
- Mandell, Lewis. 2008. "Financial Education in High School." In *Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs*, edited by Annamaria Lusardi, 257-79. Chicago and London: University of Chicago Press.
- Norvilitis, J. M., Szablicki, P. B., & Wilson, S. D. (2003). Factors influencing levels of credit card debt in college students. *Journal of Applied Social Psychology*, 33, 935-947.
- Lyons, A. C., Rachlis, M., & Scherpf, E. (2007). What's in a score? Differences in consumers' credit knowledge using OLS and quantile regressions. *The Journal of Consumer Affairs*, 41, 223-249.
- Krejcie, Robert V., and Daryle W. Morgan. "Determining sample size for research activities." *Educational and psychological measurement* 30.3 (1970): 607-610.
- Soyeon Shim, Bonnie L. Barber, Noel A. Card, Jing Jian Xiao and Joyce Serido. Financial Socialization of First-year College Students: The Roles of Parents, Work, and Education. *J Youth Adolescence*, DOI 10.1007/s10964-009-9432-x.
- Mohamad Fazli Sabri, Christine C. Cook & Clinton G. Gudmunson. Financial well-being of Malaysian college students. *Asian Education and Development Studies*, Vol. 1 No. 2, 2012.
- Jill M. Norvilitis, Michael G. MacLean. The role of parents in college students' financial behaviors and attitudes. *Journal of Economic Psychology* 31 (2010) 55-63.
- Clinton G. Gudmunson • Sharon M. Danes. Family Financial Socialization: Theory and Critical Review. *J Fam Econ Iss* (2011) 32:644-667. DOI 10.1007/s10834-011-9275-y.
- Bryce L. Jorgensen & Jyoti Savla. Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations* 59 (October 2010): 465- 478. DOI:10.1111/j.1741-3729.2010.00616.x.
- Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey. Michael Gutter, Zeynep Copur (2011).
- Robert v krejcie and Daryle w morgan(1970). Determine Sample Size for Research Activities. *Educational and Psychological measurement* University of Minnesota, Duluth and Texas A. and M. University.

## DECONSTRUCTING VISUAL MEANINGS IN A REVISIONIST TEXT: AN ALTERNATIVE PEDAGOGICAL STRATEGY IN THE NEW NORMAL

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### Abstract

*This paper explores how a pedagogical strategy can meet the limitation and challenges in the new normal. It is with the aim of reimagining education in New Norma, by discovering the sign-maker's hidden voice via the deconstruction of meanings in a revisionist text. There is the need to deconstruct meanings in education of New Normal by discovering the sign-maker's hidden voice. This has been taken from the context of the sign-maker's interpretations of the past events of Sejarah Melayu in the Creative Writing class. Using qualitative approach, the researcher adopts document and visual analysis to generate the absence as the hidden meaning. A Deconstruction of Revisioning of the past is suggested as the pedagogical strategy to discover the hidden voices in the meanings created. The conceptual constructs to support the discussion are absence, intertextuality, social semiotics, revisioning, and hyperreality in making meaning. Finding from the research reveals that selected images disclose the possible sign-makers' individual identities as representing his choices. This paper implicates changes in that reflects the dynamic of poems as the contemporary meaning-making to meet the challenges in the New Normal.*

### Keywords

Deconstruction, Pedagogical strategy, Multimodal Revisionist Poem, visuals, New Normal

### 1. Introduction

Recent pedagogical trends in education due to Coronavirus (or COVID 19 disease ) pandemic have shown the limitation and challenges faced in the New Normal. The outbreak of COVIC 19 has been so pervasive that the number of confirmed positive COVIC19 cases has risen steeply to 14,765,256 confirmed cases of COVID-19, including 612,054 deaths [19]. The trend on the increase indicates the number will considerably increase even after this paper is issued. The spread has posed severe threat to the public that necessitates a few safety measures such as lockdowns, school closure, and physical distancing. These restrict movements, change life routines, affect scarcity or even denial of traditional learning methods, and limit human communication; consequently, these affect livelihood due to increased pressure, stress and anxiety [15]. A research on addressing social and economic impact of schools closure during COVIC 19 pandemic discovered the public concerns over the performance of the learners' educational performance [14]. Likewise, in Malaysia, the pandemic has set limitations that restrict the progress of Malaysian education systems due to lock down and school

closure as it gives uncertain picture on the future of the younger generation.

Due to that, there is the need to deconstruct meanings in education of New Normal by discovering the sign-maker's hidden voice. The new phenomenon is approached as New Normal when the acute global change due to COVID19 pandemic replaces the usual practices including those in education. As defined in The Urban Dictionary (2009), new normal is the situation after severe changes have taken place that requires substitution of those accepted and habitual practiced [10]. It is worth noticing that new normal is a term in the business realm to signal the economist beliefs that industrial economy would resume normalcy after recession [3]. Hence, educational strategy as one of the educational elements follow regime of accepted pedagogical practices on constructing meanings, that need to be reimagined and developed in order to revitalise the education to meet challenges.

Reimagining education strategy is required to offer alternative in knowledge construction. Pedagogical strategy is basically known as "method for teaching and learning... (where) (T)actics **describe detailed methods**" (emphasis mine)[13]. In this research, the term is best defined as a clear implementation of pedagogical approach that lays systematic management and delivery of a knowledge and considers relevant content and learning activities.

## 2. Literature review

The study is triggered by the observation on the trend of using technology via the online modality to address the challenges in the new normal (e.g. mobile learning by Naciri et. al., 2020; digitalised visual classroom by Sintema, 2020; digital learning by Mulenga and Marban, 2020). [9][16][8]. These studies prioritize the use of technological modality as the trend of learning in the New Normal, due to the limitation sparked by the COVID19 pandemic. What has not been addressed is the study on the pedagogical strategy as the basic to the education, by emphasizing critical and creative production. How meanings created by the learners in the New Normal can be deeply analysed is aimed for to discover the learner's hidden voice.

Constructing meaning is a form of learning, as highlighted by the Constructivism approach, when the learners are the sign-makers who design their own knowledge to current ideas presented by connecting new ideas to existing ideas on the basis of materials/ activities presented to them [19].

Whilst constructivism encourages the construction of knowledge via the new meanings created, this study aims otherwise, that is by deconstructing of the meanings as a pedagogical way to learning. To this end, Derrida's (1976) reconceptualisation of deconstruction is adopted to lead to the re-interpretation of the text produced.[3]. In this study,

deconstruction is taken as potential pedagogical strategy to understand visual meanings. This is achieved by discovering the absence, or rather what is hidden in the learners' creative production named revisionist poem.

## 2.1 Deconstruction visual meanings in a revisionist text

The revisionist text is a creative writing produced in an e-Method for Literary Production course at a higher education in Malaysia. The learners were exposed to basic knowledge on the issues of Postcolonialism namely nationhood and concepts such as identity, power and discourse. The assignment on revisioning the past using the rewriting of the selected event in Malay Annals (Sejarah Melayu) produces multimodal poem that consist of the revisioned production realised in the mode of poetic lines and visual images.

Revisioning is the key to the creative production as it allows the learners as the sign-makers to refashion their representations by adapting, modifying or even change typical representations, to indicate their ideological stance[5]. Signs are defined as "any motion, gesture, image, sound, pattern, or event that conveys meaning [12]. Hence, the learners as the sign-makers given creative license to choose and produce new signs to indicate current aspirations [2]. This may be the actions the learners rarely have, especially due to the anxiety and constant pressure, such as those in the New Normal.

The strategy to making-meaning are fourfold, choosing the poem, reading with the grain, reading against the grain and the discovering the hidden voices. By deconstructing the hidden voices of the learners as the sign-makers, the readers, such as the learners in New Normal, their hidden voices can be heard via the strategy of hyperreality, semiotic analysis and intertextuality [1][6][7]. (see Figure 1).

## 3. Data Collection and Data analysis

The on deconstructing ideas are stated as follows:

Data collection - gathering and choosing data

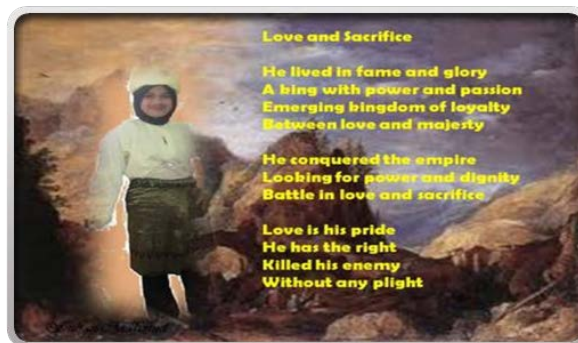


Figure 1: A Revisionist poem, *Love and Sacrifice*

### Pedagogical strategy

- i. Reading with the grain (analyse the structure and patterns)

The rocky land at the center of the image signifies the obstacles and challenges the great empire has experienced, and the sea signifies the water of political boundary (Semiotic analysis)

- ii. Reading against the grain (analyse the inconsistencies)

The picture of Sultan is not naturally connected to the background natural elements of sea and land of the visual, hence it is made strange when it is seen as a floating saint-like figure amidst all other descriptions at the background (Hyperreality). It is like looking at the western medieval painting – “human beings...seem to hang loose in space in violation of the law of gravity...” (Intertextuality)[10].

- iii. Discovering the hidden voices

The deconstruction of the visual meanings indicate a misfit to the symbolic meaning of reality [10]. What can be inferred from this peculiarity is that when the old history is forgotten, the images disappear. This may indicate the sign-maker's uncertainty over the sovereignty of the institution of royalty as she is part of post-independent generation who had not experienced the history.

### 4. Finding:

#### An Alternative Pedagogical Strategy In The New Normal during Covid-Era

Deconstruction is the possible pedagogical strategy to be used to contribute to the reimagination of the education in the New Normal. It consists of revisioning the past, such as the historical events, to reveal the sign-maker's hidden voices. By adopting deconstruction as the systematic way to understand the meanings created, they can work in pairs when they will exchange what they have produced thus role of being of producer is then alternated with the role as the reader. Consequently, the learners will be exposed to alternative way of making meaning towards knowledge production that cater to 21<sup>st</sup> century education in the New Normal.

### 5. Implication

This study contributes to the paradigm shift on empowering the learners as the sign-makers when they are able to produce end product in a creative way[20]. Consequently, this becomes a dynamic way of making meaning as the learners had to unlearn what they had learnt, to relearn new way of making meaning and to produce an alternative ideas.

### 4. Limitation of the study

This pedagogical strategy is suitable to enhance creative and critical thinking out of the box. This indicates that the lesson will go beyond the course content as it reaches the socio-cultural and political concerns. The learners require exposure to theory of nationhood and literary theories as these will be the basic elements to boost creativity beyond limit. It may not be suitable for the primary school learners as the activity requires high level of thinking. Nevertheless, this can still be modified to address the social issues such as conservation; and safety and lifestyle during COVID19.

### 5. Conclusion

The production of the revisionist poems signifies sense of empowerment when it becomes the channel for sign-maker's interest and concerns. Sign-maker's interpretation via revisioning and the reader's re-interpretation implicate changes in contemporary meaning-making. The suggested pedagogical strategy can address the dynamic of revisionist poems as the means to meet the challenges in the new Normal

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### References

- Baudrillard, J. "Simulations". Trans Paul Foss  
New York: Paul Patton Beitchman Semiotext(e). (1983)
- Croce, B. "History as the Stirry of Liberty". Chicago. Gteway Edition. (1970).
- Derrida, M. *Grammatology*. Of Grammatology. London: John Hopkins University Press. (1976)
- El-Erian, M.A.. *Navigating the new normal in industrial countries*. Washington D.C.: International Monetary Fund. (2010)
- Greenblatt, 1983. *Renaissance Self fashioning, from more to Shakespeare*. University of Chicago Press: Chicago. (1983)
- Kress, G. *Multimodality: A social semiotic approach to contemporary communication*. London: Routledge. (2010)
- Kristeva, 1980. *Desire in language: a semiotic approach to literature and art*. New York: Columbia University Press. p. 66.
- Naciri, A., Baba, M. A., Achbani, A., & Kharbach, A (2020). Mobile learning in higher education: Unavoidable alternative during COVID-19. *Aquademia*, 4(1), ep20016. <https://doi.org/10.29333/aquademia/8227>

- New normal [Def.1]. (2009). In *Urban Dictionary*. Retrieved on May 1, 2020, from <https://www.easybib.com/reference/guide/apa/dictionary>
- Panofsky, E. *Meaning in the Visual Arts*. Harmondsworth: Penguin.
- Mulenga, E. M., & Marbán, J. M. (2020). Is COVID-19 the gateway for digital learning in mathematics education? *Contemporary Educational Technology*, 12(2), ep269. <https://doi.org/10.30935/cedtech/7949>
- Panther, J. G., *Digital Communications*, 3<sup>rd</sup> ed., Addison-Wesley, San Francisco, CA (1999).
- Nordquist, R. Signs. <https://www.thoughtco.com/sign-semiotics-1692096>.
- Pedagogical strategy. IGI Global. Publisher of Timely Knowledge. <https://www.igi-global.com/dictionary/pedagogical-strategies/22165>
- Radwan, A., & Radwan, E. (2020). Social and economic impact of school closure during the outbreak of the COVID-19 pandemic: A quick online survey in the Gaza Strip. *Pedagogical Research*, 5(4), em0068. <https://doi.org/10.29333/pr/8254>
- Rosemaliza Mohd Kamalludeen. Transition to the New Normal in education. <https://www.thestar.com.my/opinion/letters/2020/04/28/transitioning-to-the-new-normal-in-education>
- Sintema, E. J. Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), em1851. <https://doi.org/10.29333/ejmste/7893>
- UNESCO. 2020. Nine Ideas Public Action. <https://en.unesco.org/news/education-post-covid-world-nine-ideas-public-action>.
- Vij Sajna. 2015. The construction of knowledge. In Australian Council for Educational Research 2015. <https://www.acer.org/files/teacher-india-sample1.pdf>.
- World Health Organisation. <https://covid19.who.int/>
- [20] Zillasafarina binti Jaafar. Paradigm shifts in consideration: a post-structuralist perspective for 21<sup>st</sup> century research in education. *Jurnal Pensyarah Cemerlang*. IPGK Pendidikan Teknik. 2017. pp. 45-52.

## FACTORS AFFECTING STUDENTS' ACHIEVEMENT IN POLITEKNIK UNGKU OMAR

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### ABSTRACT

This research was aimed to identify the students' goal, discipline, interest and social support towards their achievement and the methods to improve the quality of Dean Lists' Students Achievement at Politeknik Ungku Omar. Academic results are the outcome of education or curriculum and commonly measured by exam or continuous assessment. At the higher education institutions level, academic achievement of students is an important indicator of academic success and it can be measured through GPA (Grade Point Average) or by standardized assess-

ments designed for the purpose of determining the academic result. Students' achievements influence by many factors including students' goal, discipline, interest, and social support. The data were collected from a total of 186 Dean Lists' students from Commerce department. This study was carried out to develop measurement model on the four components of the research and method of data analysis was using SPSS version 18.0. The reliability value of the instruments in the range of 0.736 and 0.893. Thus, the results concluded that the measurement scales of these independent variables was stable to measure the variable



under study. The descriptive findings showed majority of the students agreed with the four independent variables were a part of the factors for students' achievement. Besides that, the dependent variable and all the independent variables under study were used to determining the strength of the correlation analysis. Based on the correlation analysis results under study revealed that there are was a weak positive significant correlation between students' achievement and all the independent variable. The correlation between students' interest and students' achievement has the highest correlation of 0.460. Then, it is followed by correlation analysis of students' discipline and students' goal which recorded 0.433 and 0.361 respectively. Besides that, the lowest correlation analysis 0.272 was recorded on students' social support. Therefore, it can be concluded that the interest, discipline, goal and social support has slightly influence students' achievement at Commerce department. In conclusion, the study showed that there is a need for the intituions to improve the students' achievement by determining suitable changes need and implement the necessary changes. Thus, the need for analysis and evaluation of students' achievement in the education system is crucial. This manages the educational institutions to have higher standards in focus areas of academics performance.

## 1.1 INTRODUCTION

Academic achievement is the outcome of education; commonly measured by exam or continuous assessment. It consisted of two broad groups of definitions that was employed when assessed academic achievement. Gbati (1988) defined that academic achievement refers to the numerical scores of a student's knowledge, which measured the degree of a student's adaptation to academic work and to the educational system. However, according Khadivi-Zand (1982), it is more subjective, and suggested that academic success was reliant upon the student's attitudes towards his

or her academic achievement, and depends on him or herself. Accordingly, academic achievement could be defined as the self-perception and self-evaluation of one's objective academic success (Klobal & Musek 2001). At the higher education institutions level, academic achievement of students was an important indicator of academic success. Students with higher levels of achievement at higher education institutions level was more likely to obtained good employment and salaries. Test scores predicted succeed in the job market in terms of higher wages (Joppke & Morawska, 2003). The students have to follow the right path and worked hard to keep their CGPA up and got a Dean Awards every semester. With that achievement, they will succeed and get into higher education institutions level and able to get the opportunity to be employed by a good company.

Polytechnic was one of the higher education institutions in Malaysia. Polytechnic was an institution of higher education that offering many programmes, especially vocational or technical programmes (Serols, 2016). In politeknik Ungku Omar, academic achievement is referred to the students Cumulative Grade Point Average (CGPA), in the form of a numerical score as obtained in an examination or test that was used to measure the average grade points achieve by a student in all the semesters. By having a higher CGPA, the students will be listed as the Dean Awards recipients and it can open more doors for students when the time came to apply for job or further studies (Frank Milner, 2014). A Dean Award was an award that was given to students in a higher education institutions level such as university, college and polytechnic who achieved high grades in (CGPA) during their studies at educational institutions.

## 1.2 PROBLEM STATEMENT

Lately, students do not take their CGPA results seriously. This will affect academic performance of the students' as

CGPA played a vital role in the students' academic achievement. Furthermore, most employers demand students to include their CGPA results in their resume, so a higher CGPA can help students to get their dream job (Frank Milner, 2014). Therefore, polytechnic students need to make sure that their CGPA is excellent and prepare themselves with various skills and knowledge in order to make them as the best candidate to be employed. However, most polytechnic students nowadays do not realize the importance of excellent CGPA in seeking their dream job in the future. Instead of study, students should involve in other activities such as co-curriculum activities. Having to balance their involvement between academic performance and co-curriculum activities, some might face a problem such as ineffective time management as they could not manage to have enough time to rest, to do revision and complete their assignments. Due to these commitments lead them to skip their classes and spend more time to get involved in co-curriculum activities thus they will miss the important lesson in the class. Consequently, students became more prone to stressed and depressed. Certainly, it will create lack of self confidence in polytechnic students and this can lead to low performance in students' achievement. Furthermore, not all students are interested in academic subject. This kind of problem can lead to student boredom and less interested as laziness is caused due to some students is less fond to certain subject in their course. As this situation, it creates difficulties for the students to achieve Dean Award. As for the students that have received Dean Award several times, they will be too comfortable with their situation. They thought that Dean Award was easy to achieve as they have received it for several times and take it for granted. They put less effort in their studies and it reduced the students' progress in academic achievement. Thus this will make their number of CGPA achieve to drop.

### 1.3 RESEARCH OBJECTIVE

The research focuses on six research objective.

To identify the factors affecting the Students' Achievement in Politeknik Ungku Omar.

To identify students' goals affecting the Students' Achievement in Politeknik Ungku Omar.

To recognize Students Discipline affecting Students' Achievement in Politeknik Ungku Omar.

To discover Students Interest affecting Students' Achievement in Politeknik Ungku Omar.

To identify Social Support affecting Students' Achievement in Politeknik Ungku Omar.

### 1.4 RESEARCH QUESTIONS

What are the factors affecting the Students' Achievement in Politeknik Ungku Omar?

How students' goals affecting the Students' Achievement in Politeknik Ungku Omar.

How Students Discipline affecting Students' Achievement in Politeknik Ungku Omar?

How Students Interest affecting Students' Achievement in Politeknik Ungku Omar?

How Social Support affecting Students' Achievement in Politeknik Ungku Omar?

### 1.5 RESEARCH FRAMEWORK

Figure 1.1 examines the relationship between students' goal, discipline, interest and social support towards students' achievement in Politeknik Ungku Omar. Students' achievement became the dependent variable whereas students' goal, discipline, interest and social support became the independent variables.

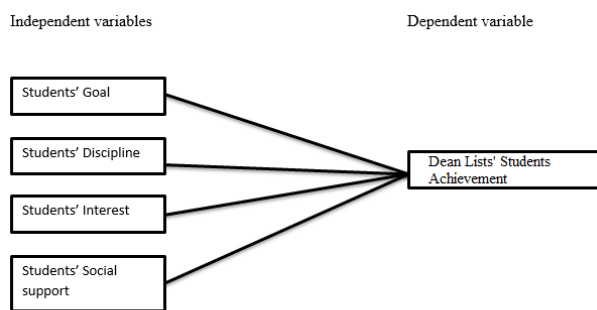


Figure 1.1 Research Framework of Students' Achievement at Politeknik Ungku Omar

## 1.6 SCOPE OF STUDY

General purpose of this study was to determine factors that influence students' achievement in Politeknik Ungku Omar. The independent variables of the study were students' goal, students' discipline, students' interest and students' social support and the dependent variable was students' achievement. The study will be held at Commerce Department, Politeknik Ungku Omar, Ipoh. The sample for the present study comprised of 186 Dean Lists' students from the population of 347 Commerce Department Dean Lists' students. It will take 6 weeks started from 13 June 2017 to 25 July 2017 to collect the data. The field work will be conducted on August 2017 to October 2017 to analyze the data gathered.

## 1.7 LITERATURE REVIEW

This study focused on students' achievement, goals, discipline, interest and students' social support. The Students' academic achievement is one of the key determinants on assessing superiority in education. Those students who are interested and actively engaged in their studies showed significant improvement in their academic performance (Linnakyl et al, 2004). Students' minds set towards a picky subject have shown a positive impact on academic performance (Bos & Kuiper, 1999). Previous academic achievements, motivational factors, teaching methodology and classroom environment significantly influenced academic performance. (Romer, 2005; Von Rhoneck, Grob, Devados and Foltz, 2008; Schnaitmann & Volker, 2010).

Better socio-economic condition and higher Parents' educational level and interest influenced the quality of education in their children (Bos & Kuiper, 1999; Rainey & Murova, 2004). The local environment and family traits with respect to study habits significantly influenced their children academic achievement (Linnakyl et al, 2004; Henderson & Berla, 2006). Institutional environment indicated by characteristics such as student teacher learning process and student's accomplishment are vital for students achievement (Brookover & Lezotte, 1999; Yvonne Beaumont Walters, Kola Soyiba, 1998; Schneider, 2002; Karemera, 2003). Guidance service provided by the institute played a significant role in accomplishment of good academics performance (Chaudhary, 2006). Midgley (2000), Henderson and Mapp (2000), Van Voorthis (2001) found that "students whose parent shown interest in their studies scored higher grades and finally enrolled in higher-level education program.

Goals are the important factor on deciding what you want to achieve in your life. It separates from what importance from irrelevant, or distractions (Neuman, 2006). Goals are the key to establishing clear targets or objectives, for learner (Ames, 2002). Goal theory proposed two general goal orientation students can adopt namely task-focused orientation with an intrinsic focus for learning and an ability-focused orientation with extrinsic focus on external rewards (e.g., getting good grades and doing better than other students). The former are commonly referred to as learning, task involvement, or mastery goals and the latter are labelled as performance or ego-involving goals (Dweck, 1996; Dweck & Leggett, 1998; Elliot & Dweck, 1998).

Researchers emphasize that for goal setting to improve performance, students should be allowed to participate in setting their own goals (Azvedo, Ragan, Cromley, & Prichett, 2002; Griffie & Templi, 1999). Participatory goal theory stated that students who chose their own goals

perform at higher levels than students who have goals set for them (Mento, Steel, & Karren, 1997, as cited in Griffee & Templi, 1997). Research revealed that many educators often create their own learning goals and rarely encouraged students to adapt these goals to their personal needs and interest (Marzano, Pickering, & Pollock, 2001). Many overestimate their students' ability to set their own learning goals (Boekaerts, 2002).

Discipline is one of the most effective factors in achieving the Dean awards. In the modern educational plans, the main purpose of discipline are to create the educational control in learning process. Indeed, discipline are the instrument for achieving high educational goals that lead to the students' growth and progress in achieving the dean awards. In order to this, students' are acquired to a higher level of self – discipline and self - control. Discipline are plan that designed to educate students', so that they become more mannerly, responsible and more discipline. Students' which have more self - discipline tend to be more successful because they have more internal control resources. (Sham, 1999). Khodabakshi and Abedi, (2005) believed that discipline are effective and important to students towards their achievement in education. Giting et al, (1999) finding have shown from their study that positive discipline have favorable effectiveness in increasing the student's achievement in receiving the dean awards.

Interests are stimulus that increased the activity power. Simultaneous to activate learning process, students should show interest in the subject they are learning and students will resort to it in order to understand the materials and apply them (Zare, 2012). It is necessary to further examine the factors involved in making students show interest in education.

The statement, "If they would only try harder, then they would do better on tests, take more risks, or earn better grade" is often heard regarding these students. Based in finding by Zare (2012) indicate that once rewards are giv-

en, they often have the opposite effect to what was intended. Therefore, instead of giving rewards, teachers need to consistently teach students to become intrinsically interest in the subject. Students who are taught to perceive themselves as causal agents in the classroom engage in more risktaking behavior, and increase their achievement (DeCharms, 1992). Also, students who perceive themselves are more in control of learning have better self-esteem (Ryan and Grolnick, 1999). Therefore, high student achievement comes from students who have interest from inside ( Zare, 2012). Researchers have paid attention to these contributing factors in higher level institutions namely university and college. Regarding the present article, viewpoint of educator at various levels are collected in terms to the factors affecting the level of interest of students including their family, social environment and peers. Social supports are broad concept to established research base that shows consensus of positive effects for all college students (Harris & D'Sauza, 2011). In fact, university students who develop social networks tend to experience more academic success (Thomas, 2000).

Research has shown clear link between parent involvement and students' success in their study. The studies also demonstrated a correlation between parent involvement and students' educational development subsequent to intrinsic academic motivation (Grolnick, Bellas & Fleming, 1998). If parents are unable to assist their children with as pefic subject area or skill, they can still play a vital role by encouraging students' feelings of competence, control and positive attitudes towards academics progress (Grolnick, Bellas & Fleming, 1998). This review found that families have strong influenced on variety of students' outcomes including development and maintenance of positive motivation.

## 1.8 RESEARCH METODOLOGY

A descriptive research design was employed in this study, using quantitative approach. The survey was carried out on students' goal, discipline, interest, social support and achievement. Data collection is carried out once using a questionnaire. The method of collecting data easily administered in a short time by the researchers. The population is all the Dean Lists' students in December 2016 from semester 2 until semester 5 session at Commerce Department that consists of 347 students. This study involves 186 students as a sample (Krejcie and Morgan 1970).

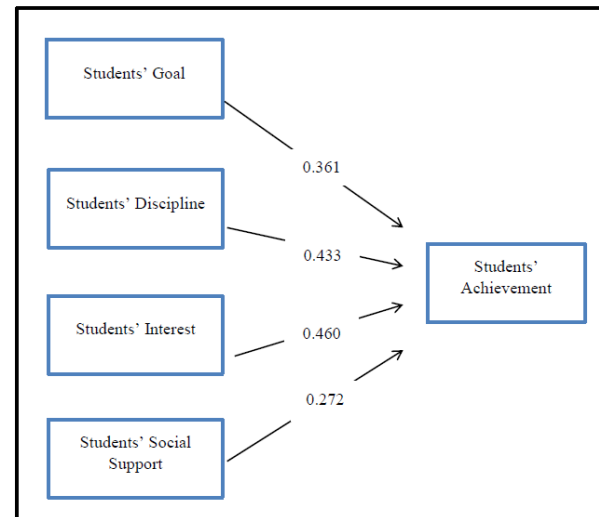
Students' achievement is referring to Grade Point Average (GPA) that student received every semester during their studies. Survey questionnaire used an existing instruments adapted from Samuel (2006) that measure the variables of students' goal, discipline, interest and social support, including also the students' achievement. Method of data analysis was using SPSS version 18.0, to report the descriptive analysis on respondents' profile and IV under study. The analysis was consisted of frequency, percentage, mean, cross tabulation and chart.

Politeknik Ungku Omar students were at various stages of semester and program. This study employed a population of all Dean Lists' students in December 2016 session from semester 2 until semester 5 at Commerce Department total of 347 students. A total of 186 students were chosen as a sample of the study (Krejcie and Morgan 1970).

## 1.9 FINDINGS

The primary purpose of the study was to add to the understanding the Factor towards Students' Achievement in Dean Award at Politeknik Ungku Omar. Discussion of the findings will be according to research objectives. Demographic characteristics of the respondents' under study include gender, race, semester, programmes and GPA. The independent variables were focusing on the students' goal, students' discipline, students' interest, students' social support; whereas dependent variable was on Dean Lists' achievement.

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 18.0, presented using Frequencies, percentage, cross tabulation and chart. Cross tabulation was used to describe and get a clear picture of descriptive information about the survey data such as demographic information and variable under study. Findings was also includes correlation between independent variables under study and between independent and dependent variable.



## 1.10 LIMITATION OF STUDY

Throughout the entire process of completed this proposal, the researcher faced some challenges and problem. But there were some unavoidable limitation that came across. First, the data collection was confined to semester two to semester five students only. The replication of the study at different semester of Commerce Department at Politeknik Ungku Omar would enabled better generalization of the finding of the study.

However, the sample for the present study comprised of 186 Dean Lists' students from the population of 347 Commerce Department Dean Lists' students. The total population of 347 students was a small proportion of the entire 1300 students in Commerce Department, Politeknik Ungku Omar because the population specifically those who achieved Dean Award. Therefore, research studies



with much larger sample size would be required to ensure appropriate generalization of the findings of the study. Students' achievement was measured and might be biased the observed on the learning matter.

Other aspects such as students and lectures behaviors or perception are not considered. Besides, only four aspects had been considered on measuring students' achievement. There are more factors that involved describing this matter and the variables of students; achievement was measured through an instrument developed by previous researchers from other country.

## CONCLUSION

Based on the findings obtained from this study, the researchers conclude that the Dean Lists' students of Commerce Department, Politeknik Ungku Omar exhibit an agreement that factors influencing students' achievement in Deans' Award consists of Students' Goal, Discipline, Interest and Social Support. The students indicated that family and friend support is the factors that influence them most in achieving Deans' Award then followed by students' life goal. Social support makes a meaningful difference in the academic success of polytechnic students and Polytechnic should support the development and maintenance of their students' key social relationships. Discipline was the second lowest factor that influencing students' achievement in Deans' Award. The lowest factor that influenced students' in receiving Deans' Award was clearly shown on the factor of interest. Both the lecturers and administrators have to look for the ways on how to encourage active participation of students in their studies and support the students to guarantee their success in studies because effectiveness of the academic support correlates with the student's motivation to look for and receive it. Students with higher need for achievement have greater academic performance and achievement.

## REFERENCES

- Bordelon, K. (2013). Perceptions of achievement and satisfaction as related to interactions in online courses. *E-learning*, 1058-1065
- Cahill, J., Bowyer, J., Murray, S. (2014). An exploration of undergraduate students' on the effectiveness of academic and pastoral support. *Educational Research*, 56:4: 398-411
- Christine McMaster (2002). Student and teacher perception of disciplines at middle school. *A research paper of graduate school university of Winconsin-stout*; 40-110.
- Duru, S. (2006). Pre-Service Elementary Education Teachers' Beliefs About Teaching and Learning In Turkey. P.H.D Dissertation. Indiana University. Ghorboni Samayer (2003). Investigating the effect of positive discipline on the earning process and its achieving strategies with focusing on students abilities. *Journal from University of Isfahan, Iran. Vol 3, No 5.*
- Gottfried, Fleming, & Bellas (1994). Roles of Parent Involvement, Family Background, and Culture Play in Student Motivation. *The George Washington University, Graduate School of Education and Human Development* 2012.
- Gifford-Smith, M. E., & Brownell, C. A. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, 41: 235-284.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate Data Analysis* (6th Ed.). Pearson: Prentice Hall, New Jersey.
- Hatcher, L. (2003). Step – By – Step Basic Statistic Using SAS: Student Guide. SAS Institute Inc. Cary, NC, USA
- Jennifer M. Hayward (2000). The Effects of Homework on Student Achievement. *THESIS 1987, Brockport Thesis Collection, Education, homework, Student Interest and student achievement*; 25-84.

- Jeffrey T. Sawyer (2005). Examining student discipline within the educational setting, a review of literature. *The graduate school University of Winconsin-stout*; 35-105.
- Kiel Working Paper (1988). Schooling resources, educational institutions, and student performance at Kiel Institute of World Economics.  
<http://www.educationnext.org/unabridged/20012/woessmann.pdf>.
- 89
- Kamemera, D., Rueben, L.J., & Sillah, M.R. (2003). The effects of academic environment and background characteristics on student satisfaction and performance. *College Student Journal*, 37(2), 298-308.
- Khiat, H. (2013). An analysis of the relationship between learning satisfaction and academic achievement of non-traditional learners in Singapore. *International journal of research studies in education*, 3(1)
- Lori Kay Baranek (2006). The Effect of Interest and Motivation on Student Achievement. *Thesis from University of North Carolina*
- Martin, A. J. (2013). Improving the achievement motivation and engagement of students with ADHD: The role of personal-best goals and other growth based approaches. *Australian Journal of Guidance and Counselling*, 23(1) 143-155.
- Mindy L. Roberts (2010). Improving Student Achievement through Professional Learning. *Journal from North Dakota State University*
- Phillipsen, L. C. (1999). Associations between age, gender, and group acceptance and three components of friendship quality. *The Journal of Early Adolescence*, 19: 438–464.
- Rubin, K. H., Bukowski, W. M., & Laursen, B. (2009). Handbook of peer interactions, relationships and groups. New York, NY: Guilford Press.
- Spinath, B. (2012). Academic achievement. V. S. Ramachandran (Ed.), *Encyclopedia of human behavior 2nd ed*: 1–8.
- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first generation college students. *NASPA Journal Online*, 43(4)
- Safiyeh Khayati, Ali Payan (1998). Effective Factors Increasing the Students' Interest in Education. *Thesis from University of Houston*.
- Vansteenkiste M, Simons J, Willy L, Sheldon KM, Deci EL (1999). The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Perspect Soc Psychol*, 2004; 87: 246-60.
- Wang and S. Eccles at the University of Michigan (2012). Influence of Parents, Teachers, and Peers on Student Engagement *The George Washington University, Graduate School of Education and Human Development 2012*.

## THE AWARENESS OF TAKAFUL INSURANCE AMONG LECTURERS AND STUDENTS IN POLITEKNIK UNGKU OMAR (PUO)

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### **Abstract**

The purpose of this study was to identify the awareness of Takaful Insurance among lecturers and students in Politeknik Ungku Omar (PUO). This study's dependent variable is awareness and the independent variables are perception, demand and acceptance of Takaful Insurance. The respondents targeted was lecturers in Commerce and General Studies Department and semester 5 students in Commerce Department. The total population for the lecturers were 126 and the sample size was 97 people while the total population for students were 179 and the sample size was 118 people. The sample size is based on Krejcie and Morgan table. Therefore, the total of sample size for this study was 215 people. Research instrument used for this study was exploratory descriptive study which was using questionnaires and Cronbach Alpha. Reliability value range is from 0.705 to 0.776. The findings showed that the overall mean of awareness of Takaful Insurance was 3.53, the overall mean of perception was 3.48, the overall mean of demand was 3.48 and the overall mean of acceptance was

3.49. The result of the study presented in this research agreed that perception, demand and acceptance contributing towards awareness on Takaful Insurance. This study would help the researchers and the other organization such as education institution to identify why nowadays people do not have awareness, perception, demand and acceptance on Takaful Insurance. This study also may help to identify the main factors that affect students and lecturers' awareness on Takaful Insurance.

### **Keywords**

Awareness of Takaful, perception, demand and acceptance.

### **1. Introduction**

Takaful is the Islamic version of the conventional insurance. It is based on the concept of the cooperation and mutual assistance where members agree to contribute money into pooling system in order to guarantee each other against loss or damage. The phrase Takaful is derived from the Arabic verb "Kafala" which absolutely means to take care of

one's need. Takaful-brand insurance is based totally on Shariah, Islamic spiritual law, and explains how it is the responsibility of humans to cooperate and protect each other.

The emergence of Takaful system is very in line with Islamic value concerning socio economic principle for the benefit of individual and society as whole. From the Shariah perspective, Takaful is labeled as the practice of sharing the risks among as many people as possible.

#### *1.1 Problem Statement*

Based on the research executed with the aid of Kamarul Ariffin Mansor (2015), the findings show that most of the respondents do now not be aware of and apprehend about the concept that is newly practiced in Takaful. For example, Al-Ujrah (commission) and Al-Wakalah (agent). Then, based on the research by Lukman Olorogun Ayinde (2012), the findings state that majority the customers are not interested in Takaful, they did not find any difference between Takaful and insurance. This is because of the Takaful is more expensive than insurance, the industry lacks expertise, the employees are not customer friendly and lack of needed policies. Until now, there are many people out there from all walks of life still not sure what Insurance and Takaful is. Is it a brand? or it is a name of an insurance company?

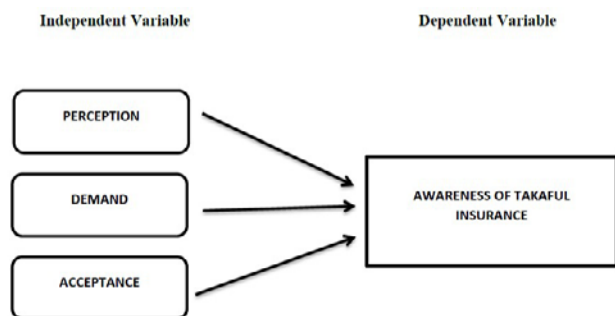
#### *1.2. Research Objective*

- To identify dependent variable (Awareness) and independent variables. (Perception, Demand, Acceptance) towards Takaful insurance among lecturers and students in Politeknik Ungku Omar (PUO).

- To determine the relationship between dependent variable and independent variables under the study.

#### *1.3. Research Framework*

Table 1 below shows the framework of dependent variable and independent variables on the awareness of Takaful Insurance.



#### 1.4 Scope of study

This study was conducted to determine the awareness of Takaful insurance among lecturers and students in Politeknik Ungku Omar (PUO). The focus is on perception, demand and acceptance of Takaful Insurance among lecturers and students in Politeknik Ungku Omar (PUO).

The respondent of this research selected from a working person and also a student from Politeknik Ungku Omar (PUO) which were involving lecturers from General Studies Department and Commerce Department. While, the students were selected from semester 5 in Commerce Department.

## 2. Research Methodology

The methodology of this study was adopting the quantitative approach by using the survey method. The data collection was collected using a questionnaire. Methods of data analysis is using SPSS version 18.0 to report the descriptive analysis on respondents' profile and independent variable under study.

The target population selected were lecturers in Commerce Department and General Studies Department while students was all semester 5 in Commerce Department from Politeknik Ungku Omar (PUO). The total population for lecturers in Commerce Department and General Studies Department were 126 people, whereas the population of semester 5 students in Commerce Department was 179 people. According to Krejcie and Morgan (1970) table, the population for lecturers that stated between 121 to 130, the sample size should be 97 people. Meanwhile, the population for semester 5 that stated between 161 to 180, the sample size should be 118 people based on the table. Therefore, the total sample size for this study is 215.

## 3. Data Analysis

Quantitative method is use in this research in order to study the perception, demand and acceptance of lecturers and students on Takaful Insurance. The data receive from the survey was quantitative analysis through the use of descriptive statistic using mean, frequency, percentage and correla-

tion using Statistical Package for Social Science (SPSS) version 18.0. The analysis was done according to research questions.

### 3.1 Respondent Profile

Table 2 below shows the profile under the study

Characteristic	Frequency	Percentage (%)
<b>Gender</b>	46	27.7
Male	120	72.3
Female	166	100.0
<b>Total</b>		
<b>Status</b>	34	20.5
Lecturer	132	79.5
Student	166	100.0
<b>Total</b>		
<b>Age</b>	136	81.9
18-30 years	21	12.7
31-45 years	9	5.4
46 years and above	166	100.0
<b>Total</b>		
<b>Race</b>	124	74.7
Malay	3	1.8
Chinese	38	22.9
Indian	1	0.6
Others	166	100.0
<b>Total</b>		

Questionnaire has been distributed to 215 respondents among students and lecturers because according to Krejcie and Morgan (1970), the sample size is larger than 30 and less than 500 appropriate for most research. From the 215 respondents in this research, only 167 respondents complete to fill out survey forms that have been distributed.

### 3.2 Correlation Analysis

The correlation analysis between independent variables and dependent variable under study was shown on Table 3 below. It was revealed that there was a medium correlation (Hatcher 2003) between awareness of Takaful Insurance and perception, demand and acceptance of Takaful Insurance.

		Awareness	Perception	Demand	Acceptance
Awareness	Pearson Correlation	1	.708**	.705**	.776**
	Sig. (2-tailed)		.000	.000	.000
	N		166	166	166
Perception	Pearson Correlation		1	.874**	.791**
	Sig. (2-tailed)			.000	.000
	N			166	166
Demand	Pearson Correlation			1	.836**
	Sig. (2-tailed)				.000
	N				166
Acceptance	Pearson Correlation				1
	Sig. (2-tailed)				
	N				

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

Table 3 shows Pearson's coefficients among variables. Acceptance of Takaful Insurance have the highest significant correlation coefficient (0.776). According to Hatcher (2003), correlation is interpreted using the guidelines suggest by Hatcher guideline as shown in table 4 below.

No correlation	0.00
Weak correlation	0.01- 0.49
Medium correlation	0.50 – 0.79
Strong correlation	0.80 – 0.99
Perfect	1

(Hatcher, 2003)

#### 4. Discussion and Conclusion

This research shows the result of the first variable (awareness of Takaful) had an overall mean of 3.53. It indicated that respondents had an agreement that awareness was an important factor. Hence, it influences the respondent's level of awareness towards Takaful. The result of the second variable (perception of Takaful) had an overall mean of 3.48, It clearly shows that respondent had an agreement that perception was a vital aspect towards the awareness of Takaful since majority of the students and lectures can understand and interpret the concept of Takaful correctly. The result of the third variable (demand of Takaful) had an overall mean of 3.48, It shows that respondent had a strong agreement that demand is a very important aspect towards the awareness of Takaful. The result of the last variable (acceptance of Takaful) had an overall mean of 3.49. It shows that respondent had an agreement that acceptance is an important element towards the awareness of Takaful. This view is parallel to the findings by Mohamad Idham (2013), it shows that the level of acceptance towards Takaful insurance product is high among respondent.

As the conclusion, Takaful is a kind of Islamic insurance, where participants make contributions money into a pool device in order to assurance each other against loss or dam-

age. Since majority of the respondents have positive results, Takaful Insurance are required to aggressively market their product and conduct awareness sessions to improve the knowledge of the people about their products and the difference between Takaful Insurance and conventional insurance.

#### 5. Acknowledgments

The writer wishes to recognize our Head of Commerce Department and Politeknik Ungku Omar's lecturers for helping us carry out this study.

#### References

- [1] Abdul Rahman, Z. (2008). The role of Islamic Financial Institutions in Wealth Accumulation, Ownership & Protection by the Ummah. Conceptual and Implementation Challenges. *Malaysia: Universiti Teknologi MARA*
- [2] Antonio, M. S., Ali, M. M., & Akbar, N. (2013). A Comparative Analysis of the Efficiency of Takaful and Conventional Insurance in Malaysia. *International Journal of Excellence in Islamic Banking and Finance*, 3(1), 1-13.
- [3] Arifin, J., Yazid, A & Sulong, Z. (2013). A conceptual Model of Literature Review for Family Takaful (Islamic Life Insurance) Demand in Malaysia. *International Business Research*, 3(2)
- [4] Ayinde, L. O., & Echchabi, A. (2012). Perception and adoption of Islamic insurance in Malaysia: an empirical study. *World Applied Sciences Journal*, 20(3), 407-415.
- [5] Bashir, Mohamed Sharif and Hj Mail, Nor Hafiizah. (2011). Consumer Perceptions of Islamic Insurance Companies in Brunei Darussalam. *International Journal Emerg. Science*, 1(3), pp. 285-306
- [6] Hassan, L. F. A., Jusoh, W. J. W., & Hamid, Z. (2014). Determinant of customer loyalty in Malaysian takaful industry. *Procedia-Social and Behavioral Sciences*, 130, 362-370.
- [7] Ismail, N., Othman, A. A., Din, S. Z. M., bin Noh, M. K. A., Yousop, N. L. M., Bakar, N. A., & Shafi, R. H. M. (2012). An Investigation of the Awareness Level of Takaful Products among the Micro Enterprises in Malaysia. *San Francisco: Academia.edu*.
- [8] Kamil, N. M., & Nor, N. B. M. (2014). Factors Influencing the Choice of Takaful Over Conventional Insurance: The Case of Malaysia. *Journal of Islamic Finance*, 3(2), 1-14.
- [9] Keong, L. L., Khor, M. L., Low, S. P., & Wong, Z. H. (2012). Awareness of Islamic banking products and services among non-Muslims in Malaysia (Doctoral dissertation, UTAR).
- [10] Mansor, K. A., Masduki, R. M. N., Mohamad, M., Zulkarnain, N., & Aziz, N. A. (2015). A Study on Factors Influencing Muslim's Consumers Preferences Towards Takaful Products In Malaysia. *Romanian Statistical Review*, 63(2), 78-89.
- [11] Md Husin, M., & Ab Rahman, A. (2013). What drives consumers to participate into family takaful schemes? A literature review. *Journal of Islamic Marketing*, 4(3), 264-280.
- [12] Razak, M. I. M., Yusof, R. I. M. M., & Ali, W. E. J. M. (2013). Acceptance determinants towards takaful products in



Malaysia. *International Journal of Humanities and Social Science*, 3(17), 243-252.

[13] Sherif, M., & Azlina Shaairi, N. (2013). Determinants of demand on family Takaful in Malaysia. *Journal of Islamic Accounting and Business Research*, 4(1), 26-50.

[14] Swartz, N. P., & Coetzer, P. (2010). Takaful: an Islamic insurance instrument. *Journal of Development and Agricultural Economics*, 2(10), 333-339.

[15] Yazid, A. S., Arifin, J., Hussin, M. R., & Daud, W. N. W. (2012). Determinants of family takaful (Islamic life insur-

ance) demand: a conceptual framework for a Malaysian study. *International Journal of Business and Management*, 7(6), 115.

[16] Zahari, A. S. M., Ab Rahman, B., Othman, A. K., & Wahab, S. (2013). Investigating the relationship between customer knowledge management and knowledge sharing among insurance companies in Malaysia. *Asian Social Science*, 9(10), 60.

## MISREPRESENTATION OF MODERN MEDICAL ELEMENTS IN MALAY DRAMA SCENES: SUGGESTION TOWARDS A SOLUTION

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### Abstract

*Since before, television drama has been proven can be a form of persuasive message towards its audiences. Either positively or negatively, the drama has become a part of the source of information for society. However, the idea from the Malay drama producers to include modern medical elements in their drama scenes looks more attractive, but then it can turn into bad ideas because of the misrepresentation of the elements. This can create misunderstanding among the audiences and can tarnish the image of local drama industries, as well as our local medical institutions. Because of that, this research was conducted through in-depth interviews with six local drama producers to find some suggestions to avoid the continuous misrepresentation of modern medical elements in Malay drama scenes. Using Media Literacy Theory by Potter (2004), this study recognizes that the involvement from the real medical practitioners can help the local drama industries in preventing the misrepresentation of modern medical elements in dramas from happening. Therefore, the idea to establish a monitoring or supervisory body from among medical practitioners were suggested. It is hoped that this research can be of benefits to all parties involved in the local drama industries, especially the producers, and not to forget, the medical institutions to prevent the misrepresentation of modern medical elements in our drama.*

### Keywords

Malay drama, medical scenes, misrepresentation, suggestion towards a solution.

### 1. Introduction

It is undeniable that drama has become one of the important media as a source of entertainment, information, and education at every age. It is easy, and the audiences have the full power to control their favourite channel. As we can see nowadays, various television channels offered various types of dramas that have led local drama produc-

ers to strive to produce more creative and interesting content for their drama to attract and engage more audiences. Therefore, modern medical elements have become one of the elements of choice to be included in most of the drama scenes because it is seen to be successful in creating feelings of sadness, suspense also creates conflict to make the storyline more interesting.

Doctors, nurses, medical assistants, board directors, and patients are the characters that we usually see when involved in medical scenes in the drama. Turrow (2012)<sup>1</sup> mentioned that medical drama is a place where it portrays all the medical treatment process, alongside the character who has power and influence in medical institutions.

### 2. Research problem.

Even though the elements of modern medical likely used to add a more dramatic mood in the scenes, sometimes the representation is inaccurate. These problems can lead to misunderstanding because audiences tend to believe what they saw on television. Stobbe, M. (2007) through his research on "Law and Order" found that audiences believed what they see even the drama misrepresent the medical elements.

Meanwhile, Shwei, et al (2015) <sup>2</sup> found that audiences can be influenced through what they see on television to decide on use of the medical applications in their daily life.

<sup>1</sup> Stobbe, M. 2007. U.S Health Officials Prescribing Doses of Medical Accuracy for TV Shows. *Deseret News*. <http://www.deseretnews.com/article/660213843/US-health-officials-prescribing-doses-of-medical-accuracy-for-TV-shows.html?pg=2> [12 Februari 2016]

<sup>2</sup> Shwei, R.J., Jacobs, E.A., Wingert, K., Montague, E. (2015). Portrayal of medical decision making around medical interventions life-saving encounters on three medical television shows. *Health Technol (Berl)*. 5(2):155-160.

However, the representation of medical elements in Malay drama scenes are often questioned for its accuracy. Like example in Figure 1 below where the cervical collar were worn improperly.



**Figure 1. Improperly worn of the cervical collar.**

If no prevention were taken to reduce this problem, it might cause a negative effect not only to the audiences, but mainly to drama industries, and medical institutions. As we can see from Figure 1, the mistakes become a joke amongst society, and from Figure 2, social media users start to comments negatively towards the drama producer, and director.



**Figure 2. One of the effects because of the misrepresentation of the modern medical elements in Malay drama scenes.**



**Figure 3. Comments made by social media users**

Besides that, it also can create confusion among drama audiences as they might believe in what they saw on television.

### 3. Research objective

As this research was conducted to prevent this problem from continuing to occur, the objective is to find suggestions from the experts in drama industries, driven with the use of structure knowledge from the Theory of Media Literacy by Potter (2004).

### 4. Methodology

To achieved the objective, the qualitative method was used where an in-depth interviews with six local Malay drama producers was conducted. All these drama producers should have more than ten years experienced in local drama industries, where they have produced five Malay drama, or telefilm, or film. Importantly, they must own their own production company.

Kohen Kappa was used as a visibility check for the data analysis where transcribed interviews were categorized into themes manually.

### 5. Findings and discussion.

From the interview, there was one suggestion that can help to prevent the problem from continuing to occur. All of them agree that one script monitoring body should be created. This idea also can support the study made by Lolley (2008)<sup>3</sup>, which stated that most of the scriptwriter didn't have any medical knowledge to write about medical elements in the drama, making the representation of the medical elements less accurate (Goodwin, 2012)<sup>4</sup>.

In their opinion, this monitoring body can help the production team, especially the scriptwriter to write and show the right fact and exact way to handle any medical elements related to the script. As suggested through study (Turrow, 2012),<sup>5</sup>it is stated that any individual from nurse

<sup>3</sup> Lolley S. (2008). *Medical Professional and the Fictional TV Medical Drama House MD*. McGill University.

<sup>4</sup> Goodwin, E. (2015). What Medical TV Shows Portray Wrong About the Life of A Doctor. *Med School Plus*. <http://www.kaptest.com/blog/med-school-pulse/2015/07/28/medical-tv-shows-portray-wrong-life-doctor/> [10 Februari 2016].

<sup>5</sup> Turow J. 2012. Nurses and Doctors in Prime Time Series: The Dynamics of Depicting Professional Power. *ScienceDirect*. [http://www.nursingoutlook.org/article/S0029-6554\(12\)00142-X/pdf](http://www.nursingoutlook.org/article/S0029-6554(12)00142-X/pdf). [17 October 2014]

organization can be invited to contribute any interesting idea related to medical elements into the story.

Besides that, this body also is expected to reprimand the errors found in the script or drama, so it can be a reminder for the drama production team to be more alert in the future.

Importantly, the monitoring body must be always able to supervise the scriptwriter or the production team if needed without any bureaucracy. Other than that, they also suggested that any medical organization which can, and willing to help the production team, should promote more about their organization and services in any media medium, to make it easier for them to find.

## 6. Conclusion

Misrepresentation of medical elements in Malay drama scenes should be taken seriously as we need to prevent these problems from creating confusion among drama audiences, and at the same time, tarnishing the image of local drama industries and medical institutions. With the suggestions given by the informants who are already involved in this field for a long time, it is hoped that this

problem can be solved for the sake of local drama industries.

## 7. References

- [4] Goodwin, E. (2015). What Medical TV Shows Portray Wrong About the Life of A Doctor. *Med School Plus*. <http://www.kaptest.com/blog/med-school-pulse/2015/07/28/medical-tv-shows-portray-wrong-life-doctor/> [10 Februari 2016].
- [3] Lolley S. (2008). *Medical Professional and the Fictional TV Medical Drama House MD*. McGill University.
- [2] Shwei, R.J., Jacobs, E.A., Wingert, K., Montague, E. (2015). Portrayal of medical decision making around medical interventions life-saving encounters on three medical television shows. *Health Technol (Berl)*. 5(2):155-160.
- [1] Stobbe, M. 2007. U.S Health Officials Prescribing Doses of Medical Accuracy for TV Shows. *Deseret News*. <http://www.deseretnews.com/article/660213843/US-health-officials-prescribing-doses-of-medical-accuracy-for-TV-shows.html?pg=2> [12 Februari 2016]
- [5] Turow J. 2012. Nurses and Doctors in Prime Time Series: The Dynamics of Depicting Professional Power. *ScienceDirect*. [http://www.nursingoutlook.org/article/S0029-6554\(12\)00142-X/pdf](http://www.nursingoutlook.org/article/S0029-6554(12)00142-X/pdf). [17 October 2014]





# THE LEVEL OF FINANCIAL MANAGEMENT OF DIPLOMA IN BANKING AND FINANCE (DKB) STUDENTS IN POLITEKNIK UNGKU OMAR

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## Abstract

The aim of this resource is to investigate factors that influencing financial management among the DKB student. The independent variable are financial literacy, spending habits and parental socialization. The population of this study is 217 respondents from Diploma in Banking and Finance students at Ungku Omar Polytechnic and the sample size was determined as 140 respondents based on the table of selecting sample size (Krejcie and Morgan, 1970). This data from this study was collected by questionnaires. This study used quantitative data with random sampling technique. Questionnaire were used as instrument in collecting the data and analysis performed were reliability analysis in which Cronbach Alpha Value more than 0.6 was considered reliable (Cronbach And Meehl 1955), descriptive analysis and correlation analysis. Data were analyzed using Statistical Packages for Social Science (SPSS 18.0). The conclusion for overall research has been drawn and few recommendations for the researcher to enhance future research have been given.

## Keywords

Financial management, spending habits, financial literacy and parental socialization.

## 1. Introduction

Based on the study of Khan and Jain (2008), "Finance is the art and science of managing money .Financial Management means planning, organizing, directing and controlling the financial activities such as procurement and utilization of funds of the enterprise. Meanwhile, student financial management was referred the behaviors and perception of how students manage their financial and handling their money while they finishing their study. The student need to know the important of financial literacy and the skills on how to manage their financial very well.

### 1.1. Problem Statement

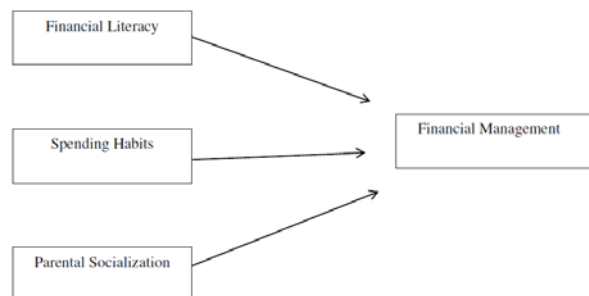
The current generation is faced with unexceptional debt burdens during and on completion of their studies while students have always found balancing their finances difficult. Lusardi and Mitchell (2011) believe that the rising cost of expenditure in life such as cost of goods and services that make people to be able to make well-informed financial decisions. Therefore, this paper is to investigate how informed is the student of Ungku Omar Polytechnic on Financial matters.

### 1.2. Research Objectives

The research objectives of this study are:

- To study the level of financial management among DKB students in Ungku Omar Polytechnic.
- To study either financial literacy affect student's financial management.
- To study either spending habits affect student's financial management.
- To study either parental socialization affect students financial

### 1.1 1.3 Research Framework



### 1.4 Financial Management

Financial management is the process of managing the financial resources, including budgeting/costing, accounting and financial reporting and risk management. It is handling your financial situation during a responsible manner to realize the specified goals (Mitchell, 2007). Good financial management requires good planning. The decisions you make regarding your finances will affect many aspects of the organization life, as well as the lives of the partners.

### 1.5 Financial Literacy

The term financial literacy has been regularly used as a synonym for financial education or financial knowledge. However, these constructs actually are conceptually different in that financial literacy is deeper than financial education; thus, using them synonymously can cause problems. Huston (2010) contends that financial literacy has two dimensions: understanding, which represents the personal financial knowledge of financial education, and use, which refers to the management of personal financial knowledge. In this context, the individual could have financial knowledge, but to be considered literate, he should have the ability and confidence to implement it when making decisions.

### 1.6 Spending Habits

Spending habits is an outflow of cash to a different person or group to buy an item or service, or for a category expense. For students or parents, is an expense. Buying food, clothing, furniture or an automobile is usually mentioned as an expense. An expense may be a cost that's "paid" or "remitted", usually in exchange for something useful.

Something that seems to cost an excellent deal is "expensive". Something that seems to cost little is "inexpensive". "Expenses of the table" are expenses of refreshments, a feast, etc (Cummins, 2009).

### 1.7 Parental Socialization

It is therefore likely that parental financial teaching is more appropriate and effective than general financial education. Vassallo (2003) supports this view by stating that parents are the most the influence of parental financial teaching on saving and borrowing behaviour 5 important socialization agents.

The theory of planned behaviour and the family systems theory both support the view that parents play a role in forming the financial behaviour of their children; these theories are further explored below.

## 1.8 Scope of Study

The scope of this study are:

- Financial management assist to determine the financial requirement of the business concern and leads to take financial planning of the concern.
- Financial management helps to take sound financial decision in the students life
- Financial management is very important in the practice of increasing the wealth
- Strong financial management helps to promoting and mobilizing individual and corporate savings.

## 2. Methodology

Research design of this study is adopting the quantitative approach that's using survey method. The research data are going to be collected once using questionnaire. This method is used because it is easy to administer in a short time. The population of the study is comprised of 217 students from semester 1 until semester 5 students of Diploma in Banking and Finance (DKB). The sample will involve 140 students out of 217 students from diploma in Diploma in Banking and Finance (DKB). The number of respondents that will be the sample for the study are determine by using Krejcie and Morgan (2007).

### 1.0 Data Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 18.0, presented using frequencies, percentage and pie chart. Findings was also include correlation analysis between independent variables under study and between independent and dependent variable

### 3.1 Respondent Profile

**Table 1 showed the profile under the study**

Demographic profile	Particular	Frequency	Percentage (%)
Gender	Male	22	15.7
	Female	118	84.3
Race	Malay	96	68.6
	Indian	39	27.9
	Chinese	5	3.6
Semester	Semester 1	13	9.3
	Semester 2	18	12.9
	Semester 3	23	16.4
	Semester 4	40	28.6
	Semester 5	46	32.9
Age	18-19 years old	26	18.6
	19-20 years old	65	46.4
	21-22 years old	48	34.3
Sources of Income	Loan (PTPTN)	92	65.7
	Parents	43	30.7
	Yayasan Negeri	3	2.1
	Other	2	1.4

In this research, the questionnaire has been distributed among the Diploma in Banking and Finance students and the instruments has been tested for its reliability. It is required to retest its reliability for this different variable and objective. The reliability test has been done using SPSS to measure the reliability of instrument using Cronbach's Alpha Coefficient.

## 3.2 Correlation analysis

**Table 2 showed Pearson Correlation analysis under the study**

variable	Financial Management		
	Correlation	Sig. (2-tailed)	N
Financial literacy	.453	.000	140
Spending habit	.124	.145	
Parental socialization	.557	.000	

## 4. Discussion and Conclusion

For this research, Analysis on overall mean for financial management was 3.0014, financial literacy was that 2.9871, spending habits was 2.9029, parental socialization was the third independent variable showed overall mean 3.2729, means students agreed that parental socialization played a main role on student's financial management. This view was parallel to the findings parental financial teaching is more appropriate and effective than general financial education. Vassallo (2003) supports this view by stating that parents are the most The influence of parental financial teaching on saving and borrowing behaviour

In conclusion, this research shows that the level of financial management can be influence by the financial literacy, spending habits, and parental socialization. The information that has been gathered from this research can be use by the respondent in manage their financial in the future.

Hopefully this research can provide a certain knowledge for the respondents in having their relevant financial management and spend their financial in the future.

## 5. Acknowledgement

The writers wish to recognize our Head of Commerce Department and Politeknik Ungku Omar's lecturers for helping us carry out this study.

## References

- [1] Allen, K. & Kinchen, V. (2009), Financial Management Practices of College Students, *Global Journal of Business Research*, Volume 3, Number 1.
- [2] Ansong, A., & Gyensare, M. A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126
- [3] Dew,Jeffery., Xiao Jing Jian. 2011. The Financial Management Behavior Scale: Development and Validation.*Journal of Financial Counseling and Planning* Volume 22: 43-59.
- [4] Falahati, L., & Sabri, M. F. (2015). An Exploratory Study of Personal Financial Wellbeing Determinants: Examining the Moderating Effect of Gender. *Asian Social Science*, 11(4), p33.
- [5] Flores, C. (2014). First generation college student financial literacy: Impact of self-efficacy and behavior.
- [6] Gasirowska, A. (2015). The Impact of Money Attitudes on the Relationship between Income and Financial Satisfaction. *Polish Psychological Bulletin*, 46(2), 197-208.
- [7] Maria Paula Calamanto (2010), *Learning Financial Literacy in Family*, Department of Sociology, San Jose State University.
- [8] Mohd Rafi, M.H.I (2016), *A study on Financial Management among Students*, Faculty of Information Management, Universiti Teknologi MARA, UiTM Puncak Perdana, Kampus UiTM Selangor, Malaysia.
- [14] Lusardi, Annamaria & Mitchell, Olivia S., 2011. "Financial literacy and retirement planning in the United
- [15] Krejcie, R.V., & Morgan, D.W., (1970). Determining
- [16] Cummins, M. M., Haskell, J. H., & Jenkins, S. J. (2009). Financial attitudes and spending habits of university freshmen. *Journal of Economics and Economic Education Research*, 10(1), 3
- [17] Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, 44(2), 296-316.
- [18] Mitchell, K. C. (2007). Understanding the financial impact of MS-DRGs. *Healthcare Financial Management*, 61(11), 56-59.
- [19] M.Y. Khan and P.K Jain. (2008). *Financial Management*. Mc Graw Hill Education (India) 5th Ed States," *Journal of Pension Economics and Finance*, Cambridge University Press, vol. 10(04), pages 509-525, October.
- [9] Potrich, A.C.G, & Viera. K.M (2015), *Development of Financial Literacy Model for University Student*, Department of Finance, Accounting and Controllorship, University of Sao Paulo, Sao Paulo, Brazil. Psychological Measurement, 30,607-6 10.
- [10] Shahryar Sorooshian & Tan Seng Teck. (2014). *Asian Social Science. Spending Behaviour of a Case of Asian University Students*; Vol. 10, No. 2. Student Budgeting and Spending. Student budgeting and spending behaviors: a comparative study.
- [11] Thapa, B.S, & Nepal, S.R (2015), *Financial Literacy in Nepal : Survey Analysis from College students*, Central Department of Management, Tribhuban University, Kathmandu, Nepal.
- [12] Thung, C.M, Kai, C.Y, Nie, P.S, Chiun, L.W, & Tsen, T.C (2012), *Determinants of Saving Behaviour among The University Students in Malaysia*, Faculty of Business and Finance Department of Commerce and Accountancy, Universiti Tunku Abdul Rahman.
- [13] Vassallo, A.C.R. (2003). Children's perception of their influence over purchases: the role of parental communication patterns. *Journal of Consumer Marketing*, 20(1), 55-66.

## THE EFFECT OF ONLINE SHOPPING TOWARDS CONSUMER BUYING BEHAVIOUR

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### Abstract

*This study aims to investigate the effect of online shopping towards consumer buying behavior. The respondents were comprised of Commerce Department in Polytechnic Ungku Omar. The objective is to identify whether the consumer's risk, price of goods and warranty issue is the effect of their buying behavior. Meanwhile, the research was*

*done by using questionnaires. A simple random sampling was used in this study where involved respondents from Commerce Department of Polytechnic Ungku Omar. Method of data analysis is using SPSS version 18 for reporting the descriptive analysis. Mean score, frequency and percentage were used to analyze the data. As the result, it shows that the risk effect has the highest overall mean. Followed by price of goods and warranty issue ef-*



*fects the online shopping. The result revealed that the risk was the major effect of online shopping towards consumer buying behavior compare to price of goods and warranty issue.*

## Keywords

Warranty Issues, Price of Goods, Consumer's Risk, and Buying Behaviour.

## 1. Introduction

According to Kaur (2020) pandemic of COVID - 19 has affected the world economy in general and has changed the behaviour of human purchasing towards online shopping. Consumer buying behaviour has suddenly changed in when the Government of Malaysia had imposed lockdown. When first lockdown was declared rush in market was suddenly increased, consumers entered in the market to purchase and stock the essential goods thru online platform. However, online shopping has potential risks for the consumers, such as payment safety, and after service (MAYILVAGANAN 2020). Due, to the pandemic of COVID-19, internet payment recently becomes prevalent way for purchasing goods from the internet. Gallino & Moreno (2018) cited that most of customers faced a lot of problems while they conduct online purchase which is customers are receiving wrong products when they purchase the things from online. Finally, Miyazakin & Fernandez (2001) state that in the internet shopping, there are security problems which effect the consumer buying behaviour. There are some "scam online stores". On those websites online purchase may not be safe; they may offer the products at low cost but might be collecting your card payment and personal details.

### 1.1 Consumer's Risks

Han Jun Ko et. al, 2013, investigate the risks that have been considered to influence the customer purchasing decision process while shopping online. From the study, risk is defined as the potential for loss in chasing a desired outcome from online shopping. Dipayan Biswas and Abhijit Biswas, 2004 from the studies of the diagnostic role of signals in the context of perceived risks in online shopping: Do signals matter more on the Web? Many experimental studies have examined the differentiating effects of three signals; seller reputation, advertising expenses, and

er cost of middlemen or 'mark-ups'. This is the difference between wholesale price and retail price. Donna L. Montaldo, 2019 says that online shopping can save you money, especially when you pair it with online savings codes, today's deals, tax-free, and free shipping offers. Fernie, Fernie & Moore (2015) cited that buying online is cheaper because the retailer does not need to pay for extra cost like rent, utilities, and operation expenses.

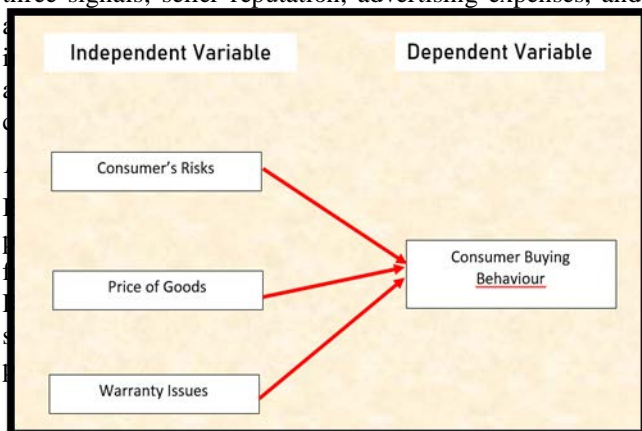
### 1.3 Warranty Issues

Mr. Jody Bird, 2014 said that the consumer in Australia are protected under the Australian Consumer Law (ACL) no matter you are online shopper or brick and mortar shopper. Australian Competition and Consumer commission (ACCC) said that when you shop on international sites it may be difficult to enforce the consumer protection laws of other countries on your behalf. Mr. Dhanya Ann Thoppil, 2014 says in the International Safe Transit Association (ISTA) online shopping is growing into a multi-billion dollar business in the Republic of India, some of the best deals for mobile phones and computers may come with unseen costs: their guarantees may not be effective here. Electronics manufacturers say consumers must be careful when buying a phone, computer, or tablet from unofficial vendors.

### 1.4 Consumer Buying Behaviour

According to Dennis et al (2010), online shopping is definitely a great way to shop with everything available on the websites. More and more companies are realizing that transformations of consumer behavior are inevitable, and thus they are changing their marketing strategies. As recent researchers have shown, Internet spending especially in business to consumer (B2C) is increasing and online shopping is becoming more popular for many people. According to the report, The Emerging Digital Economy 2, published by the US Department of Commerce, in some companies, the weight of e-commerce in total sales is quite high. Therefore, to understand internet shopping and its impact on consumer behavior can help companies use it as a form of doing business (Zheng, 2006). Furthermore, the internet can increase the use of products more efficiently and effectively than other channels to meet their needs.

### Research Framework



### 1.5 Research Questions

RQ1. Whether the consumer's risk effect the buying behaviour?

RQ2. Whether the consumer's price of goods effect the buying behaviour?

RQ3. Whether the consumer's goods warranty issues effect the buying behaviour?

### 1.6 Research Objectives

RO1. To identify whether the consumer's risk is main effect of their buying behaviour.

RO2. To determine whether the consumer's price of goods is the main effect of buying behaviour.

RO3. To determine whether the consumer's goods warranty issues is the main effect of buying behaviour.

The target participants in this situation are Politeknik Ungku Omar students and lecturers in Perak.

## 3. Finding and Discussion

The finding has been cleared describe by using table, pie chart and bar chart. The researchers have used the programme Statistical Package for Social Science (SPSS) version 18.0 to process the findings. Under this research, has explained about the descriptive data which show the reliability of the Cronbach Alpha for the entire three variables. Through this result, the researcher has found that the result of the variable risk had an overall mean of (3.22), indicates that Polytechnic Ungku Omar, Commerce Department had absolute agreement that risk was an important part that effect only shopping towards consumer buying behaviour. The second independent variable for this research is price of goods on the consumer buying behaviour. The results showed that the overall mean of (3.17) indicates that price of goods have the average mean when compared to risk. The last independent variable was warranty issues. The result showed that the overall mean of (3.11) this indicates that consumer products warranty issue does effect on their buying behaviour.

## 4. Conclusion

In this research, it analyzes in between all the effects or independent variables which are risk, price of goods, and warranty issue in buying behaviour. From the finding, all the independent variables which are risk, price of goods and warranty issue have its own reliability towards the consumer of buying behaviour. In a conclusion, it is analyzed truly in descriptive analysis that risk is the main effect which affects the consumer in their buying behaviour.

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## References

- Ben Irvine (2011). The price of shopping online versus the shopping mall. Retrieved from <https://www.onlineopinion.com.au/view.asp?article=12094>
- Biswas, Dipayan & Biswas, Abhijit. (2004). The diagnostic role of signals in the context of perceived risks in online shopping: Do signals matter more on the Web? *Journal of Interactive Marketing*. 18. 30 - 45. 10.1002/dir.20010.
- Dennis, C., Morgan, A., Wright, L. T., & Jayawardhena, C. (2010). The influences of social e-shopping in enhancing young women's online shopping behaviour. *Journal of Customer Behaviour*, 9(2), 151-174.
- Donna L. Montaldo (2019). Is Shopping Online Really Cheaper? The answer is often yes, and here's why. Retrieved from <https://www.thebalance.com/is-shopping-online-really-cheaper-939778>
- Fernie, J., Fernie, S., & Moore, C. (2015). *Principles of retailing*. Routledge.
- Gallino, S., & Moreno, A. (2018). The value of fit information in online retail: Evidence from a randomized field experiment. *Manufacturing & Service Operations Management*, 20(4), 767-787.
- Holweg, M., Disney, S., Holmström, J., & Småros, J. (2005). Supply chain collaboration:: Making sense of the strategy continuum. *European management journal*, 23(2), 170-181.
- Kaur, K. (2020). Impact of the First Phase of Movement Control Order during the COVID-19 pandemic in Malaysia on purchasing behavior of Malaysian Consumers. *Horizon*, 2, 131-144.
- Ko, Hanjun & Jung, Jaemin & Kim, Jooyoung & Shim, Sung. (2004). Cross-Cultural Differences in Perceived Risk of Online Shopping. *Journal of Interactive Advertising*. 4. 20-29. 10.1080/15252019.2004. 10722084.
- Mayilvaganan, M. (2020). COVID-19 Pandemic in the Indo-Pacific: How the Countries are Dealing Amidst Changing Geopolitics (NIAS/CSS/ISSSP/U/RR/15/2020).
- Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer affairs*, 35(1), 27-44.
- Mowen, J. C., & Spears, N. (1999). Understanding compulsive

- buying among college students: A hierarchical approach. *Journal of Consumer Psychology*, 8(4), 407-430.
- Mr.Dhanya Ann Thoppil, (2014). iPhone users in India embrace ad blocking. Retrieve from <https://www.livemint.com/Industry/p3FZbvf9oulswnCf4zGxbN/iPhone-users-in-India-embrace-ad-blocking-survey.html>
- Xiang, Z., Magnini, V. P., & Fesenmaier, D. R. (2015). Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *Journal of retailing and consumer services*, 22, 244-249.
- Zheng, F. (2006). *Internet Shopping and Its Impact on Consumer Behaviour* (Doctoral dissertation, University of Nottingham).

## A STUDY ON ORGANIZATIONAL SUPPORT, TACIT AND EXPLICIT KNOWLEDGE TOWARDS INNOVATIVE WORK BEHAVIOUR: AN EMPIRICAL EVIDENCE OF PUBLIC SECTOR

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## Abstract

Innovative work behaviour contributes to the increase of organization productivity. Innovative work behaviour (IWB) typically includes exploration of opportunities and the generation of new thoughts (creativity related behaviour), but could also include behaviours directed towards applying change, applying new understanding or enlightening methods to enhance individual and business performance. There are a lot of factors that can lead to innovative work behaviour however in this study, researcher focus on three factors that can lead to innovative work behaviour; they are knowledge sharing which is tacit and explicit knowledge and organization support. This study was conducted at public sector located in Kedah. 220 questionnaires have been distributed among middle management and 140 data successfully collected. Sampling techniques used is convenience sampling. Instrument used was adapted from previous study. This study has conducted face and content validity for instrument and it was done by expert in industry and academia. This study used SPSS for data analysis. Reliability analysis for variables also conducted which the result of cronbach's alpha value shows that variables; tacit knowledge, explicit knowledge and organization support have high reliability above 0.7. The findings indicated tacit knowledge, explicit knowledge and organization support have positive relationship with innovative work behaviour. This finding is important as it can help organization to identify area to focus in order to increase innovative work behaviour of employees. It is reported by many previous studies; high level of innovative work behaviour can contribute to the increment of productivity and consequently increases wellbeing of economy. As for the government, it is important to have innovative worker in order to achieve national goals to become high income nation.

Keyword: Innovative work behaviour, tacit knowledge, explicit knowledge, organization support.

## INTRODUCTION

The ultimate achievement an organization is to earn profit and achieve their business objectives. To achieve that, it is important that all employees are actively involved in the organization and their performances and behaviours contribute to the organization's success. However, employee attitudes and behaviours can be influenced by the internal and external factors of an organization (Hadi Farid, Fatemeh Hakimian and Mohd Nazari Ismail, 2017). Additionally previous study, Sidra Riaz, et. al., (2018) describe that to have a high-performance in organization, each employee needs to have innovative behaviour as the foundation. In organization, they know the importance of employee's innovative behaviour as an intangible asset that can lead to useful idea to compete regardless their position in the organization. Employees observe situation that can be improve throughout the process and procedure because they are the front liner who interact with customer directly. Therefore, creative employee behaviour and process that encourage the behaviour is a vital resource for a certain organization (Korzilius et al. 2017). Innovative work behaviour itself means new idea, creative thoughts, and new imaginations to enhance or to improve the organizations effectiveness (Kanter, et. al., 1990). According to Kanter, West and Farr (1990) employee innovative behaviour such a adopting, developing, and implementing new ideas for generating new products and work methods is an important asset that lead and enable an organization to do well in a dynamic business environment. However, studies on innovative work behaviour among employee seem to be less researched compare to the other work behaviour (Korzilius et al 2017, Kanter, et. al., 1990; Martins & Terblanche, 2003). According to previous study by Islam et al (2015) one of the factors that lead to innovative work behaviour is knowledge sharing. Employees need to apply and seek the knowledge sharing because if not apply it in organization it will cause misinformation to other employees (Deal and Kennedy, 2000). In addition, the knowledge sharing acts as the guidance for the employees. If they do not have the information or knowledge enough, there will be problem for them to do task (Deal and



Kennedy, 2000). One of the important capital in organization is knowledge sharing (Szulanski, 2000; Jasimuddin et al., 2012; Islam et al., 2015). Jasimuddin (2006) and Islam et al. (2015), mentioned in order to increase competitive advantage in a company, knowledge sharing as one of the important aspect. Other than that, factor that might influence innovative work behaviour is organization support (Deal and Kennedy, 2000). Organization support is “the way things are done around here” (Deal and Kennedy, 2000). Surrounding also can affect someone’s innovative work behaviour (Deal and Kennedy, 2000). In addition, many of studies have proved that highest level work engagement, managerial identification, job performance, affective commitment, lower level of job pressure, and job satisfaction, absence, and turnover involve highly on organization support (Baran, Shanock, & Miller, 2012; Caesens, Marique, & Stinglhamber, 2014; Caesens & Stinglhamber, 2014; Caesens, Stinglhamber, & Luybaert, 2014; Eisenberger, Cummings, Armeli, & Lynch, 1997; Eisenberger & Stinglhamber, 2011; Kurtessis et al., 2015; Marique, Stinglhamber, Desmette, Caesens, & De Zanet, 2013; Neves & Eisenberger, 2012; Rhoades & Eisenberger, 2002; Rhoades, Eisenberger, & Armeli, 2001). Figure 1 below ranking of global innovation index. This figure Malaysia was ranked 35th in 2016 and then fell two points, ranking it 37th in 2017. Malaysia was back in the ranking to 35th in 2018. According to Sharmila Ganapathy (2018), Malaysia was ranked 31st in 2011 and ranking 32nd in 2013. Based on this index it specifies that Malaysia did not achieved its target. Malaysia should be benchmarking itself against neighbours such as Singapore in order to step up improvement. Besides, Thailand and Vietnam improved year by year for the rankings and are not far behind (Sharmila Ganapathy, 2018). Therefore, Organizational creativeness is vital key to competitive advantages and planned regeneration ((Zhang & Bartol, 2010);Korzilius et al;(2017))

Figure 1: Top 70 ranking of Global Innovation Index (Sharmila Ganapathy, 2018)

Based on the study from Hadi Farid, et. al., (2017), employees with innovative work behaviour (IWB) needed in organization to achieve organization objective goals in business. There are some aspects will motivate employees to become an innovative which are knowledge sharing and organization support. IWB is generally framed in the idea of how individuals could simplify the accomplishment of initiation and planned introduction of new and valuable ideas, procedures, products or processes (Farr and Ford, 1990; Chan and Amran Rasli, 2013). Thus this study ought to find out the relationship between knowledge sharing namely tacit and explicit knowledge and also organizational support towards innovative work behaviour.

### The Relationship between Knowledge sharing: tacit and explicit knowledge toward Innovative Work Behaviour

There are several study show the relationship toward knowledge management and organization realize and put knowledge sharing as important resources and also as factor to the increase of work performance like creative skills, understandable, innovative behaviour and brainstorming (Hau, Kim, Lee and Kim, 2013). For innovation to happen, knowledge is a very vital factor contributes to innovation process (Rahim et al, 2015). Other than that, study about knowledge and innovation and also study about factor that contribute to the outcome of innovative work behaviour is an enduring research. According to Mura et. al., (2013) she state that as idea genera-

Global Innovation Index Top 70 Rankings By Year and Country (Asia Pacific region)

Country	2018	2017	2016
Singapore	5	7	6
Republic of Korea	12	11	11
Japan	13	14	16
Hong Kong	14	16	14
China	17	22	25
Australia	20	23	19
New Zealand	22	21	17
Malaysia	35	37	35
Thailand	44	47	52
Vietnam	45	51	59
India	57	60	66



tion for the knowledge sharing for “sharing best practices and innovative work behaviour. The result she gains for knowledge sharing towards innovative work behaviour was positive. The beneficial from knowledge sharing is not based on sharing itself but they gain more beneficial from that (Kuo et al., 2014). In addition, knowledge sharing can be accepted as the positive correlation towards innovative work behaviour of employee in the organization (Tayyaba et al., 2018). Thus, based on these discussion below hypothesis was developed.

*H1: There is a positive relationship between tacit knowledge and innovative work behaviour.*

*H2 There is a positive relationship between explicit knowledge and innovative work behaviour.*

### **The Relationship between Organization Support and Innovative Work Behaviour**

Study done by Sidra Riaz, et. Al., (2018) reported that when organizational support is important and encourage employee to have innovative work behaviour Organization Support is involving communication with other co-workers, managers, motivation from the leader and improving the use of new idea (Tsai et al, 2015; Ward et al, 2020; Yang et al, 2017; Carmeli and Schaubroeck, 2007). Moreover Carmeli and schoubroek (2007) stated that creative job performance relate to on how the work done and it is show a positive correlation to organization support. Thus based on this discussion Hypothesis below was developed.

*H3: There is a positive relationship between organizational support and innovative work behaviour.*

### **METHODOLOGY**

This study was conducted at public sector located in Kedah. 220 questionnaires have been distributed among middle management and 140 data successfully collected. Sampling techniques used is

convenience sampling. Instrument used was adapted from previous study. This study has conducted face and content validity for instrument and it was done by expert in industry and academia. This study used SPSS for data analysis. Reliability analysis for variables also conducted which the result of cronbach's alpha value shows that variables; tacit knowledge, explicit knowledge and organization support have high reliability above 0.7.

### **FINDINGS**

*H1: There is a positive relationship between tacit knowledge and innovative work behaviour.*

*H2 There is a positive relationship between explicit knowledge and innovative work behaviour.*

Table 1: Relationship between Tacit Knowledge and Innovative Work Behaviour.

	<b>Tacit Knowledge</b>	<b>Innovative Work Behaviour</b>
Pearson Correlation		.449**
Tacit KnowledgeSig. (2-tailed)		.000

Based on analysis, table 1 above indicated the result of H1, the relationship between tacit and innovative work behaviour. The result illustrate that the correlation between tacit and innovative work behaviour is significant and positively correlate with ( $r = 0.449$ ) ( $p=0.000$ ). Whereas for H2, the relationship of explicit knowledge innovative work behaviour illustrate in table 2 below. It shows that explicit knowledge and innovative

work behaviour have a positive and significant relationship towards innovative work behaviour with ( $r = 0.451$ ) ( $p=0.000$ ). The results shows there have positive, significant and moderate correlation between tacit and explicit knowledge towards innovative work behaviour. Therefore the result supported the hypothesis of this study.

Table 2: Relationship between Explicit Knowledge and Innovative Work Behaviour

	Explicit Knowledge	Innovative Work Behaviour
Pearson Correlation		.451**
Explicit Knowledge Sig. (2-tailed)		.000

*H3: There is a positive relationship between organizational support and innovative work behaviour.*

Table 3: Relationship between Organization Support and Innovative Work Behaviour

	Organization Support	Innovative Work Behaviour
Pearson Correlation		.533**
Organization Support Sig. (2-tailed)		.000

The finding indicates there is positive relationship between organizational support and innovative work behaviour with ( $r = 0.533$ ) ( $p=0.000$ ). The results shows there have positive, significant and moderate correlation between organization support and innovative work behaviour. Therefore the result supported the hypothesis of this study.

## CONCLUSION AND FUTURE STUDY

Organizational should maintain their capital by sending employee to seminar or company also can document all the knowledge that the employee gain for future references or for other employees' use. Organizational also have to make sure the content or information that gain by the employee valuable and have quality and beneficial towards employee for them to share with each other. Other than that organization also can open up a platform by using technology for example group whatsaps or using other alternative medium to interact and share information. As the conclusion, organization support has the highest relationship towards innovative work behaviour. This is show that organization especially public sector needs to focus more on maintaining the organization support towards employees. It is suggested that, public sector, need to encourage employee go for training and also expose them more to team work. For this research it was conducted with a few limitations. This limitation limit the researcher to be beyond or expand the research to be better research in term of the result valued and also the relationship for the independent and dependent variable. Thus, researcher has suggested several recommendations to future research. The study should be conducted in private organization because the demographic and behaviour of employees would be different. The study also can be conducted in variety of mode such as interview and observation,

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## REFERENCES

- Caesens, G., Marique, G., Hanin, D., & Stinglhamber, F. (2016). The relationship between perceived organizational support and proactive behaviour directed towards the organization. *European Journal of Work and Organizational Psychology*, 25(3), 398-411.
- Farid, H., Hakimian, F., & Ismail, M. N. (2017). How Malaysian managers persuade employees' innovative be-

haviour?. *International Journal of Management and Enterprise Development*, 16(4), 291-307. <https://doi.org/10.1504/IJMED.2017.086904>

Islam, M. Z., Jasimuddin, S. M., & Hasan, I. (2015). Organizational culture, structure, technology infrastructure and knowledge sharing. *Vine*.

Islam, M. Z., Jasimuddin, S. M., & Hassan, I. (2015). Organizational culture, structure, technology infrastructure and knowledge sharing: *Empirical evidence from MNCs based in Malaysia*. *Vine*, 45(1), 67-88. <https://doi.org/10.1108/VINE-05-2014-0037>

Korzilius, H., Bücken, J. J., & Beerlage, S. (2017). Multiculturalism and innovative work behavior: The mediating role of cultural intelligence. *International Journal of Intercultural Relations*, 56, 13-24.

Korzilius, Hubert, Joost J. L. E. Bücken, and Sophie Beerlage. 2017. Multiculturalism and innovative work behavior: The mediating role of cultural intelligence. *International Journal of Intercultural Relations* 56: 13-24. <https://doi.org/10.1016/j.ijintrel.2016.11.001>

Rahim, R. A., Salleh, N. F., Ahmad, S. F. S., & Mustapha, R. M. R. (2015). Exploring the relationship between leadership style, knowledge management practices, and innovative behavior. In *Proceedings of the Colloquium on Administrative Science and Technology* (pp. 499-507). Springer, Singapore. [https://doi.org/10.1007/978-981-4585-45-3\\_48](https://doi.org/10.1007/978-981-4585-45-3_48)

Rasli, A. & Chan, T. L. (2014). The Relationship between Innovative Work Behavior on Work Role Performance: An Empirical Study. *Social Behavioural Sciences*. DOI: 10.1016/j.sbspro.2014.03.717.

Riaz, S., Xu, Y., & Hussain, S. (2018). Understanding Employee Innovative Behavior and Thriving at Work: A Chinese Perspective. *Administrative Sciences*, 8(3), 46. <https://doi.org/10.3390/admsci8030046>

Smith, C., Beer, M. D., & Mason, R. B. (2015). Tacit Knowledge Sharing Behavior, Within A Relational Social Capital Framework, In A South African University Of Technology. *Journal of Applied Business Research* (JABR),31(6), 2091. <https://doi.org/10.19030/jabr.v31i6.9469>

Smith, E. A. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of Knowledge Management*,5(4), 311-321. doi:10.1108/13673270110411733

Stokvik, H., Adriaenssen, D., & Johannessen, J. (2016). Tacit knowledge, organizational learning and innovation in organizations. *Problems and Perspectives in Management*,14(3), 246-255.

Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal* 5(3):28-36

Tran, K., Nguyen, P., & Nguyen, L. (2018). The Role of Financial Slack, *Employee Creative Self-Efficacy and Learning Orientation in Innovation and Organizational Performance*. *Administrative Sciences*, 8(4), 82. <https://doi.org/10.3390/admsci8040082>

Tsai, C. Y., Horng, J. S., Liu, C. H., & Hu, D. C. (2015). Work environment and atmosphere: The role of organizational support in the creativity performance of tourism and hospitality organizations. *International Journal of Hospitality Management*, 46, 26-35.

Umme S. S.,Mohd. D. & Liu Y. (2015). TRANSACTIONAL OR TRANSFORMATIONAL LEADERSHIP: WHICH WORKS BEST FOR NOW?. *International Journal of Industrial Management (IJIM)*.

Wah, N. C., Zawawi, D., Yusof, R. N. R., & Sambasivan, M. (2018). The Mediating Effect of Tacit Knowledge Sharing In Predicting Innovative Behaviour From Trust. *International Journal of Business & Society*, 19(3).

Ward, S. (2020). Definition of Leadership (What's a Good Leader?). *Small Business*. Retrived 22 May 2020 from <https://www.thebalancesmb.com/leadership-definition-2948275>

Yang, I., & Li, M. (2017). Can absent leadership be positive in team conflicts?. *International Journal of Conflict Management*.

## THE LEVEL OF FINANCIAL MANAGEMENT OF DIPLOMA IN BANKING AND FINANCE (DKB) STUDENTS IN POLITEKNIK UNGKU OMAR

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### Abstract

The aim of this resource is to investigate factors that influencing financial management among the DKB student. The independent variable are financial literacy, spending habits and parental socialization. The population of this study is 217 respondents from Diploma in Banking and Finance students at Ungku Omar Polytechnic and the sample size was determined as 140 respondents based on the table of selecting sample size (Krejcie and Morgan, 1970). This data from this study was collected by questionnaires. This study used quantitative data with random sampling technique. Questionnaire were used as instrument in collecting the data and analysis performed were reliability analysis in which Cronbach Alpha Value more than 0.6 was considered reliable (Cronbach And Meehl 1955), descriptive analysis and correlation analysis. Data were analyzed using Statistical Packages for Social Science (SPSS 18.0). The conclusion for overall research has been drawn and few recommendations for the researcher to enhance future research have been given.

### Keywords

Financial management, spending habits, financial literacy and parental socialization.

## 1. Introduction

Based on the study of Khan and Jain (2008), "Finance is the art and science of managing money .Financial Management means planning, organizing, directing and controlling the financial activities such as procurement and utilization of funds of the enterprise. Meanwhile, student financial management was referred the behaviors and perception of how students manage their financial and handling their money while they finishing their study. The student need to know the important of financial literacy and the skills on how to manage their financial very well.

### 1.1. Problem Statement

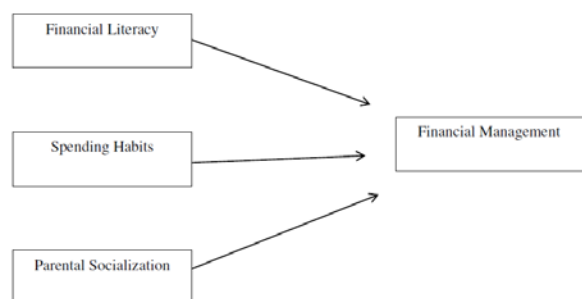
The current generation is faced with unexceptional debt burdens during and on completion of their studies while students have always found balancing their finances difficult. Lusardi and Mitchell (2011) believe that the rising cost of expenditure in life such as cost of goods and services that make people to be able to make well-informed financial decisions. Therefore, this paper is to investigate how informed is the student of Ungku Omar Polytechnic on Financial matters.

### 1.2. Research Objectives

The research objectives of this study are:

- To study the level of financial management among DKB students in Ungku Omar Polytechnic.
- To study either financial literacy affect student's financial management.
- To study either spending habits affect student's financial management.
- To study either parental socialization affect students financial

### 1.2 1.3 Research Framework



### 1.4 Financial Management

Financial management is the process of managing the financial resources, including budgeting/costing, accounting and financial reporting and risk management. It is handling your financial situation during a responsible manner to realize the specified goals (Mitchell, 2007). Good financial management requires good planning. The decisions you make regarding your finances will affect many aspects of the organization life, as well as the lives of the partners.

### 1.5 Financial Literacy

The term financial literacy has been regularly used as a synonym for financial education or financial knowledge. However, these constructs actually are conceptually differ-

ent in that financial literacy is deeper than financial education; thus, using them synonymously can cause problems. Huston (2010) contends that financial literacy has two dimensions: understanding, which represents the personal financial knowledge of financial education, and use, which refers to the management of personal financial knowledge. In this context, the individual could have financial knowledge, but to be considered literate, he should have the ability and confidence to implement it when making decisions.

### 1.6 Spending Habits

Spending habits is an outflow of cash to a different person or group to buy an item or service, or for a category expense. For students or parents, is an expense. Buying food, clothing, furniture or an automobile is usually mentioned as an expense. An expense may be a cost that's "paid" or "remitted", usually in exchange for something useful.

Something that seems to cost an excellent deal is "expensive". Something that seems to cost little is "inexpensive". "Expenses of the table" are expenses of refreshments, a feast, etc (Cummins, 2009).

### 1.7 Parental Socialization

It is therefore likely that parental financial teaching is more appropriate and effective than general financial education. Vassallo (2003) supports this view by stating that parents are the most the influence of parental financial teaching on saving and borrowing behaviour 5 important socialization agents.

The theory of planned behaviour and the family systems theory both support the view that parents play a role in forming the financial behaviour of their children; these theories are further explored below.

## 1.8 Scope of Study

The scope of this study are:

- Financial management assist to determine the financial requirement of the business concern and leads to take financial planning of the concern.
- Financial management helps to take sound financial decision in the students life
- Financial management is very important in the practice of increasing the wealth
- Strong financial management helps to promoting and mobilizing individual and corporate savings.

## 2. Methodology

Research design of this study is adopting the quantitative approach that's using survey method. The research data are going to be collected once using questionnaire. This method is used because it is easy to administer in a short time. The population of the study is comprised of 217 students from semester 1 until semester 5 students of Diploma in Banking and Finance (DKB). The sample will involve 140 students out of 217 students from diploma in Diploma in Banking and Finance (DKB). The number of respondents that will be the sample for the study are determine by using Krejcie and Morgan (2007).

### & Data Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 18.0, presented using frequencies, percentage and pie chart. Findings was also include correlation analysis between independent variables under study and between independent and dependent variable

### 3.1 Respondent Profile

**Table 1 showed the profile under the study**

Demographic profile	Particular	Frequency	Percentage (%)
Gender	Male	22	15.7
	Female	118	84.3
Race	Malay	96	68.6
	Indian	39	27.9
	Chinese	5	3.6
Semester	Semester 1	13	9.3
	Semester 2	18	12.9
	Semester 3	23	16.4
	Semester 4	40	28.6
	Semester 5	46	32.9
Age	18-19 years old	26	18.6
	19-20 years old	65	46.4
	21-22 years old	48	34.3
Sources of Income	Loan (PTPTN)	92	65.7
	Parents	43	30.7
	Yayasan Negeri	3	2.1
	Other	2	1.4



In this research, the questionnaire has been distributed among the Diploma in Banking and Finance students and the instruments has been tested for its reliability. It is required to retest its reliability for this different variable and objective. The reliability test has been done using SPSS to measure the reliability of instrument using Cronbach's Alpha Coefficient.

### 3.2 Correlation analysis

**Table 2 showed Pearson Correlation analysis under the study**

variable	Financial Management		
	Correlation	Sig. (2-tailed)	N
Financial literacy	.453	.000	140
Spending habit	.124	.145	
Parental socialization	.557	.000	

### 4. Discussion and Conclusion

For this research, Analysis on overall mean for financial management was 3.0014, financial literacy was that 2.9871, spending habits was 2.9029, parental socialization was the third independent variable showed overall mean 3.2729, means students agreed that parental socialization played a main role on student's financial management. This view was parallel to the findings parental financial teaching is more appropriate and effective than general financial education. Vassallo (2003) supports this view by stating that parents are the most The influence of parental financial teaching on saving and borrowing behaviour

In conclusion, this research shows that the level of financial management can be influence by the financial literacy, spending habits, and parental socialization. The information that has been gathered from this research can be use by the respondent in manage their financial in the future.

Hopefully this research can provide a certain knowledge for the respondents in having their relevant financial management and spend their financial in the future.

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### References

- [14] Allen, K. & Kinchen, V. (2009), Financial Management Practices of College Students, *Global Journal of Business Research*, Volume 3, Number 1.
- [15] Ansong, A., & Gyensare, M. A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *International Journal of Business and Management*, 7(9), 126
- [16] Dew, Jeffery., Xiao Jing Jian. 2011. The Financial Management Behavior Scale: Development and Validation. *Journal of Financial Counseling and Planning* Volume 22: 43-59.
- [17] Falahati, L., & Sabri, M. F. (2015). An Exploratory Study of Personal Financial Wellbeing Determinants: Examining the Moderating Effect of Gender. *Asian Social Science*, 11(4), p33.
- [18] Flores, C. (2014). First generation college student financial literacy: Impact of self-efficacy and behavior.
- [19] Gasiorowska, A. (2015). The Impact of Money Attitudes on the Relationship between Income and Financial Satisfaction. *Polish Psychological Bulletin*, 46(2), 197-208.
- [20] Maria Paula Calamanto (2010), Learning Financial Literacy in Family, Department of Sociology, San Jose State University.
- [21] Mohd Rafi, M.H.I (2016), A study on Financial Management among Students, Faculty of Information Management, Universiti Teknologi MARA, UiTM Puncak Perdana, Kampus UiTM Selangor, Malaysia.
- [22] Potrich, A.C.G, & Viera. K.M (2015), Development of Financial Literacy Model for University Student, Department of Finance, Accounting and Controllorship, University of Sao Paulo, Sao Paulo, Brazil. *Psychological Measurement*, 30, 607-6 10.
- [23] Shahryar Sorooshian & Tan Seng Teck. (2014). *Asian Social Science. Spending Behaviour of a Case of Asian University Students*; Vol. 10, No. 2. Student Budgeting and Spending. Student budgeting and spending behaviors: a comparative study.
- [24] Thapa, B.S, & Nepal, S.R (2015), Financial Literacy in Nepal : Survey Analysis from College students, Central Department of Management, Tribhuban University, Kathmandu, Nepal.
- [25] Thung, C.M, Kai, C.Y, Nie, P.S, Chiun, L.W, & Tsen, T.C (2012), Determinants of Saving Behaviour among The University Students in Malaysia, Faculty of Business and Finance Department of Commerce and Accountancy, Universiti Tunku Abdul Rahman.
- [26] Vassallo, A.C.R. (2003). Children's perception of their influence over purchases: the role of parental commu-

nication patterns. *Journal of Consumer Marketing*, 20(1), 55-66.

- [14] Lusardi, Annamaria & Mitchell, Olivia S., 2011. "Financial literacy and retirement planning in the United States," *Journal of Pension Economics and Finance*, Cambridge University Press, vol. 10(04), pages 509-525, October.
- [15] Krejcie, R.V., & Morgan, D.W., (1970). Determining
- [16] Cummins, M. M., Haskell, J. H., & Jenkins, S. J. (2009). Financial attitudes and spending habits of university freshmen. *Journal of Economics and Economic Education Research*, 10(1), 3
- [17] Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, 44(2), 296-316.
- [18] Mitchell, K. C. (2007). Understanding the financial impact of MS-DRGs. *Healthcare Financial Management*, 61(11), 56-59.
- [19] M.Y. Khan and P.K Jain. (2008). *Financial Management*. Mc Graw Hill Education (India) 5th Ed

## FACTORS INFLUENCING CONSUMERS' DECISION IN ONLINE SHOPPING

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### Abstract

*Online shopping is where the activities and processes of buying and selling are carried out on the internet which there is usually no direct interaction between buyer and seller. This online shopping phenomenon is growing very fast today. The advantages that come with this online shopping make this trend popular for most people, especially the younger generation. The increasing usage of the internet as a medium for shopping has raised seller's interest to understand consumers behaviour in online purchasing. Therefore, this study aims to examine the factors influencing consumers' decision when doing online shopping. Three constructs were proposed namely risk perceptions, website attributes and online feedback. Employing a convenience sampling method, data were collected using self-administered questionnaire and was filled up by 100 respondents. The data then were analysed using multiple regression. Result of the analysis shows that risk perceptions and website attributes are significant and have a positive relationship with customers' decision making. The relationship between online feedback and customers' decision however is not significant. In short, findings of the study provide guideline for online seller to plan appropriate strategies to attract customers' attention.*

### Keywords

Decision making, online shopping, internet, consumers.

### 1. Introduction

The number of internet users in Malaysia has reached 28.7 million [1], an increased for about four million consumers as compared to the year 2016. Report by the Ministry of International Trade and Industry [2] expected that the e-commerce market in Malaysia could increase to RM114 billion in 2020 from RM68.6 billion in 2015. Despite the challenging international economic landscape

that influencing Malaysia, the high country income through e-commerce sector shows that this sector has the potential to prosper. Thus, for a business organisation to further develop in this highly revolutionised economy, they need to ensure that the business activities are in line with the customers and economic needs [3]. The online business platform provides a lot of advantages from the aspect of communication and resource management. However, consumers' willingness to use the internet as a purchasing platform is still a challenge. Most consumers used internet to get information, but only part of them really used this platform for shopping [4]. As such, it is important for business owners to understand factors that influence customers behaviour in using an online shopping platform. Despite various studies that have been conducted on this aspect, most of it has focused on a developed nation, while a developing nation like Malaysia is neglected [5]. The relevancy of those findings on the Malaysian context is still questionable because of the different economic landscape [3]. As such, this study is considered relevant to examine factors influencing Malaysian consumers decision in using online shopping.

### 2. Literature Review

The internet and e-commerce has changed the way consumers searched for information and finding products and services to fulfil their needs. The increasing number of internet users has forced businesses to find ways to attract their attention. Currently, businesses started to use social media as a platform to reach consumers. Previous studies on online business has focused on the community and small businesses perception and adaptation towards e-commerce [6]. Current research on the other hand has focused on the users experience in using e-commerce, users interaction with the website and content of the website or social media pages [7]. Several factors influencing con-

sumers online behaviour have been investigated among others including perceived risk and trust, word of mouth and e-word of mouth, product, price and quality perception [8], perceived convenience [9], as well as brand reputation [10]. In the context of this study, three factors have been chosen namely perceived risk, website attribute and online feedback as past studies stated that these factors are among the relevant factors influencing consumers decision in the online context.

### 3. Methodology

This study conducted a primary data collection using survey questionnaire. The questionnaire was divided into five sections which contain items related to perceived risk, website attribute, online feedback, consumers decision and demographic profile. The items were adapted from past studies namely Gefen, Karahanna, and Straub (2003), Kim, Ferrin, and Rao (2008), as well as Reddy and Aradhya (2017). A 7-point Likert scale was used to measure the response. Employing a convenience sampling method, respondents at the age of 18 and above were approached. 100 valid questionnaires managed to be collected. Data then were analysed using multiple regression.

### 4. Findings

In general, majority of the respondents are male (59%), at the age of 18-25 years old (90%). Most of them are students (93%) with monthly income less than RM1,000.

Initially, reliability analysis was performed and the value of Cronbach Alpha for each constructs are between 0.7 to 0.9 which are considered acceptable and good. Correlation analysis was also performed and the value of Pearson correlation for perceived risk and decision making is 0.521 (positive), website attribute and decision making is 0.608 (positive) and online feedback and decision making is 0.386 (positive). Finally, multiple regression analysis was performed to test the hypotheses. From the three hypotheses, two are significant which are perceived risk and website attribute. Online feedback on the other hand is not significant.

### 5. Discussion and Conclusion

Findings of the study shows that perceived risk and website attribute are important in determining consumers' decision to use online shopping platform. This is not surprising as past study shows that more than half online consumers felt conscious on their safety and privacy while doing online transaction. As such, they would choose website that could reduce this risk especially if it is their first business encounter. On the other hand, website attributes such as design, navigation, check out process, audio and visual are also significant in influencing customers' decision. Finally, online feedback however is considered not significant. This is supported by past studies which prove

that loyal customer do not consider other customers' feedback as important [11]. Thus, based on this finding, it is important for business owner to consider these three factors in planning their online business strategy.

### References

- [27] MCMC. (2018). E-Commerce Consumers Survey 2018.
- [28] KPLB. (2019). *Dasar pembangunan luar bandar* (Vol. 53), available at <https://doi.org/10.1017/CBO9781107415324.004>
- [29] Ahmad, S. Z., Abu Bakar, A. R., Faziharudean, T. M., & Mohamad Zaki, K. A. (2015). An empirical study of factors affecting e-commerce adoption among small- and medium-sized enterprises in a developing country: Evidence from Malaysia. *Information Technology for Development*, 21(4), 555–572.
- [30] Senecal, S. (2000). Stopping variables in online buying processes: An innovation diffusion approach. *Americas Conference on Information System*, 1380–1385.
- [31] Kurnia, S., Choudrie, J., Mahbubur, R. M., & Alzougool, B. (2015). E-commerce technology adoption: A Malaysian grocery SME retail sector study. *Journal of Business Research*, 68(9), 1906–1918.
- [32] Feindt, S., Jeffcoate, J., & Chappell, C. (2002). Identifying success factors for rapid growth. *Small Business Economics*, 19(September 1999), 51–62.
- [33] Martínez-Navarro, J., Bigné, E., Guixeres, J., Alcañiz, M., & Torrecilla, C. (2019). The influence of virtual reality in e-commerce. *Journal of Business Research*, 100(October), 475–482.
- [34] Bianchi, C., & Andrews, L. (2012). Risk, trust, and consumer online purchasing behaviour: A Chilean perspective. *International Marketing Review*, 29(3), 253–275.
- [35] Hamed AL-Shukri Udayanan, H. K. (2019). Factors Influencing Online Shopping Intention: A study among online shoppers in Oman. *International Journal of Academic Research in Business and Social Sciences*, 9(3), 691–708.
- [36] Jamaluddin, M., & Nek, K. Y. Y. (2015). Satu tinjauan: Pola gelagat pengguna ke atas keputusan pembelian secara atas talian. *Pengurusan Dan Perniagaan*, 1–14.
- [37] Spillinger, A., & Parush, A. (2012). The Impact of Testimonials on Purchase Intentions in a Mock E-commerce Web Site. *Journal of Theoretical and Applied Electronic Commerce Research*, 7, 51–63.

## WORK FROM HOME: THE IMPACT AND THE CHALLENGES TOWARDS EMPLOYEES DURING COVID-19

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### ***Abstract***

Malaysian citizens were in panic due to spreading of COVID-19 disease (Corona Virus) since December 2019. The Malaysian Prime Minister has enforced a movement control order (MCO) on 18th March 2020 as a mitigation effort to reduce community spread and the overburdening of the country's health system. In obeying MCO order, majority of the Malaysian citizens was requested to stay indoor in avoiding outside activities. Few industries in Malaysia were requested to work from home (WFH) such as telecommunication, human resource, academic, insurance, marketing sectors and many more. Generally, work from home can provide advantages and disadvantages to the workers especially during a severe pandemic situation. Malaysian publics are in combination with different types of feelings and emotions due to Covid-19 impact. On top of this, they are requested to comply job duties from home. Thus, this study is mainly to examine the impact of working from home and to identify the challenges faced by employees those working from home. The result showed that, working from home give positive impact on saving cost and time, productivity, finished task on time and work life balance.

### **1. Introduction**

Malaysian citizens were in panic due to spreading of COVID-19 disease (Corona Virus) since December 2019. The Malaysian Prime Minister has enforced a

movement control order (MCO) on 18th March 2020 as a mitigation effort to reduce community spread and the overburdening of the country's health system. In obeying MCO order, few industries in Malaysia were requested to work from home (WFH). WFH is defined as a situation of the working environment when employees are transforming from physical appearance to a state of mind using laptop and technology in completing their jobs. The advancement of information technology has made WFH as an effective and convenient method to produce a productive working environment without attending to physical job place (Shareena & Mahammad Shahid, 2020).

Generally, work from home can provide advantages and disadvantages to the workers. Malaysian publics are in combination with different types of feelings and emotions due to Covid-19 impact. On top of this, they are requested to comply job duties from home. Instead of completing house cores jobs, they need to spend time productively for office jobs. Thus, this study is mainly to identify opinions of employees towards work from home during MCO period.

### **2. Content**

#### **2.1. Advantages and Disadvantages towards Working from Home**

Grough in 2012 define WFH as employees who carry out remunerative jobs with his or her home or in the surrounding grounds. According to Subramaniam,



Overton and Maniam (2015), define WFH as a combination of flexi-time, working from home, teleworking, permanent part-time and career break.

Puwanto and the colleague identify few advantages and disadvantage of WFH such as working from home is more convenient in completing work, does not follow stipulated hours. Not only that, WFH can help employees in reducing transport costs due to workers no need to spend money to pay for transportation expenses. However, they do reveal about the disadvantages of WFH which are employees can be lacking in motivation to work effectively due to they don't feel working environment at home.

Through a survey research with 50 respondents in examining their perception towards working from home indicated that concentration can be given to the work only if they work in office and they added further that work from home is very stressful due to unable to manage and balance personal and professional life (Shareena & Mahammad Shahid, 2020).

Amabile & Kramer, (2013) found that work from home is helping the employees to balance their office work with their routine work, saves time and increased the productivity.

According to MicroExec in 2013, there will be many distractions for employees work from home due to they need to complete house chores, take care of children and their other relevant jobs which needs to be completed. Carter in 2016, in examining the impact of WFH; identify that workers are more productive and efficient in office environment surrounding rather than at home.

Work from home encourage a communication gap between superior and the subordinates and other co-employees to communicate with the team due to online interaction therefore, the amount of effective communication will be affecting (Go, 2016). Employees that work from home feel that they are missing out from team work and communication (Russell, 2013). Interestingly, a study by Nicole in examining the benefits from WFH, identify that employees that work from home are cost beneficial and highly motivated and helping in improving job satisfaction.

Crosbie and Moore in examining work- life balance from WFH revealed that few negative implications were found out such as reducing social contact and effective interaction with others due to loneliness, employee's self - esteem also impacted badly due to work from home because they don't feel professional way when works from home.

### 3. Data Analysis and Findings

The survey questions were distributed to the employees using google form via internet medium. The data was

collected during May-June 2020. This study contained 33 percent of males and 67 percent of females. 23 percent are from age 18 to 30 years; 53 percent from age group 31 to 39 years; and 14 percent from age 40 to 49 years. The occupations sectors were divided into Education (77 %), Management (16%), Production (2%), and other services (5%).

#### 3.1 Testing the Hypothesis of the study

The researchers tried to find out whether there is positive impact while working at home during COVID-19. Chi square test has been used in order to test those hypotheses.

*H1: Working from home creates positive impact to the cost saving,*

Based on the test result, the researcher reports that there is a significant impact on the cost saving where the significance value of the chi-square test show  $p=.001$  ( $df=5$ ,  $p<.05$ ). The result shows a significance impact. Thus, working from home creates positive impact to the cost saving because employees saving petrol and time to commute to the workplace.

*H2: Working from home creates positive impact to the productivity*

There is a significant impact on the productivity where the significance value of the chi-square test show  $p=.003$  ( $df=11$ ,  $p<.05$ ). Thus, our data found that employees who working from home finishes the targets or task on time.

*H3: Working from home creates positive impact to the job satisfaction.*

Results reported that there is no significant impact on the job satisfaction when employee working from home where the significance value of the chi-square test show  $p=.182$  ( $df=12$ ,  $p<.05$ ).

*H4: Working from home creates positive impact to the work life balance*

Based on the test result, there is a significant impact on the work life balance when employee working from home where the significance value of the chi-square test show  $p=.000$  ( $df=4$ ,  $p<.05$ ).

*H5: Self-discipline, face to face contact, visibility, communication, and atmosphere are challenges working from home*

Researchers tried to find out whether self-discipline, face to face contact, visibility, communication, and atmosphere are challenges working at home during COVID-19. Chi square test has been used in order to test those hypotheses. Based on the test result, data reports that there are significant challenges on the self-

discipline, face to face contact, visibility, communication, and atmosphere. The significance value of the chi-square test for self-discipline show  $p=.000$  ( $df = 7$ ,  $p<.05$ ). The result shows a significance challenge. While for the face to face contact, the significance value of the chi-square test for the face-to-face contact show  $p=.017$  ( $df = 5$ ,  $p<.05$ ). The result shows a significance challenge. Next, visibility, the significance value of the chi-square test show  $p=.000$  ( $df = 6$ ,  $p<.05$ ). The result shows a significance challenge as well. For communication variable, the significance value of the chi-square test show  $p=.000$  ( $df = 8$ ,  $p<.05$ ). The result shows a significance challenge. Lastly, for atmosphere factor, the significance value of the chi-square test show  $p=.000$  ( $df = 7$ ,  $p<.05$ ). The result shows a significance challenge.

#### 4. Conclusion

Overall, in examining the impact and the challenges faced by employees those working from home during Covid-19 pandemic situation, data revealed that there is significant impact on the cost saving. Result depicted that there is significant impact on the productivity and output of jobs from employees work from home. However, results showing negative impact to job satisfaction and motivation of employees and employees do face few challenges according to this study.

#### References

- [1] Amabile, T., & Kramer, S. (2013). *Working from home: A work in progress*. Harvard Business Review. Retrieved from <https://hbr.org/2013/07/working-from-home-a-work-in-pr>. Assessed on 15th July2020.
- [2] Carter, C. (2016, October 4). *3 Things No One Tells You About Working from Home*. Forbes. Retrieved from <http://www.forbes.com/sites/christinecarter/2016/10/04/3-things-no-one-tells-you-about-working-from-home/>. Assessed on 15th July2020.
- [3] Crosbie, T & Moore, J. (2004). *Work-life Balance and Working from Home*. *Social Policy & Society* 3:3, 223–233. DOI:10.1017/S1474746404001733.
- [4] Go, R. (2016, May 9). *The 7 deadly disadvantages of working from home*. Hubstaff. Retrieved from <http://blog.hubstaff.com/disadvantages-of-working-from-home/> Assessed on 15th July2020.
- [5] Gough, K. V. (2012). *Home as workplace*. *International Encyclopedia of Housing and Home*, 414-418.
- [6] MicroExec. (2013, March 27). *How to maintain professionalism while working from home*. Retrieved from <http://microexec.com/2013/03/27/how-to-maintain-professionalism-while-working-from-home/>. Assessed on 15th July2020.
- [7] Nicole, F. (2015). *Gauging Perceived Benefits from 'Working from Home' as a Job Benefit*. *International Journal of Business and Economic Development* Vol. 3 Number 3.
- [8] Purwanto, A., Asbari, M., Cahyono, Y., Fahlevi, M., Mufid, A., Agistiawati & Popong Suryani (2020). *Impact of Work from Home (WFH) on Indonesian Teachers Performance During the Covid-19 Pandemic: An Exploratory Study*. *International Journal of Advanced Science and Technology* Vol. 29, No. 5, (2020), pp. 6235 – 6244.
- [9] Russell, Joyce. (2013, Mar 24) “*Career Coach: The pros and cons of telecommuting*.” *The Washington Post*. Retrieved [http://www.washingtonpost.com/business/capitalbusiness/career-coach-the-pros-and-consof-telecommuting/2013/03/22/fee86bfa-9196-11e2-bdea-e32ad90da239\\_story.html](http://www.washingtonpost.com/business/capitalbusiness/career-coach-the-pros-and-consof-telecommuting/2013/03/22/fee86bfa-9196-11e2-bdea-e32ad90da239_story.html). Assessed on 15th July2020.
- [10] Shareena & Mahammad Shahid. (2020). *Work from home during Covid 19: Employees Perception and Experiences*. Vol 9, Issue 5, PRINT ISSN No. 2277 – 8160; DOI :10.36106/gjra.
- [11] Subramaniam, G., Overton, J., & Maniam, B. (2015). *Flexible working arrangements, work life balance and women in Malaysia*. *International Journal of Social Science and Humanity*, 5(1), 35-38.

## FROM CONSENSUS TO CONFLICT: THE EXPERIENCE OF PAN-MALAYSIA ISLAMIC PARTY (PAS) IN POLITICAL COALITION

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### ABSTRACT

**Purpose of the study:** *This article is an in depth discourse of how the Pan-Malaysian Islamic party (PAS) manages to zealously safeguard their fundamental political tenets while at the same time engaging in a new political coalition in an Alternative Front (BA) in 1999 and People Front (PR) in 2008. These political leagues would assume a lasting feature as PAS explores a new terrain of cooperation that traverse more than an electoral pact. These collaborations which incorporated their shared beliefs and concerns for the sake of democracy, justice, freedom and good governance have unfolded up a new frontier of political leverage for PAS. This also suggests that the party should be less affectionate to its intrinsic party ideologies as it embraces the new coalition's common struggles.*

**Methodology:** *The qualitative approach of this study derived its data from extensive verbal interviews with seven prominent top key leaders in the PAS political leadership hierarchy. Several primary documents and minutes of numerous meetings are also scrutinously gleaned over for more informative details.*

**Main Findings:** *The main striking discovery of this research illustrates that although PAS hopes that its collaboration with other parties would be an endurance one rather than winning an election. However, this never materialises as its efforts to reconcile between the differences of the party inherent principles and the coalition collective objectives ends in a stalemate situation. PAS has an underlying commitment that this cooperation would be able to expedite in fulfilling their Islamic agenda in establishing an Islamic Nation and the implementation of the Islamic hudud law which, on the other hand, do not augur well with the alliances common objectives and eventually imperilled their commutual understanding.*

**Applications of this study:** *This research is relevance in the sense that it looks at the survival of an Islamic party existence within the realm of a turbulent political coalition with other parties of different births. It also provides insights in understanding the perspective between Islam and democracy or in other words the interplay of Islamic politics in a stormy democratic ecosystem.*

**Novelty/Originality of this study:** *This study to a certain extent invariably interprets that the collaboration of PAS in the BA and PR, rhetorically speaking, is more at a stage of a coalition of convenience and of a short-lived in nature.*

**Keywords:** *Pan Malayan Islamic Party, political coalition, Alternative Front and People Front*

## INTRODUCTION

Historically speaking, PAS is a party unaccustomed to forming a political accord with other political parties. It used to be in partisanship with the National Party (Parti Negara) during the 1959 Malaysia General Election (Ramlah Adam, 1999). It had formed an alliance with United Malay National Organisation (UMNO) in the National Front or Barisan Nasional (BN) and became part of the coalition federal government. It had also a political relationship with the Spirit of 46 party (Semangat 46) as Solidarity of Ummah Movement or Angkatan Perpaduan Ummah (APU) and formed a coalition state government in Kelantan. The intentions of its earlier alliance are antithetical with the latter alliances with BA and PR. The battle cry of the earlier collaboration is to preserve the vested interest of the Malay and Islam. On the other hand, the latter confederation is more of a general ideological clarion call on behalf of democracy, justice, freedom and good governance. Generally, it is not conscripted towards the establishment of an Islamic Nation or the implementation of the hudud law as expressed in the PAS party doctrine (Ramlah Adam, 1999).

During PAS sojourn as a political affiliate in the bigger entities of BA and PR, its inherent party philosophy is subsumed under the Commutual Policy of the entities. PAS has to give priority in achieving the common goals rather than adhering to its own ideological objectives in an efforts to win votes. This turn of event, has made PAS as a party that is more democratic, open and inclusive. Amazingly, PAS managed to secure a bigger wins during the General Elections. In the Malaysia General Elections of 1999, PAS won 27 parliamentary seats and 98 sate seats. This is considered as a big leap forward in the history of the party, as it won the most seats among the opposition parties, that even entitled its representative to be bestowed as the Opposition leader during the People Assembly or Dewan Rakyat sitting. In the 2008 General Elections it won 23 parliamentary seats and was able to wrest control of the state of Kelantan and the state of Kedah to be under its domain. In the 2013 General Elections, PAS managed to secure 21 parliamentary seats and maintained Kelantan.

On the other hand, PAS extraordinary political success has a pricy price tag. It rouses the political confidence of its grassroots members to demand that the time is ripe for PAS to accelerate the reification of its fundamental political ideals into reality, namely, the establishment of an Islamic Nation and the implementation of the hudud law. This is in direct contradiction with

PAS's commutual stand with other parties which eventually led to the breakup of the coalition. Incidentally, the main cause of the failure of PAS's political cooperation during the Alternative Front or Barisan Alternatif was the issue of Islamic state formation while the implementation of hudud laws during People Front or Pakatan Rakyat.

In evaluating how PAS strikes an equilibrium between rendering the needs of the common goals and fulfilling their own fundamental political tenets, we need to understand this scenario from the viewpoints of several PAS key party leaders. Among the leaders that were interviewed were PAS senior leaders such as former PAS vice president Dato' Husam Musa, former PAS secretary, Dato' Mustafa Ali, PAS vice president, Dato' Ir. Iskandar Abdul Samad, PAS Deputy Head of Ulamak (Religious Scholars) Assembly, Dato' Dr. Nik Muhammad Zawawi Nik Salleh, Parit Buntar Member of Parliament, Dato' Dr. Mujahid Yusuf Rawa, former PAS Deputy President, Tuan Haji Nasharuddin Mat Isa, former PAS Selangor Commissioner, Dato' Dr. Hassan Mohamed Ali, former PAS Assembly Associate Supporters Chairman (DHPP), Hu Pang Chow, and PAS Research Center, Director of Operation, Dr. Mohd Zuhdi Marzuki.

The verbal information received was supplemented with primary sources texts such as the minutes from the Central Working Committee Meeting, the Central Working Committee Daily Meeting, a series of key note addresses from the President Policy Speech, during the Annual General Assembly (Muktamar) of the party, Presidential Speech during the Alternative Front and People Front Conventions, the Election manifestos, common policies of People Front and its bulletins. This research also went through the Party Media organ, Harakah and views of other parties as found in the newsletters of Voice of Justice or Suara Keadilan (PKR) and Rocket (DAP). The rarely known tabloid Eksklusif which was part of the alternative media since the inception of the reformative movement in 1999 was also inspected.

### **The Establishment of PAS Political Coalition in the Alternative Front or Barisan Alternatif (BA) and the People Front or Pakatan Rakyat (PR)**

The Alternative Front or Barisan Alternatif (BA) was officially launched on the 3<sup>rd</sup> of August 1999 ("Gerak dilancar Tumbang BN," 1999). Pas for the first time had to accommodate in a new cooperation with a motley of political parties of diverse genealogies. There was the Democratic Action Party (DAP) whose ideological stands were at odds with PAS. National Justice Party or Parti Keadilan Nasional or PKR (KeAdilan) was a new party. Malaysia People Party or Par-



ti Rakyat Malaysia (PRM) was a new reinvented party. Soon after the sacking of Anuar Ibrahim and the revival of the people reformation protest movement, the four parties decided to join hand for a common purpose agenda to advocate for the resurgence in actualising the idealistic concept of justice, freedom, democracy and good governance. In the beginning it was more of an electoral pact of the opposition coalition to depose the ruling coalition of National Front through exercising the voting rights of the people in a democratic setting of a general election (“Ingin Islam Perintah Malaysia,” 1999).

Historical archives indicate that the Malaysian People Movement for Justice Council or GERAK (Majlis Gerakan Keadilan Rakyat Malaysia) movement led by PAS was the catalyst in the set up of Alternative Front (BA). This gathering of multiple of political parties and Non-governmental Organisations (NGO) received overwhelming support of the people to qualify it as a rising force to reckon with in shouldering the task of the reformation agenda. On the other hand it is movement with no political substance. GERAK was revitalised as a political power so that it could achieve its objective more effectively and meaningfully (Mahfuz Omar, personal communication, 30th May, 2001). As a united front of multiple parties it would have the political clout to overthrow the BN fortress. It would be a smart strategic move if this cooperation of various opposition parties would be able to win the election and ultimately form the government.

The coalition of opposition parties appeared formidable when they agreed upon a commutual agreement on the 3rd of October 1999. Among the various sterling *raison d’etre* or rationale of their struggles they put forward to the Malaysian people were to promote and maintain the sanctity of an independent Malaysia; to create constitutionally a social democratic society; to design an economic system that provides equal rights to all Malaysian so that all the people would have an equal opportunity and receiving an equal income commensurating with their skills and abilities.

BA also contrived an electoral arrangement so that they would not be in the opposing position of a three-cornered fight during an election. In facing BN it would be a one to one contest. As a result in the 1999 Malaysian General Election, there was a straight battle in 152 parliamentary seats and 367 state seats between BA and BN. PAS competed in 63 constituents (the most), followed by (KeADILan) in 59 constituents and DAP in 47 constituents while PRM in

only 4 constituencies. PAS won big during that election, more than 4 times more seats in comparison to their performance in the previous 1995 general election. Pas secured 27 Parliamentary seats, DAP 10 seats, KeAdilan 5 seats while PRM did not get any seat. In the state constituencies PAS won 98 seats, gained control of the states of Kelantan and Terengganu, whereas DAP won 11 seats and KeADILAN 4 seats. PAS failed to maintain political cooperation in the BA because they did not agree with DAP on the issue of Islamic state formation. This will be discussed in the next discussion.

Nevertheless, seven years after the departure of DAP from the Alternative Front on 23<sup>rd</sup> September 2001, a new front, the Pakatan Rakyat or People Front (PR)<sup>1</sup> (The term of "Pakatan Rakyat" was suggested by PAS President in 2008) was officially launched on the 1<sup>st</sup> of April 2008, 23 days after the 12th General Election.<sup>2</sup> This was regarded as the second phase of the opposition coalition effort in consolidating and maintaining their alliance power based on a combined interest of key matters and public concerns while at the same time undertook a reciprocal concession understanding particularly in an election time. PAS, PKR and DAP were the key partners in this People Front alliance. The apex objective of the alliance this time around was more focus on a united stand of broad homogenous issues and interest, rather than highlighting the differences of each individual party ideology. The three parties have vouched on a Commutual Policy in seeking a meaningful cooperation in promoting democracy. Unwittingly, the Malaysian electorate for the first time in history was presented with a unprecedented huge alternative force in the coming election (Abdul Hadi, public speech, November 29, 2009).<sup>3</sup> The Commutual Policy had four components, namely, Reestablishing a Truly Transparent Democracy, Generating a Higher Level of Economic Performance, Steadfast and Just, Social Justice and Human Development, Federal and State Relationship and Foreign Affair Relationship. PAS supported the PR alliance Commutual Policy. According to the PAS President Dato' Seri Abdul Hadi Awang, this Commutual Policy was the reflection of the people's hopes and aspirations as manifested in the federal constitution (Abdul Hadi, public speech, November 29, 2009).

Besides the Commutual Policy, all participating parties in the People Alliance agreed unanimously to uphold the basic status quo. They agreed to accept and protect Islam as the federal religion and the special position of the Malays and the bumiputera, to defend the role and the responsibility of the Constitutional Monarchy, to intensify the usage of the Malay Language as

elucidated in the Article 152 of the Federal Constitution, to expand the use of the Malay Language as the regional lingua franca and to bolster the usage of the mother tongues of all races.

Astonishingly, during the 2008 Malaysian General Election, however, each individual party PAS, PKR and DAP put forward a separate party manifesto. Nevertheless, they were singularly united in wanting reform and revitalising democracy in Malaysia. PAS proclaimed a manifesto as, *“Towards a Welfare Nation”*,<sup>4</sup> on the other hand PKR manifesto was broadcast as, *“A New Hope for Malaysia”*, while DAP exclaimed, *“Let’s Change ( Jom Ubah)”*. It seems momentarily, Pas manifesto, did not mention the formulation of an Islamic Nation but more working towards realising the formation of a Welfare Nation. Apparently, PAS was determined to be the saviour of the people’s welfare and national interest through an efficient and enlightened management of the economy and equitable development that is user-friendly to man and the environment. Like Barisan Alternatif, PAS failed to maintain political cooperation in Pakatan Rakyat due to their suggestions on the implementation of hudud laws. This also will be discussed in the next discussion.

### **PAS and the Polemic of Commutual Policy in a Political Cooperation**

Since PAS inception into the political alliance of the Alternative Front, PAS contention was that the opposition pact should give undisputed credence to issues of common interest rather than brooded over their differences. PAS President Dato’ Fadzil Mohd Noor, also believed that the close opposition block camaraderie under the flag bearers of justice and humanity is a durable feature of the opposition against any attempt to dislodge it (Fadzil Noor, public speech, Mei 28, 1999).<sup>5</sup> PAS was able to see eye to eye with the DAP on the ground that they had common foes and issues that could be addressed politically. In the words of Lim Kit Siang, DAP stalwart, the basis of the cooperation of PAS and DAP was not to establish an Islamic Nation but rather to advocate the causes of their collective synonymous issues and public concerns (Lim Kit Siang, 2001).<sup>6</sup>

The installation of an Islamic state and the attainment of the hudud law were never part of the political concord between the parties of the Alternative Front. These concepts were clearly absent in their Commutual Manifesto<sup>7</sup> launched by the Alternative Front in confronting the 10<sup>th</sup> Malaysian General Election. Their main focus was not in propagating the political dogma of each party but more in figuring how to handle the challenges of development for a just and

transparent economic system, a social system that alleviates the plight of the poor and embarking towards a more open economy (“Manifesto Membela Rakyat,” 1999).

PAS stratagem, as reasserted by the former Pas vice president Mustafa Ali, was that the coalition should not fuss over their parties differences in their joint homogenous stance. He elaborated, *“We formulate the manifesto together. At that time we did not give emphasis on topics of differences, but more on discussing about development matters”* (Mustafa Ali, personal communication, 17<sup>th</sup> June 2014). In this context of political cooperation in the People Alliance, PAS affirmation towards the consensual policy<sup>8</sup> rather than get distracted with its party agenda is the critical delicate bond of the alliance political unity. By converging in on the common issue and public interests the alliance was able to widen its appeal and voter support towards the opposition in general and to PAS in particular. This a winning formula that the alliance was looking for that could be translated into the desired change that it was aiming for (Khalid, 2016).

Inadvertently, PAS tolerance approach in raising popular issues and mutual concerns rather than confining its struggle to its own agenda enable it to get access in promoting Islam more openly and inclusively. According to Dato’ Dr. Mujahid Yusuf Rawa by adopting such approach PAS had undergone a transformation into the third curve, a new phase that saw the evolution of the party becoming more mature as a national party rather than a localized party. (Mujahid, 2012). What he meant by a national party was not a party that fought for the parochial national interest but rather a party that was able to comprehend and be supportive across the board of national issues acceptable to most Malaysians.

The question is to what extent can PAS withstand its commitment to give priority to the common issues and public interest as contained in their Commutual Policy understanding as compared to the demands to promote the primary tenets of PAS party struggle? Will PAS be more comfortable in promoting the original tenets of its struggle or feels shackled by the political manoeuvring in the alliance with regard to promoting Islam? This question is relevant as there is a wind of change in its pledge to the concept of Commutual Policy vis-a-vis in attaining the party jihad conviction.

The insistence by opposition alliance to give more credence and pre-eminence to the commutual policy has to certain extent hampered PAS desire to expound its philosophy at the same time. PAS concluded that it was pertinence for it to be more flexible in juggling their political commitment between complying with the objectives of the consensus policy and working towards their own party agenda. We can observe a paradigm shift in policies through the key

note addresses by its political leaders during the PAS General Assembly (Muktamar) in the year 1999 and 2007 in the earlier stage of their political alliance as compared to the keynote addresses on policies during the PAS General Assembly (Muktamar) in 2008, 2014 and 2015 in the latter part of their political alliance when PAS was in political turmoil with other partner parties. During the 1999, 45<sup>th</sup> PAS General Assembly (Muktamar) the then PAS President articulated in his speech the concept of “Together we Uphold Justice” (Fadzil Noor, public speech, Mei 28, 1999)<sup>9</sup> and the key note address on policy in the 53<sup>rd</sup> PAS General Assembly of 2007 he further expanded the idea to “Save Democracy and Uphold Justice,” Generally speaking, in its earlier fellowship association PAS expressed more the desire in sustaining the common issues and public concerns about justice and humanity as the premier rallying call and to downplay their original party struggle.<sup>10</sup>

Apparently, PAS mingling with the other parties reached a crossroad, where PAS wished for a new direction. The president key note address during the PAS 46<sup>th</sup> Annual General Assembly (Muktamar) of 2000 extolled “*PAS as Leader of Unity*”, and the president key note policy speech in the 60<sup>th</sup> PAS AGA(M) of 2014 reminded the party to “*Keep on be Consistent (Beristiqomah)*” and PAS president speech in the 61<sup>st</sup> PAS AGA(M) of 2015 urged members to “*(Beristiqomah) Be Consistent Until Victory*”. There appeared to be a reversal change of policy as the emphasis now was for party members to be consistent to the fundamental struggle of the party. Consistency or Istiqomah was the party new solidarity call. It was a aide-memoire or reminder for party members to be firm on policy, practices and real struggle from Allah as Islam is a perfect everlasting religion consistent in its principles and flexible enough to be prescribed throughout the ages<sup>11</sup> as scripted in the PAS constitution.<sup>12</sup> The theme of consistency was successively recited gloriously over the two PAS AGAM in 2014 and 2015 for PAS to be consistent in terms of the party policy and undertaking and be firm and unyielding when it comes to principles in the midst of the political wrangling with other parties.<sup>13</sup>

Consequently, party leaders were regularly advised not to breach the boundary of cooperation of *tahaluf* in dealing with other parties so as “*to safeguard the principles and inherent tenets of the party, be absolutely loyal to the party so not to abandon them in their enthusiasm to seek political gain*”.<sup>14</sup> Political partisanship did not mean one should dissipate the prime mission of the party into the other form of struggle or system just for the sake of winning.



PAS resourcefulness in coordinating the equilibrium outcome between adopting the political objectives of the alliance that prioritise winning an election and to that of defending the main-spring struggles of the party was immensely successful but beginning to stir some restlessness during PAS 59<sup>th</sup> AGA(M) on 15<sup>th</sup> August 2008 . This came about after 5 months of the 12<sup>th</sup> Malaysia General Election of 8<sup>th</sup> March 2008 when the opposition block won an unprecedented monumental victory in the election. It secured 82 parliamentary seats and captured the governments of over 5 states such as Kelantan, Kedah, Perak, Selangor and Penang. However this raises the contention whether after achieving a victory during an election means that the PAS can also be assured in realising its original goals? A victory during this election as the opposition block should not make PAS complacent in continuing their infinite mission for Islam as their inspirations and aspired orientation.<sup>15</sup>

More evidently, in 2010 PAS remodelled its approach in this political cooperation by putting forward a working paper entitled, “*Tahaluf Siyasi (Political Alliance): Guidelines from an Islamic Perspective*”. This reinforces PAS intrinsic philosophical framework less it deviates from its primary purpose. Six guidelines are listed in forging political cooperation with other parties so that the party will not stray away from the righteous original path of the party struggle. Firstly, *the Tahaluf*, should be the means to fortify Islam, and should ensure the paramount position of the Muslim people is in place and there is room in the propagation of Islam and Islamic ideals are protected. Secondly, *the Tahaluf* must ensure that Islamic principles must be safeguarded and preserved at all time. Thirdly, absolute dedication or Intima should be only towards the Pas leadership and not to the alliance. Fourthly, *the Tahaluf* should provide the opportunity, space and scope where missionary works could be undertaken. Fifthly, the objective of winning in Islam should not justify the unconditional acceptance of *the Tahaluf*. Sixthly and lastly, the Ulamak (the Religious Scholars) Consultative Council should be the final arbiter to evaluate periodically whether to extent the Political Alliance or *Tahaluf Siyasi* based on its *maslahah (Beneficial)* or *mafsadah syar’iyyah* (harmful in Syariah).<sup>16</sup>

Consequently, PAS is aware that it should be able to juxtapose equally between the alliance aspirations for a triumph at the ballot boxes and honouring the party intrinsic beliefs. Pas as a bona fide functional Islamic party has to operate within the domains of the Islamic governance (sahsiah), missionary works (dakwah) and educating the masses (tarbiah). It is unavoidable that there would be a stiff showdown between the desire for power and the faithful adherence

to principles (Keane, 1993). It makes PAS struggle more complex (Farish, 2016). This ceaseless internecine collision of ideas between the aims of getting the people approval as in winning in an election and the dreams to implement the primary principles of the party is synonymous as imploring for a synergy between the “voice” and the “syariah” (Burhanuddin, 2012). In this context the voice refers to the support and inspirations of the people while the syariah refers to the party principal resolution in establishing an Islamic Nation and the implementation of the hudud laws.

### **Political Cooperation with the Objective of Islamic Victory, Islamic State and Hudud Law**

Pas commitment to actualise the party struggle while still in a political alliance can be traced to the faithful adherence and observance to the principles of *Tahaluf Siyasi* (Political Alliance) which specifically demanded for an Islamic victory.<sup>17</sup> The first principle of *tahaluf Siyasi* concept is that any sort of political cooperation should fortify Islam and ensure the paramount position of the Muslim people is in place and there is room in the propagation of Islam and Islamic ideals are protected. Certainly PAS faced an Hobson’s choice or lack of choice as it faced an impasse in this political cooperation. If PAS still insisted in realizing their original ideological plans, there might lose the voters supports that it badly needed during an election. This means that PAS has to give priority to the united commutual policy as any new policy has to get the nod from the rest of the alliance.

Although PAS seeks an equilibrium political posture in the alliance, its prime party objective is toward uplifting the supremacy of Islam as outlined in the principles of *Tahaluf Siyasi* (Political Alliance) (Nik Mohd Zawawi, personal communication, 27<sup>th</sup> April, 2016). In this regard, the primary political tenets of the party should remain intact, notwithstanding PAS position in the alliance, where in reality it never abandons its true party mission for an Islamic victory (Nik Mohd Zawawi, personal communication, 27<sup>th</sup> April, 2016). Mujahid Yusuf Rawa disclosed that:

“ No party has dropped its basic party ideology. This is in our cooperative agreement. DAP cannot questions PAS Islamic ideologue. Neither do we question DAP slogan of, “Malaysian Malaysia or Democratic” or PKR who proposes a liberal approach for example. We respect their beliefs”

This statement to a certain extent has given the *carte blanche* or “the complete freedom to act” to each party to keep intact their individual party ideology, despite the fact that they are allies. As such, PAS was willing to lose DAP solely to pursue its aspirations in the issue of establishing an Islamic State while cooperating in BA. In fact, PAS never questions each individual party political ideologies nor does it want them to drop them.<sup>18</sup> In the same vein, other party should not question PAS ideology or drop it, despite working together.

Subsequently, PAS should never be overzealous in wanting to win at the expense of sacrificing their fundamental party principles. Winning an election is not simply an electorate victory at the ballot boxes but a victory that could fulfill the PAS party constitution, “to struggle for a nation where the community and administrator that practise Islamic values and laws towards acceptance by Allah”,<sup>19</sup> PAS does not want to be seen in its political cooperation as simply to gain power and ignoring the fundamental tenets of its struggle. (Nik Mohd Zawawi, personal communication, 27<sup>th</sup> April, 2016).

Dr. Mohd Zuhdi Marzuki, Director of Operation of PAS Research Centre, impassionedly stated that the most important element in an election victory was not the victory itself but to ensure that messages of the party struggle reach the masses.

The messages are to promote and influence the people about PAS sacred pursuits about the sanctity and perfection of Islam, Islamic Nation concept and Islamic laws. He believed that the true victory for PAS is in achieving the party objectives, rather than winning in an election (Zuhdi Marzuki, personal communication, 18<sup>th</sup> December, 2014).

“Sometimes, it appears that PAS is not winning (we have won Kelantan) but in reality we are beginning to be accepted by most people. In the government too they are beginning to talk about the laws of Allah. .. We have got Islamic Nation concept in the Islamic Studies or Tasawwur Islam curriculum .. so the people are already beginning to accept Islam, although PAS has not won.....” (Zuhdi Marzuki, personal communication, 18<sup>th</sup> December, 2014).

PAS stance that places emphasis more on an Islamic victory rather than winning in an election, was severely criticised by some individuals, including PAS former political leaders who had joined the Amanah party. One of them, Khalid Samad, said that by disputing the importance of an election success was more in making PAS as just another Non-Governmental Organisation (NGO). PAS should contemplate deeply at the benefits and liabilities implications of its actions (khalid, 2016b). Such stance would discourage member from working hard to win in an election and ultimately would make PAS a weak party.

PAS wards off disapproval remarks about its conviction by still insisting that winning an election through a political alliance must go hand in hand with the resurgence perpetuation of its party Islamic charter. So it is mandatory that the an election victory is a victory for Islam, which is the mainstay of the party ideals. PAS was against any effort to make it as a tool just to win an election. Dato' Seri Abdul Hadi maintained that it was an undisputed fact that the coalition election victory during the 12<sup>th</sup> Malaysian General Election of 2008 was made possible due to the overwhelming efforts of its extensive party machinery and the hard work of its numerous party members not only for its party but for other parties as well.

The pinnacle objectives of PAS 's constitution are to establish an Islamic Nation and the implementation of the hudud laws. These twin objectives are an inherent parts of the party struggle. They were always a part of PAS dreams since joining the BA coalition, which unfortunately were not codified in the united commutual policy. The deputy PAS president of the time, Dato' Seri Abdul Hadi considered that PAS had two main stratagems in becoming part of the BA coalition. Firstly, it would associate itself with an Islamic group, such as People Justice Party or Parti Keadilan Rakyat (KeADILan) who was responsive to the idea of an Islamic Nation. Although the party was a multi-racial party, it was dominated by Malay Muslim members who were sympathetic towards Islam and also agreeable to an Islamic scholar image (M. Hafiz M. Redzuan, 2013). Abdul Hadi believed the acceptance of an Islamic Nation by KeADILAN was vitally important as this was the prerequisite condition on why PAS wanted to be in the political coalition ("Ingin Islam Perintah Malaysia," 1999).

Secondly, the other stratagem was the extraordinary ties with DAP which was only confined to mutual matters of common interest such as upholding justice and not related to the promo-

tion of an Islamic Nation.<sup>20</sup> PAS firm conviction in advocating this policy of an Islamic Nation led to the withdrawal of DAP from the pact. PAS was not perturbed by this withdrawal, although it had lost an alliance partner. PAS still maintained that a political partnership should not be an obstacle in accomplishing its sacred constitutional objectives.

PAS and DAP friendship was not as rosy as before, when PAS was adamant that its membership in the political alliance with other parties did not mean that it would abandon its desire for the creation of an Islamic Nation in Malaysia.<sup>21</sup> The formation of the Islamic Nation would entail the Islamic law would be introduced. However, non-Muslims were exempted from this Islamic law. PAS was willing to face the consequences of its action. As a result, DAP officially quit from the pact on 23th September 2001. PAS would not step backward just to indulge with DAP's dissent. The party creed has been the source of the party inspiration since time immemorial. The decisive view of PAS was that it would still uphold its principal struggle for an Islamic Nation, while working in a political collaboration with other parties, even if it meant DAP would not be in the group.

Lim Kit Siang clarified that DAP rejection in the establishment of an Islamic Nation did not mean the Party was anti-Islam. It was based on the contention that an Islamic Nation would deny the rights of the non-Muslims and the non Muslims were not ready to live under a theocratic state, based on religious edicts, like the Islamic Republic of Iran (Mohd Izani, 2005). On the other hand, PAS believed DAP leaders misunderstood the true objectives of PAS struggles relating to Islam. The explanation of DAP leaders, particularly about Islam was also not clear enough to the opposition pact (Mohd Izani, 2005).

Other than the formation of an Islamic Nation, another contentious issue was the implementation of the hudud law which was not in the consensus agreement of the opposition pact. According to Mustafa Ali (Mustafa Ali, personal communication, 24<sup>th</sup> February 2014), PAS responsibility in wanting to implement the hudud law cut across political consideration. He stated that, “*Hudud is not a political factor but it is a responsibility more momentous than political.*” He defended PAS rights to implement the hudud law. Although DAP disagreed about implementing the laws, it had not right to prevent the law from being implemented. He elaborated as follows;



“ You disagree it is all right. But you cannot prevent PAS from doing it. It is our right. That’s why we accept the premise ‘agree to disagree’. PAS could not reject the Hudud Laws. I have explained that to DAP.” (Mustafa Ali, personal communication , 24<sup>th</sup> February 2014)

PAS reiterated that it was willing to lose in the election and lost backing from the DAP and the voters as a result of their determination to install the Hudud Laws. PAS had also no objection if DAP wanted to resign from the pact because of it. Mustafa vehemently stressed, “ *If you want to be out, you can go. But we will never abandon not at all. If we lose, we lose.*” (Mustafa Ali, personal communication, 24<sup>th</sup> February 2014). However, he hoped DAP should not be hasty in its decision and would remain in the political alliance. The firm statement from Mustafa Ali, clearly indicated PAS unflinching commitment to the Hudud laws to an extent it was prepared to suffer the consequences of losing the election, support from DAP and support from the electorate.

Besides Mustafa, another faithful PAS leader, Dato’ Husam Musa impassionly recapitulated the same arguments as Mustafa, stressing that as PAS is an Islamic party it is its responsibility to implement the hudud law, (Husam Musa, personal communication, 24<sup>th</sup> April, 2014). He added that DAP was not an Islamic Party and was not expected to support PAS ideology with regard to hudud law. Nevertheless, he hoped for DAP to be matured enough to accept the hudud law, as non-Muslims were exempted from the law.

It is timely and fittingly for PAS to be more transparent and firm in advocating the party ideals. It is imperative that PAS should not hide its intention to promote Islamic jurisprudence or Syariah, in order just simply to win votes.<sup>22</sup> PAS should announce to the people in advance its goal to realise the hudud law before and not after being in power. Its vice president Dato’ Ir. Iskandar Abdul Samad, who was also PAS Selangor Commissioner, emphasised that PAS should demonstrate openly to the people its wish to institute the hudud law (Iskandar A. Sa-

mad, personal communication, Oktober 8<sup>th</sup>, 2015). He explained that it was only fair that the people should know Pas intention so that the people can decide to legitimise the law or not.

What is more important PAS should not be seen as eluding the people, specifically non-Muslims by withholding its underlying true motive in instituting the hudud law only after attaining political power. In this respect, PAS Kelantan government putting forward a Syariah Criminal Penal Enactment (2) (1993) 2015<sup>23</sup> was in line with the primary aims of the party cannon. It was also in accordance with the *Tahaluf Siyasi* concept, which stipulated that PAS could not conceal its intention simply because it wanted political support. As PAS was becoming more open in its struggle, it no longer had to be secretive and to make concession with its prime ambition. This also proved PAS courageous decision to be more transparent in its crusade is more sacrosanct than winning an election through a political alliance.

DAP was the party that vociferously opposed PAS freedom to legitimise its party agenda in the political alliance. DAP secretary, Lim Guan Eng categorically stated that PAS should not promote its party inherent beliefs as the voters that voted for PAS were not based on the policy of implementing the hudud law but based on their Joint Commutual Policy.<sup>24</sup> PAS revealed that DAP used to warn it that DAP would resign from the Central Executive Committee if PAS tried to put in the hudud agenda in their joint commutual agreement.<sup>25</sup> PKR was also in agreement with DAP that hudud law was not part of the deal of their alliance. It stated that PAS should get the green light from Presidential Council before a Hudud agenda was added (“PKR Sokong DAP Tolak Hudud.”, 2015).<sup>26</sup>

The sharp rebuttals from the two alliance partners distinctively indicated that PAS agenda was not in the menu of the united Commutual Policy. On the contrary, to go along with this policy was reprehensive to PAS as it had never sacrifice or relinquished the party sacred constitution just to relish a victory in an election (“PAS Tidak Akan Gadai Prinsip,” 2018). Each party has its own goals which is not part of the Commutual Policy. PAS considered their political cooperation was one of a loose confederation and did not at all touch on each individual party obligations and battle plans<sup>28</sup> (Mustafa Ali, personal communication 24<sup>th</sup> February 2014).

The altercation over the implementation of the Hudud law was not only bustling between the component parties of DAP and PKR against PAS but also became a heated stirring issue of

contention among some PAS party members who eventually took the final decision to break away from the party and formed their own Amanah Party. (Iskandar A. Samad, personal communication 8th October 2015). They argued that PAS was not honest in undertaking its pledge to honour the mutual understanding among the coalition members.(Dzulkefly,2016). They added that PAS should not be in a hurry to implement the hudud law as they should be done in a strategic manner. PAS should wait for a time when the party was more appealing to the general public first. Once the public acknowledged PAS sincerity than they could be in resonance with the party struggles, explained Husam. PAS should first regularly engage on common matters close to the people's hearts. Husam took the example of the Prophet Muhammad Rasulullah (s.a.w.)'s approach when he began his preaching by stressing on matters of common concerns first before venturing on to other matters.

Pas should be realistic in realising its utopian ideal by gaining popular support first before taking in any steps as outlined in its Tahaluf Siyasi. This meant the struggle to legalise the hudud law should be approached with great trepidation. Husam was of the view that wresting political power should be the first requisite before putting into effect the hudud law. He illustrated his point as follows;

“ We have to be practical. If we have no seat, what can we do? What are we fighting for? It is not only hudud but also corruption. We have no seat, even corruption we cannot get rid off. Even to restructure a just economic system , we cannot do it without power and without seat” (Husam Musa, personal communication, 24<sup>th</sup> April , 2014).

PAS in a democracy should be more systematic and ingenious in its initiatives and be able to differentiate of how to act before gaining power and after gaining power. Husam stated that, “ *This step by step approach is more crucial as there may be some differences in what we do before gaining power and after gaining power*” (Husam Musa, personal communication, 24<sup>th</sup> April, 2014). He attested that the enactment of the hudud law could only be feasible if PAS clinched political power. It went without saying that on obtaining the people mandate, it could have the authority to legislate for the Hudud law. If PAS was tied down with debating on sin-

gle moot point, such as the hudud law but neglected to reach a consensus opinion than this is a losing battle for PAS.

The non-Muslims leader in DHPP was not in favour in instituting the hudud law. Its chairman, Hu Pang Chaw asserted that actualising the hudud law was not the pre-eminence and pressing demands of the moment. He suggested that PAS should concentrate more in resolving on topics of fighting corrupting, on political stability and on development, rather than on hudud law. He said,

“ With regard to hudud, I disagree. I am not anti hudud but the timing is not correct. Before you can establish the hudud law you need a lot of explanation. Now is a raining season you want to sell ice. Raining season is cold , what reason you want to give? Now is an election time. What do you want to campaign about? You should talk about anti-corruption, development and political stability. Now you want to talk about hudud. People ask what is hudud? Why hudud? How do you want to explain? What is the right version? The problem with PAS is that now is not the right time. In a raining season, you want to sell ice, the timing is not correct.” (Hu Pang Chaw, personal communication, 17<sup>th</sup> March , 2014).

It seemed that PAS non-Islamic wing DHPP was not supportive of the hudud law as pointed out by its chairman. This was a set-back to PAS (“Semua Sayap PAS Sokong Hudud di Kelantan,” 2014). The support from this wing was vital to PAS as this could validated the non-Muslim acceptance of the law. This wing should be able to explain to the non-Muslims about the hudud laws and its implication on the non-Muslims. However this objective was quashed because of the dissenting voice from its chairman. PAS was crestfallen, as it could not garner enough recognition form its non- Muslims group to sanction the implementation of the hudud law.

In addition, PAS understood that the implementation of the hudud law could not be done in haste as it had legal obstacle and required an infrastructural preparation. Dr. Mujahid admitted that the present legal constraints did not permit hudud law to be instituted. PAS should use the democratic, legal and technical avenues in dealing with that (Mujahid Yusuf Rawa, personal

communication, February 24, 2014). Dr Mujahid's views in the methodology and stages in implementing the hudud law was at total variant with PAS, who wanted to implement it immediately. Dr Mujahid invariably agreed with Tun Dr. Mahathir Mohammad opinion about hudud law. Tun stated that the hudud law as established in Kelantan was against the Federal Constitution.

Nevertheless, these objection about the implementation of the hudud law felt on dear ears on PAS. PAS was adamant they wanted to administer the hudud law as it was bound by the Islamic syariat dictums.<sup>27</sup> In the 61<sup>st</sup> PAS Annual General Assembly (Muktamar), PAS president chastised those who apposed the hudud law including party leaders, that the party was impetuous and in haste in wanting to establish the hudud law. He reminded them PAS had long odyssey struggle since 1950's to consecrate the law. After a period of 40 years, PAS finally managed to inaugurate hudud law for the first time in Kelantan state in 1993 as part of the Enactment of the Syariah Criminal Laws. PAS gave an ultimatum to DAP to support the hudud law or the opposition political alliance would end ("DAP Tidak Faham Bahasa," 2015). As usual DAP outspokenly denounced PAS statement and protested that hudud law was not part of the unified commutual policy within the People Front (Pakatan Rakyat). DAP stalwart and adviser Lim Kit Siang pointed out PAS had reneged on its assurance before the General Election of 2013, not to give unduly emphasis on the implementation of the hudud law hastily. This ceaseless war of words over the Hudud issue meant PAS *Tahaluf Siyasi* was a redundant proposition, as it could not be accomplished ("Hudud: DAP Beri Ingatan Kepada PAS," 2015).<sup>28</sup> As the two components partners were at loggerheads over each other stances, the harmonious relationship between DAP and Dato' Seri Abdul Hadi Awang finally collapsed ("DAP Kekal dalam Pakatan Rakyat, Putus Hubungan dengan Hadi," 2015). But unexpectedly DAP and PAS still maintained a strange sort of relationship in a political understanding. Only that the DAP was very sore with Dato' Seri Abdul Hadi Awang and to rub salt in the wounds or add insult to injury DAP openly endorsed the candidature of PAS Presidential post to PAS vice president Ahmad Awang instead of Dato' Seri Abdul Hadi Awang during PAS Leadership Election for the year 2015 to 2017, ("Saingan Kerusi Parlimen Pertembungan Dua Suara," 2015). This roused the anger of PAS who regarded it as a political interference in an internal matter.



A major event unfolded during PAS 61st Annual General Assembly (Muktamar) when PAS accepted the undebatable resolution of PAS's Religious Scholars Wing (Dewan Ulama PAS) to annul the *Tahaluf Siyasi* (Political Cooperation) with DAP. Simultaneously, this also abrogated PAS tie-up with the People Front (PR) ("Batal Pakatan dengan DAP,"2015). On the other hand, PAS still maintained a working relationship with PKR (KeADILan). A massive watershed transition took place in the party, the Religious Scholars group (Kumpulan Ulama) of the party took over the leadership of the party. Those group who lost during this party election resigned from the party and established a new party called National Thrusworthy Party or Parti Amanah Negara (Amanah) (Khalid, 2016).<sup>29</sup> The new party headed by the former PAS vice president Mohammad Sabu declared its determination to work together with DAP and PKR. They eventually assembled a new opposition pact the Hope Alliance or Pakatan Harapan ("Konflik Dasar Parti Bayangi Ikatan Pakatan Harapan,"2016).<sup>30</sup>

## CONCLUSION

Pas protracted unpredictable political cooperation with other parties cut across just in winning an election but also to build up their mutual collective understanding . Their concerted views and concerns about society bring PAS and DAP together despite their ideological differences. Political notations and terminologies about democracy, justice, freedom, and good governance are what that bind them together in BA and PR. This is despite the fact that they hold dearly to their original parties struggles. Nevertheless their relationship are both tumultuous and challenging. Consequently, it is bound to happen that the interest of the alliances and the basic struggles of each party would collude and shook their political coalition.

This article has undoubtedly shown that PAS somewhat upheaval political adventure is still shackled between appeasing the demands of the joint commutual policy of the alliances and its perpetual desire to install an Islamic Nation and the hudud law. The loose political linkup of the alliances is not binding which has a loophole that PAS exploited to its advantage to institute its own individual party agenda while still tie-down down to the partnerships. It raises the shaky contention that PAS selflessly looks up to its own party but looks down on its teammate in the alliances. Does it also mean that PAS is more concern about syariah than listening to the

voice of the people? PAS is not willing to sacrifice its own party perennial ambition but more willing to forego the support of the people and being kept out of the alliances.

PAS is still grappling on how to deftly equilibrate in managing sometimes conflicting twin roadmaps of the alliance to that of its party. This failure is due in part to the contradiction that exists of between remaining faithful to the party principles and going for broke in order to acquire the glory of power through an electorate victory assisted by the alliances. As a whole, this whole episode that we have discussed indicates that PAS political coalition is a matter of coalition of convenience and short-lived in nature.

## REFERENCES

Batal Pakatan dengan DAP. (2015, Jun 4). *Berita Harian*. hlm. 6

DAP Kekal dalam Pakatan Rakyat, Putus Hubungan dengan Hadi. (2015, Mac 24). *Rocketkini*. <http://www.rocketkini.com/2015/03/24/dap-kekal-dalam-pakatan-rakyat-putus-hubungan-dengan-hadi/>

DAP Tidak Faham Bahasa. (2015, Mac 16). *Utusan Malaysia*. hlm. 5

Farish A. Noor. (2016). *The Malaysian Islamic Party PAS 1951-2013*. Petaling Jaya: Strategic Information and Research Development Centre (SIRDC)

Gerak dilancar Tumbang BN. (1999, April 17). *Eksklusif* bil. 01. hlm. 2

Hudud: DAP Beri Ingatan Kepada PAS. (2015, Februari 18). *Utusan Malaysia*. hlm. 5

Ingin Islam Perintah Malaysia. (1999, Mei 31 – Jun 6). *Eksklusif* bil. 07. hlm. 19

Istilah Pakatan Rakyat dicadangkan Presiden PAS. (2008, Ogos 18 – 21), *Harakah* bil. 1367. hlm. N3

Keane, J. (1993). *Power Sharing Islam?*. London: Liberty for Muslim World Publications

Khalid Samad. (2016). *Dari PAS ke Amanah*. Petaling Jaya: Ilham Books

Konflik Dasar Parti Bayangi Ikatan Pakatan Harapan. (2016, Januari 9). *Berita Harian*. hlm. 11

Lim Kit Siang. (2001). *BA & Islamic State*. Petaling Jaya: Democratic Action Party

Manifesto Membela Rakyat. (1999, tarikh). *Eksklusif* bil. 29. hlm. 4

M. Hafiz Abdul Samad & M. Redzuan Othman. (2013). Reformasi 1998 dan Kesannya terhadap Pilihan Raya Umum ke-10, 1999 di Malaysia. *Jurnal Pusat Kajian Demokrasi dan Pilihan Raya Universiti Malaya (UMcedel)*, 2(1), 73-90.

Mohd Izani Mohd Zain. (2005). *Islam dan Demokrasi: Cabaran Politik Muslim Kontemporari di Malaysia*. Kuala Lumpur: Penerbit Universiti Malaya

Mujahid Yusuf Rawa. (2012). *Rejuvenasi PAS: Idea Realiti Aplikasi ke arah Aspirasi Massa*. Seremban: Ilham Centre.

PAS Tidak Akan Gadai Prinsip. (2008, September 29 – Oktober 5). *Harakah* bil. 1379. hlm. F3

PKR Sokong DAP Tolak Hudud. (2015, Mac 17). *Utusan Malaysia*. hlm 6

Saingan Kerusi Parlimen Pertembungan Dua Suara. (2015, Jun 3). *Berita Harian*. hlm. 8

Semua Sayap PAS Sokong Hudud di Kelantan. (2014, April 7 – 10). *Harakah* bil. 1935. hlm. N3.

## Footnotes

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Pakatan Rakyat or People Front is suggested by PAS President, Dato'Seri Abdul Hadi Awang in a seminar one month after the 2008 General Election. The term People Front is suitable as a loose confederation between parties in the People Front. It means a front that function according to platform as agreed by the Malaysian people who love justice and welfare.

The 12<sup>th</sup> General Election was on 8<sup>th</sup> March. Parliament was dissolved on 13<sup>th</sup> February 2008 and candidate nomination was on 24<sup>th</sup> February 2008.

Speech by the President, Dato' Seri Abdul Hadi Awang, in the People Front Convention on 29<sup>th</sup> November 2009 at Shah Alam.

PAS Manifesto for the 2008 General Election contains 12 main items, namely Trustworthy Governance, Just and Clean, Prudent Management of the National Wealth, Guarantee the Security of Lives, Respect of Property by Eliminating Crime, Comprehensive Education as the catalyst of Change, Guarantee Health Service of the People, Welfare of the Public and Private sectors workers,

Guardian as a whole people-friendly welfare, Special offer for women, Developing the Agriculture Industry and with that improving the livelihood of Farmers and Fishermen, Ethical Policy and Free Mass Media Practice, Clean and Democratic, Preserving the Environment and National Harmony Policy.

For further reference, please refer to the Speech text on Policy Speech at the 45<sup>th</sup> PAS General Assembly (Muktamar), entitled "Together We Uphold Justice", by Datuk Haji Fadzil Mohd Noor 28<sup>th</sup> May 1999.

DAP consistently rejects the establishment of an Islamic Nation. This social democratic party considers the Islamic Nation Concept is not suitable for Malaysia as it can threaten the position and the freedom of non-muslims in this country.

This Manifesto was launched on 26<sup>th</sup> October 1999 at Chinese Assembly Hall, Jalan Maharaja Lela attended by high ranking party leaders from PAS, KeADiIlan, People Malaysia Party (PRM). This Joint Manifesto has 6 agenda, such as, Strengthening the Economy, Expand Transparency and Accountability, a New Social Contract in a New Era, National Harmony, To build a Genuine Democracy and Rehabilitate the international Image and Position of the country.

The Joint Commutual Policy of the opposition pact was introduced during the first People Front Convention at Shah Alam on 2009 where the political cooperation of PAS, DAP and PKR has reached its zenith. The Joint Commutual Policy covers Rejuvenate a Transparent Democracy, Generate a Higher Level Economy, Resolute and Just, Social Justice and human development, Federal and state relationship, and foreign affairs relationship. This joint policy is considered as a cooperative and democratic understanding that can unite the opposition block.

For further reference, please refer to the Speech text on Policy Speech at the 45<sup>th</sup> PAS General Assembly (Muktamar), entitled “Together We Uphold Justice”, by Datuk Haji Fadzil Mohd Noor 28<sup>th</sup> May 1999.

In PAS 1999 Annual General Assembly (Muktamar), “Pas admitted that they have differences. Small and big differences. But to overthrow a wicked, corrupted, chronic cronyism, nepotism are more important. We are not united yet but we are together.”

President Policy Speech in PAS 62<sup>nd</sup> Annual General Assembly (Muktamar) on 4<sup>th</sup> June 2015.  
President Policy Speech in PAS 61<sup>st</sup> Annual General Assembly (Muktamar) on 19<sup>th</sup> September 2015.

Deliberating and Debating (Munafasyah) the 58<sup>th</sup> President Policy Speech,” A Welfare Nation is the Thrust of Fellowship “, on 26<sup>th</sup> January 2013 at the Islamiyah Education (Tarbiyah) Center at Pengkallan Chepa, Kelantan.

President Policy Speech in PAS 62<sup>nd</sup> Annual General Assembly (Muktamar) on 4<sup>th</sup> June 2015  
President Policy Speech in PAS 58<sup>th</sup> Annual General Assembly (Muktamar),” PAS For ALL”, on 1<sup>st</sup> August 2015.

For further reference, please refer to the working paper, entitled, “*Tahaluf Siyasi*: Guidelines from an Islamic Perspective”, prepared by the PAS’s Ulamak ( Religious Scholars) Consultative Council.

For further reference, please refer to the working paper, entitled, “*Tahaluf Siyasi*: Guidelines from an Islamic Perspective”, prepared by the PAS’s Religious Scholars Consultative Council.

President Policy Speech in PAS 62<sup>nd</sup> Annual General Assembly (Muktamar) on 4<sup>th</sup> June 2015  
Please refer to Clause 5 of PAS Constitution.

DAP consistently rejects the establishment of an Islamic Nation. This social democratic party considers the Islamic Nation Concept is not suitable for Malaysia as it can threaten the position and the freedom of non-muslims in this country. DAP added that the establishment of an Islamic Nations is contrary to the joint understanding of the opposition block in BA. It is also not included in the Joint Manifesto of BA in the 1999 General Election.

PAS Central Daily Committee Meeting Reminder on the 7<sup>th</sup> of July 2001.

For further reference, please refer to the working paper, entitled, “*Tahaluf Siyasi: Guidelines from an Islamic Perspective*”, prepared by the PAS’s Religious Scholars Consultative Council.

Syariah Criminal Penal Enactment (2) 2015 is an enactment allocated to criminal offenses under syariah, qisas and ta’zir hudud law and related matters. The types of offences punishable under hudud includes *Sariqah* (stealing), *Hirabah* (individual who robs using force), *Zina* (adultery) and sodomy, *Qazaf* (accusing adultery and sodomy), *Syurb* (drinking alcohol and getting drunk or intoxicated) and Irtidad (apostasy). This enactment contains 71 clauses.

DAP reemphasized that People Front is committed as a collective government representing the aspirations of all Malaysian, regardless of race, religion and beliefs and hope to construct a new Malaysia based on the values of freedom, justice, democracy, integrity, and human dignity. DAP also reiterated that all component parties in the People Front Alliance should uphold the Joint Commutual Policy through mutual understanding based on honesty and respect one another in the People Front (PR)’s Leadership Council.

Hansard of the 12<sup>th</sup> State Assembly, 5<sup>th</sup> term sitting, 1<sup>st</sup> Meeting, 21<sup>st</sup> March 2012  
 “PKR Sokong DAP Tolak Hudud”, *Utusan Malaysia*, 17 Mac 2015.

President Policy Speech in PAS 6<sup>1st</sup> Annual General Assembly (Muktamar) on 4<sup>th</sup> June 2015

Lim Kit Siang said that Abdul Hadi admitted there were many things must be done before Hudud can be implemented, for example if we want to enforce the amputation of hand for stealing, the minimum wage must be established first.

According to Khalid Samad, Amanah Party has the same policy as PAS, only the different is that we practise honest cooperation and commitment to the political cooperation in the opposition block.

Amanah, DAP and PKR had signed a Hope Cooperation Agreement or Pakatan Harapan Agreement to ensure that the cooperation between themselves will be a universal lasting one and to avoid any breakup as in PR would not happen again. Among the matters that had become mutual policies are the principle and approach in designing mutual policy and loyalty in adhering to mutual policies; principle and approach in the running of the election including determining the seats to be nominated; principle and approach in managing the running of Pakatan Harapan Alliance government and the opposition block and principle and approach in handling a situation when the agreement was breached.



## IMPLEMENTATION OF HOTS IN DEBATE STRATEGY TO IMPROVE THE ABILITY OF SPEAKING ARABIC AMONG STUDENTS

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### ABSTRACT

*Teaching Arabic as a second language in higher institutions to students who are non-Arabic speakers has been a challenge. Although different methods and strategies have been implemented in different places, the results remain same. The phenomenon of students who cannot speak Arabic actively is seen as a common problem in many universities. Among the reasons is that the lecturers have not been able to implement appropriate learning strategies in teaching foreign languages. This study aims to measure the effectiveness of the implementation of debate strategies in improving students' Arabic speaking skills and critical thinking. This study uses a pre-experimental design to know the effectiveness of applying the debate strategy. Data collection uses instruments in the form of tests, observations and documentation, and the data are analyzed quantitatively. The results show that the application of the debate strategy can improve Arabic speaking skills and critical thinking of students with  $t\text{-count} > t\text{-table}$  ( $3.5 > 2.09$ ) which means that the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_a$ ) was accepted. Thus the application of HOTS in the Arabic debate strategy can improve students' speaking skills and critical thinking. The results of this study provide input for using HOTS in every learning activity to be more effective in improving learning outcomes.*

**Keywords:** Higher Order Thinking Skills, Strategy, Debate, Speaking Skills, Critical Thinking

## INTRODUCTION

Nowdays, language instructors are required to be able to overcome the problem of language learning for foreign speakers. The result of a research in Indonesia conducted on students majoring in Arabic shows that most of them find difficulties in speaking Arabic, with an error rate reaching 74% (Bahruddin & Halomoan, 2019) on the other aspect, speaking skills are the core of language competence that requires each language learners to master it well. Mastery of speaking skills will enable learners to use language in accordance with its function, namely as a means of communication among members of the community.

This condition requires language lecturers to make various innovations to be able to do active and interesting language learning (Saidi & Al Hausaniyah, 2017) indeed, various methods and strategies have been used by lecturers when teaching in order to improve the quality of speaking skills, so that learning objectives can be achieved optimally. However, the learning models, methods and strategies used are still traditional in nature as they have been published in educational and social scientific journals (Firmansyah, 2017). Moreover, the skills needed to be mastered by students are not just four active language skills, but they must also have the ability to think critically in implementing these skills (Trilling, B & Fadel, C, 2009). This is a demand for learning in the modern era, which is characterized by speed in everything. Among the models that can be used to accelerate language learning is a HOTS (High Order Thinking Skill) based model which contains analysis, evaluation and creation which follow the result of Bloom's taxonomy development as conducted by Anderson and his friends (Anderson & Krathwohl, 2001) (Brookhart, 2010). The strategy related to language learning based on HOTS is the practice of a debate using foreign languages the students learn. Therefore, the merging of these two components in learning can improve speaking skills and familiarize students with critical thinking when using a second language. Using a debate method in learning has actually existed in ancient times, specifically in the time of Aristotle (348-322 BC), Protagoras of Abdera, dubbed the "Father of Debate" in Athens (481 BC), even farther from the chou dynasty (chou dynasty) (1122-255 BC) (Huryn, 1986). This means that the debate itself has undergone a long process, therefore, it is considered a good way and must be used as an alternative in learning Arabic.

This debate has been used at the college level in various disciplines, including nursing, medicine, and pharmacy (Doody & Condon, 2012; Keynejad et al., 2017; Peasah & Marshall, 2017). Several studies have proven that debates can develop oral communication, critical thinking, reasoning abilities and teamwork (Candela et al., 2003; Hanna et al., 2014; Arrue et al., 2017). When students are given a topic to

debate, they will try to find data, arguments that can strengthen their debate position whether as opposition or proponent. They will benefit from these abilities as long as they prepare themselves in mature manner.

Structured debate requires consideration of alternative opinions before coming to conclusions about the topic being discussed. This debate aims to train analytical and critical thinking, and evaluate the strengths and weaknesses of each view (Vo & Morris, 2006; Kennedy, 2009). Delivering the results of analysis and criticism of a theme should be supported by a practice of continuous speaking. Therefore, in order get desirable goal in this skill, a fluent speaking is needed for the good debate. Stammering in a debate is a problem and must be avoided in order to get better performance.

Debate can increase student involvement in the educational process, encourages independent and critical thinking, and it attracted students and teachers alike (Snider & Schnurer, 2006). Debate can also make someone open and exposed to see a problem from various perspectives and think about it deeply, increase accountability in learning, pre-class preparation and involvement in the classroom, (Arrue & Zarandona, 2019; Rodger & Stewart-Lord, 2020). Thus, debate can be an alternative for effective learning strategy to improve Arabic speaking skills, as well as critical thinking. Debate can also encourage teamwork and inspire a sense of friendship, because apart from careful preparation, it also requires the ability to think and produce an effective refutation (Koklanaris et al., 2008). A critical thinking is one part of HOTS.

The results show that the application of debate strategies in learning can make someone more open in seeing a problem from various perspectives and deeper thinking, increasing learning accountability, pre-class preparation and involvement in class, as well as promoting diffusion in the educational community (Arrue & Zarandona, 2019) (Rodger & Stewart-Lord, 2020). The research can be understood that the debate strategy can produce deep thinking and analytical skills which are an inseparable part of HOTS.

Research conducted on English learning shows that learning based on HOTS is proven to improve students' reading skills, making students able to criticize a text with logical opinions and can answer several questions that demand analytical, evaluation and creative abilities (Pamungkas, 2017). The need for the adoption of HOTS in the debate strategy was revealed from the results of interviews with Rikza, Maisarah and Maulida, students of the Arabic Language Education Program at the Maulana Malik Ibrahim

State Islamic University of Malang. They also said that the weakness was due to lack of vocabulary, especially scientific expressions that they rarely listened to (Interview, 09/16/2019). Thus, empirical foundation is still needed in regard with the application of debate to improve students' speaking and critical thinking skills in the context of learning Arabic in Higher Education.

## **LITERATURE REVIEW**

### **The concept of applying HOTS in debates**

Higher Order Thinking Skill (HOTS) is the result of Bloom's taxonomic revision in a taxonomy for learning, teaching, and assessing (Anderson & Krathwohl, 2001) (Brookhart, 2010) in the order of: (a) remembering, (b) understand, (c) apply, (d) analyze, identify and understand parts of the material or the whole material, (e) evaluate, and (f) create. Included in the HOTS category are analyze, evaluate and create, Wendy also added that HOTS includes creative and critical thinking skills (Conklin, 2012).

Debate is one form of general submission in the form of an expression of an argument that confronts two or more speakers around a chosen issue in a certain period of time (Markaz, 2020). In the debate process, the speakers express their ideas and opinions freely. The free expression is a useful strategy for practicing students' speaking skills (Ar Rukkabi, 1986). A good debate is result of sharp analysis, quality evaluation and it can create good arguments.

Using debate in learning is a creative way of learning process, and it is good because learning is actually a harmonious blend of teaching activities undertaken by teachers and learning activities carried out by students (Helmiati, 2013). Learning is also an integration of the concepts of teaching and learning. The emphasis lies on the combination of the two, namely the growth of the educator's subject. The concept can be seen as a system, so that the learning system can include components of students, objectives, materials, facilities and procedures as well as tools or media that must be well prepared (Daryanto, 2012). According to Gagne and Briggs, "teaching is a set of events which affects learners in such a way that learning is facilitated" (Suparman, 2014).

Learning by using a debate strategy is one of the learning models that invites students to be active in conversations properly and correctly. Debate in the debate learning model is more directed at developing certain abilities among students, such as the ability to express logical, clear and structured opinions, listen to different opinions, and the ability to support views they prefer (Imas & Berlin, 2016). Debate in learning

is strategy that involves active students in the classroom, whether they are the debaters or just listeners (Hartono, 2008). Thus, this kind of debate model is also a strategy in active learning which will encourage students to participate in the activity by actively speaking about the arguments raised in the debate. The steps of learning through a debate strategy start with dividing participants into two groups of proponents and opponents, then each group reads and understands the materials to be delivered in the debate. Subsequently, the teacher appoints one group member to speak, while the other group responds, and vice versa. During the debate, the teacher writes the core of each conversation until it gets the expected agreement. Afterwards, the teacher adds concepts or ideas that have not been revealed in the debate. At the end of the debate, the teacher invites students to make conclusions or summaries agreed on the topic to be achieved (Abdussalam & Siddik, 2014).

Another learning steps applied in this model of study by applying HOTS in debates which aims to improve speaking skills are, (1) the lecturer gives an assessment of the subject matter that contains a brief explanation and provides a controversial explanation related to the subject matter, (2) the lecturer shares the text with students regarding the learning materials containing debatable (controversial) topics to be discussed on and performed by students who have read the text, (3) the other lecturers are divided into two large groups, namely proponent and opponent sides, (4) the lecturer explains the basic rules and strategies to be used in the debate, (5 ) the students practice the method (*uslub*) by looking at the text in the related argumentation given at the beginning of learning, (6) students utilize basic vocabularies, and the method (*uslub*) as instructed and approved by their lecturer, (7) the lecturer appoints three students from the proponent group and another three from the opponent group to prepare the debate venue, (8) the lecturer invites the first speaker to the proponent group to give an argument for two minutes. Later, the lecturer presents the first speaker to the group who gives a rebuttal to the argument of the first speaker. (9) passing the debate, the lecturer approves the students who hear the debate activities to review the points in the argument of the speaker on the paper distributed to them, (10) the lecturer involves in the debate activities by preparing a report provided with the contents of the debate speakers, (11) the lecturer calls on several questions about the materials and invites students to answer orally, (12) the lecturer invites students to make their respective conclusions, (13) The lecturer gives appreciation and opens learning session by making conclusion and reciting *hamdalah* followed by closing remarks. During the debate time, the proponent group will show the weaknesses of the opponent group so that the conflict and rebut-



tal process start. This is the important part of learning through debate model with the objective to achieve students' critical thinking skills.

Media dialogue, defending opinions and self-defense (Nasution, 2019) HOTS is related to improving students' thinking skills at a higher level, more importantly it is relating to the ability to think critically when receiving various types of information, creative thinking in solving problems using the knowledge needed (Husna, 2018).

Therefore, HOTS is one of the components and skills of creative and critical thinking. The creative and critical thinking can develop students to be more innovative, creative and imaginative (Havsari, 2019). That is because HOTS is not only learning by relying on memorization and understanding, but also training students to be able to analyze things and explain their ideas clearly.

### **Speaking skills**

Skills are the potential contained in human beings so that with it can to do certain jobs easily and accurately (Ilyani, 1992). While speaking is an interactive process for delivering and receiving information. Thus, speaking activities require a person's ability to express the right words (An-Naqoh, 1985). Speaking skills are the ability to express the sounds of articulation or words to express thoughts in the form of ideas, opinions, and desires to the speaking partner. Talking activities can be divided into two activities, namely before communicating and during communication (Hermawan, 2011).

The purpose of learning speaking skills is to enable students to communicate verbally well and naturally with the language they are learning. This is in accordance with the position of speaking skills in each language as the core or origin of the language (Bahruddin, 2018). Communicative goals in language learning cannot be achieved if the learner has not been able to use language verbally. Speaking skills include productive language skills, where a learner is required to be able to produce language verbally.

### **METHOD**

This study uses a Pre Experiment design (Creswell, 2014) by linguistic observation of the application of HOTS (Higher Order Thinking Skill) in debates to improve Arabic speaking skills and critical thinking of

students. This research was conducted at Maulana Malik Ibrahim State Islamic University of Malang. In this study, the researchers chose semester 3 (International Class Program) ICP Maulana Malik Ibrahim State Islamic University of Malang as an experimental class with a sample of twenty (20) students. They get lessons in speaking skills by applying HOTS to the debate strategy. This study uses two variables, it is the effectiveness of using a debate strategy as a variable X, while speaking skills as a variable Y. In this study, the research design used was One Group Pretest-Posttest Design. Data collection techniques are tests, observations and documentation, and they are analyzed quantitatively. Observation is used to make direct observations on the subject under study, while the test is used to measure the results obtained by students.

## RESULT AND DISCUSSION

### Implementation HOTS in the debate

Learning speaking skills by using HOTS in the debate strategy is carried out in the ICP class H program of the UA PBA Program Maulana Malik Ibrahim Malang. Learning practices were carried out by six meetings over six consecutive weeks including pretest and posttest, with a total of 20 students.

Based on observations at the first meeting, all the steps of its implementation were carried out accordingly, namely (1) the lecturer gave an overview of the subject matter in the form of a brief explanation and gave a controversial statement related to the subject matter, (2) the lecturer shared text to students about learning materials along with controversial statements to be debated and instructed students to read the text, (3) The lecturer divided students into two large groups, namely the proponent and opponent, (4) The lecturer explained the basic style and rules used in the debate, (5) Students practiced the method (*uslub*) by looking at the text in an argument related to the problems given at the beginning of learning, (6) Students used the basic vocabulary and method (*uslub*) that has been taught in answering lecturer questions, (7) the lecturer appointed three students from the proponent group and three students from the opponent group to occupy the place that has been prepared to carry out debate activities, (8) the lecturer invited the speakers to give their arguments with two minutes for every speaker, (9) during the debate, the lecturer instructed students who attend the debate to record points from speaker's arguments in papers provided, (10) the lecturer ended the debate activities by giving some notes related to the contents

delivered by the speakers in the debate, (11) the lecturer asked students several questions about the topic debated by answering them verbally, (12) the lecturer invited students to make conclusions respectively, (13) the lecturer concluded the session by highlighting important points discussed and closed the activity with the recitation of *hamdalah* and *salam*.

The implementation of steps mentioned above can be seen in table 1 that shows the scores ranging from score 4 with reference to the assessment range 4 = very well, score 3 = well, score 2 = average and score 1 = poor.

As for the second meeting, the lecturer did not explain the technical steps that would be used in the debate for it was similar to the previous steps mentioned in the first meeting with a score of 3.9 (very good). While at the third meeting and afterwards, the lecturer did not also explain the technical steps as they are similar to the previous meetings. Therefore, the lecturer did not invite the speakers to give their arguments, because they already knew their respective duties, with a score of accomplishment of 3.8 (very good).

For more details about the implementation of HOTS in the debate strategy which produced a very good score, this can be seen in table 1.

**Table 1. HOTS Implementation Scores in the debate**

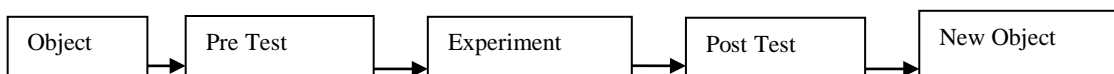
Meeting	Average	Category
1	4	Very good
2	3,9	Very good
3	3,9	Very good
4	3,8	Very good
5	3,8	Very good
6	3,8	Very good
Average	3,7	Very good

In table 1, it shows that at the first meeting, all the steps of using HOTS in the debate strategy were carried out well as shown in the table. It shows that the score achieve is four (4) with reference to the assessment range 4 which means it is the best result and the peak of achievement. While in the second meeting it shows that there is a decrease in score of achievement until it reaches a stable condition at the eighth, ninth, and tenth meeting. Based on these results, it shows that that the implementation of HOTS

in the debate strategy can achieve very good results when runs constantly. Whereas the other scores are not achieved, namely score 3 = well, score 2 = average and score 1 = poor. According to the table above, the researchers found that learning using HOTS in the debate has been obtained in a very good and stable category at meetings 4, 5 and 6. Therefore, based on the table as shown above it can be concluded that learning using HOTS in the debates can be utilized and carried out very well.

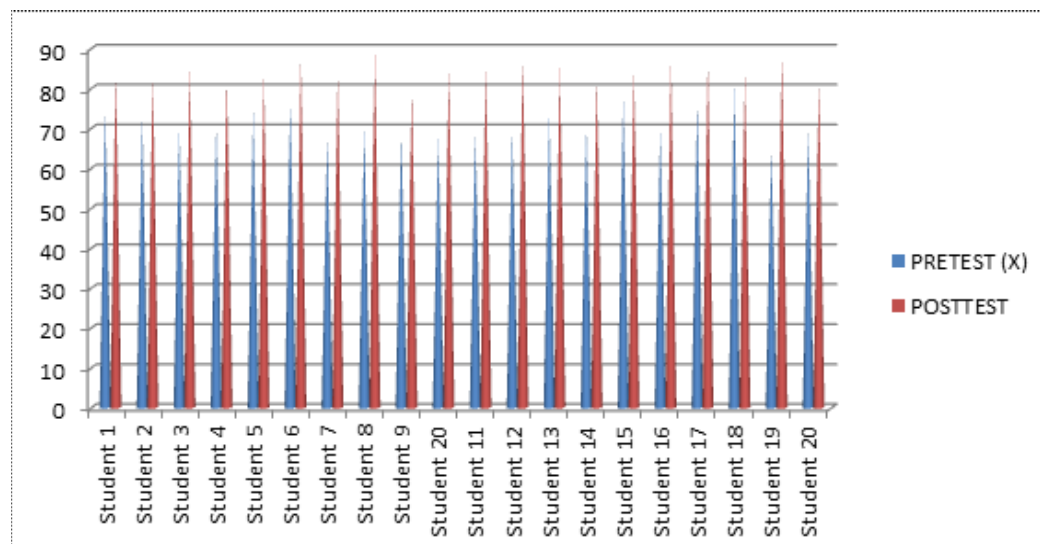
### **The effectiveness of HOTS implementation in debate strategies to improve speaking skills.**

After the pre-test and post-test results data in the form of student's score results obtained by processing ordinal data into interval data through calculations, the researchers compare the results of pre-test and post-test, and examine the hypotheses that have been determined by conducting data analysis so that research results can be achieved carefully. This study contained one group of subjects, which include an experimental treatment. The experimental research design used can be seen in Figure 1.



**Figure 1. Pre-test and Post-Test design block diagram**

In Figure 1, the effect of a treatment on the dependent variable will be tested in the group. In this study, the Pre Test and Post Test design was used. The Pre Test and Post Test processes use the t test or t-test formula for small, interconnected samples. Comparison of scores or pre-test and post-test scores obtained from this study can be displayed on the graph in Figure 2.



**Figure 2 Graphic Student Pre-Test and Post-test Value**

In figure 2, the test for 20 students obtained 4 categories of rating, the first category was students who were treated showed a post-test score that is low as many as 3 students, then the second category was obtained as many as 4 students, the following category was obtained as high as 5 categories and competing categories high as much as 8, for the high category was identified by students with female gender, for the low category was dominated by male. Background of students getting high HOTS influence because of their discipline in preparing the debate materials, while students get low HOST effect because of the minimal preparation when participating in the debate.

Furthermore, the mean score on the pre-test was 71.9 with a standard deviation of 3,782, while the mean score on the post-test was 84.95 with a standard deviation of 2,398. This shows that there are significant differences between pre-test and post-test in terms of ability of students to speak Arabic and think critically. The grades of students who have been taught using the debate strategy obtain an average score that is much higher than before. This means that the application of HOTS in the debate strategy can significantly improve Arabic speaking skills and critical thinking of students. The mean and standard deviation can be seen in table 2.

**Table 2. Mean and standard deviation (SD) of pre-test and post-test**

Devendent Variable	Method	N	Mean	SD
Ability to speak Arabic and think critically students	Pre-test	20	71,9	3,782
	Post-test	20	84,95	2,398

The result of  $t_{count} = 3.5$ , while the result of  $t_{table}$  is 2.09 in  $df = N_x + N_y - 1 = -1 + 20 - 1 = 19$ . This result shows that  $t_{count} > t_{table}$ . Therefore the null hypothesis is rejected and the alternative hypothesis is accepted. This means that the use of HOTS in debate strategies in teaching Arabic significantly improves students' critical speaking and thinking skills. As in table 3:

**Table 3. The results from the t-test of the post-test scores**

Devendent Variable	DF	T-count	T-table	Result	Hypothesis	Remark
Ability to speak Arabic and think	19	3,5	2,09	Significant difference in means	Ho	Reject



critically students	
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The hypotheses studied were obtained after the analysis, showing that there were differences between students who were before and after being taught with a debate strategy. That difference shows that the debate strategy positively influences students' speaking skills and students' critical thinking. The results showed T-count was higher than T-table which was  $3.5 > 2.09$ . This is in line with research which found that debates can improve encouraging critical thinking, deep thinking increases learning accountability, pre-class preparation and classroom involvement (Snider & Schnurer, 2006; Arrue & Zarandona, 2019; Rodger & Stewart-Lord, 2020; Koklanaris et al., 2008). In the English language, HOTS strategy-based learning is proven to improve students' reading skills and to make the students able to criticize a text with logical opinions and be able to answer several questions that demand analytical, evaluation and creative abilities (Pamungkas, 2017).

It can be concluded that the application of HOTS in the debate strategy has a significant effect on students' speaking skills. From the statistics shown above and interviews with students, a comparison is obtained before and after treatment. Students who are taught with debate strategies speak Arabic more fluently than before and are more critical in understanding a discourse. This is demonstrated when students actively participate and involved in giving responses, and the tests show that most students get better grades.

Based on the observations, there are positive impacts on student's performance during the learning process using a debate strategy. Among the impacts are: the students become more active in learning. This is because their learning method is student-centered using debate strategy which forces students to read, listen to opponents' arguments, dare to speak, express opinions of the opponents with polite, and focus on the topic being discussed.

## CONCLUSION

Among the findings reached in this research are: the implementation of HOTS in the debate on learning speaking skills for ICP H PBA students of the State Islamic University of Maulana Malik Ibrahim Malang, showed very good results with a score of 3.9. The study also showed an increase in speaking skills

after treatment of ICP H PBA students of the State Islamic University of Maulana Malik Ibrahim Malang in the process of learning speaking skills. The average value of the increase from 71.9 to 84.95. Furthermore, by looking at the results of the calculation of the t-test formula for small samples that are interconnected in this study, which shows that  $t\text{-count} = 3.5$  and  $t\text{-table} = 2.09$  where  $t\text{-count} > t\text{-table}$  ( $7.6 > 2.09$ ) so that the hypothesis is null ( $H_0$ ) was rejected while the alternative hypothesis ( $H_a$ ) which read "there is a significant influence of the application of HOTS in the debate on the ability to speak Arabic and critical thinking of ICP H PBA students of the State Islamic University of Maulana Malik Ibrahim Malang can be accepted and proven". Thus, it can be concluded that the results of this study showed that there is a significant influence on the application of HOTS in the debate strategy on the ability to speak Arabic and critical thinking among ICP H PBA students of the State Islamic University of Maulana Malik Ibrahim Malang.

This research is limited to the application of HOTS in teaching speaking skills using a debate strategy, which shows a positive impact because students are required to make preparations before the learning process begins. Given these limitations, future researchers can conduct further similar research by applying HOTS to other learning strategies.

The learning process of speaking skills in Arabic is influenced by several determinants in addition to strategy, including student motivation, lecturer competence, media and appropriate teaching materials. Thus, the results of research found that the benefits of HOTS in this learning strategy can encourage improvements in learning Arabic in general. By integrating all the factors of language learning to the maximum, students will get learning outcomes in accordance with learning objectives.

## REFERENCES

- Abdussalam, I., & Siddik, M. (2014). *58 Model Pembelajaran Inovatif*. Media Persada.
- Aditya Fajrin, A. (2019, October 21). *Wawancara* [Personal communication].
- Afifah. (2109, October 21). *Wawancara* [Personal communication].
- An Naqoh, mahmud K. (1985). *Ta'lim Al Lughah Al Arabiyah Li An Nathiqina Bi Lughatin Ukhra*. Ma'had Al Lughah Al Arabiyah.

- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (Complete ed). Longman.
- Andriani, A., Dewi, I., & Halomoan, B. (2018). Development of Mathematics Learning Strategy Module, Based on Higher Order Thinking Skill (Hots) To Improve Mathematic Communication And Self Efficacy On Students Mathematics Department. *Journal of Physics: Conference Series*, 970, 012028. <https://doi.org/10.1088/1742-6596/970/1/012028>
- Ar Rukkabi, J. (1986). *Thuruq Tadris Al-Lughah Al Arabiyah*. Dar al Fikri.
- Arrue, M., Unanue, S., & Merida, D. (2017). Guided university debate: Effect of a new teaching-learning strategy for undergraduate nursing students. *Nurse Education Today*, 59, 26–32. <https://doi.org/10.1016/j.nedt.2017.08.011>
- Arrue, M., & Zarandona, J. (2019). El debate en el aula universitaria: Construyendo alternativas para desarrollar competencias en estudiantes de ciencias de la salud. *Educación Médica*, S1575181319301986. <https://doi.org/10.1016/j.edumed.2019.10.016>
- Assegaf, T. (2019, October 21). *Wawancara* [Personal communication].
- Bahrudin, U. (2018). *Dirasaat Fi Ilmi Al Lughah At Tathbiqi*. Uin Maliki Press.
- Bahrudin, U., & Halomoan. (2019). Tahlil Al Akhta' Asy Syai'ah Lada Thullabi Qismi Talim Al Lughah Al Arabiyah FI Al Jami'ah Al Islamiyah Al Hukumiyah bi malang. *Journal Of Arabic Studies*, 2, 201–214. <http://dx.doi.org/10.24865/ajas.v4i2.186>
- Baiti, N. (2019, October 21). *Wawancara* [Personal communication].
- Brookhart, S. M. (2010). *How to assess higher-order thinking skills in your classroom*. ASCD.
- Candela, L., Michael, S. R., & Mitchell, S. (2003). Ethical Debates: Enhancing Critical Thinking in Nursing Students. *Nurse Educator*, 28(1), 37–39. <https://doi.org/10.1097/00006223-200301000-00013>
- Conklin, W. (2012). *Higher-order thinking skills to develop 21st century learners*. <http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=663306>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). SAGE Publications.
- Daryanto. (2012). *Model Pembelajaran Inovatif*. Gava Media.
- Doody, O., & Condon, M. (2012). Increasing student involvement and learning through using debate as an assessment. *Nurse Education in Practice*, 12(4), 232–237. <https://doi.org/10.1016/j.nepr.2012.03.002>
- Dusturia, N. (2019, October 21). *Wawancara* [Personal communication].

- Firmansyah, M. B. (2017). *Model Pembelajaran Diskusi Berbasis Perilaku Berliterasi Untuk Keterampilan Berbicara*. 2(2).
- Hanna, L.-A., Barry, J., Donnelly, R., Hughes, F., Jones, D., Lavery, G., Parsons, C., & Ryan, C. (2014). Using Debate to Teach Pharmacy Students About Ethical Issues. *American Journal of Pharmaceutical Education*, 78(3), 57. <https://doi.org/10.5688/ajpe78357>
- Hartono, dkk. (2008). *PAIKEM (Pembelajaran Aktif Inovatif Kreatif Efektif dan Menyenangkan)*. Zanafa Publishing.
- Havsari, V. O. (2019). *Penguatan Daya Nalar Peserta Didik Melalui Penilaian HOTS Berbasis Literasi Sains* (Vol. 1). <http://eproceedings.umpwr.ac.id/index.php/semnaspgsd/article/viewFile/1082/931>
- Helmiati. (2013). *Micro Teaching*. Aswaja Pressindo.
- Hermawan, A. (2011). *Metodologi Pembelajaran Bahasa Arab*. Remaja Rosdakarya.
- Huryn, J. S. (1986). Debating as a Teaching Technique. *Teaching Sociology*, 14(4), 266. <https://doi.org/10.2307/1318385>
- Husna. (2018). *HOTS (Higher Order Thinking Skills) dan Kaitannya dengan Kemampuan Literasi Matematika*, Prisma, Prosiding Seminar Nasional Matematika. 171.
- Ilyani, A. F. (1992). *Al Maharah Al Lughawiyah*. Dar al muslim.
- Imas, K., & Berlin, S. (2016). *Model Pembelajaran*. Kata Pena.
- Kennedy, R. R. (2009). The power of in-class debates. *Active Learning in Higher Education*, 10(3), 225–236. <https://doi.org/10.1177/1469787409343186>
- Keynejad, R. C., Creed, S., Fernando, M., Bell, D., Codling, D., Crowther, G., Harrison, J. R., Jaleel, S., Kendall, K., Megahey, L., Noble, E., O'Donnell, C., Pilcher, F., Walker, T., & McLaughlan, D. (2017). Docbate: A National Medical Student Debate. *Academic Psychiatry*, 41(6), 839–841. <https://doi.org/10.1007/s40596-017-0697-1>
- Koklanaris, N., MacKenzie, A. P., Fino, M. E., Arslan, A. A., & Seubert, D. E. (2008). Debate Preparation/Participation: An Active, Effective Learning Tool. *Teaching and Learning in Medicine*, 20(3), 235–238. <https://doi.org/10.1080/10401330802199534>
- Maisarah, I. (2019, October 21). Wawancara [Personal communication].
- Markaz, munazharat Q. (2020). *Mafhum Al munazharah*. <https://www.qatardebate.org/ar/>
- Maulidatuzzakiya. (2019, October 21). Wawancara [Personal communication].
- Nasution, H. (2019). *Kiat Menjadi Pemenang Debat Bahasa Arab*. Pustaka Diniyah.
- Oktavia, W. (2019, October 21). Wawancara [Personal communication].

- Pamungkas, N. A. R. (2017). Penerapan Higher Order Thinking Skills (HOTS) untuk Meningkatkan Keterampilan Membaca Siswa SMA. *Tajdidukasi*, VIII.
- Peasah, S. K., & Marshall, L. L. (2017). The use of debates as an active learning tool in a college of pharmacy healthcare delivery course. *Currents in Pharmacy Teaching and Learning*, 9(3), 433–440. <https://doi.org/10.1016/j.cptl.2017.01.012>
- Q. Aini, F. (2019, October 21). *Wawancara* [Personal communication].
- Ridwan, A. F., Alimuddin, R., & Djadir. (2019). Efektifitas Penerapan Pendekatan SAVI Setting Cooperative Script dalam Pembelajaran Matematika siswa kelas IX SMP Negeri 33 Makassar. *Jurnal Matematika, Fakultas Matematika Dan Ilmu Pengetahuan Alam Universitas Negeri Makassar*, 3, 70–80.
- Rikza Irnaini Al Badri, H. (2019, October 21). *Wawancara* [Personal communication].
- Rodger, D., & Stewart-Lord, A. (2020). Students' perceptions of debating as a learning strategy: A qualitative study. *Nurse Education in Practice*, 42, 102681. <https://doi.org/10.1016/j.nepr.2019.102681>
- Rozi, F. (2018). Uslub Al Munazarah Bi Al Madkhal Al Fa'ali Fi Ta'lim Maharah Al Kalam. *Ihya al-Arabiyyah*, 4.
- Saidi, A. bin K. A., & Al Hausaniyah, H. binti A. (2017). *Istiratijiyat At Ta'lim An Nasythi* (Vol. 1). Dar al maisarah.
- Snider, A., & Schnurer, M. (2006). *Many sides: Debate across the curriculum* (Rev. ed). International Debate Education Association.
- Suparman, M. A. (2014). *Desain Instruksional Modern: Panduan Para Pengajar dan Inovator Pendidikan*. Erlanga.
- Tohiroh, C. (2019, October 21). *Wawancara* [Personal communication].
- Trilling, B., & Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times*.
- Vo, H. X., & Morris, R. L. (2006). Debate as a Tool in Teaching Economics: Rationale, Technique, and Some Evidence. *Journal of Education for Business*, 81(6), 315–320. <https://doi.org/10.3200/JOEB.81.6.315-320>

## CONSUMER PROTECTION IN LIFE INSURANCE INDUSTRY AND ITS CHALLENGES IN INDONESIA: A QUALITATIVE EXPLORATORY STUDY

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### ABSTRACT

*Trust is a crucial factor in the financial industry. Some of the financial scandals that had impacted Indonesia include the 1998 economic crisis. Such phenomenon had encouraged the regulator to apply adequate consumer protection to the Indonesians. Furthermore, the existence of adequate consumer protection will have a direct impact on the Indonesian financial industry, particularly in the life insurance sector where the rate of penetration in the last 10 years is still low. The implementation of consumer protection in the Indonesian context is untimely and inconsistent. This paper, based on empirical research, explored the existing conditions for the implementation of consumer protection across Indonesia's life insurance industry. In addition, this paper also analyzed the perception of the benefits and challenges involved in implementing those requirements. The study found that consumer protection is still in progress at work, inconsistent and not implemented optimally, although there are a number of benefits and risks if implemented as needed. This condition arose because of the lack of commitment by the regulator to consistent implementation, lack of quality assurance and unsuitable selling process as well as limitations in capability and competence in the appointed dispute resolution body. The authors suggest multiple actions including implementing periodic regulatory quality assurance for the quality of implementation in the form of assurance review and sanctions as well as strengthening the need based selling platform for life insurance companies. In addition, there is a need to develop an effective and measurable financial literacy and financial inclusion programs for consumers and build a life insurance product and process related competency and capability of the arbitrator and mediator from the appointed dispute resolution. Finally, the authors recommend the establishment of awareness programs on the existence of the dispute resolution body across cities in Indonesia.*

### Keywords

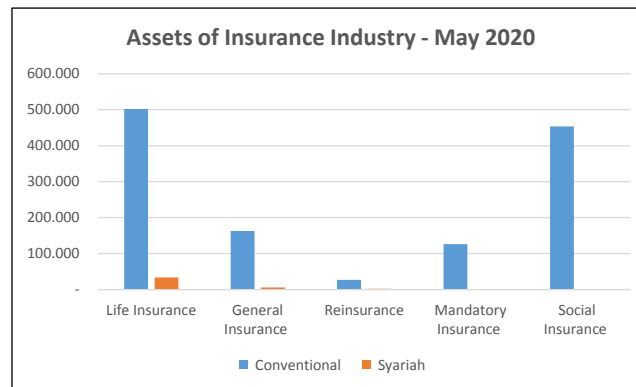
*consumer protection, life insurance, regulation.*



## INTRODUCTION

In Indonesia, the development of the insurance industry is quite positive. The Indonesian Financial Service Authority ("Otoritas Jasa Keuangan, OJK") noted significant growth in asset size in the last five years since 2012. OJK is an independent and integrated financial authority that established by the Law No 21 of 2011. It has authority to regulate, supervise, inspect, and investigate all financial activities and institutions in Indonesia. The government is mandated to implement and integrate regulation and supervision of all activities relating to financial services, including insurance. Based on OJK data, the insurance industry's total assets reached IDR 584.02 trillion in 2012 while its assets jumped to IDR 968.92 trillion by the end of 2016 [1]. Subsequently, based on data from OJK in December 2019, its assets jumped almost 50% to IDR 1,371.18 trillion. The penetration and insurance density are also higher. Insurance penetration describes the development of insurance when compared with the development of Gross Domestic Product (GDP). While insurance density describes the average expenditure of Indonesian population for insurance within a year. As of January 2017, the insurance industry contribution reached 2.87 percent of GDP; while regarding insurance density, the average spending of Indonesian population for insurance amounted to IDR 1.29 million per year. This penetration, however, is still lower than regional countries like Singapore, Malaysia and Thailand where the rate has reached 5 per cent. Based on OJK statistics in May 2020 [2], Indonesia's total number of insurance companies reached 152 that consist of 79 general insurance companies, 61 life insurance companies, 7 reinsurance companies, 3 compulsory insurance companies and 2 social insurance companies.

Specifically, life insurance industry is important as it helps transfer risks away from the insured to the policy issuer. By assisting in risk transfer, insurance allows the insured to undertake projects or engage in economic activities and transactions which otherwise would not have been engaged due to the risk. Furthermore, insurance manages risk by pooling exposures such that ultimately aggregate losses are shared across the economy. This applies more so for long term insurance as life policy issuers remain one of the major investors with funds invested in the real economy mainly in the form of debt and equity instruments. Due to its long-term nature and considerable contribution to the economy [3], life insurance is at the forefront when it comes to the right to adequate consumer protection, such as demanding disclosure of accurate and reliable information when deciding to buy or sell insurance. In addition to its significant contribution to financial assets, the consumer protection aspect is deemed as important by both the policy issuer and insured (refer Table 1).

**Table 1. Assets of Insurance Industry – May 2020**

According to OJK Statistics in May 2020, with nearly IDR 535.16 trillion, life-policy issuers hold more than three times the financial assets of non-life policy issuers. Based on Table 1, there is a small contribution by Sharia Insurance in the life insurance companies' asset size. For many families, a life insurance policy is necessary for financial continuity in the event of an unexpected death. The policyholder in seeking to buy an insurance policy is usually expected to disclose all information necessary that will enable an intermediary to provide relevant advice. In the same vein, policy issuers are also expected to conduct a proper selling process based on the needs of the consumer, which also covers sufficient explanation of products, features, charges, benefits, exclusions, and illustrations relevant to the policy.

As Indonesia is an attractive market for life insurance industry and as there are still opportunities to improve the industry penetration and the density, the regulator (OJK) prioritized the consumer protection as one of its main oversight responsibilities. This is in accordance to Article 31 of Law No. 21 of 2011 on the Financial Services Authority that states the OJK will issue further provisions on consumer protection in the financial services sector [4]. The OJK issued a Consumer Protection Act for financial industry in August 2013 known as OJK Regulation No. 1/POJK.07/2013 which emphasized the transparency of products, a proper need based selling process, consumer complaint reporting and mechanism.

Taking account of this situation, this paper seeks to answer several questions. Firstly, what are the existing condition of consumer protection implementation in Indonesia? Secondly, how can an adequate protection of consumers provide benefits and mitigate risks when well implemented? Furthermore, what are the challenges of consumer protection implementation in Indonesia?

This paper will explore the implementation of consumer protection regulation in the life insurance industry and will highlight the critical review over its implementation based on the facts gathered as well as the insight from the consumer protection related employees in the life insurance companies such as compliance officer, consumer services, management and legal officer. Finally, discussion of the finding as well as the theoretical and practical implications are presented together with the recommendations accordingly.

## **MATERIAL AND METHODS**

This study used qualitative methods that consist of a desk study of the literature and other relevant data that related to the implementation of consumer protection regulation, and in-depth semi-structured interviews with key participants from life insurance companies. The study used in-depth interviews involving 11 participants to assess their beliefs, concerns, and perceived opinions of consumer protection implementation in life insurance industry.

### **Participants**

A convenience sample of study participants were selected from life insurance professionals who deals with consumer protection issues such as misconduct cases, litigations, disputes, complaints, and regulations. All participants were selected purposively to include employees from the 5 biggest life insurance companies in Indonesia and the regulator's staff. The participants were comprised of 3 Head of Compliance, 2 Head of Consumer Services, 2 Head of Legal, 2 Head of Internal Audit and 2 Regulators.

### **Procedures**

A convenience sample of study participants was chosen from among Indonesia's top five life insurance companies. The main reason why these five life insurance companies are selected is that the total assets of these five companies represent more than 70 per cent of life insurance assets across Indonesia. Furthermore, the professional connection of the authors and those involved in the field of compliance role making it possible to get access to participants from the aforementioned life insurance companies.

The authors approached the participants personally through phone call conversations for the purpose of the interview. The background information as well as the purpose of the study were given to potential participant earlier. The semi-structured interview technique was conducted in a quiet private area using recording devices accordingly.

## **Data Collection and Analysis**

An in-depth semi-structured interview guide was used as the primary instrument of data collection. The validation process on the interview results used the secondary data from regulator's statistics. The semi-structured instrument with both closed and open-ended questions were administered to selected participants who dealt with consumer protections related issues such as disputes settlement, misrepresentation cases, fraud cases, and complaints. Information validation, and probing issues were carried out in the field to verify the information.

Participants were asked for their perceptions of issues, concerns, and challenges based on their experiences in dealing with consumer protection implementation in life insurance. Interviews lasted between 45 to 90 minutes and were recorded using audiotape. Analysis of interview were based on qualitative content analysis conducted by the authors. All interviews were conducted in Bahasa Indonesia to facilitate the gathering of data.

## **RESULTS**

Analysis of interviews revealed three main themes related to the current implementation of the Consumer Protection Regulation. The first theme is about the implementation issues related to the quality of regulatory oversight. The second theme is the perceived benefit and risk of strict implementation of consumer protection. Finally, the third theme is the challenges they have in their roles such as quality, consistency and clarity from regulator, the need-based selling for insurance companies, and the awareness and good communication for appointed dispute resolution body.

### **Theme 1: The Implementation Issues**

Based on the in-depth interviews with three Head of Compliance, they opined that the implementation of consumer protection in the life insurance industry is still not running effectively and not as ideal as those set forth in the regulations related to consumer protection. All Head of Compliance stressed the ignorance from regulator on the consumer protection requirement, for example the requirements for life insurance companies to handle consumer complaints within 20 business days. One of the head of compliance responded, "I think the regulator needs to do the quality assurance on the requirements they made. It is always good in design but not in the implementation. It is a nice to have".

Two Head of Legal also highlighted the neutrality of the regulator where there have been cases of fraudulent claims committed by organized crime syndicates using hospital income insurance products in 2018. One of them noted, “the regulator needs to be balanced when there is a dispute between customer and the insurance companies. We will always become the victims on the misrepresentation cases although we have explained the products to the customers, and they signed all the documents. Not all the customers are good customers especially when the syndicate is involved.”

From the consumer service point of view, one Head of Customer Services pointed out that the Regulation should be more specific to the type of insurance product such as Unit Link Product and Tele-Marketing. The reason for these two products because these products are the main contributors of consumer complaints. He added, “I cannot control what the sales forces say during the sales process, especially the agents. They always say unit link is a guaranteed product so they can get the commission. We pay too much commission for agents in selling unit link product. The clear outcome of this product is low persistency, complaint and more complaint.” Both head of customer services also stressed out that the life insurance industry contributed significantly of all consumer complaints in financial industry that were addressed to Regulator.

### **Theme 2: Perceived Risk and Benefit**

Participants were positive about the benefits of a sound implementation of consumer protection. Most of the participants from life insurance companies agreed that the implementation of consumer protection is expected to align the position between the life insurance companies with consumers in order to create a healthy and mutually beneficial market conditions between the two parties. One Head of Compliance stated, “if we can have the improvement in the transparency aspects of financial products and services, it will encourage consumers and communities to better know the benefits, costs, and risks of insurance products and services before buying them. The customers can select and compare the various products offered by insurance companies.” The Head of Customer Services also stated that, “people will feel more secure using products and services offered by life insurance companies so that loyalty and their numbers continue to increase. Not to mention the customer experience from the benefits of the products.”

Both regulator staff mentioned that, “it is time for Indonesia to create the behavior of prudent financial services institutions and developing our consumers and people who understand the products and financial

services.” Both benefits will result in a disciplined financial industry (market discipline) that will ultimately further expand access to finance. All participants agreed that the ideal condition will also support government programs in establishing a more financially secure community.

Aside from the perceived benefits, the participants also raise potential risks when the aspects of consumer protection in the life insurance industry is not implemented optimally. Their concerns are as follows:

Firstly, there is "no growth" in consumer protection culture at both the life insurance companies and industry level. This condition is a significant risk if linked to the industry's efforts to build confidence in the market. Without the right market confidence, the insurance industry will not grow well and sustainable. One of the Head of Customer Service added, “We need to build the confidence and currently the confidence of life insurance product is low. Lost are due to complaints, unpaid claims, frauds, and misrepresentations by the agents. So why would the customer want to buy life insurance based on this negative image?”.

Secondly, the low level of supervision and governance of life insurance products and services offered to consumers and community. The risk of vulnerability that consumers face will increase when in product design, marketing, and in case of the dispute is not handled properly. The risk management aspect shall consider the risk of consumer protection implementation as an important part and not only seen it as a complement to the health of the insurance industry or companies. One Head of Compliance stressed the recent scandal of PT Asuransi Jiwa Jiwasraya. According to the Head of Compliance, “the regulator has issued the regulation pertaining investment governance including the allowable threshold of individual investment. How come they did not supervise the requirement they created? They should have detected the scandal since year 2015 as the companies did not comply with the requirements and the non-compliance was clearly reflected in its report to regulators. How did the regulator miss it?”

Thirdly, the increasing danger of consumer data security. Protection of personal data as a crucial factor in protecting the interests of consumers. It is important to have assurance for not misuse the consumer data, including data that requires consumer’s consent if the life insurance company use it for product and service offerings purposes. One of the Head of Legal stated, “the fraud claims triggered by the syndicate are the eye opener. Most of the customers are not aware that their personal data has been misused by the



syndicate to buy insurance policies. And we as the insurance companies were also not aware that the syndicate registered to become our agents, one of us...”

Fourthly, the standard provisions of insurance agreement have not met the expected fairness. The standard provisions in the life insurance industry largely contain elements of raw clauses that should certainly not harm consumers, including transparency of benefits, costs, and risks. Most participants were in the opinion that insurance agreement was not read by the customers for various reasons. One Head of Compliance said, “The agreement is getting thicker and thicker.... I will not read the agreement if I were the customer. It is confusing and not customer-centric.”

Finally, the lack of adequate complaints handling mechanism for consumers. Consumers need assurance of proper complaint handling and a clear governance if the complaint leads to a dispute. There should be a consistent implementation of dispute resolution as stated in the standard agreement between the two parties including if there is an alternative dispute settlement process using the appointed dispute resolution body. One of The Head of Customer Services added, “the dispute provision is already in the agreement and the customer did not read it. Once they have a dispute, they will immediately go to the lawyer or police office without seeing us on the possibility of mediation. Regulator needs to send a clear message or awareness on this item.”.

### **Theme 3: Key Challenges**

There are three levels of challenges based on the role raised by the participants, namely: regulator, life insurance companies and the appointed dispute resolution body.

The main challenge on the part of the regulator is to show the seriousness and consistency in the implementation of consumer protection regulations. Regulators are required to send the right message to life insurance companies, consumers and relevant parties by imposing sanctions on 'uncompliant' insurance companies, periodic assurance mechanisms for implementing this regulation, and ongoing efforts to raise awareness of the expectations of consumers, life insurance companies and parties involved in dispute resolution on the expectations of the implementation of consumer protection regulations. One of the regulator staff said, “We are dealing with low financial literacy in the life insurance. It is difficult to send the message only by issuing the regulations. We need to come down more often...perhaps we also need

to do mystery shopping to see the sales process from the sales forces.” The other staff added,” The scope of regulatory oversight to non-banking financial institution is too wide. Not only insurance need to be supervised, we also need to supervise multi finance, asset management and brokerage companies. We need more resources.”

For the life insurance companies, the main challenge would be how to implement the proper life insurance sales process by assessing the consumers' needs, their risk profile and using the consumer data properly. Both Head of Compliance stated, “It is difficult to ask more time to explain insurance product with your customer, especially the high net worth customers. They just do not have the time to listen to the explanation. They only want to sign the documents and go.”

The other challenge would be how to build an effective financial literacy and financial inclusion program to the consumers as required. One of the Head of Customer Services also added,” In Indonesia, no customer will contact an insurance agent and says that they want to buy insurance. Life insurance is not a priority yet in Indonesia. As insurance companies, we need to have a robust program to improve the financial literacy over our products.” The success and measurable programs would provide benefits to the life insurance companies in term of disputes reduction, small product mismatch and sustainable persistency rate.

On the other hand, there are many issues identified in the side of the appointed dispute resolution body. The challenges are the lack of awareness in the consumers on the role of the dispute resolution body, the lack of representatives of the dispute resolution body in various cities of Indonesia, lack of capability in handling dispute related to Unit Link Product and the lack of competence from the arbitrator or the mediator in the field of life insurance. On this challenge, all participants agreed that the systematic awareness program on the role of the resolution body as well as the proper training to the arbitrator and mediator over the insurance product and its process should be in place. One of the Head of Legal responded, “We must partner with the regulator in building a campaign over these bodies existence by starting to establish representative office in the cities outside big cities in Indonesia.”. The regulator staff also added,” we need to have a clear communication with the police department in case the unaware or uneducated consumers filed their complaints directly to the police authorities. The police department should escalate the cases to the companies if they are aware on such events.”

## DISCUSSIONS

All participants reported universally objective opinion on the issues, perceived risk and benefit as well as the challenges on the existing consumer protection implementation in life insurance industry.

The implementation issue on dispute is consistent with the statement from the Badan Mediasi Asuransi Indonesia (BMAI) that is one of the appointed external dispute resolution body, which stated that the consumer claims handler has not satisfied some of the policyholders. The misunderstanding between the insured and the policyholder over the obligation to disclose information and facts during the sale of the policy causes a dispute between the insurer and the policyholder [5]. The other issue related to the regulator neutrality in the syndicate fraud claim, have brought one Chief of Executive Officer (CEO) of a joint venture life insurance company and a Head of Claim to become suspects in relation with a police report filed by a consumer. The industry players reacted on this case and have made police reports as well as sought advice to regulators on responding to these frauds. In this case, the regulator was deemed as being indecisive in enforcing protection, including the protection of life insurance companies that became a victim in these cases. The CEO and the Head of Claim became suspects in accordance with the breaches of Consumer Protection Act [6]. This shocking incident triggered the Government to revisit the Act and to revise it. Currently the revision of the Act is targeted to enter the National Legislation Program (PROLEGNAS) by 2020 and will be discussed with the House of Representatives in 2020. In the other hand, the complaint issue is verified by a study that showed the insurance industry contributed to 24% of all consumer complaints in financial industry that were addressed to Regulator [7].

In term of perceived benefits of the consumer protection [8], a study by Word Bank on developed and developing countries in 2017 revealed that the sound implementation of consumer protection generates transparency, efficiency improvement in governance and better retail financial markets. The study also highlighted there are many cases where it failed to improve and brought adverse results for consumers and market development. In the other hand, if the insurance sector has a weak consumer protection regulation, inappropriate market conduct practices would exist such as pooling practices, lapping of premiums, and misrepresentation by the sales forces. In response, the regulator will introduce a specific consumer protection laws and systems to fix the issues, but only after confidence in the sector has eroded and the potential of sector growth has been severely impacted. This study is consistent with the issues raised by the participants over the implementation issue.

On the perceived risks raised by the participant related to the regulatory oversight and governance, the recent scandal and cases in insurance industry has become the focus specifically on the case of PT Asuransi Jiwa Jiwasraya. Ministry of Finance has assigned the Audit Board of The Republic of Indonesia to investigate the life insurance companies over this case. The result was announced where OJK 's role as regulator was at the spotlight. The Attorney General's Office continues to investigate the authorities, having previously named the Deputy Commissioner for Capital Market Supervision II OJK as a suspect [9].

While the key challenges faced by the participants, low financial literacy and low financial inclusions are consistent with the financial literacy and inclusion survey conducted by OJK[10] in 2016, which positioned insurance financial literacy to be lower (15.8%) than the banking sector (66%). The financial literacy index in insurance has deteriorated to 15.8% in 2016 compared with 17.8% in 2013. The result of financial literacy index survey in insurance was contrary to the survey results of the financial inclusion index in insurance in which the financial inclusion index shown an increase from 11.8% (2013) to 12.1% (2016). The authors conclude that the increase in the access to financial products was not matched with the decrease in the financial literacy across Indonesia.

Further statistics based on Indonesia Life Insurance Association indicated that the unit link product contributed to 63% of the total premium generated during 2019 [12]. This data indicates the perception that life insurance is an investment instead of a protection to its policyholder. This is also contrary with the abovementioned phenomenon in which the financial literacy in insurance is still exceptionally low (15.8%). This is also might support the other phenomena in which only small portion of saturated customers might have the affordability to buy the unit link products (1.77%) based on the surveys conducted by Lembaga Penjamin Simpanan [13]. On the other hand, there is high expectation for life insurance, in which OJK predicts in its official life insurance industry forecast that the life insurance industry will have annual growth estimates ranging from 10 % to 30% [11].

## ANALYSIS

The results of the discussion were subsequently reflected onto the strategic management literature on the relevant key theories for further verification. The key theories used are: (1) The Agency Theory through

the Principal-Agents relationship as well as the actual governance mechanism within the insurance companies to deal with the transactional costs; and (2) The Structure Conduct and Performance (SCP) paradigm analysis for life insurance in Indonesia.

### **Agency Theory**

Agency Theory is the subset of the theory of the firm that analyzes the conflicts that may arise between principals and agents. In this paper, the interpretation of the principals would be the investors or the shareholders. While the agents would be interpreted as management, insurance intermediaries (sales forces), brokers or bancassurance consultants. However, based on the insurance industry complexity, the Principal-Agent relationship might also apply to the relationship between regulator and the insurer or between the insurer and the policyholders. For so long, economist have been putting their concerns on the incentive issues that arise when decision making in a company is the authority of managers who are not the company's owners. This problem stems from the separation of ownership from control in modern business because of asymmetrical information between managers and owners. The other issue is that managers as agents may not always act in the best interests of shareholders as principals [14]. This concern has triggered the development of the Behavioral Theory of the Firm and The Management Theory of the Firm where both theories reject the neo-classical model of the owner who operates the company by himself to maximize profits. Both theories suggested that managers should satisfy a minimum profit limit instead of profit maximization as suggested by the neo-classical theory [15]. In Indonesia's life insurance industry, where common performance indicators exist and are subject to multi-interpretation, such as persistence ratio, value of new business(VONB), gap of expenses (GOE), case size and active agents, examples of the satisfying minimum profit constraint clearly exist among some firms. As the Agency Theory is continuously developed, it explores the Principal-Agent relationship, organization structure and the relationship between pay and performance has become a critical issue in the insurance industry. The insurance industry is a good market to test the implications of agency theory because it is characterized by complex ownership structure. According to the theory, ownership is one form of control mechanism for mitigating the Agency problems as above mentioned and the expected result would be the behavior of the firm vary systematically across ownership structures [16]. Asymmetry information between managers and owners is therefore a form of market imperfections that has triggered many resource allocation decisions unconsciously taken by the manager with more information compared to the owners. The decision making for resource allocation is made through the operation of the price mechanism and the resources tend to flow wherever they command to the highest price [17]. For insurance industry, transaction costs are very rele-

vant in a sense that the principal-agent relationship involves the extensive sunk cost investment in the form of training expenses to sales forces, licensing fees, continuing professional development expenses as well as training expenses to key talents in the insurer. From the regulator point of view, the transaction costs are controlled through series of regulation relevant to recruitment of sales forces, mandatory licensing of insurance sales forces, prohibition of proxy agent practice, and sanctions of pooling, twisting and churning practices among insurers.

As the agency problem arises when the conditions of incomplete contracts and potential uncertainty, there are two key issues that are addressed by this theory. The first issue is the possibility of adverse selection that due to inability of a principal to verify the agent's claims concerning agent's own ability or productivity. The second issue is the moral hazard when there is possibility for the agent to act opportunistically in the agent's own private interests but against the principal's interests as stipulated in the contract that binds the agent to the principal. As earlier explained, asymmetric information would cause adverse selection. In the context of health insurance, the only person who knows better than insurance company on his or her health status, is the policyholder. This means the options exercised by the policyholder may be different with the interest of the insurer [18]. In practice, any individuals who have sufficient information of their future health problems, will buy the all-inclusive coverage they can cover their future health related costs. In the other hand, the insurance company that high likely does not have the information of the policyholder's potential health issue, will be accepting the policyholders and offer them policies with premiums which do not price factual risk [19]. The research by Borna & Avila concluded that due to this lack of information that resulted in higher cost, insurance companies would turn raise the premiums because customers would buy insurance based on their needs of insurance.

The second issue in the moral hazard due to the principal-agent problems and asymmetric information. The issue is defined as the tendency that insured individuals might take on risk prone behavior as they know that the insurer will cover the claim and bear the cost of those risks [20]. This issue would trigger the typical insurance fraud in which the policyholders who file fraudulent and bogus claims that cost the insurer. This issue can be prevented if the insurance companies had the same information available as the agents or the customers. As a conclusion, issues raised by participants are consistent and being verified with the studies related to the Agency Theory.



**Structure Conduct and Performance (SCP)**

The SCP paradigm were significantly developed by Mason and Bain in (1959). According to SCP, the structure of a market influences the conduct of the firms operating in the market, which in turn influences the performance of those firms. In this paper, the life insurance will be explored in term of its compositions to financial industries, distribution channels, products, risks, asset allocation, interconnectedness with banks, and its performance.

In general, insurance industry is still dominating the non-banking financial institution specifically the life insurers. In term of product, the unit linked product still dominates the life insurance industry which is in line with the significant asset allocation in stocks and mutual funds. Most of the products are distributed through Agency Channel and Bancassurance Channel. There is a high rate of interconnectedness with banks as significant numbers of insurance company are owned by the banks. The insurance industry is heading to the practice of the banking industry in which the regulator started to stringent the regulations. To sum up, the asset size of the top ten life insurers represent almost 85% of the total life insurance companies' assets.

In term of the demand of the life insurance product in Indonesia, the demand of investment-type life insurance product in Indonesia is increasing significantly for the past 5 years. Based on OJK statistics, the recent premium from unit linked product was IDR 30 trillion for Q1 2018 compared with IDR 22 Trillion in Q1 2017. Based on a study of consumer's perspective [21], the customer's negative attitude towards certain products such as unit linked product, which results from the product structure, actual low return versus illustrated return, and the sales policies adopted by insurance providers. Based on the factual situation in the industry, the sales forces are triggered by the higher commission in selling unit linked product (30%) compared with the lower commission in traditional insurance products (5%). This fact was also raised by the participants in the interview.

From the SCP structure analysis point of view, we can conclude that the form of life insurance market in Indonesia is oligopoly by considering the market share from the participants based on the premium collected. In addition, the Indonesia Government through the role of OJK is heavily involved in determining the right conduct through series of regulations including allowable investment mandate, approving the entrants of new insurance companies and fit & proper test for the key party of the company. From the life

insurance companies point of view, the conduct of oligopoly is clearly reflected in the product differentiation, allowed investment instruments by regulator, periodic financial soundness reporting, and cooperation as well as competition between companies in the life insurance association covering claims, legal, compliance, risk management, finance and products. While from the performance point of view, there is a clear expectation from the regulator on the consumer protection, capital requirements, and contribution to Indonesia's economy. Thus, the Indonesia's life insurance market is an oligopoly, complex, dominated by unit linked product, high asset allocation in stocks and mutual funds and cannot be characterized by colluding firms. In addition, oligopoly is the market structure most conducive to rapid technological change based on suggestion from some economists. However, this paper is not exploring the innovation theory related to the technological change.

## CONCLUSIONS

Consumer protection is expected to align the position between the life insurance companies with consumers to create a healthy and mutually beneficial market conditions between the two parties. Nevertheless, the implementation of consumer protection in the life insurance industry is still a work in progress as it was not running effectively, inconsistent, lack of clarity and not as ideal as those set forth in the regulations. There are several key benefits as well as key risks if the consumer protection is in place. There are various issues including inconsistency, lack of assurance on the quality of implementation, improper selling process, low awareness from the consumers as well as lack of capability and competence of the appointed dispute resolution body in dealing with life insurance product or process. To overcome these issues, this study suggests a number of actions to be undertaken:

- (1) Periodic regulatory quality assurance for the quality of implementation in the form of assurance review, mystery shopping and sanctions impose;
- (2) Strengthening the need-based selling for life insurance companies;
- (3) Developing an effective and measurable financial literacy and financial inclusion programs for consumers;
- (4) building a life insurance product and process related competency and capability of the arbitrator and mediator from the appointed dispute resolution; and
- (5) Establishing awareness and the existence of the dispute resolution body across cities in Indonesia.

**Implications for future research**

This study, being of an exploratory and interpretive nature, raises several opportunities for future research, both in terms of theory development and concept validation. More research will in fact be necessary to refine and further elaborate the above findings.

First, while this study has generated useful insights of “customer experience” from the implementation of consumer protection regulation, very little can be said based on the five biggest life insurance companies’ experience. This study could be extended to apply grounded theory for life insurance in Indonesia in term of sustainable competitive advantage strategy, rather than analytical, generalizability, as we have sought here.

Second, this study offers the opportunity to refine and validate the concepts emerged from the inductive analysis. For example, the concept of providing transparency to the customers would encourage them to choose the best product that fits with their needs as well as to mitigate the dispute due to mis-selling risks. This concept will need further refinement and elaboration, in terms of both the customer’s knowledge of life insurance products and the awareness of the customer’s real needs of the insurance product.

Finally, as discussed in the research findings, further work is necessary to examine the practices of the regulator’s supervision in providing the reasonable assurance over the implementation of the regulation. Further research can thus shed light on the ideal quality assurance program, level of supervision or even the level of infrastructure required for each life insurance company to support the implementation of the consumer protection regulation, particularly in the event of pandemic crises, in which a new challenge of providing reasonable assurance that the virtual sales process can protect policyholders.

**REFERENCES**

- Suryowati, Estu. “Rata-rata Belanja Asuransi Masyarakat Indonesia Capai Rp 1,29 Juta per Tahun”, (2017) available at <<http://ekonomi.kompas.com/read/2017/04/02/171500726/rata-rata.belanja.asuransi.masyarakat.indonesia.capai.rp.1.29.juta.per.tahun.>>
- Otoritas Jasa Keuangan. “Statistik IKNB Periode Mei 2020”, (2020). available at <<https://ojk.go.id/id/kanal/iknb/data-dan-statistik/statistik-iknb/Pages/-Statistik-IKNB-Periode-Mei-2020.aspx>>
- Otoritas Jasa Keuangan. “Peraturan No. 12/POJK.01/2017 tentang Penerapan Program Anti Pencucian Uang dan Pencegahan Pendanaan Terorisme di Sektor Jasa Keuangan”, (2017). available at

<<http://www.ojk.go.id/id/regulasi/otoritas-jasa-keuangan/peraturan-ojk/Pages/POJK-Nomor-12-POJK.01-2017-.aspx>>

Otoritas Jasa Keuangan . “Undang undang no 21 tahun 2011 tentang Otoritas Jasa Keuangan”, (2011).available at<<http://www.ojk.go.id/id/regulasi/otoritas-jasa-keuangan/undang-undang/Pages/undang-undang-nomor-21-tahun-2011-tentang-otoritas-jasa-keuangan.aspx>>

Mediatama, G. “BMAI: Penanganan klaim asuransi belum memuaskan”, (2018). available at<<https://keuangan.kontan.co.id/news/bmai-penanganan-klaim-asuransi-belum-memuaskan>>

R, M. “Dirut Allianz Jadi Tersangka, Polisi: Asuransi Minta Rekam Medis.”, (2018).available at<<https://news.detik.com/berita/d-3660117/dirut-allianz-jadi-tersangka-polisi-asuransi-minta-rekam-medis>>

Mediatama, G. “OJK: 24% pengaduan konsumen berasal dari asuransi.”, (2018) available at<<https://keuangan.kontan.co.id/news/ojk-24-pengaduan-konsumen-berasal-dari-asuransi>>

The World Bank. ” Good Practices for Financial Consumer Protection (p. 63).”, (2017) available at <<https://openknowledge.worldbank.org/bitstream/handle/10986/28996/122011-PUBLIC-GoodPractices-WebFinal.pdf?sequence=1&isAllowed=y>>

Rahma, G. “BPK: Peran Pengawasan OJK, Kunci Perkara Jiwasraya”, (2020) available at <<https://bisnis.tempo.co/read/1359756/bpk-peran-pengawasan-ojk-kunci-perkara-jiwasraya/full&view=ok>>

Otoritas Jasa Keuangan, “Survei Nasional Literasi dan Inklusi Keuangan (p.14).”, (2016).

Hafiz, M. “Seperti Apa Industri Asuransi pada 2018?”, (2018).available at <<http://marketeers.com/seperti-apa-industri-asuransi-pada-2018/>>

Asosiasi Asuransi Jiwa Indonesia, “Laporan Triwulan IV Asuransi Jiwa 2019”, (2019).

Lembaga Penjamin Simpanan. “Data Distribusi Simpanan Bank Umum Periode April 2020 (p.9)”, (2020).available at <<https://www.lps.go.id/web/guest/riset>>

Jensen, Michael C. & Meckling, William H., “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure.”, (1976). available at <<https://ssrn.com/abstract=94043> or <http://dx.doi.org/10.2139/ssrn.94043>>

Baumol, W. “Business Behaviour, Value and Growth.”, (1959).

Pottier, “Agency Theory and Life Insurer Ownership Structure”, *Journal of Risk and Insurance*, (1998).

Coase, R.H. “Durability and monopoly”, *Journal of Law and Economics*, 15, 143–9, (1972).

Long, J. D. “Ethics, Morality, and Insurance”. Indiana University, Graduate School of Business, (1990).

Borna, S. & Avilla, S. “Genetic Information: Consumers' Right to Privacy Versus Insurance Companies' Right to Know a Public Opinion Survey”, *Journal of Business Ethics* **volume 19**, 355–362, (1999).

Cardon, J. H., & Hendel, I. “Asymmetric information in health insurance”, *Journal of Economics*, 32, 408-427, (2001).

Ostrowska-Dankiewicz, “The Polish life insurance marketing view of consumer protection issues”, *Journal of Insurance, Financial Markets and Consumer Protection* No. 25, (2017).

## **COMPREHENSIVE PERFORMANCE MEASUREMENT SYSTEM AND MALAYSIAN FOOTBALL PLAYERS SATISFACTION**

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## ABSTRACT

*This paper aims to examine the relationship between Comprehensive Performance Measurement (CPMS) and Malaysian football player satisfaction. Structural Equation Model (SEM) through the PLS Smart Modeling is used to verify the construct and reliability as well to test the hypothesis. There were 330 professional football players from the Malaysia Super League and Premier League involved in this study. There is a positive and significant relationship between CPMS and Malaysian football player satisfaction. This finding based on the self-determination theory, comprising three basic psychological needs namely autonomy, relatedness, and competence that can influence players' satisfaction and enhance their performance. This study is conducted in a football sports setting that adds to the knowledge of CPMS in performance evaluation based on self-determination theory. This is a unique combination of Management Control System and Sports Management. This study able to assist the Football Association of Malaysia (FAM) and also football club and state association to control the football players' behaviour by preparing various sets of physical activity measurements and performance evaluation records. The CPMS as a source of reference can use to improve documentation from the aspects of setting skills standard, physical fitness, regulations, and strategies. This will be able to increase the quality and performance of the players as well as the football team in Malaysia, all at once giving high levels of satisfaction.*

**Keywords** Comprehensive Performance Measurement, System, Football Player Satisfaction, Self-Determination Theory

## INTRODUCTION

The effectiveness of the Performance Measurement System (PMS) is one of the important factors that carry the success of an organisation. PMS is a set of processes and mechanisms used by an organisation to identify the main objectives and support the implementation of the action, planning, measurements, control, rewards and learning [17]. PMS plays two main roles which are (1) as an instrument for strategic implementation and to ensure the planned actions are concurrent with the organisation's goal achievements [3][10][35] and (2) as a motivation control device to affect the individual's peak behaviour, which will ease the organisation's goal achievement [8][22],[28]. PMS is widely used in the industrial, service, and government sectors, and has shown that it impacts not only the organisation's performance [2][21][29] and even influences individual worker's performance [1][21][39]. However, in the sports sector, empirical PMS research is very limited even though there is a high level of need, especially for football.

In this research, the high demand for PMS in football is motivated by the uncertain performance factor that is related to the various emotions of the player such as worry, frustration, pressure, and feeling unmotivated which affect individual performance [33], which leads to influencing the entire team's performance during competition. PMS is seen as important in an unpredictable environment as a mechanism to reduce uncertainty in decision making [11]. The usage of PMS helps managers to control behaviour, communicate, and motivation so that there is an effort to maintain peak form [34][36]. As a motivational control tool, PMS can influence the football players' behaviour to strive

for the best and consequently ease their teams' success. The uncertain performance of Malaysian players is filled with weak players, uncertain team position, frequent changing of coaches, emotions and pressure due to pay backlog where some are not even paid, and these are seen as signs that player dissatisfaction contributes towards the decline of players' performance. CPMS is seen as a system that is capable of providing performance information based on the behaviour and needs of the football players. The CPMS characterised by the basic psychological needs of autonomy, competence and relatedness can raise the self-determination of the player (which is intrinsically motivated), when these needs are fulfilled concurrently with more comprehensive performance information can be provided. Next, it encourages the increase of the happiness and satisfaction of the players. Self-determination theory and the integrated motivational approach such as the proposed model by Vallerand and Losier [37] is used in this research to explain the relationship between CPMS and the football player's satisfaction.

### Self-Determination Theory

The self-determination theory asserts that humans have the natural tendency towards the intrinsic growth and motivation, where this intrinsic motivation and wellbeing require the fulfilment of three basic psychological needs namely (1) autonomy (2) competency and (3) relatedness [19][20]. Players' wellbeing in this study is measured with a positive effect and the satisfaction in sports which is player satisfaction. When CPMS containing comprehensive information of players' performance characterising needs of autonomy, competency and relatedness is used more comprehensively, the players' self-determination increases in line with the fulfilment of the needs. Next, it encourages the players' increased satisfaction. Thus, it is expected that there is a direct relationship between CPMS and player satisfaction.

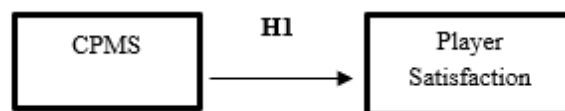


Figure 1: Conceptual Framework and Hypothesis

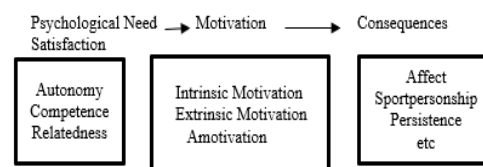


Figure 2: Model of Integrated Motivation based on Self-Determination Theory  
Sources: Vallerand and Losier (1999)

### CPMS and Player Satisfaction

Player satisfaction is closely linked with their performance. According to Fraser [18], the players' level of satisfaction influences their involvement in sports, where players are more satisfied with the entire experiences and the performance that is less likely to be eliminated from the sports. According

to Chelladurai [9], performance is the most important resource to player satisfaction where the standard performance will be different according to their level of satisfaction. Extensive studies on the satisfaction of the athletes have shown that there is a high correlation between players' satisfaction and performance. The level of players' satisfaction that is related to excellent performance shows a significant relationship between player satisfaction and performance [30]. Eichas [16] and William [39] state that player satisfaction is found to be linked with the effort, willingness and performance, and Riemer [32] maintains that the main beneficiary of sports organisations is the athletes/players and their satisfaction is seen as the prerequisite that displays higher performance.

Various issues in the football sports industry have been topic for heated debate among the people in the society, especially related to the abandoned players' welfare, lack of compatibility and cooperation among the players in the team also the coaching aspect that is distracting that they become the causes for the performance uncertainty, and further leading to them failing to display the best actions. The failure in fulfilling the needs of the players is the precursor for the dissatisfaction and this affects performance. The satisfaction level will decline when emotional disturbances come into the picture, such as the threat from the management – this steals the fun or enthusiasm for the players to perform well. Thus, players must strive to have positive emotions like happiness and calm in increasing their satisfaction to achieve optimal performance, rather than having negative emotions leading to dissatisfaction or weak performance [25]. Players who are happy with the acknowledgement, progress, responsibility, hospitality, coach and teammates' support and work environment are likely to work harder and improve the performance. Happy players will also reduce their absence from training, fatigue and surrender. The outcome of empirical studies shows that players' performance is very much influenced by coaches leadership behaviour, team cohesion and athletes' satisfaction [12].

To date, there has yet to be a study that sees the use of PMS on athletes' or players satisfaction. Only empirical studies involving PMS and job satisfaction have been carried out where PMS preparation with feedback and complete information has given a positive impact on every individual's motivation and satisfaction at work [1][23][26][27][28]. Lau and Martin-Sardesai [12] show that the CPMS through the Balance Score Card (BSC) and the additional dimension covering all important aspects in business has increased job satisfaction and motivation that have become the main prerequisite in the increased work performance. CPMS used has helped enhance the efforts of the employees and reduce uncontrollable situations that can influence the satisfaction and performance of the employees in achieving organisational goals. The study by Lau and Sholihin [28]

also proves that PMS based on financial and non-financial measurements is equally important to job satisfaction. The right PMS and complete preparation of information can give a positive impact on every individual's work motivation and satisfaction. The study by Haslina [23] also shows that financial measurement relates significantly with job satisfaction and it also influences individual performance. The study by Lau and Oger [27] shows that the effect of justice in evaluating the employee's procedure towards job satisfaction is indirect through the justice and trust of the superiors.

Based on the previous findings of the above studies involving individual employees, the use of PMS in the sports sector as the tool of performance evaluation is expected to monitor and motivate individual players to help achieve satisfaction and excellence in sports. The formation of CPMS based on the definition by Hall [22] is seen to suit the studies done in the sports sector. CPMS in football prepares comprehensive information in the performance evaluation that can increase the players' self-motivation the basic fulfilment of the autonomy, competency and relatedness. The readiness of the performance information is more comprehensive in PMS and its use in the performance evaluation can encourage footballers to behave and to become motivated, and this increases satisfaction.

CPMS characterising autonomous needs, competency and relatedness, when the information is more comprehensive, it can fulfil the basic needs and further increase the players' self-determination leading to their increased satisfaction. Thus the following hypothesis is formed:

H1: There is a positive relationship between CPMS and Malaysian football players satisfaction

## **RESEARCH METHODOLOGY**

### **Research Design**

This research uses the quantitative approach with reviews through questionnaires. This research uses the sampling technique as opposed to probability by using directed techniques whereby a target group has specific characteristics and the most suitable ones are chosen as research respondents. Football players from clubs or state associations who compete in Super League and Premier League are chosen as research respondents. Both leagues are the main professional football leagues playing in Malaysia. Every football league has 12 teams that have to undergo a process involving players' professionalism and infrastructure facilities to ensure that professional standard game patterns are displayed by the competing teams. Seeing the Super League and Premier League are the main

football leagues in Malaysia, there is a need for PMS to provide comprehensive information to ensure that each team from either clubs or state associations succeeds in giving their best performance through the control and motivation given to the football players. Furthermore, professional players from the club or state association that compete are under a payroll, making their performance evaluation a form of control mechanism using PMS as an example for something which is critical and is expected to be fully utilized.

Table 1 shows the frequency distribution respondents of the football club and state associations that competed in Super League and Premier League. Every club/state association has a total of 25 registered players that encompass main and reserve players. There are 11 main players and 14 reserves. Therefore, it is estimated that there is a total of 600 football players when taking into account both main and reserve players. From this total, 330 football players have responded to the questionnaire that was distributed, all together getting 55% rate of response. Each player was given 45 minutes to complete the questionnaire and the researcher ensured that each player returned the completed questionnaire

Table 1: Frequency Distribution Respondents of Football Club/State

Team	No. Players (N)	Percentage (%)
Angkatan Tentera Malaysia FA	25	7.6
Felda United FC	20	6.1
Johor Darul Ta'zim FC (JDT I)	25	7.6
Kelantan FA	11	3.3
Sime Darby FC	13	3.9
Perak FA	19	5.8
Polis DiRaja Malaysia FA	15	4.5
Selangor FA	14	4.2
Terengganu FA	13	3.9
Johor Darul Ta'zim (JDT II)	25	7.6
Kedah FA	15	4.5
Perlis FA	20	6.1
Negeri Sembilan FA	26	7.9
PKNS FC	20	6.1
Sabah FA	11	3.3
KL SPA FC	21	6.4
T-Team FC	18	5.5
UiTM FC	19	5.8
<b>Total</b>	<b>330</b>	<b>100</b>

## Instrument

The CPMS instrument in this research sees how far the PMS used provides performance information concerning important aspects needed to increase motivation and behavioural control towards the football players. The items used in this instrument which were adapted to the sports field by using CPMS instrumentation by Hall [22] include elements of basic psychological requirements needed by a player to increase his self-determination towards a better performance. Among them are providing an autonomous performance measurement such as muscle endurance test, flexibility, speed, and

mental strength to ensure the player's peak performance. The player's competency is measured through monitoring and continued comparison which is recorded from time to time during the player's performance to reach the predetermined set level and objective. Good and positive relatedness between players, coaches, and management staff by providing basic living necessities and effective training infrastructure will help players to be more focused and can help to increase their performance. The CPMS items that were adapted to the sports industry were measured using a Likert scale between 1 (not at all) to 5 (to a great extent) where respondents will provide their views when taking into consideration performance evaluation.

The player's satisfaction is measured using an instrument that was developed by Riemer and Chelladurai [31]. Known as the Athlete Satisfaction Questionnaire (ASQ), this is an established instrument and is widely used for research in the sports field and sports management by Burns [6] and Anuar [4]. This instrument measures the respondent's level of satisfaction towards 42 items that cover 11 dimensions using the 5-point Likert scale which are 1 (very dissatisfied) until 5 (very satisfied). However, after running exploratory analysis factors on the players' satisfaction, this research used only five dimensions, which are ability utilization and individual performance, team performance, personal treatment and training instruction, team task contribution, and personal dedication.

### **Data Analysis**

The data received was analysed using Statistical Package for Social Sciences (SPSS) version 17 and SmartPLS version 3.0 SPSS version 17. The research hypothesis was tested using SmartPLS software using a measurement model and study the structuring model. The measurement model aims to strengthen and confirm measurements as well as the relationship between the variables which are made of confirmatory analysis, convergent and discriminant validity test, and reliability test. These tests are carried out at different stages of the measurement model. The structural model is implemented to determine the significant difference for every path coefficient between the independent variables and the dependant variables by using the research hypothesis.

### **Findings**

The demographic representation of the respondents is shown in Table 2. A total of 330 football players from 18 clubs and state associations returned the questionnaire, making the rate of return at 73.33%. Players between the ages of 21 and 25 and those between 26 and 30 were shown to have almost similar percentages, each at 39.4% and 40.3%. Players over the age of 30 were at 14.2%, and



those below the age of 20 were at 6.1%. The majority of the players were between the ages of 21 and 30 (79.7%) which seem to be the normal age range of professional football players. The education level shows that the majority of the respondents finished high school, at 78.2%. Diploma holders were at 13.0%, 7.9% were shown to be degree holders, and 0.9% held masters degrees. Player category indicated that the majority of the respondents are local players at 95.2%, with only 4.8% being imported players. The massive percentage gap between local and imported players is due to the limitation imposed whereby each team is allowed only four imported players. Besides, some imported players are not fluent in English, let alone Bahasa Malaysia, making it harder for them to answer the questionnaires.

Table 2 shows that from a player position aspect, defenders have the highest rate at 37%. This is followed by mid-fielders with 29.7%; attack at 20.9%, and goalkeepers 12.4%. This percentage distribution between players' positions is almost similar to the usage of the tactical dimension system 4-4-2 to determine each player's playing position where four defenders, four midfielders, and two attackers are needed. More than half of the respondents (55.8%) have been playing football since the ages of 6-11. Respondents with less than five years of experience, between the ages of 12-17 and over 18 years are respectively at 19.1%, 18.2%, and 3.9% each. As the majority of the respondents were between the ages of 21-30, rationally their involvement in football is between 6-11 years. Next, the majority of the duration in which the players are with their current team is less than 2 years or 56.4%. The period of 3 to 4 years is 30.9%, 5 to 6 years is 7.9% and 7 years above is 4.8%. A brief period with a club or state association is consistent with the profession where most of the professional players including those in Malaysia are often brought into new teams when the league season comes to its close. For the game status, the main players 40.6%, reserve players 41.8%, injured players 5.8% and others or those serving as substitutes 11.8%. Every club/state association is only allowed to register 25 players for every club and state association; 11 main players and 14 reserve players. It is found that two hours of training per day has the highest percentage which is 61.8%. Less than two hours of training is practised by most clubs/state football association because when the match season begins, players will only undergo low-intensity training to avoid injury and to keep having high stamina level, with the tight schedule every week. Football players are guided by qualified and experienced coaches where almost all coaches (93.3%) have more than five years of experience.

Table 2: Respondents' demographic profile

Demographic characteristics	Category	No (n)	Percentage (%)
Age [Mean (SD) = 2.63 (0.801)]	≤20 years	20	6.1
	21 – 25 years	130	39.4
	26 – 30 years	133	40.3
	≥ 30 years	47	14.2
Level Of education [Mean (SD) = 1.32 (0.6550 )]	School	258	78.2
	Diploma	43	13.0
	Bachelor Degree	26	7.9
	Master Degree	3	0.9
Player Category	Local	314	95.2
	Import	16	4.8
Player position	Striker	69	20.9
	Defender	122	37.0
	Midfielder	98	29.7
	Goalkeeper	41	12.4
The number of years playing football [Mean (SD) = 2.07 (0.726)]	≤ 5 years	63	19.1
	6 – 11 years	194	58.8
	12 – 17 years	60	18.2
	≥ 18 years	13	3.9
The number of years playing with current team [Mean (SD) = 1.61 (0.829)]	≤ 2 years	186	56.4
	3 – 4 years	102	30.9
	5 – 6 years	26	7.9
	≥ 7 years	16	4.8
Game status	Main player	134	40.6
	Injured player	19	5.8
	Reserve	138	41.8
	Others (Replacement player)	39	11.8
Total number of training hours per day [Mean (SD) = 1.38 (0.487)]	≤ 2 hours	204	61.8
	3 – 4 hours	126	38.2
Chief coach experience [Mean (SD) = 2.81 (0.985)]	≤ 5 years	22	6.7
	6 – 11 years	131	39.7
	12 – 17 years	65	19.7
	≥ 18 years	112	33.9

Table 3: Hypothesis Testing CPMS and Malaysian Satisfaction Football Players Satisfaction

H1: There is a positive relationship between CPMS and football players' satisfaction					
Model	Path	Path Coefficient	Standard Error	t-value	R <sup>2</sup>
Model 1	CPMS → Personal Treatment & Training Instruction Satisfaction	0.384	0.052	7.336***	0.147
	CPMS → Ability Utilization & Individual Performance Satisfaction	0.188	0.045	4.149***	0.035
	CPMS → Team Performance Satisfaction	0.284	0.051	5.588***	0.090
	CPMS → Personal Dedication Satisfaction	0.333	0.056	5.948***	0.111
	CPMS → Team Task Contribution Satisfaction	0.375	0.055	6.823***	0.140
H 1 is supported. CPMS as the behavioural control and motivational tool that provides various performance information can influence and enhance the satisfaction of the football players.					
Notes:					
CPMS-Comprehensive Performance Measurement System		AU – Ability Utilization	PD – Personal Dedication		
PT – Personal Treatment		IP – Individual Performance	TTC – Team Task Contribution		
TI – Training Instruction		TP – Team Performance	Satis – Satisfaction		

Table 3 shows the results for Model 1. There is a positive and significant relationship between CPMS and the satisfaction of football players from the dimension of personal treatment and training instruction satisfaction ( $\beta=0.384$ ;  $t=7.336$ ,  $p<0.001$ ), ability utilization and individual performance ( $\beta=0.188$ ;  $t=4.149$ ,  $p<0.001$ ), personal dedication satisfaction ( $\beta=0.333$ ;  $t=5.948$ ,  $p<0.001$ ), team performance satisfaction ( $\beta=0.284$ ;  $t=5.588$ ,  $p<0.001$ ) and the team task contribution satisfaction ( $\beta=0.375$ ;  $t=6.823$ ,  $p<0.001$ ). Based on the determination of the path coefficient value by Cohen [13], it is found that CPMS gives a moderate positive effect (between 0.31 and 0.50) towards personal treatment and training instruction satisfaction, personal dedication satisfaction and team

task contribution satisfaction. However, for team performance satisfaction and ability utilization and individual performance, the positive effect is small (between 0.05 and 0.30). The outcome of the hypothesis testing finds that Model 1 used to test hypothesis 1 is supported, showing that CPMS influences and enhances the satisfaction of football players.

The quality of Model 1 is based on the variant value ( $R^2$ ). The outcome of the study finds that CPMS has contributed 3.5% to the change in the ability utilization and individual performance satisfaction, 14.7% to the change in the personal treatment and training instruction satisfaction, 11.1% to the change in the personal dedication satisfaction, 8% to the change in the team performance satisfaction and 14% to the change in the team task contribution satisfaction. CPMS is found to have a small effect on all five dimensions of player satisfaction based on the indicator determined by Cohen [13]; where  $R^2$  in the range of 0.02 and 0.15 and it refers to a small value.

## DISCUSSION

Model 1 SEM is used to test the relationship between CPMS and player satisfaction. The findings of Model 1 establishes that CPMS gives a positive and significant path coefficient effect towards five dimensions of player satisfaction namely personal treatment, and training and instruction; individual performance and ability utilization; personal dedication; team performance; and team task distribution. Thus, Hypothesis 1 is accepted.

The acceptance of hypothesis 1 shows that CPMS as a tool of behaviour control and motivation that provide various performance information, influences and increases the satisfaction of football players. CPMS has a moderate influence on the satisfaction of personal treatment and training and instruction, team task contribution and personal dedication. Meanwhile, CPMS has a small influence on the satisfaction of team performance, individual performance and ability utilization. CPMS that fulfils the psychological basic needs plays an important role in controlling the behaviour and motivating players through various aspects of performance measurement and target and linked with the strategy and operation of the club/state association, to the point that the intrinsic motivation and self-determination of the players can be increased. This will further impact the players' satisfaction. These findings are consistent with previous studies in the sector of business industry and individual services in which PMS preparation with feedback and complete information has given a positive impact towards the individual motivation and job satisfaction [1][23][27][28]. Lau and Martin-Sardesai [26] also assert that the use of CPMS through Balance Score Card and additional dimension that covers all important aspects in business has increased job satisfaction and motivation,

the two prerequisites in work performance. In sports, several previous studies find that individual athletes achieve intrinsic motivation when the psychological basic needs (autonomy, competency, relatedness) have become satisfactory [5]. Apart from that, intrinsic motivation is also the best predictor to the overall performance of the athletes as they display high determination and spirit [14][24].

## CONCLUSION

CPMS is a tool for control and effective monitoring in influencing the behaviour of football players like individual workers or managers in the industrial sector, towards a congruent goal achievement for the club or state association. As a behavioural motivation tool, CPMS needs to fulfil the basic needs of psychology, namely autonomy, competency and relatedness that have become the main aspects of the enhanced football players' self-motivation level, and further contributes towards players' wellbeing in the form of satisfaction. The use of CPMS since the early involvement of the players can increase their self-determination from time to time. The implementation of CPMS that is more proactive in the national football development program will be able to bring back the supremacy of this sports in this country.

## REFERENCE

- [1] Aboshnaf, Abdalla., The influence of performance measurement systems on managerial performance through cognitive and motivational mechanisms: Evidence from manufacturing companies in Libya. Tesis Dr. Fal, University of Huddersfield, (2015)
- [2] Adams, C.A., Muir, S. & Hoque, Z. 2014. Measurement of sustainability performance in the public sector. *Sustainability Accounting, Management and Policy Journal* 5(1): 46-67, (2014)
- [3] Anthony, R.N. & Govindarajan, V., *Management of Control Systems*. New York: Mc Graw-Hill, (2007)
- [4] Anuar, D., Salleh, R. & Mohd Isha, A., Management training programme and its effect on the sports school athletes' satisfaction. *International Journal of Management Studies* 22(1): 73–95, (2015)
- [5] Banack, H.R., Sabiston, C.M. & Bloom, G.A, Coach autonomy support, basic need satisfaction, and intrinsic motivation of paralympic athletes. *Research Quarterly For Exercise And Sport* 82(4): 722-730, (2011)
- [6] Burns, G.N., Jasinski, D., Dunn, S.C. & Fletcher, D., Athlete identity and athlete satisfaction: The non-conformity of exclusivity. *Personality and Individual Differences* 52: 280-284, (2012)
- [7] Chalofsky, N., An emerging construct for meaningful work. *Human Resource Development International* 6: 69-83, (2003)
- [8] Chenhall, R.H, Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society* 28: 127–168, (2003)
- [9] Chelladurai, P., Imamura, H., Yamaguchi, H., Oinuma, Y. & Miauchi, T., Sport leadership in a cross-sectional setting: The case of the Japanese and Canadian university. *Journal of Sport and Exercise Psychology* 10: 374-389, (1998)

- [10] Chenhall, R.H., Integrative strategic performance measurement system, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organization and Society* 30: 395-422, (2005)
- [11] Chenhall, R.H., Theorizing contingencies in management control systems research. Dlm. Chapman, C.S., Hopwood, A.G. & Shields, M.D. (pnvt.). *Handbook of Management Accounting Research*, hlm. 163-206. Oxford, UK: Elsevier, (2007)
- [12] Coffman, J.P., The community college coach: Leadership practices and athlete satisfaction. Thesis Dr. Fal, University of San Diego, (1999)
- [13] Cohen, J., Statistical Power Analysis for the Behavioural Sciences. Edisi ke-2. Hillsdale: L. Erlbaum Associates, (1988)
- [14] Coon, A., *Predicting college women rowers' motivation and persistence: A self-determination theory approach*. Tesis Master, Boise State University, (2015)
- [15] Deci, E.L. & Ryan, R.M., The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11: 227-268, (2000)
- [16] Eichas, T.M., Relationship among perceived leadership style, member satisfaction and team cohesion in high school basketball teams. Tesis Master, Bowling Green State University, Bowling Green, (1992)
- [17] Ferreira, A. & Otley, D., The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research* 20: 263-282, (2009)
- [18] Fraser Thomas, J., Cote, J. & Deakin, J., Understanding dropout and prolonged engagement in adolescent competitive sport. *Psychology of Sport and Exercise* 9: 645-662, (2008)
- [19] Gagne, M. & Blanchard, C, Self-determination theory and well-being in athletes. Dlm. Hagger, M.S. & Chatzisarantis, N.L.D. (pnvt.). *Intrinsic motivation and Self-determination in Exercise and Sport*, hlm. 243-254. Champaign, IL: Human Kinetics, (2007)
- [20] Gagne, M. & Deci, E.L., Self-determination theory and work motivation. *Journal of Organizational Behavior* 26: 331-362, (2005)
- [21] Grafton, J., Lillis, A.M. & Widener, S.K., The role of performance measurement and evaluation in building organizational capabilities and performance. *Accounting, Organizations and Society* 35: 689-706, (2010)
- [22] Hall, M., The effect of comprehensive performance measurement systems on role clarity, psychological empowerment and managerial performance. *Accounting, Organizations and Society* 33: 141-163, (2008)
- [23] Haslina, H., Amizawati, M.A. & Ruhanita, M., Peranan pengukuran prestasi strategik ke atas kepuasan kerja dan kekuasaan psikologi dalam kalangan pengurus dalam sektor automotif. *Jurnal Pengurusan* 34: 65-78, (2012)
- [24] Jöesaar, H., Hein, V. & Hagger, M.S., Peer influence on young athletes' need satisfaction, intrinsic motivation and persistence in sport: A 12-month prospective study. *Psychology Sport Exercise* 12(5): 500-508, (2011)
- [25] Lane, A.M., Devonport, T.J., Soos, I., Karsai, I., Leibinger, E. & Hamar, P., Emotional intelligence and emotions associated with optimal and dysfunctional athletic performance. *Journal of Sport Science and Medicine* 9: 388-392, (2010)
- [26] Lau, C.M. & Martin-Sardesai, A.V., The role of organisational concern for workplace fairness in the choice of a performance measurement system. *The British Accounting Review* 44: 157-172, (2012)
- [27] Lau, C.M. & Oger, B., Behavioral effects of fairness in performance measurement and evaluation systems: Empirical evidence from France. *Advances in Accounting, Incorporating Advances in International Accounting* 28(2): 323-332, (2012)
- [28] Lau, C.M. & Sholihin, M., Financial and non-financial measures: How do they affect job satisfaction?. *The British Accounting Review* 37: 389-413, (2005)
- [29] Lee, C.L. & Yang, H.J., Organization structure, competition and performance measurement systems and their joint effects on performance. *Management Accounting Research* 22: 84-104, (2011)

- [30] Lorimer, R., The interdependence of coaches' and athletes' perceptions and satisfaction with performance. *International Journal of Coaching Science* 69-80, (2011)
- [31] Riemer, H.A. & Chelladurai, P., Development of the athlete satisfaction questionnaire (ASQ). *Journal of Sport Exercise Psychology* 20: 127–156, (1998)
- [32] Riemer, H.A., Development of the athlete satisfaction questionnaire. Tesis Dr. Fal, Ohio State University, Columbus, (1995)
- [33] Séve, C., Riab, L., Poizata, G., Sauryc, J. & Durand, M., Performance-induced emotions experienced during high-stakes table tennis matches. *Psychology of Sport and Exercise* 8: 25, (2007)
- [34] Simons, R., *Performance Measurement And Control Systems For Implementing Strategy: Text And Cases*. Upper Sadle River: Prentice Hall, (2000)
- [35] Toumela, T.S., The interplay of different levers of control: A case study of introducing a new performance measurement system. *Management Accounting Research* 16(3): 293-20, (2005)
- [36] Ubeda, C.L. & Santos, F.C.A., Staff development and performance appraisal in a Brazilian research centre. *European Journal of Innovation Management* 10: 109-125, (2007)
- [37] Vallerand, R.J. & Losier, G.F., An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology* 11: 142–169, (1999)
- [38] Vallerand, R.J. & Losier, G.F., An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology* 11: 142–169, (1999)
- [39] Williams, J.M. & Hacker, C.M., Causal relationships among cohesion, satisfaction and performance in women's intercollegiate field hockey teams. *Journal of Sport Psychology* 4: 324-337, (1982)
- [40] Zarinah A.R. & Che Ruhana I., Decision facilitating role of comprehensive performance measurement system (CPMS) and job performance: Influence of role ambiguity and locus of control. *Pertanika Journal Social Sciences & Humanities* 23: 145–160, (2015)



# PSYCHOLOGICAL CAPITAL ELEMENTS: A STUDY ON JOB PERFORMANCE OF PUBLIC UNIVERSITIES ADMINISTRATOR IN MALAYSIA

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## ABSTRACT

*Positive psychological Capital (PsyCap) states of an individual have been identified as a main predictor of employee job performance. This paper attempts to explore the relationship between chosen PsyCap elements – hope, optimism, resilience, and self-efficacy towards job performance based on the extant literature. Self-efficacy could be evaluated through someone's capabilities to mobilize the motivation, cognitive resources and courses of action which needed to meet the demands. Organizations should prefer breaking a task into smaller and achievable components, so that the efficacy of the employees can be enhanced in shorter span of time and greater disappointment of a possible failure in a task can be avoided prior investing a lot of time and efforts. Instead of considering difficult tasks as burden, employees with high self-efficacy treat them as challenges thus leading to a higher embracement of their 'selves' with their roles. Optimism and hopeful employees see positive side of the situation that makes them attach themselves cognitively and physically with their jobs. The study conducted a survey based on structured questionnaire, which revealed that hope, optimism, self-efficacy and resilience have significant impact on favourable work outcomes such as in-role performance, citizenship behaviours, job satisfaction, commitment, and engagement. At the end, this paper suggests that, to attain the highest job performance level among the administrator position, the organization need to focus more to adapting the PsyCap concepts and elements in their strategic management planning.*

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## 1 INTRODUCTION

Job performance plays a significant role in defining organizational success. It is necessary to understand as to how employees can be kept satisfied and motivated to achieve out of the ordinary results. Satisfied employees generate customer satisfaction by excellence in performance that leads to organizational success thus resulting in improved financial success. Employee satisfaction not only enhances the productivity, but also increases the quality of work. It is necessary for a company to perceive as to what employees feel, think, desire along with discovering how the workforce devotion and commitment can be increased. Employee satisfaction is closely related to service quality which is

then related to company profitability. Service quality has a positive persuade on employee as well as employer satisfaction. Besides this, firm profitability has a reasonable non-recursive effect on employee satisfaction. Employee satisfaction plays a considerable role in enhancing the firm profitability and improving operational performance of organizations and quality of goods and services. There is no doubt in it that employee satisfaction is critical to attain quality and profitability in service industry especially. Employee satisfaction impacts quality at industry through satisfaction-quality-profit cycle. In service industry, to achieve quality and profitability at organization, employee satisfaction is fundamental and without it, service industry cannot think of being successful (Rachel et al., 2018). Human resource management should provide the proper job scope to ensure the workers well fit with the job offered. Human resource is the person in-charge to hire and choose the qualified workers to fit into the respective job scope.

### **1.1 Statement of the Problem**

Theories concerning job satisfaction and job performance are still weak, empirical studies provide mixed result and the situation of staff attitude – performance needs further investigation . The public servic needs a reformation towards people, not only processes as people are the engine of each organization and constitute the foundation upon which it is built. As reported by Lau (2012), public admintrators form the backbone of public service delivery and their capacity to facilitate the evolving national agenda largely determines the success of public policies. Besides, the restructuring of the civil service entails institutionalising mechanism to promote greater accountability and transparency, as well as enhancing the skills of the people in the public asdminstration (Lau, 2011). An unhealthy employees may cause this foundation to crumble due to high levels of absenteeism and subsequent increasing costs (Reijseger et al, 2008) In order to prevent such negative effects, the organizational sciences have paid much attention to the negative aspects of work life (Wright & Cropanzano, 2004), such as job burnout (Halbesleben & Buckley, 2004). But due to this negative focus, the positive aspects of working life have largely been ignored. Organizations need to unleash the talents and motivations of their employees if they are to achieve peak performance (Katzenbach, 2000). Public organization are in a high race to establish a high performance staff to eliminate previous perceptions towards the job performance quality of their staff. In order to improve and enhance job performance in the organization, human capital should be prioritized and analysed in a workplace setting (Peterson & Luthans, 2002) by engaging the theory with work engagement that can directly improve job performances from the ; in role (IR) and extra role (ER) perspectives

### **1.2 Research Objective**

The main objective is:

To investigate the effect of of PsyCap (hope, optimism, resilience and self-efficacy) on job performance (extra role in role performance) of the assistant registrar in Malaysia Public University.

### **1.3 Significance of the Study**

This study is significant in many ways as it will directly involve the performance of the staff quality and well-being. The workplace revolutions have been transforming from 8 hours sessions into longer period of time with extra job tasks and responsibilities. Apparently, it is one of the first few attempts to investigate the implementation of psychological capital (PsyCap) concepts introduced by Luthans and Youssef (2007) into the workplace in Malaysia public sector agencies with the aid of work engagement (Schaufeli and Bakker, 2002) as mediating factor in order to enhance the job performance capabilities which specifically focusing towards in-role and extra role behavior (OCB) developed by Maxham et.al. (2008).

Therefore, the identification of the specific productivity and job quality limiters in the public sector agencies will provide a useful launching pad for further research in this area with the aid from the new framework which highlights the elements that can be investigated and tested to enhance job performance quality in the selected organization. It could perhaps also assist in the great emphasis that focus towards human capital need to be adapted and recognized with the suggestion that all organization shall foster the elements of PsyCap if they want to increase the job performance amongst their employees.

### **1.4 Limitation of the Study**

It is only generalised to the public universities located in Klang Valley instead of total number of 20 public universities around Malaysia and larger continents due to this limit. Furthermore, the experiment will be conducted within the framework developed in this study.

## **2 LITERATURE REVIEW**

Over the time, organizations have been looking for ways and strategies for improving performance. This includes a thorough study and analysis of many aspects in organizations (human resource, material resources, motivation and financial) and many more. Job performance represents behaviours of

the staff engaged at work that they can contribute to the achievement of organizations goal setting. Moreover, it is about behaviours that are within the control of the staff and not about the results (effectiveness), the costs involved in achieving results (productivity), the results that can be achieved in a period of time (efficiency), or the value an organization places on a given level of performance, effectiveness, productivity or efficiency. Job performance is an abstract, latent construct that cannot be pointed to or measured directly. It is made up of multiple components or dimensions (Koopmans et.al, 2011). Meanwhile, Campbell (1990) in the Koopmans et. al (2011) mentioned job performance is a behaviours or actions that are relevant to the goals of the organization.” Three notions accompany this definition: (1) work performance should be defined in terms of behaviour rather than results, (2) work performance includes only those behaviours that are relevant to the organization’s goals, and (3) work performance is multidimensional.

## **2.1 Psychological Capital (PsyCap)**

Derived from the quotes by Peterson (2006), “what is good about life is as genuine as what is bad and therefore observes equal attention”, Luthans (2002) stated the basic concept of PsyCap as the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in modern workplace. This concept focuses to the positive organization (staff as the priority) instead of fixing the weaknesses. With the enormous changes in the way of organization conduct, it has been recognizes that over the years, many positive construct has been applied in the organization includes positive affectivity, positive reinforcement, job satisfaction and commitment, self-evaluation and many others.

By adapting positive psychology into the workplace situation using PsyCap, it will give a renewed emphasis to the importance of positive approach. (Youssef & Luthans, 2007). PsyCap highlighted the importance of more positive approach need to be applied not only in a psychology, but also in management and business field, derived from the research done by Walsh, Weber & Margolis (2003) who reported that the in the management and business field, negative biased words have increased four-fold compared to the positive terms. Typically, PsyCap determined and strengthen into individual (staff) positive psychological conditions and human resource strengths-relates to the individual well-being and performance quality improvement.

## **2.2 The Elements Of Psycap**

### 2.2.1 Hope

Hope has been defined as a positive motivational state that is based on an interactively derived sense of successful agency and pathways. (Snyder et. al, 2000). Hope has been shown to be applicable and relate to various performance factors like the workplace and the people inside the organization. (Luthans, Avolio, Walumbwa

Li, 2005). Human resources with a higher hope are more profitable, higher retention rates and have greater satisfaction and commitment towards their jobs and well-being. (Snyder et. al, 2000). Hope is not an emotion but it more directly link to dynamic cognitive motivational system. (Snyder et.al, 1991) Meanwhile, Pekrun, Elliot, Maier (2006) see hope as one of the academic achievement emotions resulting from mastery and performance-approach goals.

### 2.2.2 Optimism

A famous quote by Winston Churchill, “a pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.” Optimism has been proven to improve the immune system, prevent chronic disease, and help people cope with unfortunate news. Gratitude is associated with optimism and has been determined that grateful people are happier, receive more social support, are less stressed, and are less depressed. Recent research indicates that optimists and pessimists approach problems differently, and their ability to cope successfully with adversity differs as a result. (www.pursuit-of-happiness.org, 2015). As stated by Scheier & Carver (1985), optimism is a set of generalized positive outcome expectancies.

### 2.2.3 Resilience

Malik (2013) stated that resilience is the ability and capacity of a workplace

to withstand potential significant economic times, systemic risks, or systematic disruptions by adapting, recovering or resisting being affected and resuming core operations or continuing to provide an acceptable level of functioning and structure. It is the ability to respond quickly. Eventually, it is the responsibility of those in leadership roles (managers and supervisors) to create a workplace climate that fosters well-being and facilitates resilience.

Intense and unpleasant demands tend to overload people, especially when the demands are unrelenting and there is insufficient time to regain balance. Even when people are coping well and stress levels are low, prolonged over-demand can lead to burn out and a subsequent negative impact on workers as well as the economy of an organization (Hiebert, 2006).

#### 2.2.4 Self-efficacy

Self-efficacy is defined as having confidence to take on and put in the necessary effort to succeed at challenging tasks. The determination and courage to take the responsibilities given by the superior will challenge every individual how to survive and make it success. Meanwhile, Stajkovic and Luthans (1998) define self-efficacy as the “individual’s conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context.

## 2.0 RESEARCH METHODOLOGY

The purpose of this study was to investigate the relationship between PsyCap and JPQ. Furthermore, this study attempts to analyse the concept of psychology in organizational behaviour which are focusing into positivity aspect rather than fixing weaknesses.

### 3.1 Research Design

This research is a regression coefficient research as it examines the relationship between variables. This research illustrates an extensive picture of the variables under PsyCap in order create a high job performance quality in the organization.

### 3.2 Population and Sampling

For this study, the data were collected from public universities Assistant registrars scheme; namely Administration Officer, Assistants Administration Officer or Executive Officer (title are differed by organization) with the salary scheme of N41, which currently employed in seven (7) public universities in Klang Valley.

### 3.3 Survey Instruments



The instrument will be used for the data collection is a online survey questionnaire. The questionnaires are the combination of the open ended questions, close ended with optional answers and two types of five-point Likert Scale basis with the following values:

Strongly Agree, (2) Disagree, (3) No Opinion, (4) Agree and (5) Strongly Agree. Another type of five-point Likert Scale values were as follow: (1) Not Important, (2) Least Important, (3) Uncertain, (4) Important and (5) Most Important.

The questionnaires will be divided into five (5) sections, Section A, B, C, D and E. Section A will analyse the demographic background of the respondents which consists the designation, duration of service, qualifications, salary range, gender, marital status and age of the respondent. Next, Section B until Section E will comprehensively illustrate the question from every variable involved. An online survey will be developed by the researcher and the questionnaire will be emailed to each respondent selected within time frame.

### **3.4 Reliability and Validity of Instruments**

According to Sekaran (2006) the reliability of the instruments indicates the extent to which the study is error free and ensures the measurement is consistent across time and across the various items in the instruments. The study will have consistent results if repeated overtime or if used by two different researchers. To examine the reliability of the study, the instruments will be sent to a pilot study to test the normality before it is used in the real set of questionnaires. Meanwhile, according to McMillan and Schumacher (2006), the validity of instruments is the extent to which uses made based on scores are reasonable and appropriate. The questionnaire will be tested for both face and content validity by experts who check for errors, ambiguity, and concept. One (1) lecturer in concern established the face validity for this study and one (1) expert from the industry will be consulted to review this study. The feedback obtain from these experts will assist in improving the instrument.

### **4.0 Conclusion**

Both work engagement and job performance are of vital importance to human resource managers as well as independent consultant in that field. In this present study, the relationship observed towards

assistant registrar in Malaysia public universities. The knowledge generated is based on the study conducted regarding work engagement among assistant registrar in Malaysia public universities. In spite of strong theoretical support for moderation by experience between work engagement and job performance, the results of this study are closely linked. In order to keep their work force engaged consistently for several years, managers who acts as employers need to take effective steps towards enhancing vibrancy in their organization. Implementing vibrancy related measures as per the needs of employees, such as high job autonomy, monetary benefits which could help the organizations in optimally utilizing their job performance.

## REFERENCES

- Akshay Malik, (2013) Efficacy, Hope, Optimism and Resilience at Workplace – Positive Organizational Behavior. *International Journal of Scientific and Research Publications*. Vol. 3 (10)
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job Resources Boost Work Engagemnet, particularly when job demands are High. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A.B., & Leiter, M.P. (Eds.) (2010). Work Engagement: A Handbook Of Essential Theory And Research. New York: Psychology Press
- Bakker, A.B., Demerouti, E. (2007). Using The Job Demands-Resources Model To Predict Burnout And Performance. *Human Resource Management Journal*, vol. 43, 83-104
- Basikin (2007), Vigor, Dedication And Absorption: Work Engagement Among Secondary School English Teachers In Indonesia. Retrieved April 1, 2015 from [www.aare.edu.au](http://www.aare.edu.au)
- Bateman, T.S., & Organ, D.W. (1983). Job Satisfaction And The Good Soldier: The Relationship Between Affect And Employee "Citizenship. *Academy of Management Journal*, 24(4), 587-595.
- Campbell CH, Ford P, Rumsey MG, et al. (1990) Development of multiple job performance Measures in a Representative Sample of Jobs. *Pers Psychol*. Vol. 43

Campbell, J.P. (1990). Modeling The Performance Prediction Problem In Industrial And Organizational Psychology. In M.D. Dunnette and L.M. Hough (Eds.), *Handbook of Role-Based Performance Scale Psychology*, Vol. 1 (2) pp 687-732.

Campbell, J.P., McCloy, R.A., Oppler, S.H., & Sager, CE (1993). A Theory Of Performance. In N. Schmidt, W.C. Borman, & Assoc. (Eds.), *Personnel Selection in Organizations*, pp35-70, San Francisco, CA: Jossey-Bass.

Engelbrecht, S. (2006), “*Motivation And Burnout In Human Service Work: The Case Of Midwifery In Denmark*”, unpublished doctoral dissertation, Roskilde University, Roskilde.

Friedrich, G.W. (2000). *Methods of Inquiry: Sampling Theory*. Retrieved April 1, 2015 from [www.scils.rutgers.edu](http://www.scils.rutgers.edu).

Gaby Reijseger, Wilmar B. Schaufeli, Maria C.W. Peeters, Toon W. Taris, (2008) *A Model Of Work Relation Between Work Relation And Job Performance*, *Occupational Health Psychology: From Burnout To Well-Being*. Retrieved April 1, 2015 from [www.wilmarschaufeli.nl](http://www.wilmarschaufeli.nl)

Memari H, Mashallah, V., Aghababae, Z., Davali, M.M., (2013) *The Effect of Positive Organizational Behavior of the Staff on Organizational Performance, Based on the Luthans Model in Public Organizations of Behbahan*, *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 4 (9).

Hiebert, b. (2006). A Contemporary Look At Stress And Burnout: Clarifying The Nuances. *The Alberta Counsellor*, 29(1), 16-25. Retrieved April 1, 2015 from [www.ijsrp.org](http://www.ijsrp.org).

Hunt, N. & Tyrrell, S. (2001). Discuss Sampling Methods. *LTSN Maths Stats or* Retrieved April 1, 2015 from [www.coventry.ac.uk](http://www.coventry.ac.uk).  
*Network*.

Halbesleben, J. R. B., & Buckley, M. R. (2004) *Attribution And Burnout: Explicating The Role Of Individual Factors In The Outcomes Of Burnout*. Retrieved April 1, 2015 from [www.jom.sagepub.com](http://www.jom.sagepub.com).

Katzenbach, J.R. (2000), *Peak Performance: Aligning the Hearts and Minds of Your Employees*, Harvard Business School Press, Boston, MA.

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., De Vet, H. C. W., Van der Beek, A. J. (2011). Conceptual Frameworks Of Individual Work Performance: Systematic Review. *Journal of Occupational and Environmental Medicine*, 53, 856-866. & A Luthans, F. (2002), Positive Organizational Behavior: Developing And Managing Psychological Strengths, *Academy of Management Executive*, Vol. 16, pp. 57- 72.

Luthans, F. and Youssef, C.M. (2007), Emerging Positive Organizational Behavior, *Journal of Management*, Vol. 33, pp. 321- 49.

Maxham JGI, Netemeyer RG, Lichtenstein DR. The Retail Value Chain: Linking Employee Perceptions To Employee Performance, Customer Evaluations, And Store Performance. *Market Sci.* 2008;27:147–167.

Pekrun, R., Elliot, A. J., & Maier, M. A. (2006). Achievement Goals And Discrete Achievement Emotions: A Theoretical Model And Prospective Test. *Journal Of Educational Psychology*, 98, 583–597.

Rich, B.,Lepine, J.A., Crawford, E.R. (2010), Job Engagement: Antecedents and Effects on Job Performance. *Academy of Management Journal*, vol. 53 (3), p. 617-635.

Salkind, Neil J. (2003). *Exploring Research*. 5th ed. New Jersey: Prentice Hall.

Schaufeli, W.B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The Measurement Of Engagement And Burnout: A Confirmative Analytic Approach. *Journal of Happiness Studies*, vol. 3, 71-92

Sekaran, Uma. (2006). *Research Methods for Business : A Skill Building Approach*. 4<sup>th</sup> ed. New Delhi : Wiley India.

Salanova, M., Bakker, A.B. and Llorens, S. (2006), Flow At Work: Evidence For An Upward Spiral Of Personal And Organizational Resources, *Journal of Happiness Studies*, Vol. 7, pp. 1-22.

Salanova, M., & Schaufeli, W.B. (2008). A Cross-National Study Of Work Engagement As A Mediator Between Job Resources And Proactive Behavior: A Cross-National Study. *International Journal of Human Resources Management*, 19, 226-231

Scheier, M. F., & Carver, C. S. (1985). Optimism, Coping and Health: Assessment and Implications of Generalized Outcome Expectancies. *Health Psychology*, 4 (3), 219-247.

Shirom, A. (2003), Feeling Vigorous At Work? The Construct Of Vigor And The Study Of Positive Affect In Organizations, Ganster, D. and Perrewe, P.L. (Eds), *Research in Organizational Stress and Well-being*, JAI Press, Greenwich, CT, pp. 135- 65.

Snyder, C. R., Kevin L. Rand, and David R. Sigmon (2002). Hope Theory: A Member of the Positive Psychology Family. in *Handbook of Positive Psychology*, C. R. Snyder and Shane J. Lopez, eds. Oxford, UK: Oxford University Press, 257-276.

Stajkovic, A. D., & Luthans, F. (1988). Self-Efficacy And Work-Related Performance: A Meta-Analysis. *Psychological Bulletin*, 124(2), 240-261.

Strutton, D., and J. Lumpkin.(1992)Relationship Between Optimism and Coping Strategies in the Work Environment. *Psychological Reports*, Vol. 71, No. 3, pp. 1179- 1186.

Welbourne, T. M., Johnson, D. E. & Erez, A. (1997). The Role-Based Performance Scale: Validity

Analysis Of A Theory-Based Measure. Retrieved April 1, 201215 from [digitalcommons.ilr.cornell.edu](http://digitalcommons.ilr.cornell.edu).

Wright, T.A., & Cropanzano, R. (2004). The Role of Psychological Well-Being in Job Performance: A Fresh Look at an Age-Old Quest. *Organizational Dynamics*, vol.33 (4), 338-351

Yalabik, Z. Y., Popaitoon, P., Chowne, J. A. and Rayton, B. A., 2013. Work Engagement As A Mediator Between Employee Attitudes And Outcomes. *International Journal of Human Resource Management*, vol. 24 (14), pp. 2799-2823.

## THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR IN MALAYSIA PUBLIC SECTOR: EMPLOYEE RETENTION AS A MEDIATOR

### ABSTRACT

*Employee retention is a process in which the employees are encouraged to remain with the organization for the maximum period of time or until the completion of the project. Employee retention is an issue that relevant to all types of an organization including the public sector. The objective of this paper is to examine the human resource management practices that influence employee retention in the public sector organizations in Malaysia and to test the mediating effect of employee retention in the relationship between human resource management practices factors and organizational citizenship behavior in the public sector organizations in Malaysia. This study applied the quantitative research design. The sample size obtained was 1110. The stratified sampling was used to obtain a greater degree of representation. The data strongly support the proposed relationship between human resource management practice and the employee retention. Meanwhile, employee retention is a mediator between human resource management practice and organizational citizenship behavior. The data were collected at one point in time. This study disseminates essential knowledge to enhance our understanding of the relationship between human resource management practices, employee retention, and organizational citizenship behavior. The positive relationship between employee retention and organizational citizenship behavior in this study reveals that these employees who willing to stay in the organization will create a voluntary commitment within an organization especially in the public sector organization that is not part of his or her contractual tasks.*

**Keywords-***Human resource management practice, employee retention, organizational citizenship behavior, mediate, social exchange theory.*

### INTRODUCTION

Employee retention is one of the most important objectives for the Human Resource departments in all organizations. Employee retention is a process in which the employees are encouraged to remain with the organization for the maximum period of time or until the completion of the project. Employee retention is an issue that relevant to all types of an organization including the public sector. It is due to those employees who willing to remain in organization show more dedicated to working for organization's growth.

On the other hand, if an employer decides not to remain with the organization, the organization will face the employee turnover, which can affect the organizational effectiveness, whether public or private (Sherman, 2014; Mobley, 1982).



## **LITERATURE REVIEW**

Browell (2003) defines employee retention as keeping those members of staff that one wants to keep and not losing them from the organization for whatever reason, especially to the competitors. In another word, employee retention is a process in which the employees are encouraged to continue with the organization for the maximum period of time or until the completion of the project.

## **RESEARCH OBJECTIVES**

To examine the human resource management practices factors that influence employee retention in the public sector organizations in Malaysia.

To test the mediating effect of employee retention in the relationship between human resource management practices factors and organizational citizenship behavior in the public sector organizations in Malaysia.

## **Social Exchange Theory**

The relationship between the human resource management practices factors and employee retention can be explained through the Social Exchange Theory. The Social Exchange Theory starts with the premise that humans interact with social behavior in order to maximize benefits and minimize costs, which then leads to a positive outcome (Hutchison & Charlesworth, 2003). From this perspective, the social exchange theory suggests that employees respond to perceived favorable working conditions by behaving in ways that benefit the organization and or other employees. Equally, employees retaliate against dissatisfying conditions by engaging in negative work attitudes such as absenteeism; lateness of preparing to quit the organization (Haar, 2006; Crede et. al., 2007).

## **Human Resource Management Practice and employee retention**

Human resource management practice is a series of integrated decisions that form employment relationship. Their quality contributes to the ability of the organizations and the employees to achieve their objective (Milkovich & Boudreau, 1997). Other researchers such as Jones, George, and Hill (2000) have defined human resource management practice as the activities performed by managers to attract, retain, and manage the performance of employees so that they contribute to achieving organizational goals. In specific, human resource management practice consists of various organizational practices such as selection, reward and recognition of employee, training, employment structures and opportunities, compensation and benefits (Chew & Chan, 2008; Kochachathu, 2010), performance appraisal and employee security, (Lee & Lee, 2007; Hong et. al, 2012).

Human resource management practice is very important because it can produce positive attitude and behavior among the employees, such as willingness to remain in the organization. Previous researchers argue that individual's decision to become and remain a member of an organization is determined by their perception toward the human resource management practice (Butkus & Green, 1999) such as an attractive compensation package (Williams & Dreher, 1992; Highhouse et. al., 1999; Parker & Wright, 2001; Walker, 2001), organizational justice (Rampfumedzi, 2009; Meyer & Smith, 2000), job security (Fitzenz, 1990), and recognition employee capabilities and performance contributions (James & Mathew, 2012; Walker, 2001). The other human resource management practice that can influence employee retention are career development opportunities (Cappelli, 2000; Bhatnagar, 2007; Bushe, 2012), work-life balance (Cappelli, 2000; Walker, 2001), opportunity to attend training and development program (Fitzenz, 1990; Bhatnagar, 2007; Ramlall, 2004) such as the social program for new employees (Davies, 2001).

The link between human resource management practice and retention is in line with the social exchange perspective that argues the employees exchange their willingness to remain in the organization, in return for the effective human resource management practice from the organization (Meyer & Smith, 2000). Below is the possible reason to support the link between human resource management practice and employee retention. First, human resource management practice can build employee feel that their capabilities, efforts, and performance contributions are recognized and appreciated (Davies, 2001). Second, human resource management practice can help to rectify deficiencies in employee performance and provide the skills and abilities to the employee (Gomez-Mejia et. al., 1995; Jaramillo, Mulki, & Marshall, 2005). Third, human resource management can make employee feel of satisfaction, especially when they are treated fairly in term of salary, bonus, and promotion (Adams, 1965; Mueller & Boyer, 1994). Based on the previous discussion, below is the proposed hypothesis:

Hypothesis 1: Human resource management is positively related to employee retention

### **Employee retention and organizational citizenship behavior**

Organizational citizenship behavior indicates employee behaviors that are discretionary, beyond the call of duty and not rewarded in the context of an organization's formal reward structure (Organ, 1988). For example, catering support to a colleague, helping a recently recruited employee to settle into the organization, demonstrating a degree of flexibility by tolerating requests deemed to be excessive or unreasonable, defending the image of the organization in a discussion or inspires a co-worker who is demotivated about his or her achievement or professional development (Paillé,

2013). Organizational citizenship behavior entails personal motivations that go beyond the need to offer something in return for being treated fairly (Lavelle, 2010).

Organizational citizenship behavior is measured by four dimensions namely altruism, helping, sportsmanship and civic virtue (Paille, 2009). Altruism refers to voluntarily helping others with a specific work-related task, such as helping a co-worker with the heavy workload (Organ, 1997). Helping behavior is behaviors targeted at individual others for the purpose of alleviating their struggles with work-related problems or probably avoid problems from appearing in the first place (Organ et. al., 2005). Sportsmanship is enduring hardship and interference without complaining (Organ, 1988), keeping a positive attitude when things do not go as planned and not taking offense when others reject one's suggestions and ideas (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Civic virtue is keeping themselves knowledgeable about the organization as a whole rather than simply focusing on their own job or department (Organ, 1988; Hart et. al., 2016). Meanwhile, the other scholars such as Williams and Anderson (1991) grouping organizational citizenship behavior with two dimensions known as OCB-individuals (OCBI) and OCB-organization (OCBO). OCBI is behaviors directed at specific individuals in the organization, such as courtesy and altruism. It is devoted to the organization indirectly by giving a good deed to peers and co-workers. While OCBO is behaviors concerned with benefiting the organization as a whole, such as conscientiousness, sportsmanship, and civic virtue.

Morrison (1994) reveals that employees who willing to remain in the organization will engage in more organizational citizenship behavior. Similarly, Ünal (2013) also argues that employees who stay with the organization or wish to stay longer in the organization will create a positive working environment where employees infrequently complain about the aggravation experienced by them and diminish work-related conflicts of other employees. Thus, the following hypothesis is proposed:

Hypothesis 2: Employee retention is positively related to organizational citizenship behavior.

## **RESEARCH METHODOLOGY**

This study applied the quantitative research design. The quantitative research design primarily follows the confirmatory scientific method because its focus is on hypothesis testing and theory testing. The population of this study is the supporting staff employees who work in the public sectors that are based in Putrajaya, Malaysia. The population of the supporting staff for public sector employees in this context is 16,488. The sample size obtains from the respondent was 1110

and met the requirement of Krejcie and Morgan (1970). The stratified sampling was used to obtain a greater degree of representation (decreasing the sampling error). This technique was appropriate where various public service existed in a public sector organization while functions between public sector organizations were almost similar in nature. A pilot study was conducted involving 43 respondents from the target population. This sample size was adequate for pilot study purposes.

The pilot study result (see table 1) showed that the alpha values for the three measures exceeded the cut-off point of 0.70. Cronbach alpha values for the measures are 0.765 for compensation, 0.798 for appraisal, 0.79 for training and development, and 0.905 for safety & health. The overall, Cronbach alpha value for human resource management practice is 0.754. The value for organizational citizenship behavior and employee retention are 0.70.

**Table 1:** Illustrates The Reliability of Each Variable.

<b>Reliability results of the variables and its dimensions</b>	<b>Number of items</b>	<b>Cronbach's Alpha</b>
Human Resource Management Practice	19	0.754
Organizational Citizenship Behaviour	13	0.70
Employee Retention	5	0.70

Compensation, reward and benefit were measured with five items developed by Jun and colleague (2006). Performance appraisal practice was measured with three items developed by Whiting and colleague (2008), Training and development practice was measured with five items developed by Edgar and Geare (2005), Safety and health practice was measured with six items developed by Amick (2000), Organizational citizenship behaviour was measured based on the 13 items developed by Podsakoff and MacKenzie (1994). Organizational citizenship behavior consists of four dimensions named as altruism, helping behavior, civic virtue and sportsmanship. Employee retention was measured with five items developed by Jun and colleague (2006). The data of this study were analyzed using structural equation modeling (SEM) technique and using AMOS 23 software.

### **Data Analysis**

The complete and usable surveys were 1110. The final sample size exceeds the minimum sample size required to analyze the proposed model using the structural equation model technique (Hair et. al. 2010). The complete total of respondents represents twenty-four ministry public sector organizations in Malaysia. 33.4 percent (N = 371) of the employees were male and 66.6 percent (N = 739) were female. In terms of age, 8.6 percent (N = 95) were between 18 and 25 years old, 53.1 percent (N = 589) were between 26 and 35 years old, 28.2 percent (N = 313) were between 36 and 45 years old, 8.2 percent (N = 91) were between 46 and 55 and the remaining 2 percent (N =

22) were 55 and over years old. The majority of the employees were married (72.5 percent, N = 805), while the remaining 27.5 percent (N = 305) were single.

The value of descriptive statistics of variables include in this study are employee retention had the lowest mean value of 3.4744, while organizational citizenship behavior indicated the highest mean value of 3.5793 and human resource management practices is 3,5312. The standard deviations of all variables appeared in a range 0.50109 to 0.90567 as in table 1.

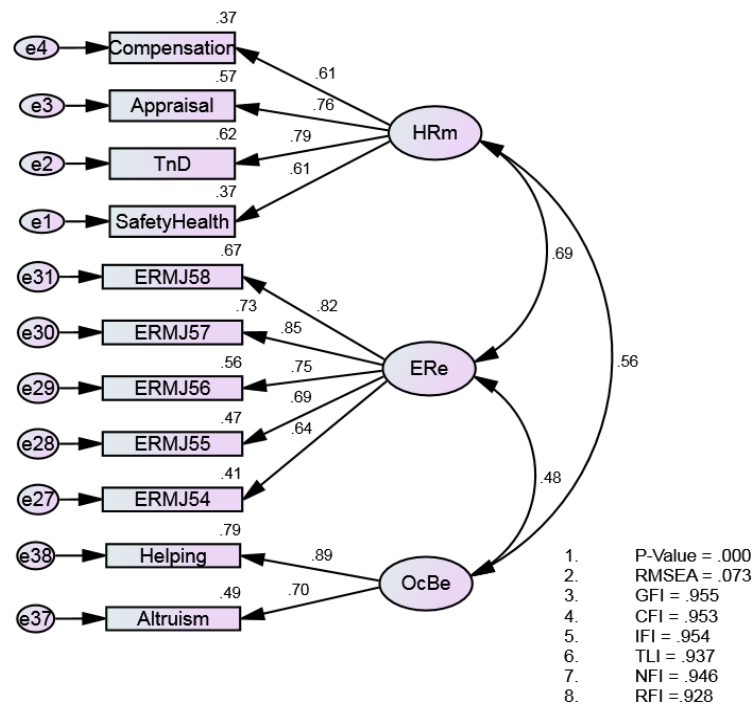
**Table 1:** Descriptive Statistics for All Variables.

<b>Construct</b>	<b>Mean</b>	<b>Std. Deviation</b>
HRm	3.5312	.50109
OcBe	3.5793	.90567
ERe	3.4744	.61239

Note: N= 1110, HRm= Human Resource Management Practices, ERe= Employee Retention, and OcBe= Organizational Citizenship Behaviour

### **Confirmatory Factor Analysis**

This study decided to apply the Pooled-CFA since it is more efficient, thorough, and can avoid the model identification problem especially if some of the constructs have less than four measuring items (Zainudin, 2015; Zainudin et al., 2010). Each latent construct (i.e. human resource management practice, employee retention, and organizational citizenship behavior) included in the model is identified and the measured indicator variables (items) are assigned to latent constructs as shown in Figure 1. By using this method, all constructs are pooled together and linked using the double-headed arrows to assess the correlation among the constructs and the CFA procedure executed at once for all constructs in order the combined constructs would increase the degrees of freedom for the model (Zainudin Awang, 2015)



**Figure 1:** Full Measurement Model

According to the results (see table 2) derived from the confirmatory factor analysis, the p-value associated with this result is 0.000. The value for the root means square error of approximation (RMSEA) is 0.073, which is below 0.08. The result concerning the comparative fit index (CFI) is 0.953, above the acceptable value of model fit, which is 0.90. The Tucker-Lewis Index (TLI) was 0.937, above the acceptable value of model fit which is 0.90. Therefore, fitness indexes for new measurement model are achieved and will proceed to obtain the value of Average Variance Extracted (AVE) and Composite Reliability (CR) for every construct (human resource management practice, employee retention, and organizational citizenship behavior) of this study.

**Table 2:** Full measurement model Confirmatory Factor Analysis Goodness-of-Fit Statistics

Name of Category	Name of Index	Level of Acceptance
<b>Absolute Fit</b>	Chi-Square	<b>.000</b>
	RMSEA (<0.08)	<b>.067</b>
<b>Incremental Fit</b>	CFI (>0.90)	<b>.889</b>
	TLI (>0.90)	<b>.879</b>
<b>Parsimonious fit</b>	Chisq/df (<5.00)	<b>5.387</b>

The validity of the measurement model was assessed based on the convergent validity and discriminant validity as the minimum threshold value for AVE is 0.5 or higher for the validity to achieve and the value of Composite Reliability (CR) 0.6 respectively. Based on table 3 this study concludes that the Convergent Validity and Composite Reliability for all constructs in the model have been achieved (Zainudin, 2012, 2015).



**Table 3:** The Average Variance Extracted (AVE) and Composite Reliability (CR) for all constructs

Construct	Item	Factor Loading	AVE (minimum 0.5)	CR (minimum 0.6)
<b>HRm</b>	safety health	.61	.500	.789
	TnD	.79		
	Appraisal	.76		
	Compensation	.61		
	ERMJ54	.64		
<b>ERe</b>	ERMJ55	.69	.569	.867
	ERMJ56	.75		
	ERMJ57	.85		
	ERMJ58	.82		
<b>OcBe</b>	Altruism	.70	.641	.779
	Helping	.89		

Discriminant Validity for the construct achieved if the correlation among the exogenous constructs in the model does not exceed 0.85 (Zainudin, 2015). Table 4 shows that the correlation value between all construct is less than 0.85. In addition, the square root AVE for all variables also higher than any the correlation values in its row and column. Thus, the study concludes that the Discriminant Validity for all constructs achieved.

**Table 4:** Discriminant Validity Index Summary

Variable	HRm	ERe	OcBe
<b>HRm</b>	<b>0.707</b>		
<b>ERe</b>	.686	<b>0.754</b>	
<b>OcBe</b>	.565	.479	<b>0.800</b>

Note: HRm= Human Resource Management Practices, ERe= Employee Retention, and OcBe= Organizational Citizenship Behaviour.

### Structural model validity

Following the confirmation of the measurement model validity, the structural model was specified by assigning relationships from one construct to another based on the conceptual framework that was developed in the previous literature review as the following hypotheses tested:-

Hypothesis 1- Human resource management practices are positively related to employee retention.

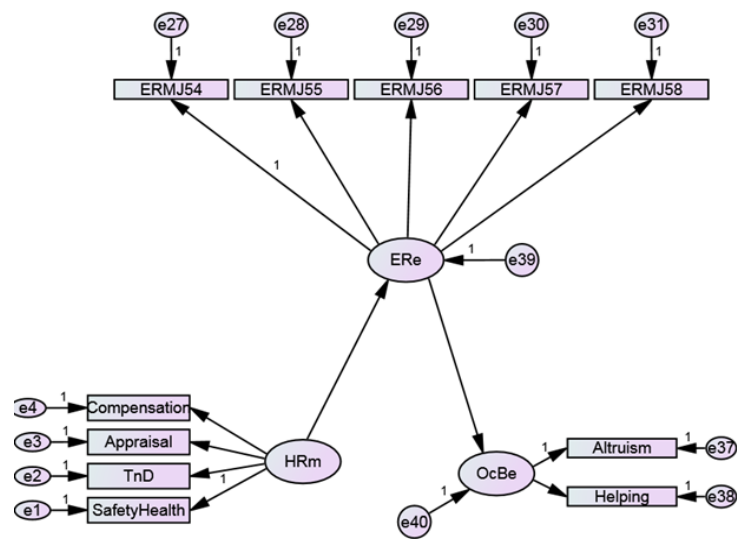
Hypothesis 2- Employee retention will mediate the relationship between human resource management practice and organizational citizenship behavior.

Table 5 shows the results of regression path coefficient. Human resource management practices shows positive and significant impact on employee retention (Coefficient = 0.837, Critical Ratio =

14.295,  $p < 0.001$ ). Employee retention was positively and significantly related to organizational citizenship behaviour (Coefficient = 0.416, Critical Ratio = 10.195,  $p < 0.001$ ).

**Table 5:** The Regression Path Coefficient

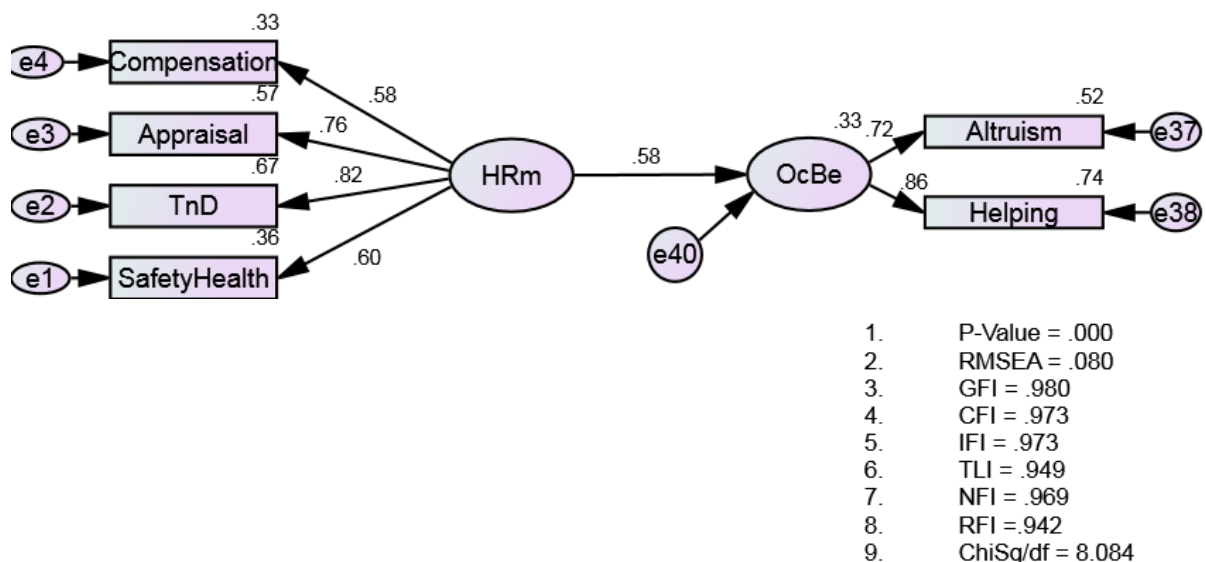
Construct	Construct	Estimate	S.E.	C.R.	P	Result
ERe	<--- HRm	.837	.059	14.295	***	Significant
OcBe	<--- ERe	.416	.041	10.195	***	Significant



**Figure 2:** Structural Model

### Analysing the Mediating Effects

Firstly, this study has tested the direct effect of HRm and OcBe as shown in Figure 3. The output in Table 6 shown coefficient is 0.576, and it has a significant effect on OcBe (critical value=11.696)

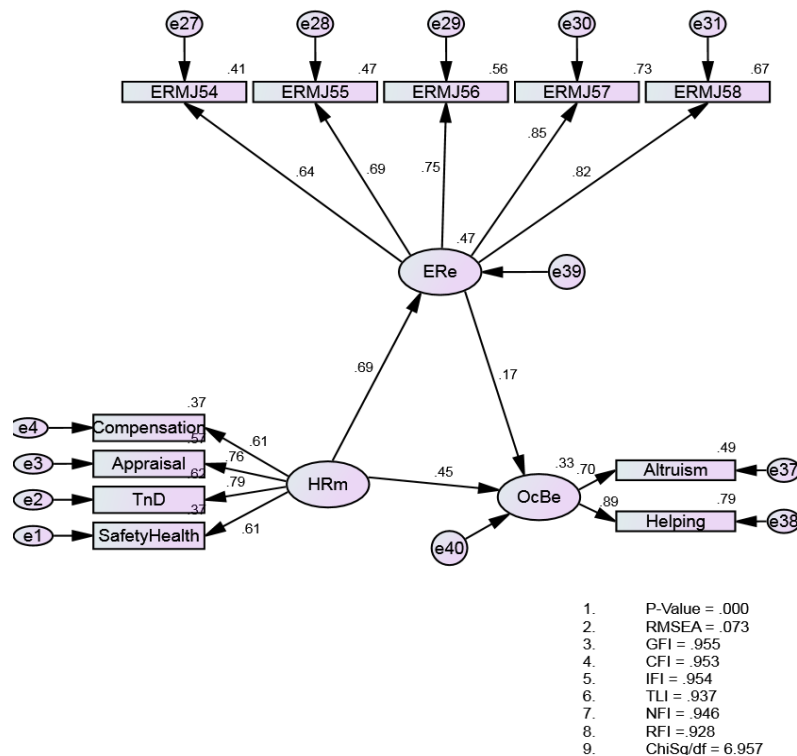


**Figure 2:** The result of direct effect on HRm (The Beta Coefficient is 0.576)

**Table 6:** The direct effect of HRm on OcBe is significant  
(Beta Coefficient 0.576)

Variable	Variable	Estimate	S.E.	C.R.	P	Result
OcBe	<--- HRm	0.576	.054	11.696	***	Significant

Second, this study has created a new model by including the construct ERe as a mediator (see Figure 3). Table 7 shows that the coefficient of the direct effect of HRm on OcBe have reduced to 0.446 but still significant when the mediator (ERe) enter the model. The other direct effect between HRm to ERe (coefficient =0.686, critical ratio =14.109,  $p < 0.001$ ) and between ERe to OcBe (coefficient =0.173, critical ratio =3.527,  $p < 0.001$ ) also show positive and significant effect.



**Figure 3:** The AMOS output showing Regression Weights between construct

In this study was interested to prove that the construct ERe is mediating the relationship between construct HRm and construct OcBe.

**Table 7:** The Path Regression Coefficient and its significance

Variable	Variable	Estimate	S.E.	C.R.	P	Result
ERe	<--- HRm	.686	.056	14.109	***	Significant
OcBe	<--- ERe	.173	.044	3.527	***	Significant
OcBe	<--- HRm	.446	.062	7.372	***	Significant

Based on the previous results, the construct ERe does mediate the relationship between HRm and OcBe. The type of mediation here is called "partial mediation" since the direct effect of HRm and OcBe is still significant after the mediator variable ERe entered model even though the path coefficient for HRm was reduced from 0.576 (Table 6) to 0.446 (Table 7). In another word, HRm has the direct effect on OcBe and also the indirect effect on OcBe through ERe.

To confirm the test for mediation, the steps outlined by Baron and Kenny (1986) using SPSS were followed. First, human resource management practice was positively related to organizational citizenship behavior ( $\beta = .446$ ,  $p < 0.05$ ). Thus, the first condition of mediation was met. Second, human resource management practice was positively related to employee retention ( $\beta = .686$ ,  $p < 0.05$ ), thus meeting the second condition of mediation. Third, employee retention was positively related to organizational citizenship behaviour ( $\beta = .173$ ,  $p < 0.05$ ). Finally, the effect of HRm on OcBe is still significant even after controlling the effect of ERe ( $\beta = 0.173$ ,  $p < 0.05$ ). This result confirmed that ERe has partially mediated the relationship between HRm and OcBe.

The data strongly support the proposed relationship between human resource management practice and the employee retention. Meanwhile, employee retention is a mediator between human resource management practice and organizational citizenship behavior.

## DISCUSSION OF FINDING

### **Human resource management practices are positively related to employee retention**

The conceptual framework of this study anticipates that human resource management practices will positively relate to employee retention. This study dispute that the employee retention will be stronger if the organizational management implements the good practice of human resource management.

The result of data analysis indicates that a significant and positive relationship between human resource management practices and employee retention. The finding supports the proposed model of the relationship of human resource management practice in term of contributing to the employee retention. This result suggests that the application of good compensation, training and development, performance appraisal and safety and health practice can facilitate the employee to stay the longer time in the public sector organization in Malaysia.

The finding is in line with previous studies that argue the human resource management practices is one of the factor that influence employee retention (Imna et. al., 2015; Tangthong, 2014; Khan et.

al., 2011; Chew et. al., 2008; Shaw et. al., 1998). The positive link between human resource management practices and employee retention makes sense because the employee will stay in a particular organization if they are treated and rewarded equally fair and appropriately (Mercer Report, 3003). Similarly, an employee also will remain with the organization when they feel their capabilities, effort, and performance contributions are rewarded and acknowledged (Davies, 2001). Although the finding of this study is quite similar with previous studies, however, this study extends the literature by providing empirical evidence that human resource management practice has a positive effect to the employee retention in the context of the public sector in Malaysia.

The discussion on how employee retention who refer to employees' willingness to stay in the organization longer has the impact on employees, particularly to their organizational citizenship behavior have received less attention in the literature. Till date, there is still lack of evidence to support the role of employee retention as a mediator in the relationship that has been mention before.

### **Employee retention is a mediator between human resource management practice and organizational citizenship behavior.**

The conceptual framework of this study predicted that employee retention will mediate the relationship between human resource management practice and organizational citizenship behavior. The analysis result confirmed the role of employee retention as a mediator in the relationship between human resource management practice and organizational citizenship behavior.

This finding is in line with the social exchange theory (Blau, 1964). The social exchange theory state that an exchange of goodwill takes place between employee and organization or employee and supervisors and a sense of reciprocity exists between members. Therefore, the employees who have perceptions of being treated with respect and dignity throughout human resource management practice by their organization will willing to stay in the organization and demonstrate behavior that goes beyond the call of duty (Hart et. al., 2016; Organ, 1988). An example of treatment given by the public sector organization in Malaysia to their employees are the pension, hospitalization benefit, study leaves, training and development and recognition).

### **LIMITATION OF STUDY**

One of limitation of this study is the data were collected at one point in time, applying a cross-sectional design methodology. While beyond the scope of this study, a longitudinally designed study may provide more robust findings on which to base causal inferences (Chiaburu et al., 2010; López et al., 2006).

## CONCLUSION

This study disseminates essential knowledge to enhance our understanding of the relationship between human resource management practices, employee retention, and organizational citizenship behavior in a non-Western context, specifically in the Malaysian public sector organization. Specifically, this study has provided empirical evidence on the impact of human resource management practices on employee retention as well as the impact of employee retention toward organization citizenship behavior. Although the findings are limited to the context of public sector organizations in Malaysia, they can be a reference for other organizational types. In addition, this study provides empirical about the role of employee retention as a mediator between human resource management practice and organizational citizenship behavior.

## REFERENCES

- Adams, J. S., 1965. Inequity in social exchange. *Advances in experimental social psychology*, 2, 267-299.
- Amick, B. C., Habeck, R. V., Hunt, A., Fossel, A. H., Chapin, A., Keller, R. B., & Katz, J. N., 2000. Measuring the impact of organizational behaviors on work disability prevention and management. *Journal of occupational rehabilitation*, 10(1), 21-38.
- Baron, R. M., & Kenny, D. A., 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bhatnagar, J., 2007. Talent management strategy of employee engagement in Indian ITES employees: key to retention. *Employee relations*, 29(6), 640-663.
- Browell, S., 2003. *Staff retention in a week*. Hodder & Stoughton.
- Bushe, B., 2012. Factors that determine academic staff retention and commitment in private tertiary institutions in Botswana: Empirical review. *Global advanced research journal of management and business studies*, 1(9), 278-299.
- Butkus, R.T. and Green, T.B., 1999. *Motivation, beliefs, and organizational transformation*. ABC-CLIO.
- Cappelli, P., 2001. On-line recruiting. *Harvard business review*, 79(3), 139-146.
- Chew, J. and Chan, C.C., 2008. Human resource practices, organizational commitment and intention to stay. *International journal of manpower*, 29(6), pp.503-522.
- Crede, M., Chernyshenko, O.S., Stark, S., Dalal, R.S. and Bashshur, M., 2007. Job satisfaction as mediator: An assessment of job satisfaction's position within the nomological network. *Journal of Occupational and Organizational Psychology*, 80(3), pp.515-538.
- Davies, R., 2001. How to boost staff retention. *people management*, 7(8), 54-56.



- Edgar, F., & Geare, A., 2005. HRM practice and employee attitudes: different measures–different results. *Personnel review*, 34(5), 534-549.
- Fitzenz, J., 1990. Getting-Good And Keeping-Good Employees. *Personnel*, 67(8), 25-28.
- Gomez-Mejia, L. R., Balkin, D. B., & Cardy, R. L., 1995. Managing human resources.
- Haar, J.M., 2006. The downside of coping: Work–family conflict, employee burnout and the moderating effects of coping strategies. *Journal of Management & Organization*, 12(2), pp.146-159.
- Highhouse, S., Stierwalt, S. L., Bachiochi, P., Elder, A. E., & Fisher, G., 1999. Effects of advertised human resource management practices on attraction of African American applicants. *Personnel Psychology*, 52(2), 425-442.
- Hong, E.N.C., Hao, L.Z., Kumar, R., Ramendran, C. and Kadiresan, V., 2012. An effectiveness of human resource management practices on employee retention in institute of higher learning: A regression analysis. *International journal of business research and management*, 3(2), pp.60-79.
- Hutchison, E.D. and Charlesworth, L.W., 2003. Theoretical perspectives on human behavior. *Hutchison (Ed.), Dimensions of human behavior: Person and environment*, 2, pp.46-88.
- James, L., & Mathew, L., 2012. Employee retention strategies: IT industry. *SCMS Journal of Indian Management*, 9(3), 79.
- Jaramillo, F., Mulki, J. P., & Marshall, G. W., 2005. A meta-analysis of the relationship between organizational commitment and salesperson job performance: 25 years of research. *Journal of Business Research*, 58(6), 705-714.
- Jones, G., George, J., & Hill, W., 200). *Contemporary Management*. USA: Irwin McGraw-Hill.
- Jun, M., Cai, S., & Shin, H. (2006). TQM practice in maquiladora: Antecedents of employee satisfaction and loyalty. *Journal of operations management*, 24(6), 791-812.
- Kochachathu, P., 2010. *The Influence of Human Resource Practices on Employee Retention* (Doctoral dissertation, Universiti Utara Malaysia).
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Lavelle, J., 2010. Public Service HRM Policies and Practice: Trends & Challenges for HR Management in the Broader Public Sector in the International Arena, AAPAM Roundtable Conference. *Durban, South Africa*.
- Lee, F.H. and Lee, F.Z., 2007. The relationships between HRM practices. *Leadership style, competitive strategy and business performance in Taiwanese steel industry*.
- Meyer, J. P., & Smith, C. A., 2000. HRM practices and organizational commitment: Test of a mediation model. *Canadian Journal of Administrative Sciences/Revue canadienne des sciences de l'administration*, 17(4), 319-331.

Milkovich, G.T. and Boudreau, J.W., 1997. Personnel/human resource management: A diagnostic approach. Homewood, IL: Richard Irwin.

Mobley, W.H., 1982. Employee, Turnover: Cause Consequences, and Control. Addison-WeleyPublishing Company. Inc. Philipines.

Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of management journal*, 37(6), 1543-1567.

Mueller, C. W., Boyer, E. M., Price, J. L., & Iverson, R. D., 1994. Employee attachment and noncoercive conditions of work: The case of dental hygienists. *Work and occupations*, 21(2), 179-212.

Organ, D. W., 1988. *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books/DC Heath and Com.

Organ, D. W., 1997. Organizational citizenship behavior: It's construct clean-up time. *Human performance*, 10(2), 85-97.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B., 2005. *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Sage Publications.

Paillé, P., 2009. Engagement et citoyenneté en contexte organisationnel: un examen empirique sur l'apport des cibles multiples d'engagement à la prédiction des comportements de citoyenneté organisationnelle. *Le travail humain*, 72(2), 185-204.

Paillé, P., 2013. Organizational citizenship behaviour and employee retention: how important are turnover cognitions?. *The International Journal of Human Resource Management*, 24(4), 768-790.

Parker, O., & Wright, L., 2001. PAY AND EMPLOYEE COMMITMENT: THE MISSING LINK-The company that enhances compensation conditions and practices will likely see an improvement in employee commitment. *Ivey Business Journal*, 65(3), 70-73.

Podsakoff, P. M., & MacKenzie, S. B., 1997. Impact of organizational citizenship behavior on organizational performance: A review and suggestion for future research. *Human performance*, 10(2), 133-151.

Podsakoff, P.M., MacKenzie, S.B., Paine, J.B. and Bachrach, D.G., 2000. Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of management*, 26(3), pp.513-563.

Public Service Department Annual Report 2008, viewed 16 January 2017, [http://www.jpa.gov.my/index.php?option=com\\_content&view=article&id=348:annual-report&Itemid=45&lang=en](http://www.jpa.gov.my/index.php?option=com_content&view=article&id=348:annual-report&Itemid=45&lang=en).

Public Service Department Annual Report 2016, viewed 16 January 2017, [http://www.jpa.gov.my/index.php?option=com\\_content&view=article&id=348:annual-report&Itemid=45&lang=en](http://www.jpa.gov.my/index.php?option=com_content&view=article&id=348:annual-report&Itemid=45&lang=en).

Ramlall, S., 2004. A review of employee motivation theories and their implications for employee retention within organizations. *Journal of American Academy of Business*, 5(1/2), 52-63.

Rampfumedzi, L., 2009. *Retention strategy for miners and artisans at Tshikondeni coal mine* (Doctoral dissertation, Stellenbosch: University of Stellenbosch).

Sherman, T.K., 2014. *The effects of job embeddedness on retention of employees in public higher education*. California State University, Fresno.

Ünal, A. P. Ö. F. (2013). Relationship between the facets of job satisfaction and the dimensions of organizational citizenship behavior: Mediating role of organizational commitment. *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 18(1).

Walker, J. W., 2001. Zero defections? *Human Resource Planning*, 24(1), 6–8.

Whiting, H. J., Kline, T. J., & Sulsky, L. M., 2008. The performance appraisal congruency scale: an assessment of person-environment fit. *International Journal of Productivity and Performance Management*, 57(3), 223-236.

Williams, L. J., & Anderson, S. E., 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, 17(3), 601-617.

Williams, M.L. and Dreher, G.F., 1992. Compensation system attributes and applicant pool characteristics. *Academy of Management Journal*, 35(3), pp.571-595.

Zainudin, A., 2012. Structural equation modeling using AMOS graphic. *Shah Alam: Universiti Teknologi MARA Publication Centre (UPENA)*.

Zainudin, A., 2015. Structural equation modeling using AMOS graphic. *Shah Alam: Universiti Teknologi MARA Publication Centre (UPENA)*.

## **FACTORS INFLUENCE VEGETABLES AND FRUITS BUYING INTENTION DURING PANDEMIC CRISIS COVID-19**

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*In the field of agriculture, emerging social media help farmers sell directly to consumers. Yet individual farmers continue to struggle to reach consumers and gain trust. In these struggles, farmers using social media to build public awareness, promote consumer trust, and provide mutual support among communities. Covid-19 pandemic has brought all economic challenges sectors, especially agriculture. The Movement Regulation Order (MCO) in Malaysia has affected labor supply and disrupted supply chains in the agricultural industry. There are not many open enterprises, and it has restricted all wholesale-market operations. Nevertheless, household demand for fresh farm products is increasing as people stay cooking indoors. Therefore, farmers need to be more aggressive in terms of marketing on social media to reach the consumer so that they can continue to generate revenue and sales. The purpose of this study is to analyze the factors influencing fruit and vegetable purchase intention through social media based on consumer behavior. Theory of Planned Behavior (TPB) was used in this study. This study was carried out using an online survey technique that gathered data from 90 respondents. SPSS has been used for the analysis of the results. The result shows that intention to buy online is impacted by attitude and perceived behavioral control of the consumer. However, consumer satisfaction has an indirect influence on online purchase intention through the mediator of consumer attitudes. Most of the perceived risk and perceived benefits mode value results in having a higher number for their intention to buy fruits and vegetables online.*

**Keywords***Social Media, Theory of Planned Behavior, Agriculture***1. INTRODUCTION**

During the Covid-19 crisis, attention must be given to the agricultural sector to guarantee food security and to protect farmers, breeders, and fishers and workers in the agricultural industry who are exposed to economic hardship (Rahmawati et al., 2018).

During the MCO, the three macro-categories of economic problems created were identified. Ferlito & Perone (2020) said that the supply chain was disrupted, and the price hikes in the short term had caused human sequence. Online agriculture had attracted people's interest in agriculture since they are able to know where their food is coming from, how it was raised, and how it got to their plate. According to White, Meyers, Doerfert & Irlbeck (2014), the U.S. Department of Agriculture (2013) said online farming is essential as consumers want their food convenient, ethically raised and healthy. This pattern helps users to keep in touch with farmers who would not otherwise be able to do so due to time and distance problems.

Recently, the proportion of vegetables in consumer food spending has increased (Rahmawati et al., 2018). Vegetables are essential foods, and they provide essential vitamins, minerals, and other nutrients for humans (Rahmawati et al., 2018; Cheng et al., 2016; Saba et al., 2018; Zhang et al., 2017). Price, appearance, and free from harm were significant factors affecting consumers' behavior in buying vegetables (Bosch et al., 2012).

With the rapid growth of social media, people around the world are able to communicate quicker, more cost-effectively, and with less reservation across shared interests. Social media users are building their information-sharing communities, accounts, forums, and blogs. They also sell and buy agricultural commodities in this community. (Balkrishna & Deshmukh, 2017). Social media allows people to create posts, upload, interact, discuss, and network in a wide variety of agriculture digital platforms. The health centers and business studies also found the changes in fruit and vegetable consumption after marketing in social media. (White, Meyers, Doerfert & Irlbeck, 2014).

Several internet users have begun to be interested in shopping online for agricultural products. Still, the findings are not very convincing because they continue to choose to visit traditional shops while purchasing fresh products so that they can touch and select the product (Rizkia, 2015). Therefore, the purpose of this study is to analyze the factors influencing fruit and vegetable purchase intention through social media based on consumer behavior.

## **2. LITERATURE REVIEW**

### **2.1 THEORY OF PLANNED BEHAVIOR**

The theory of planned behavior (TPB) is an extension of the theory of reasoned action (TRA) (Ajzen, 1991). Ajzen (1991) claimed that, as in the original reasoned action theory (TRA), the purpose of a person to perform a given behavior is a central factor in the theory of planned behavior (TPB). Intentions are assumed to capture the motivational factors that affect an action; they are indications of how hard people are willing to try, of how much effort they expect to expend to perform the behavior. As a general rule, the higher the motivation to engage in action, the more likely its success should be. However, it should be clear that behavioral intent can only find expression in behavior if the behavior in question is under wilful control. Under this theory, perceived conduct control and behavioral intention can be used explicitly to predict behavioral achievement.

In recent years, TPB has been successfully applied in a variety of fields to confirm its value (Wong & Aini, 2017; Setiawati et al., 2018; Rana & Paul, 2017; Putri Simamora & Djemdjem Djameludin, 2020; and Li et al., 2020). It is also well acknowledged that in an online transaction, it can explain the problem of consumer purchase intention (Wei et al., 2018).

To the best of our knowledge, while there is extensive research to explore influential factors in online purchasing intention, online purchasing intention for foods and vegetables still lacks in measurement (Wei et al., 2018). Given the lack of understanding about purchasing fruits and vegetables online, especially during The Covid-19 pandemic, the purpose of this study is to identify the underlying belief on the intention of the consumer to purchase fruits and vegetables online. Finding from this study aimed at increasing the knowledge about the motivation that drives consumers to buy fruit and vegetable online basis.

### **2.2 USER INTENTION TO BUY VEGETABLES AND FRUITS USING SOCIAL MEDIA**

The use of social media in agricultural marketing nowadays is proliferating and becoming a powerful tool and connecting millions around the world (Fikri et al., 2019). Farmers use social media because it can connect over a geographical distance with farmers, agribusiness, and agri-experts. Social media in agricultural marketing provides solutions to the problems of agricultural marketing to some degree (Bite Bhalchandra Balkrishna et al., 2017).



Social media in agricultural marketing offers solutions to the problems of agricultural marketing to some degree. A significant advantage of using social media in agricultural marketing is the ability to acquire a wealth of knowledge and ideas, the opportunity to establish key partnerships, the opportunity to reach more extensive consumers, farming experts (Bite Bhalchandra Balkrishna et al., 2017).

Social media can affect food preferences. The Hartman Group's Clicks and Cravings Survey, a market research firm that specializes in consumer behavior, found that 49 percent of adults online reported learning about food through social networking. Forty percent of adults online said learning about food through websites, apps, or blogs. Survey participants were asked if they spend more time reading from print or online sources about the food. Forty-six percent of online consumers reported that they spend more time reading online, and 31 percent said they spend equal amounts of time reading online and from print sources about food. Such figures are all important factors to take into account when selling a food product (Reau, 2013).

Consumer behavior is dynamic, and there is beauty in trying to understand consumer's intention to purchase for a product category like fruits and vegetables. The use of the Internet for shopping for fruits and vegetables has proliferated in recent years and has a profound influence on many consumers' shopping process (Fikri et al., 2019). Ling et al. (2010) propose that online marketers should investigate the determinants of online customer purchasing intentions. Pavlou (2003) states that observing assessing consumer behavior online is crucial.

Shim et al. (2001) show that the intention to use the Internet to gather information for search goods is not only the strongest predictor of Internet purchasing intentions but also mediates the relationship between purchasing intentions and predictors such as attitudes towards online shopping, perceived control and online purchasing experience. Zhang et al., (2018), concluded that when customers had experience buying vegetables online, the probability of purchasing intention increased by 6.7% and the willingness to pay a premium price increased by 10.0%.

### **3. METHODOLOGY**

To study factors determining consumers' purchase behavior for fruits and vegetables using social media, primary data was collected from fruits and vegetable consumers. This study is based on quantitative research over social media purposively because the researcher wants to identify patterns of social media user who meets the characteristic of the study. A questionnaire was adopted

from the study () in Malaysia. The survey was conducted using google form and distribute from April to July 2020. The survey consisted of 5 multiple-choice questions and ten questions that the respondents had to answer with a 5-point Likert scale. The questionnaire was sent randomly, and everybody can answer the question without pressure. As this study only measures the pattern of the buyer, the descriptive research analysis is executed. A total of 90 respondents answered the question with the timeline given, and all surveys were included in the report as all fully completed. The researcher had used the method because the respondents were chosen randomly, and it will not be biased for the result. As mention by Henroid, Ellis, and Huss (2003), the Internet has made the information collection process simpler. It is also used as a trustworthy source of knowledge due to the quality of the information. The collected data was organized before analysis. We searched the dataset for missing data and outliers. The "outlier labeling law" has been used for this. All values were considered outliers beyond the measured range (Hoaglin & Iglewicz, 1987). Then, the data were analyzed using SPSS statistical software.

#### **4. FINDING AND DISCUSSION**

The data shows that significant respondents are from the gender female, i.e., 83.3 % and male respondents are 16.7 %. The information also indicates that substantial respondents are from the age group of 31-40 years (46 %) and followed by group 21-30 years old at 33%. As in a study done by White, Meyers, Doerfert & Irlbeck (2014), women are more likely to use social media than men, and Internet users are more likely to use social media if they reside in an urban area as opposed to rural. The data shows that most of the respondents are using social media for information seeking, followed by a solution of the problem. The evidence indicates that salary most of the respondents were government servants and non-working at 37.8 % each. The Private sector supports it at 14.4 % and the Own self at 10%. The data shows that most of the respondents are visiting Social media more than 16 times daily is at 32.2%. Henroid, Ellis, and Huss (2003) noted the Internet has made the process of information retrieval easier and is often seen as a reliable source of information because of the readiness of the data.

Perceived risk is consumer's subjective assumptions regarding risks, the effects of actions that cannot be expected. Based on the frequency, 84.5 % of respondents agree that they cannot check the original product if they buy vegetables or fruits online. 81.1% of them admit they cannot touch and feel the authentic products if they buy vegetables or fruits online. 20% disagree, while 45% agree that they risk sacrificing their personal data when purchasing products online. 82.2% agree that products purchased may not meet their expectations. From the data, it was found that the consum-

er knows the risk they involved and social media allowing for more transparency between the producer and the consumer. (White, Meyers, Doerfert & Irlbeck, 2014) Although the adoption of social media as a marketing tool was challenging since people are less sure about e-buying, selling agricultural goods on social media. (Balkrishna & Deshmukh, 2017)

Perceived benefits are a belief about desirable behavioral outcomes. From the study, It was found that 63% agree that they can buy vegetables or fruits wherever they want if the purchase can be made online. 82% of them also agree if buying vegetables or fruits online can save their energy compared to visiting traditional stores. Besides, 83% of them agree buying vegetables or fruits online can avoid the hassle of driving and parking. But, since we don't specify social media, 34% not sure if there are discounts and prizes are available if they buy online. A significant benefit of social media in agricultural marketing is the potential to acquire a wealth of expertise and ideas, the opportunity to develop critical partnerships, the opportunity to reach broader audiences (Balkrishna & Deshmukh, 2017). All the participants said the primary reason for starting their social media presence was to provide reliable information about agriculture to the consumer. This highlight consumer need to give opinions, express deeply felt emotions and sharing experience by writing (White, Meyers, Doerfert & Irlbeck, 2014)

Subjective norm refers to the societal burden that is experienced or not included in. From the study, 36% were not sure whether their family and colleagues would agree if they buy vegetables or fruit online. However, 69% of them agree that social media regularly encourages people to shop online. Besides, 57% has agreed the person they trust in his opinion encouraged them to do online shopping. When addressing their social media activity for the benefit of agriculture, males said that social media helps to promote openness, while females noted that social media helps support social advocacy (White, Meyers, Doerfert & Irlbeck, 2014)

Perceived behavioral control is how a person sees an action based on his or her abilities. The data shows that 48% have the resources to buy vegetables or fruits online, and 65% can afford to buy vegetables or fruits online. 51 % agree that buying vegetables or fruits online is more accessible than other methods, and 62.2 % finally acknowledge that they can decide to buy vegetables or fruits online.

User satisfaction is a customer reaction to the consistency between expectations and actual results that are experienced after having the products. Most of the respondents feel satisfied with the social media interaction (51.1% ) because the social media performance is following user expectations (57.8%) and is a useful thing to do (67%). 48.9% agree buying vegetables or fruits online is a good idea, and 43.4 % agree that they consume more vegetables or fruits if available online. How-

ever, 34.4% of them recognize the social media knows its users well enough to offer products that are tailored to their needs or buying it online is better than buying in traditional stores (35.6% ). All the participants said they were pleased with their use of social media and that nothing would have changed about their adoption of this technology. (White, Meyers, Doerfert & Irlbeck, 2014)

Online purchase intention is the intention of consumers to exchange information and conduct transactions online. From the study, only 67.7% intend to buy fruits or vegetables online soon and 41.1% predict that they will purchase fruits and vegetables online in the future. 54.5% said that there is a high possibility of buying fruits and vegetables online; 24.4% not sure they will choose to buy online as their preference. The market interest is still weak as compared to the perception of farmers. Farmers expect the customer to use social media in their business transactions because it is very transparent and real-time, especially during the fresh market (White, Meyers, Doerfert & Irlbeck, 2014).

## **5. CONCLUSION**

As the gap between consumers and farmers increases, the concept of building trust and understanding between these two parties is of crucial importance (White, Meyers, Doerfert & Irlbeck, 2014). The results of the study show most of the social media user is dominated by females. The age group of farmers is following the most between 31-40 years who are using social media effectively. Most of the users browsing social media for more than 16 times every day. Even though they are using social media frequently, the awareness of fruits and vegetables sale activity still low. They still have small intention to buy from social media. Despite they agreed that selling V&F online is easy, but the plan to buy shortly still considered low. Social media offers opportunities for online marketing but is not limited to those that do not endorse modern agricultural marketing practices (Balkrishna & Deshmukh, 2017).

## **6. RECOMMENDATION**

This study does not require respondents to make purchases on the specific social media being examined so that the consistency relating to many stages of the transaction cannot be assessed. Therefore, further research can be included considering incorporating quality aspects that include purchasing, payment, and after-sales services. Furthermore, the study results indicate that 33.7 percent of the effects of other variables are still unidentified. It's suggested that more research may add other variables that can affect the purpose of online transactions, such as the perceived price variable. Meanwhile, client recommendations are marketing via social media, adding live chat functionality to the website, and enhancing website quality in terms of appearance or design.

## REFERENCE

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior And Human Decision Processes*, 50, 179–211.
- Bite Bhalchandra Balkrishna & Dr. Anand A. Deshmukh (2017) A Study on Role of Social Media in Agriculture Marketing and its Scope, *Global Journal of Management and Business Research: E-Marketing*, Volume 17 Issue 1 Version 1.0, Online ISSN: 2249-458
- Bosch, M. C., Srivastava, S. K., & Roy, S. (2012). *Factors influencing consumers' behavior for vegetable purchase Regional Crop Planning for Improving Resource Use Efficiency and Sustainability View project Research prioritization of vegetable crops View project*. <https://www.researchgate.net/publication/236347469>
- Brenda J. Reau (2013). Social media has the opportunity to influence food preferences. *Michigan State University Extension, Michigan State University Product Center* - April 24, 2013
- Carmelo Ferlito and Gaetano Perone (2020) Covid-19 and the MCO : An Exit Strategy for Malaysia, *The Institute for Democracy and Economic Affairs (IDEAS)*
- Cheng, L., Jiang, S., Zhang, S., You, H., Zhang, J.W., Zhou, Z.Y., Xiao, Y., Liu, X., Du, Y.S., Li, J.L., Wang, X., Xin, Y.Q., Zheng, Y.G. and Shang, K.X. (2016), "Consumers' behaviors and concerns on fresh vegetable purchase and safety in Beijing urban areas China," *Food Control*, Vol. 63, pp. 101-109.
- Danielle White, Courtney Meyers, David Doerfert & Erica Irlbeck (2014) Exploring Agriculturalists' Use of Social Media for Agricultural Marketing; *Journal of Applied Communications*, Volume 98, No. 4 • 72
- Fikri, A., Nurmalina, R., Najib, M., & Simanjuntak, M. (2019). The Determinants of Online Vegetables/Fruits Repurchase Intention: Stimulus-Organism-Response Model and Theory of Planned Behaviour. *European Scientific Journal ESJ*, 15(10). <https://doi.org/10.19044/esj.2019.v15n10p147>
- Henroid, Jr., D., Ellis, J. & Huss, J. (2003). Methods for answering food safety questions on the World Wide Web. *Journal of Applied Communications*, 87(4), 23-34
- Hoaglin, D. C., and Iglewicz, B. (1987), "Fine Tuning Some Resistant Rules for Outlier Labeling," *Journal of American Statistical Association*, 82, 1147-1149.

Li, B., Yin, Z., Ding, J., Xu, S., Zhang, B., Ma, Y., & Zhang, L. (2020). Key influencing factors of consumers' vegetable e-commerce adoption willingness, behavior, and willingness-behavior consistency in Beijing, China. *British Food Journal*. <https://doi.org/10.1108/BFJ-11-2019-0834>

Ling, K.C., Chai, L.T. Piew, T.H. (2010). The effects of shopping orientations, online trust, and prior online purchase experience toward customers' online purchase intention. *International Business Research*, Vol. 3 No. 3, pp. 63-76

Manjunath Chikkamath, BR Atteri, Shivendra Kumar Srivastava and Shubhadeep Roy (2012) Factors influencing consumers behavior for vegetable purchase; *Vegetable Science*, Volume39 (1): 35-39

Pavlou, P.A. (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, Vol. 7 No. 3, pp. 101- 34.

Putri Simamora, T., & Djemdjem Djameludin, M. (2020). Analysis of Intention to Buy Cinema E-Tickets Among IPB Students with Theory of Planned Behavior (TPB) Approach. In *Journal of Consumer Sciences E* (Vol. 05, Issue 01).

Rahmawati, N. A., Suroso, A. I., & Ramadhan, A. (2018). Factors Influencing The Purchase Intention in Online Organic Fruit and Vegetable Stores. *Jurnal Manajemen Dan Agribisnis*. <https://doi.org/10.17358/jma.15.3.209>

Rizkia C. 2015. Bagaimana tren belanja grocery online di Indonesia?. <http://selular.id/news/ecommerce>. [4 Mei 2017].

Saba, A., Moneta, E., Peparaio, M., Sinesio, F., Vassallo, M. and Paoletti, F. (2018), "Towards a multi-dimensional concept of vegetable freshness from the consumer's perspective," *Food Quality and Preference*, Vol. 66, pp. 1-12.

Setiawati, H., Hartoyo, H., & Simanjuntak, M. (2018). Analysis on Intention of Purchasing Organic Foods by The Undergraduate Students of IPB Using The Theory of Planned Behavior Approach. *Jurnal Manajemen Dan Agribisnis*. <https://doi.org/10.17358/jma.15.2.198>

Shim, S., Gehrt, K.C., Lotz, S.L. (2001). Export implications for the Japanese fruit market: fruit-specific lifestyle segments. *International Journal of Retail & Distribution Management*, Vol. 29 No. 6, pp. 300- 16



- Wei, Y., Wang, C., Zhu, S., Xue, H., & Chen, F. (2018). Online purchase intention of fruits: Antecedents in an integrated model based on the technology acceptance model and perceived risk theory. *Frontiers in Psychology*, 9(AUG). <https://doi.org/10.3389/fpsyg.2018.01521>
- Zhang, B., Fu, Z.T., Wang, J.Q., Tang, X.L., Zhao, Y.S., and Zhang, L.X. (2017), "Effect of householder characteristics, production, sales, and safety awareness on farmers' choice of vegetable marketing channels in Beijing, China," *British Food Journal*, Vol. 119 No. 6, pp. 1216-1231.
- Zhang, B., Fu, Z., Huang, J., Wang, J., Xu, S., & Zhang, L. (2018). Consumers' perceptions, purchase intention, and willingness to pay a premium price for safe vegetables: A case study of Beijing, China. *Journal of Cleaner Production*, 197, 1498–1507. <https://doi.org/10.1016/j.jclepro.2018.06.273>

## STUDENTS' PERCEPTIONS TOWARDS THE IMPORTANCE OF LEARNING SUPERWRITE: ALPHABETIC WRITING SYSTEM FOR OFFICE PROFESSIONALS AT MARA UNIVERSITY OF TECHNOLOGY

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### ABSTRACT

*This study examined students' perception towards the importance of learning SUPERWRITE: Alphabetic Writing System for Office Professionals as one of the short and speed writing method in the public higher learning institutions in Malaysia. This paper reports on the results of a survey towards one hundred randomly final year students from Diploma in Office Management and Technology, Faculty of Business and Management, Universiti Teknologi MARA (UiTM) Cawangan Melaka. The questionnaires were used as a research instrument that comprise of 12 statements which are self-constructed by the researchers based on the current syllabus of OBM200 (Executive Note-Taking). A descriptive statistic was used to measure the level of students' perception towards the importance of learning SUPERWRITE that was distinctly categorized into four areas; The principles of SUPERWRITE itself, Development of Speed Writing Skill, Development of Transcription Skill and SUPERWRITE as a Professional Skill. The result of this study is clearly indicated that students' perception towards SUPERWRITE as a professional skill that they should have reported the highest level by observing mean value. Most of students nowadays are not limit themselves with the highest academic achievement but also start looking for additional skill or knowledge that could be learned during their term of study. This is due to the high requirements in qualifications needed by today's employers or organizations that mostly searching for graduates who are competent in all aspects. Therefore, SUPERWRITEs' Principles is important to be learned by UiTM students to increase their office professional skills as well as giving them a competitive edge when they venture into the employment market.*

**Keywords:** SUPERWRITE, principles, learning, perception, short writing, professional skill

### INTRODUCTION

The awareness of using short writing method has become crucial as one of the added-value for individuals' skills in education and employment field. In recent years, a demand for this skill growth due to meet the requirement of qualification of individual especially for Administrative Office Personnel posts such as secretary, personal assistance, administrative clerk, executive as well as administrator in private and public organization (Mornizan & Rufiah 2018). More peoples rely on the importance of short writing method as one of the office skills. As to align with this requirement, most of the public and private higher learning institution in Malaysia offered the course of short writing method or speed writing skill as a part of compulsory subject to be taken by the students. The fundamental of shorthand was created and introduced by Dr. John Robert Gregg since

1948 and today there have a lot of short writing methods that were currently used for education and employment purpose. One of the established short writing methods that commonly used nowadays is SuperWrite, an Alphabetic Writing System for Office Professionals.

SuperWrite is commonly used as one of the methods in short and speed writing for English words and largely intended for people who need to increase their writing speed without devoting months to learning more complicated systems. Based primarily on longhand and secondarily on phonetics, SuperWrite employs all 26 letters of the alphabet. There are no symbols or phasing to remember, therefore the time required to learn is minimal. It has been used since 1999 as an abbreviated writing system which emphasized 20 lessons/principles of construction that was developed by Dr. A. James Lemaster (Professor Emeritus) and Dr. John Baer (Associate Professor) from Rider University, Lawrenceville, New Jersey. All the principles have been documented by the authors through their book, *SuperWrite: Alphabetic Writing System for Office Professionals* (2<sup>nd</sup> edition) and it was introduced as one of the compulsory subjects that have been listed in certain course or program in public higher learning institution in Malaysia.

Universiti Teknologi MARA (UiTM) is one of the public higher learning institutions that offered the subject of Executive Note-Taking (OBM200) whereby those of SuperWrite Principles would be emphasized as a learning content. It is due to the program offered in Diploma of Office Management and Technology require the students to master with office skills such as document processing skill, note-taking skill, typing skill, information management skill, record management skill as well as administrative management skill. Basically there have six (6) UiTM branches that offered this course which is UiTM Melaka (Alor Gajah Campus), UiTM Pahang (Jengka Campus), UiTM Kedah (Sungai Petani Campus), UiTM Sarawak (Samarahan Campus), UiTM Terengganu (Dungun Campus) and UiTM Kelantan (Machang Campus). Instead of UiTM, the SuperWrite Principles also has been introduced to students a Private College such as Institut Darul Takzim (INSTEAD), Johor Bharu and Shah Putra College, Kuantan. Both of the private college also offered the Executive Note-Taking course to students in Diploma in Office Management and Technology.

The questions of what are the importance of learning Superwrite Principles that student may achieved must take into account in order to investigate their perceptions towards learning Superwrite in their course. Horwitz (1987) stated that what learners believe about what they are learning and about what they need to learn strongly influences their receptiveness to learning. In this sense, what students can achieved from learning SuperWrite Principles is determined to a great extent by what they want to learn. Thus, to investigate the students' perception, the researchers were described the importance of learning SuperWrite Principles based on the course outcomes (CO) that was listed in Course Information of Executive Note-Taking (2020) provided by Faculty of Business and Management, UiTM. Therefore, the importance of learning SuperWrite Principles were distinctly categorized into four areas; The principles of SuperWrite itself, Development of Speed Writing Skill, Development of Transcription Skill and SuperWrite as a Professional Skill.

## RESEARCH QUESTION

RQ: What is the level of students' perception towards the importance of learning SuperWrite?

Based on the above research question above, the researchers intent to identify students' perception towards the importance of learning SuperWrite into four slightly areas; The principles of SuperWrite itself, Development of Speed Writing Skill, Development of Transcription Skill and SuperWrite as a Professional Skill. Due to some reason, these following research questions were developed.

RQ1: What is the level of students' perceptions towards the principles of SuperWrite?

- RQ2: What is the level of students' perceptions towards the importance of speed writing skill?  
RQ3: What is the level of students' perceptions towards the importance of transcription skill?  
RQ4: What is the level of students' perceptions towards SuperWrite as a professional skill?

## STATEMENT OF THE PROBLEM

Although SuperWrite Principles has become one of core subject in short writing skill offered among students from Diploma in Office Management and Technology students, their perception and acceptance towards the principles are still become a question. This study was conducted as to identify whether the principles should be continued offered or not towards students from Diploma of Office Management and Technology. In addition, the researcher also interested to get a clear view regarding how far the principles may benefits by the students towards their future job especially for those who will involve in Administrative Office Personnel groups such as secretary, personal assistant, administrative clerk, executive and administrator. Short writing skills has become quite common when sending SMS among mobile users, twitter messages, comments on social networks and etc, but still there is no consistent method used to simplify the words. Mostly, the short writing style is based on discretion of each individual and preferences. Moreover, the new generation's perception towards the importance of short writing skill such as SuperWrite is still unknown. Due to some advanced technology today, the students may have an option or reason to choose any electronic devices such voice recorders, smart phones, tablets or computer to record notes, messages or important information rather than writing a brief note. Some studies encourage the use of electronic devices as aids for learning strategies (Hyden, 2005; Tront, 2007), whereas other researchers argue exactly the opposite claiming that these resources hinder and diminish students' academic performance (Fried, 2008; Kay & Lauricella, 2011; Ragan, Jennings, Massey, & Doolittle, 2014). Therefore, this study attempts to investigate students' perception towards the importance of learning SuperWrite in higher public education institution which is specifically among Diploma in Office Management students at UiTM Cawangan Melaka.

## LITERATURE REVIEW

SuperWrite has been introduced since 1999 as one of the short and speed handwriting method for English words. The principles was developed by Dr. A. James Lemaster (Professor Emeritus) and Dr. John Baer (Associate Professor) from Education, Rider University, Lawrenceville, New Jersey. All the principles have been documented in their book which is *SuperWrite: Alphabetic Writing System for Office Professional* (2<sup>nd</sup> edition) in 1999 by two main authors, A. James Lemaster and John Baer. The book was used as one of the compulsory references by all students in semester three from Diploma of Office Management and Technology Program, Faculty of Business and Management, UiTM. There have 20 principles of construction that was emphasized by the authors in this book and all 20 principles of construction were reinforced to UiTM students including a part of introduction towards the principles, Alphabet Abbreviating Principles, Special Abbreviation Words and Transcription Exercise. All those principles were formulated accordingly in order to make handwriting method become fast, regular and consistence. As stated by Connelly, Gee & Walsh in 2007, emphasizing the superiority of handwriting was benefits to both the reproduction of letters of the alphabet and the quality of written composition.

The principles of SuperWrite emphasize on abbreviated writing system that based primarily on longhand and secondarily on phonetics. SuperWrite principles does not require memorizing a new alphabet or changing one's normal writing style. It is a writing system that use cursive forms of the letters of the spoken alphabet to represent sounds. Besides, the authors have assigned 75 special abbreviations standing for 89 words in SuperWrite. Those special abbreviations are short and

highly suggestive forms for frequently used words. Aside from assigning special abbreviations to common words, the system functions largely by omitting short vowels from within words. Long vowels are written to aid in legibility. Meanwhile initial and final vowel are written. If the letter or letters are pronounced as an unrelated sound the phonetic letter is written. Hence, SuperWrite could be considered an impure abjad. The authors claim it uses only the 26 letters (A-Z) of the longhand alphabet with no extra symbols, however, the capital letters used (C, O, S, T, U, X) have different functions from their lowercase forms, and the uncrossed **t**, which would be considered a mistake in longhand has a different function from the crossed **t**, bringing the total number of symbols in SuperWrite to 33 (Lemaster and Baer, 1999).

According to the Course Information of Executive Note-Taking (2020), there are three types of exercises that should be conducted simultaneously during class session in order to ensure the effectiveness of learning SuperWrite; Short Writing, Dictation and Transcription exercises. The students are required to learn and understand 20 principles of SuperWrite before proceed with those three exercises. The lecturer should be able to reinforce those principles with the most effective way as to develop note-taking skill among their students. Notetaking is a multidimensional process because the students must pay attention to the explanation, select the relevant information and then translate it into specific phrases (Steimle et al., 2009). It seems that several cognitive processes are involved in taking classroom notes, such as attention and memory. Taking notes will facilitate students to recall information and help them to memorize the information. This is one of the reasons why taking classroom notes is a very common student activity in their learning.

One of the main purposes of learning SuperWrite is to facilitate the dictation process. According to Federal Chamber Dictionary (2000) 'dictation' is the process of saying or reading something aloud for someone else to write down. Dictation is an activity to write down something that someone says or reads out as it is being said or immediately after it is said. In the nineteenth century, dictation was used extensively in teaching foreign language in conjunction with the grammar-translation method (Stansfield 1985). Although not many writers have written on dictation as an individual topic and internationally, there is hardly any research which looks into the effect of dictation towards learning session. The use of dictation as one of the favorite language teaching and learning methodologies has gone through a long history. The Dictation has long played a significant role in the English language curriculum in primary and secondary school (Curriculum Development Council, 1997). Dictation is therefore conventionally treated as an isolated and independent lesson in most schools' weekly timetables. Teachers often follow the some of the method of dictation as suggested by the former Education Department in the school syllabus. Thus, dictation often acts as a memorization exercise or a spelling-checking assessment in which teachers read the text, pupils dictate it, and then the teachers read the text the third time for pupils to check through their work (Davis & Rinvoluceri, 1988).

As stated by Lemaster & Baer (1999) in his book *SuperWrite: Alphebatic Writing System for Office Professionals* (2<sup>nd</sup> edition), learning SuperWrite will assist students to develop their short writing skill as well as increase their speed in writing English words. Based on the study conducted by Silvia et. al (2011) among 40 secretarial students from Thika Technical Training Institute, Kenya stated that the curriculum developers need to review the place of shorthand in the secretarial career today because cultivating positive self-concept in a subject is not just about the 'significant others' influence but also springs from appreciating its normative dimension. They found that 60.6% of the secretarial students love shorthand and 60.5% of them agreed that shorthand is necessary as to be a secretary. In addition, SuperWrite would also help the students to apply a fast and legible note-taking skill during the class session. Taking lecture notes is widely accepted as a useful strategy for increasing student attention and retention of academic discourse. Note-taking is intuitively appealing to the lecture listener and is generally viewed as a way to facilitate the process of learning and remembering lecture material. According to Kiewra (1989), note-taking is beneficial for at



least two reasons. First, note-taking aids lecture learning by activating attention mechanisms and engaging the learner's cognitive processes of coding, integrating, synthesizing, and transforming aurally received input into a personally meaningful form. Second, note-taking is seen as beneficial because the notes taken serve as an external repository of information that permits later revision and review to stimulate recall of the information heard.

Today, the principles of SuperWrite is not only introduced among students in UiTM or private college, but it was also has been introduced and open to everyone who are interested to learn. One of the UiTM centre that offered SuperWrite as a public course is Institute of Business Excellence (IBE) that was operated at main campus of UiTM Shah Alam, Selangor. IBE is the consultancy and business arm for the Faculty of Business Management Universiti Teknologi MARA. Although offering its services in various areas, IBE prides itself as a centre for retail excellence for which this is its niche area. IBE offered professional development programmes such as short courses, seminars, workshops and in-house training. One of the short courses that offered by this centre is SuperWrite: Alphabetic Writing System. This paid short course was open to the target participants such as government and private staff, educators, newcomers and to anyone who are interested to gain knowledge in SuperWrite course. It seems that SuperWrite is one of value-added course that should be mastered for office professionals as to fulfill the organizational requirement and industry's demand.

## METHODOLOGY

This research aimed to investigate the level of students' perception towards the importance of learning SuperWrite. Therefore the research design utilized by the researchers is quantitative research which is descriptive study as to measure the students' perception towards the importance of learning SuperWrite. The sample of this study used was drawn from UiTM Student Information Management System (SIMS) that consists of all final year students from Diploma of Office Management and Technology, Faculty of Business and Management in UiTM Cawangan Melaka. The selection of the sample was based on simple random technique. This techniques required the researchers to select the population of the final year students from the program randomly using a table of random number. The total population of this study is 161 students ( $n=161$ ). A good decision model based on Krejcie and Morgan (1970) was used to determine the appropriate sample size of 113 ( $S=113$ ). The questionnaires were used as a research instrument and personally administered to the 113 students but 100 were returned. An identical Likert 5-scale questionnaire with twelve statements indicating the responses of 'strongly disagree', 'disagree', 'neutral/uncertain', 'agree' and 'strongly agree' was used to collect students' perceptions towards the importance of learning SuperWrite. This allowed respondents to provide a wide range of responses. They were given about one day to complete the questionnaire and return it to the researchers. The main advantage of this procedure was the researches can collect all the completed responses within a short period of time. Besides, any doubts that the respondents might have on any question could be clarified on the spot (Umar Sekaran, 2006). The questionnaires are divided into five sections. The first section was focus on the student's perception towards principles of SuperWrite, second section was focus on the students' perception towards the importance of speed writing skill, third section was focus on students' perception towards the importance of transcription skill fourth section is focus on students' perception towards the importance of SuperWrite as a professional skill. Finally, the last section was focus on the respondents' demographic information. The questionnaires were self-constructed by the researchers based on the course outcomes stated in current syllabus and schemes of work of OBM200 (Executive Note-Taking). It was written in English and being translated into Malay to facilitate the understanding of the respondents. The reliability test was conducted in order to ensure that the instruments used was reliable or not to be distributed to the specific sample size. One of the most commonly used indicators of internal consistency is Cronbach's Alpha Coefficient. Ideally the cronbach alpha coefficient of the scale should be above



(0.7) (Nunnally, 1978). If the cronbach alpha coefficient was above (0.7), the scale considered reliable with the sample size. It was found that the scale has good internal consistency as reported in below table. Cronbach's Alpha 0.905 indicates a high level of internal consistency for the scale with this specific sample.

**Table 1:** *Cronbach's Alpha Scores for the Scale*

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items Tested
.905	.905	12

## FINDINGS AND DISCUSSION

### Respondents' Demographic Information

The findings of the study were analyzed using the Statistical Package for the Social Sciences (SPSS) version 20. The analysis begins with the respondents' demographic information that consists of gender, age, semester of taking OBM200 and frequency of taking this code. Out of 113 questionnaires distributed, 100 were completed and returned, showing that the survey returned rate was 88.5%. The findings of respondents' demographic information stated as below.

**Table 2**

*Respondents' Demographic Information*

Demographics Variables	Frequency (N=100)	Percentage (100%)
Gender		
Male	16	16
Female	84	84
Age (years old)		
15 – 20	97	97
21 – 25	3	3
Semester of taking OBM200		
Semester 3	100	100
Frequency of taking this code		
First time	100	100

As depicted in Table 2, there were 16% male as compared to 84% female in the overall sample. The gender bias in this study noted to be quite common in which female were more heavily repre-

sented. Majority of students that taking Diploma of Office Management and Technology program were female students whereby male students were presented minority. Meanwhile the distribution of respondents by their age group shows that most of respondents were at the age of 15-20 years old (97%) and the rest were at the age of 21-25 years old (3%). All of the respondents taking this code (OBM200) during semester 3. It also shows that all the respondents are taking this code at the first time whereby it represented 100% of the students have passed for this code during semester 3.

### **The Students' Perception towards the Importance of Learning SuperWrite**

This section aims to provide a brief outline of respondents' perception towards the importance of learning SuperWrite. The study used 12 statements to measure the level of students' perception towards the importance of SuperWrite that were slightly categorized into four areas; The Principles of SuperWrite itself, Development of Speed Writing Skill, Development of Transcription Skill and Development of Professional Skill. The descriptive statistic were used to measure the level of students' perception towards the importance of learning SuperWrite whereby the first objective of this study was to measure the level of students' perception towards the importance of Principles of SuperWrite, the second was to measure the level of students' perception towards the importance of speed writing system, the third was to measure the level of students' perception towards the importance of transcription skill and finally to measure the level of students' perception towards the importance of SuperWrite as a professional skill. To measure the level of students' perception, the study observed the mean value for each outcome of learning SuperWrite. The classifications of mean value for each outcome were high, moderate or low. Subsequently, the resulting average scores of all respondents were classified into three arbitrary levels: low, moderate and high. The three categories and their range values were range as Table 3 below.

**Table 3**

*Arbitrary Level: The measurement of Mean*

Level	Value
Low	1.00 - 2.33
Moderate	2.34 - 3.66
High	3.67 - 5.00

### ***Level of Students' Perception towards the Importance of Principles of SuperWrite***

In this section, the study used 3 statements to measure the level of students' perception towards the importance of Principles of SuperWrite. The response options ranged from (1) strongly disagree to (5) strongly agree with higher scores indicating higher level of students' perception.

**Table 4**

*Level of students' perception towards the importance of principles of SuperWrite*

Items	Frequency (N=100)	Mean	SD	Levels
<b>Principles of SuperWrite</b>				
SuperWrite principles of construction is easy to learn and understand.	100	4.16	.692	<i>high</i>
SuperWrite principles of construction makes speed and short writing method become consistent.	100	4.06	.617	<i>high</i>
SuperWrite principles of construction is applicable to be used by everyone.	100	4.03	.643	<i>high</i>
<b>Mean (average) for Principles of SuperWrite: 4.08 (High: 3.67 – 5.00)</b>				

As depicted in Table 4, the level of students' perception towards the importance of principles of SuperWrite is categorized as 'high' (mean=4.08) according with the rating stated in Arbitrary Level. Most of the students appeared to have been agreed towards the importance of theory of SuperWrite. The theory was created in an easy way as to capture the students' intention in learning it. According to Lemaster & Baer (1999), there have 20 lesson/principles of construction in SuperWrite to supply a fast and legible note-taking system that can be learned quickly for use in the office by information-processing personnel. All those principles are separately prepared with some of explanation related with the principles, examples of words, application and transcription exercises to be completed by students. Those principles of construction were arranged accordingly starting from the rude words until adding suffix and prefix to a word, the sound of combination letters, compound words, word beginning and ending. SuperWrite also contains 75 special abbreviations and some of additional abbreviation at the end of the lesson. Those special and additional abbreviations are short and highly suggestive forms for frequently used words. Thus, principles of SuperWrite was easy to learn and very applicable to be used by everyone.

#### ***Level of Students' Perception towards the Importance of Speed Writing Skill***

In this section, the study used 3 statements to measure the level of students' perception towards the importance of speed writing skill. The response options ranged from (1) strongly disagree to (5) strongly agree with higher scores indicating higher level of students' perception.

**Table 5**

*Level of students' perception towards the importance of speed writing skill*

Items	Frequency (N=100)	Mean	SD	Levels
<b>Development of Speed Writing Skill</b>				
SuperWrite helps me to jot down words quickly at least 30 wpm.	100	3.92	.614	<i>high</i>

SuperWrite develop my ability to summarize words through an office-style dictation.	100	4.03	.577	high
SuperWrite makes me easy to take note, message and instruction during class session.	100	4.09	.683	high

**Mean (average) for Speed Writing Skill: 4.01 (High Level: 3.67 – 5.00)**

As depicted in Table 5, the level of students' perception towards the importance of speed writing skill is categorized as 'high' (mean=4.01) according with the rating stated in Arbitrary Level. Most the students appeared to have been agreed towards the importance of learning SuperWrite as to develop speed writing skill. It seems to indicate that SuperWrite assist them a lot in take a note, message or any instructions from their lecturer. According to Moin et al., (2009) the activity in which higher education students usually spend most of the time during traditional lectures is taking notes. Considering the memory process, it seems that taking notes facilitates recall of information both qualitatively and quantitatively (Einstein et al., 1985; Fisher et al., 1973). This is one of the reasons why taking classroom notes is a very common student activity. SuperWrite also helps them to develop their ability in facing with office-style dictation. According to Federal Chamber Dictionary (2000), 'dictation' is the process of saying or reading something aloud for someone else to write down. It is differ from the note-taking whereby dictation is the process of reading meanwhile note-taking is the process of writing. This process usually involves the lecturers and students as a simulation activity during class. The lecturers will dictate an instruction and contents of mailing documents (Business and Personal Letters) and students are responsible to taking down the instructions and contents in order to produce the complete business/personal letter. At the end of the course, students are able to copy notes/text at a speed of at least 30-40 words per minutes (Based on OBM200 Course Outcome). Most of the students are aware that by having this kind of exercise, it will help them a lot in preparing with the skill of office-style dictation in the future. This skill will be useful for them especially when in a real working environment in order to prepare a letter, report, memo or any related documents that will instruct by his or her employer.

#### ***Level of Students' Perception towards the Importance of Transcription Skill***

In this section, the study used 3 statements to measure the level of students' perception towards the importance of transcription skill. The response options ranged from (1) strongly disagree to (5) strongly agree with higher scores indicating higher level of students' perception.

**Table 6**

*Level of students' perception towards the importance of transcription skill*

Items	Frequency (N=100)	Mean	SD	Levels
<b>Development of Transcription Skill</b>				
SuperWrite helps me to transcribe the word quickly at least 15 wpm.	100	3.81	.677	high

SuperWrite increase my proficiency in spelling words correctly.	100	3.93	.742	high
SuperWrite enrich and expend my English vocabulary.	100	3.94	.649	high

**Average Mean for Transcription Skill: 3.89 (High Level: 3.67 – 5.00)**

As depicted in Table 6, the level of students' perception towards the importance of transcription skill is categorized as 'high' (mean=3.89) according with the rating stated in Arbitrary Level. Most of the students appeared to have been agreed towards the importance of SuperWrite as to develop transcription skill. According to Federal Chamber Dictionary (2000), 'transcription' or 'transcribe' mean the process of writing the text in full from notes or copy it from one place to another. It was different from the word 'translation' whereby translation is the process of putting writing or speech into another language. In this context, the term of transcription was used since SuperWrite requires students to transcribe the abbreviation words to longhand words. They will be trained to transcribe an abbreviated word to longhand words continuously as to ensure that they are able to spell the word correctly. This process enables student to transcribe the words correctly as to produce a complete text, passage, report or any mailing documents. As stated by Abdullah Hassan (1994), the transcription of word should be concise and consistence in order to preserve the word from misinterpretation and misunderstanding. In addition, most of the students are aware that transcription skill will help them a lot in enriching and expending their vocabulary English words. An automatic repetition of letters or words to writing full semantic and grammatically meaningful sentences (as happens when taking classroom notes in university settings) can be more efficiently done by hand. This way of taking notes increases memory processing because it appears to encourage more complex and stable memory links (Smoker et al., 2009). SuperWrite will also enable them to transcribe the words as much as they can within the allocation time. At the end of the course, students are able to transcribe the abbreviation at a speed at least 15 words per minutes (Based on OBM200 Course Outcome).

### ***Level of Students' Perception towards the Importance of SuperWrite as a Professional Skill***

In this section, the study used 3 statements to measure the level of students' perception towards the importance of SuperWrite as a Professional Skill. The response options ranged from (1) strongly disagree to (5) strongly agree with higher scores indicating higher level of students' perception.

**Table 7**

*Level of students' perception towards the importance of SuperWrite as a professional skill*

Items	Frequency (N=100)	Mean	SD	Levels
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#### **SuperWrite as a Professional Skill**

SuperWrite considered as important office skill that I should have for my future work field.	100	4.24	.668	high
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SuperWrite is a skill needed as to be a secretary, executive and administrator in an organization.	100	4.18	.593	<i>high</i>
SuperWrite would be an added-value skill in my academic qualification.	100	4.13	.597	<i>high</i>

**Mean (average) for SuperWrite as a Professional Skill: 4.18**  
**(High Level: 3.67 – 5.00)**

As depicted in Table 7, the level of students' perception towards the importance of SuperWrite as a professional skill is categorized as 'high' (mean=4.18) according with the rating stated in Arbitrary Level. Most the students appeared to have been agreed towards the importance of SuperWrite as one of the professional skill in management and administrative fields that required in the future. Instead of having a good typing and keyboarding skill, SuperWrite skill could also be considered as important skill that they should have to perform office's tasks. As stated by Connelly et al., (2007), emphasizing the superiority of handwriting was benefits to both the reproduction of letters of the alphabet and the quality of written composition. These competencies needed as to be an efficient secretary, executive or administrator in future. Today, employers looking to hire new employees look for specific skills and qualities in new workers in hopes of creating or maintaining an efficient, professional and productive workplace. Perhaps, the X factor in individuals' qualifications would be a considered by employers to fulfill the vacancies with the most qualified candidates. Therefore, by having the best qualities and skills, the opportunity to get the job especially in administration and management fields would be larger.

### **Level of students' perception towards the importance of learning SuperWrite**

In this section, the study consists of 12 statements from four areas of importance of learning SuperWrite as to measure the level of students' perception towards the importance of learning SuperWrite. The importance of learning SuperWrite constructed by the researchers was based on course outcome of Executive Note-Taking (OBM200) that students may achieve at the end of course. The outcomes was categorized into four areas; The principles of SuperWrite, Development of Speed Writing Skill, Development of Transcription Skill and SuperWrite as a Professional Skill. The response options ranged from (1) strongly disagree to (5) strongly agree with higher scores indicating higher level of students' perception.

**Table 8**

*Level of students' perception towards the importance of learning SuperWrite (Summarization)*

Items	Frequency (N=100)	Mean	SD	Levels
Principles of SuperWrite	100	4.01	.625	<i>high</i>
Development of Speed Writing Skill	100	4.08	.651	<i>high</i>



Development of Transcription Skill	100	3.89	.689	<i>high</i>
SuperWrite as a Professional Skill	100	4.18	.619	<i>high</i>

As depicted in Table 8, the level of students' perception towards the importance of learning SuperWrite was high. By observing the mean values of each outcome, the respondents received higher level of perception toward SuperWrite as a professional skill (mean=4.18), followed by development of speed writing skill (mean=4.08), principles of SuperWrite itself (mean=4.01) and finally development of transcription skill (mean=3.89). This is clearly indicated that students' perception towards SuperWrite as a professional skill that they should have was the highest compared to the perception towards development of speed writing skill, principles of SuperWrite itself and development of transcription skill. It seemed to indicate that the students have a strong believe that SuperWrite skill would prepare them with a professional skill that can be applied during working. Since the organization and employers' requirements are taken into consideration, most of students are not limit themselves with the highest academic achievement but also start to think the additional skill or knowledge that could be learned during the term of their study which may differentiate them with others. According to Harvey et al (2002) state that most employers are looking for graduates who are proactive, can use higher level skills including analysis, critique, synthesis and multi layered communication to facilitate innovative teamwork in catalyzing the transformation of their organization. Thus, most of students in higher learning institution nowadays begin to concern on what they could apply as to represent themselves in future work field.

## CONCLUSION

As a conclusion, the researchers found that SuperWrite is important to be learned by UiTM students due to the findings showed that the level of students' perception towards the importance of learning SuperWrite is categorized as high. The course of Executive Note-Taking (OBM200) should be continued offered among students in Diploma of Office Management and Technology, Faculty of Business and Management, UiTM as to meet the student expectation as well as employer's requirements. The result of this study is clearly indicated that students' perception towards SuperWrite as a professional skill that they should have reported the highest level by observing mean value (4.18) followed by development of speed writing skill (4.08) principles of SuperWrite itself (4.01) and finally development of transcription skill (3.89). It seemed to indicate that the students have a strong believe that by mastering the principles of SuperWrite, it would prepare them with a professional skill to be a secretary, personal assistance, executive as well as administrator in future. Most of students are not limit themselves with the highest academic achievement but also start looking for additional skill or knowledge that could be learned during their term of study. This is due to the high requirements in qualifications needed by today's employers/organizations that mostly searching for graduates who are competent in all aspects. Nowadays, an employer expects graduates to have the technical and discipline competences from their degrees but require graduates to demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical thinking, problem solving and often managerial abilities or potential. Therefore, learning SuperWrite is a great opportunity for students to increase their office skills as well as giving them a competitive edge when they venture into the employment market.

## RECOMMENDATION

The researchers attempted to outline the recommendations for future research. In spite of the limitations, this study has the potential value of continuous review for further research. In further study, the researchers are recommended to enlarge the population of the study by including all UiTM Campuses that offered this course. The future researchers also can highlight what the elements that should be considered in order to ensure the effectiveness of office style dictation during class session. The study will definitely extend the types of dictation that can be applied by lecturers or teachers in conducting dictation activity towards their students and how it should be conducted effectively. In addition, researchers also suggest to conduct a comparative study of handwriting and computer typing in note-taking by university students. The results may notice with advantages and disadvantages of using different approaches to taking classroom notes in different behavioral areas and it will motivate future researcher to study the consequences of several learning processes in higher education. Finally, it also would be useful to explore employers' perceptions of the employability skills of new graduates which help undergraduates or new graduates to be employable.

## REFERENCES

- Abdullah Hassan & Ainon Mohd. (1994). *Panduan Ejaan Rumi Bahasa Melayu*. Kuala Lumpur: Utusan Publication & Distributors.
- Connelly, V., Gee, D., & Walsh, E. (2007). *A Comparison of Key-boarded and Handwritten Compositions and the Relationship with Transcription Speed*. *British Journal of Educational Psychology*, 77(2), 479-492.
- Course Information (2020). *Executive Note-Taking (OBM200)*. Faculty of Business and Management: Diploma of Office Management and Technology.
- Curriculum Development Council (1997). *Recommended Teaching Syllabus for Primary and Secondary school*. Hong Kong: Curriculum Development Institute.
- Davis, P. and Rinvold, M. (1988). *Dictation: New Methods, New Possibilities*. Cambridge: Cambridge University Press.
- Einstein, G.O., Morris, J., & Smith, S. (1985). *Note-taking, Individual Differences and Memory for Lecture Information*. *Journal of Educational Psychology*, 77(5), 522-532.
- Federal Chamber of Advance English Dictionary (2000). *English-Bahasa Malaysia Edition*. Federal Publication Sdn. Bhd.
- Fisher, J.L., & Harris, M.B. (1973). *Effect of Note Taking and Review on Recall*. *Journal of Educational Psychology*, 65(3), 321-325.
- Fried, C.B. (2008). *In-class Laptop Use and its Effects on Student Learning*. *Computers & Education*, 50(3), 906-914.
- Harvey, L., Locke, W. and Morey, A. (2002). *Enhancing Employability, Recognizing Diversity*. London, Universities UK.
- Hyden, P. (2005). *Teaching Statistics by Taking Advantage of the Laptop's Ubiquity*. *New Directions for Teaching and Learning*, 101, 37-42.

- Horwitz, E. K. (1987). *Student beliefs about language learning*. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 119-129). Englewood Cliffs, NJ: Prentice Hall.
- Kay, R., & Lauricella, S. (2011). *Exploring the Benefits and Challenges of Using Laptop Computers in Higher Education Classrooms: A Formative Analysis*. Canadian Journal of Learning and Technology, 37(1), 1-18.
- Kiewra, K. A. (1989). *A review of note-taking: The encoding-storage paradigm and beyond*. Educational Psychology Review, 1, 147-172.
- Krejcie, Robert V., Morgan, & Daryle W. (1970). *Determining Sample Size for Research Activities*. Educational and Psychological Measurement.
- Lemaster, A. J & Baer J. (1999). *SuperWrite: Alphabetic Writing System for Office Professional*. 2 Edition. Cincinnati, Ohio: South-Western Educational Publishing Co.
- Moin, L., Magiera, K., & Zigmond, N. (2009). *Instructional Activities and Group Work in the U.S. Inclusive High School Cotaught Science Class*. International Journal of Science and Mathematics Education, 7, 677-697.
- Mornizan Yahya & Rufiah Rafiee. (2018). *RINTAS: Satu Kaedah Penulisan Rumi yang Ringkas dan Pantas*. Seri Kembangan: Univision Press Sdn. Bhd.
- Nunally, J. C. (1978). *Psychometric Theory*. New York: Mac Graw Hill.
- Ragan, E.D., Jennings, S.R., Massey, J.D., & Doolittle, P.E. (2014). *Unregulated Use of Laptops over Time in Large Lecture Classes*. Computers & Education, 78, 78-86.
- Silvia, K. V., Joseph, W. N & Eunice, M. (2011). *Influence of Teachers' and Students' Attitudes Towards Performance in Shorthand in Technical Training*. Department of Educational Foundations, Masinde Muliro.
- Smoker, T.J., Murphy, C.E., & Rockwell, A.K. (2009). *Comparing Memory for Handwriting versus Typing*. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 53(22), 1.744-1.747. Sage Publications.
- Stansfield, C. W. (1985). *A History of Dictation in Foreign Language Teaching and Testing*. Modern Language Journal, 69( 2), 121-128.
- Steimle, J., Brdiczka, O., & Mühlhäuser, M. (2009). *Collaborative Paper-based Annotation of Lecture Slides*. Educational Technology & Society, 12, 125-137.
- Tront, J.G. (2007). *Facilitating Pedagogical Practices through a Large-scale Tablet PC Development*. IEEE Computer, 40(9), 62-68.
- Uma Sekaran (2006). *Research Methods for Business: A Skill Building Approach*. Fourth Edition. Wiley-India Edition.

## **IRRADIATED PEANUT INK FOR CONSUMER PRODUCT- A REVIEW**

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### **ABSTRACT**

*There are two types of ink present in today's industries which are petroleum-based ink and vegetable-based ink. However, it is not a favorable choice to applied petroleum-based ink in our daily life since it contains a higher level of volatile organic compounds (VOCs). This group of carbon involved in the atmospheric photochemical reactions that contribute to the warming of the earth. This condition was remarkable can cause side effects to the workers if they were commonly exposed to it. Amusingly, vegetables-based ink has been one of the best creations for the development of ink in the world since vegetable-based ink was an eco-friendly ink. The oil from the vegetable ink is conveniently being cultivated and can be collected hence refined effortlessly. The most popular ink based on vegetable oil is from soybean. The oil is luminous which provided more striking color apart from the petroleum-based oils. Nevertheless, we would like to expand the competence of this type of ink through the use of peanut oil in creating eco-friendly ink. Yet to test the suitability of the peanut oil, it will undergo a characterization process by irradiation. It will be determined based on the finding of the journal written by (Barros, Prudencio, 2016), (Erhan et al, 1992) and (Al-Bachir, 2015) as a guide to achieving the objectives of the project.*

### **INTRODUCTION**

In the early era of human civilization, the invention of ink has become one of the most indicator expansion in human history. Ink has been formed since prehistoric times long ago using various substances. Earlier of 1457, the revolution of printing starting to take off. Ink has been used in a lot of economic industrial developments today which are the printing of books and newspapers, food-packaging industries, and clothes printing. However, the use of today's ink which is mostly coming from petroleum-based ink has side effects on the earth. It brings a lot of adverse effects on our bodies and Earth. The traditional petroleum-based inks are environmentally hazardous. It contains Volatile Organic Compounds (VOCs) which are organic chemicals that have a high vapor pressure at ordinary room temperatures such as the toluene  $C_7H_8$ , benzene  $C_6H_6$ , and xylene  $C_8H_{10}$ . These compounds can be very harmful to the environment, wildlife, and people. Solvent inks contain volatile organic compounds (VOCs), which can cause ozone pollution when released into the atmosphere when it reacts with nitrogen oxides. The reaction also leads to health problems like asthma, emphysema, and bronchitis, so printing workers are regularly exposed to health hazards unless given protection. Besides, the ink mostly is not transparent and dull in colors compared to vegetable-based ink that also required more use of ink to make a vibrant look, therefore, causing a cost-effective issue (Co, Ku, Ma & To, n.d.).

To encountered the problems there was another type of ink that has been introduced to the world which is ink that was made based on the content of vegetables. It can yield the lesser varieties of colors that are suitable in the production of lively saturated colors when prints. The vegetables-based ink also has a great ability in ink covering when it is being used. When the ink is being printed on a coated paper with a combination of materials or polymer to get a few traits needed such as weight and smoothness, it will create colors that more intense to be seen. This type of ink can mitigate the colors to make a better mileage of printing. Vegetables-based ink has fewer pigments that can cover the same optical effect of colors (Aydemir, Yenidoğan, Karademir, & Kandirmaz, 2018). The creation of this ink is by using various analytical techniques to extract the oil from the vegetables to be processed as the main ingredient in the production. The best vegetable category being used in the making of this ink is the beans (*Fabaceae*) family because the oil that comes from it contains 60% polyunsaturated fat and 24% monounsaturated fat which were classified as a heart-healthy oil (Nierenberg, 2017). Thus, through the innovation of ink from peanut oil, it surely can expand the green printing industries along with protecting the earth from any harmful substances.

This paper aims to study the appropriateness of the peanuts oil to make ink. Thus the aim can be accomplished through the following objectives where we want to study the physical and chemical properties of beans and investigate the effect of peanut oil during the pre and post condition after irradiation. Through the peanuts from the *Fabaceae* species, its virgin oil will be extracted as the main ingredient to combine with other substances to produced ink. A presser machine with greater power will be applied to obtain the oil after the peanuts have undergone a heating process at least under  $50^{\circ}C$  for about 30 minutes. It also goes through a sieving process to ensure there was no other foreign matter occurred. After the pressing process, the oil will then mix with the pigments of colors, resins, and waxes. The resulting product will be characterized by GC-17 A Shimadzu Chromatography to get the determination of the fatty acids in both conditions. There was the use of AvaSpec Spectrometer Version 1 to evaluate the colors of samples when it was radiated and not radiated (Al-Bachir, 2015).

## LITERATURE REVIEW

This paper used a journal wrote by (Barros, Prudencio, 2016), (Erhan et al, 1992) and (Al-Bachir, 2015) as a guide to achieving the objectives stated. This section will explain about the review of the experimental literature on the production of vegetable-based ink from the peanut oil. In this part, there will be an explanation about the vegetable-based ink, the characteristics of the grease used in the making of vegetable-based ink and irradiation towards the peanut oil.



### *Vegetable-Based Ink*

Vegetables-based ink was first introduced in ancient China back to 50 centuries ago where it is invented from the mixture of vegetable oil and soot merged. The compositions of ink consist of three substantial units which are colorants such as dye or pigments to give it colors, and additives that work to increase the abilities of the ink such as resin and a carrier which differed this type of inks with the petroleum-based ink. The most applied oil in this type of inks is flax, safflower, and soy (Bamboo Ink, 2018). Yet each oil produced contributed to various advantages such as the soybean oil, it has luminous properties which provided more striking color apart from the petroleum-based oils. As for that, we would like to test the suitability of peanut oil for the production of eco-friendly ink.

### *Elemental Compositions of Peanut Oil*

The peanut oil is one of the most necessary substances in the making of inks. The oil was categorized in a group of fats that can be composed of some of the nuts, fruits, and seeds. Peanut oils are comprised of triglycerides TAGs which is about 95% of including its minor part of mono and diglycerides that commonly has lesser than 5% of the compounds, sterols which up to 1%, fat-soluble vitamin, pigments, waxes, and phosphatides. The raw oil contains at most two percent of the minor parts. Interestingly, the minor parts of this oil have pigments that produce colors. The major component which is TAG contains three fatty acids that hooked up to one molecule of glycerol. To create a simple TAG, it needs the combination of three fatty acids that has the same size but most common shape found is the one that combined two or three kinds of fatty acids in the molecule.

### *Physical and Chemical Properties of Peanut Beans*

Physical properties portrayed the components that can be grouped without the need for chemical identity to be changed while chemical properties were determined when there was a change that occurred in the molecular structure. The research about this study has been conducted in 2016 by Marcio de Barros and Sandra Helena Prucendio where they discovered the properties of beans that were popular in regions of Brazil. There were seven kinds of beans used which were Saracura, Juriti, Perola, IAPAR 31, IAPAR 81, Carioca, and Colibri. The researchers applied eight tests to gain the chemical and physical properties of the beans.

The beans were tested based on their sizes which then concluded that their average sizes are small through their weight. They used the weight of 100 units of each pellet to classified it according to the class size. They also evaluated the color of the beans according to the color parameter by using the Gardner Colorimeter model 45/0. They measured the hardness of the beans using the TA-XT2 Texture analyzer in the units of Newtons(N), then the raw beans undergo a water absorption test when it is on a maceration process. The maceration process is a test that aims the decreasing of time for the pellets to cook because when heated the water will favor the deportation of heat.

It is also certified through the cooking time needed and beans integrity when under heating treatment. They tested the mineral contents inside the beans by using the digestion of raw beans with a chemical solution consists of nitric perchloric acid. To get to know about the bean's moisture, lipids, and protein, they undergo the proximate composition to determine their total carbohydrates of each bean for 100 grams of sample. The researchers concluded that Saracura which the one that has high mineral contents is the best beans recommended for the processing works in the industry. This valuable result can show the suitability of oil from the peanut as an important material in the making of ink. This is because peanut contains a higher level of mineral content too (Healthywomen, 2011).



### *Irradiation of Peanut Oil by Gamma Rays*

Based on the research done by Mahfouz al-Bachir, 2015 about the quality characteristics of oil extracted from gamma-irradiated peanut (*Arachis hypogea L.*), he committed to determining the effect of the radiation to the oil collected from the peanuts. The samples were selected to be irradiated at the doses of 0, 1, 2, and 3 kilo Gray of the gamma irradiation. He used three methods in determining the characteristics of peanut oil when it was irradiated which are the treatments and analysis, the physiochemical and statistical traits. He placed the non-irradiated and radiated samples at room temperature for about one year under a relative humidity. Then the properties of both samples were analyzed after being put for 12 months. The traits of grease under a physiochemical test were done in three types of measurements which were the determination of the fatty acids using GC-17 A Shimadzu chromatograph, chemical analysis, and color measurements by using AvaSpec Spectrometer Version 1.

When he analyzed the data, he stated that the radiated samples of the peanut oil after being stored for twelve months are lower and have a high amount of fatty acids which shows that the oil is highly nutrients compared to the irradiated one. The Thiobarbituric acid relatives substances (TBARS) of the samples were analyzed and show the result of both samples. After being tested, both show an increasing value of TBARS. He also tested the effect of irradiation and storage time on the colors of the oil which shows that the irradiation has decreased the colors of oil and less light. The results of the research illustrated that acid, TBARS, and the iodine values when in two conditions which were radiated and non-radiated in a storage period for about twelve months were below the limits of desirable. Yet it is considered as the beneficial oils to be used.

## **EXPERIMENTAL**

### *Material*

There will be the need of 1 kilogram of raw peanuts, natural resin Bentone 128, waxes Butylated hydroxytoluene BHT, pigments that composed from carbon black (Elftex 8) which will be applied to give colour to the peanut inks and Hydrite R to increase the brightness of the ink.

### *Heat Treatment*

One kilogram of peanuts was cleaned from any foreign matter to ensured that the samples did not have a heavy metal attached to it which can cause the material to be contaminated. For the next process, the cleaned peanuts will be heated under a temperature of below 50 degrees Celsius on a shallow pan with a Bunsen burner for about an hour. The sample was heated to remove any unwanted material and foreign matter.

### *Crushing and Sieving*

The peanut beans under the presser will proceed to be pressed to collect the oils by using a 1500W CZR109 automatic oil press machine with a 304 stainless steel peanut presser with 110V. Before proceeding the extraction of oil all the apparatus such as spatula were cleaned and rinsed with acetone or isopropanol to prevent contamination on the sample. The sample of peanut beans was sieve using a <50µm test sieve to achieve <50µm of the oil with no other mixture of other substances. The peanut beans that were too big were pressed again to get the desired size to extract the sample

until all the samples pass through the <50µm test sieve. Next, the sample will be kept aside for a while to make sure that the mixture of oil with other substances will be separated based on their densities.

### *Mixture of Oil and Additives*

The extracted oil will be then carefully blended with the pigment, resins, and waxes as the carriers. Firstly, to get the black printing ink, it was formulated from the carriers through the heating process under a temperature of 65 to 70 degrees Celsius and then blended with 1.0% butylated hydroxytoluene (BHT) with 6 to 20% carbon black (Elftex 8). The temperature that undergoes an inflated was important to dissolve the BHT. The pigment then needed to be dispersed with a Shar High-Speed Disperser, Model D-10P, that works at 2500-3000 rpm over five to seven hours. Color pigments, carriers, and additives were premixed with a Shar High-Speed Disperser, Model D-10P, at 2500 rpm for about 20 to 30 min. The diffusion of the pigments was done in an Eiger Mini Mill, it is filled with 2-mm chrome steel balls, that works at 3500 rpm for about 10 minutes. To increase the clotting of the ink, Bentone 128 was combined to the ink in an amount of 0.5 to 2.0% to modified the viscosity based on the needs and to increase the brightness of the ink, the Hydrite R can be added to the solutions about 20% of it.

### *Measurement of Viscosity*

There will be the need to measured the viscosities by using the Laray Falling Rod Viscometer, Model MV.01. The measurements of the viscosity of the ink were conducted to test its ability in making a higher adhesiveness and not easily melted when used for printing. To obtained the color inks that were the same to each other, it was tested by the Quick Peek color proofing kit.

### *Measurement of Rub Resistance*

The ANPA-NAPIM Rub-off Standard Test Procedure was used to calculate the rub-off resistance of the ink produce from the peanut oils. It can be valued as the percent of the blackness of the smudged that were determined when the ink was tested on top of a sheet. It was calculated through the following formula:.

$$\% \text{ Blackness} = \frac{\% \text{ R (tissue)} - \% \text{ R (rub stain)}}{\% \text{ R (tissue)}} \times 100$$

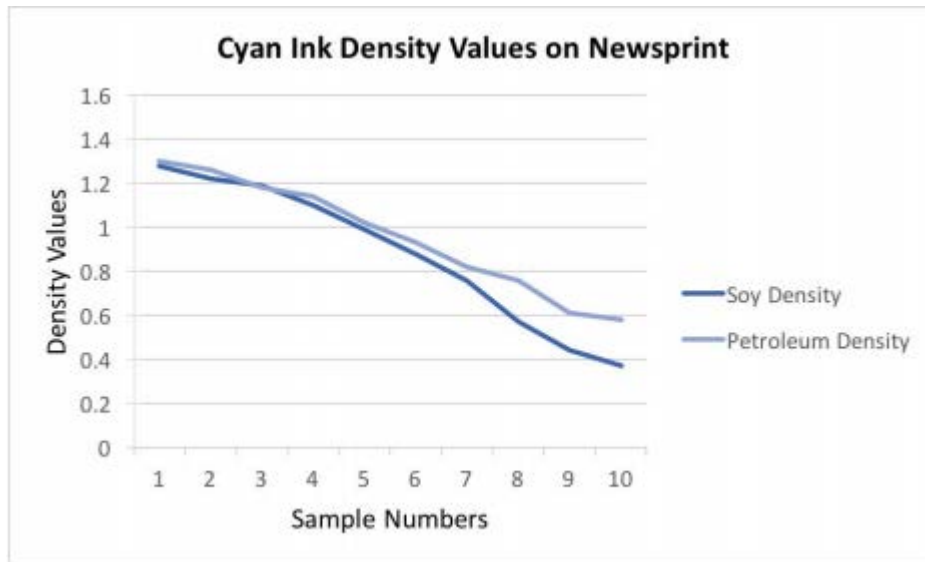
The rate of pigment infatuation on the newsprint through the infiltration in the sheet or resin after it is hard showed by the result of the percentage in the calculation. When the result portrayed that the blackness achieved lesser than 6% between the time of 2 hours, then it is labeled as ink with better rub-off resistance.

### *Sample Characterization*

The extracted peanut oil that were used in producing a vegetables-based ink need to be tested for its pre and post condition after irradiation by gamma. It is tested by using the GC-17 A Shimadzu Chromatograph to get the determination of fatty acids in both conditions. There were also the use of AvaSpec Spectrometer Version 1 to evaluate the colors of samples when it was radiated and not radiated based on the journal from Mahfoud al-Bachir, 2015.

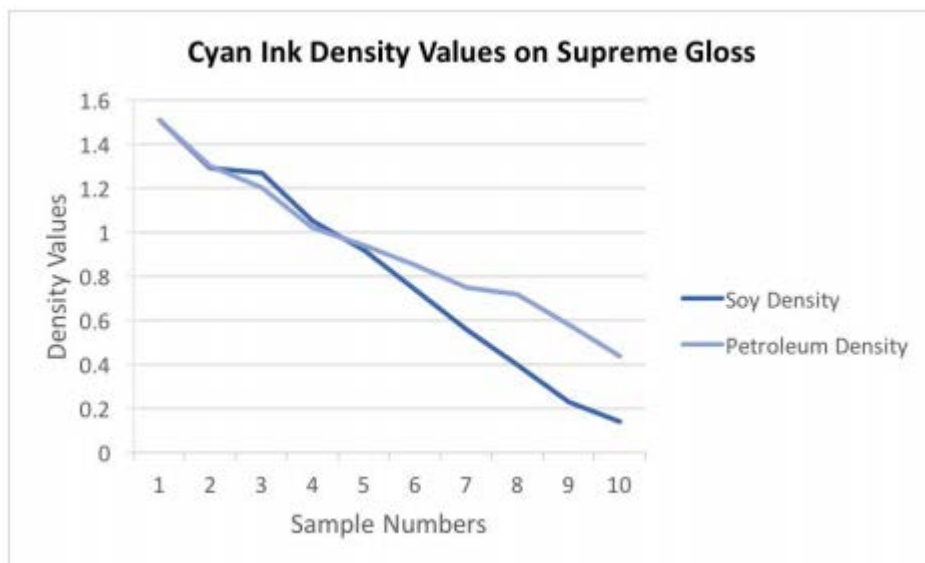
## RESULTS AND DISCUSSIONS

The qualities of vegetables-based ink are better compared to petroleum-based ink when it is being tested for offset printing (Co, Ku, Ma & To, n.d.). The color production from vegetables has yielded the slightest color difference which shows its possibilities in producing vibrant colors when on prints. Contrary to it, the petroleum oil used ink created a color that duller when being used. Naturally, the petroleum oil is cloudy and influence the color pay-off.



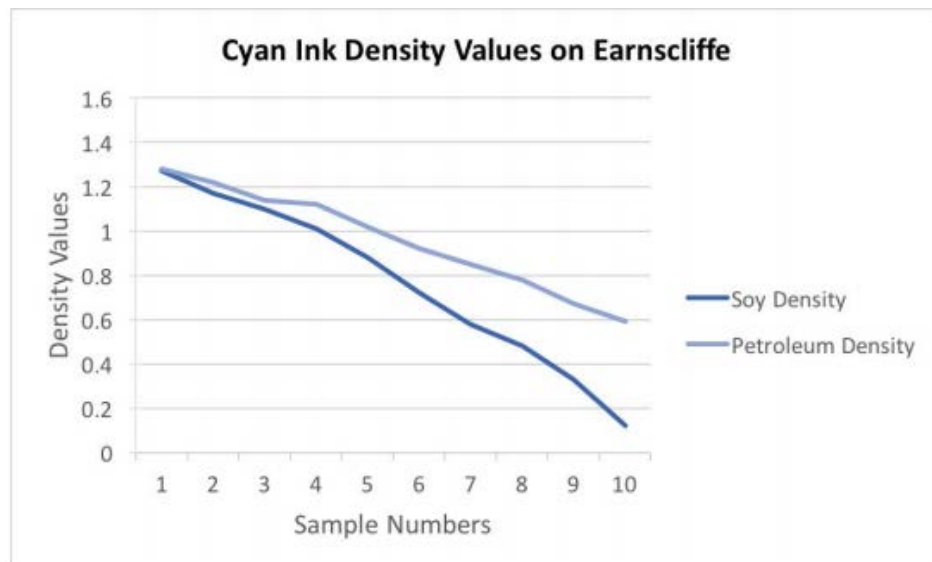
**Figure 1.** The ink density values of vegetables-based and petroleum-based ink printed on newsprint

(Co, Ku, Ma & To, n.d.).



**Figure 2.** The ink density values of vegetables-based and petroleum-based ink printed on supreme gloss

(Co, Ku, Ma & To, n.d.).



**Figure 3.** The ink density values of vegetables-based and petroleum-based ink printed on earnscliffe

(Co, Ku, Ma & To, n.d.).

The ink itself has better rub resistance which does not give a smudging effect when the ink was used on a printed paperboard. It does not shows a lot of blemished which valued its capability to withstand a friction. Vegetables-based ink has high potential of adhesion to the substrate compared with petroleum-based ink.



**Figure 4.** The ink rub resistance of the vegetables-based ink on the surfaces

(Co, Ku, Ma & To, n.d.).



**Figure 5.** The ink rub resistance of the petroleum-based ink on the surfaces  
(Co, Ku, Ma & To, n.d.).

The objectives which want to study the physical and chemical properties of beans by Barros, M., and Prudencio, S. H. has concluded that the beans with small size with lighter colors, higher level of proximate and mineral composition such as copper Cu, ferum Fe and potassium K together with medium hardness after cooking, lower cooking time required, water absorption capacity and the greater integrity after cooking were the good choices of beans that can be used for domestic and industrial use.

**Table 3.** Proximate composition of bean varieties Carioca, IAPAR 81, Saracura, Juriti, Pérola, Colibri and IAPAR 31<sup>1,2,3</sup>.

Varieties	Moisture	Proteins	Lipids	Ash	Carbohydrates
Carioca	12,09±0,16 <sup>d</sup>	22,30±1,32 <sup>b</sup>	1,19±0,29 <sup>b</sup>	4,04±0,19 <sup>a</sup>	72,47±1,19 <sup>a</sup>
IAPAR81	12,25±0,09 <sup>d</sup>	23,48±0,94 <sup>ab</sup>	1,81±0,29 <sup>ab</sup>	3,88±0,18 <sup>ab</sup>	70,83±0,77 <sup>ab</sup>
Saracura	13,28±0,22 <sup>bc</sup>	22,03±1,11 <sup>b</sup>	1,87±0,14 <sup>ab</sup>	4,00±0,10 <sup>a</sup>	72,10±1,08 <sup>ab</sup>
Juriti	12,52±0,39 <sup>dc</sup>	22,49±0,57 <sup>ab</sup>	1,99±0,54 <sup>a</sup>	4,05±0,12 <sup>a</sup>	71,4±0,90 <sup>ab</sup>
Pérola	13,51±0,11 <sup>b</sup>	24,76±0,77 <sup>a</sup>	1,47±0,14 <sup>ab</sup>	3,89±0,04 <sup>ab</sup>	69,89±0,95 <sup>b</sup>
Colibri	13,44±0,55 <sup>b</sup>	24,86±0,60 <sup>a</sup>	1,26±0,16 <sup>ab</sup>	3,76±0,09 <sup>ab</sup>	70,08±0,57 <sup>ab</sup>
IAPAR31	14,47±0,20 <sup>a</sup>	24,23±0,52 <sup>ab</sup>	1,38±0,21 <sup>ab</sup>	3,66±0,07 <sup>b</sup>	70,73±0,47 <sup>ab</sup>

<sup>1</sup> Average of three replications ± standard deviation

<sup>2</sup> Averages accompanied by the same letter in the same column do not differ significantly at p≤0,05

<sup>3</sup> Results expressed on dry basis (d.b.), except for moisture, in g/100g of sample.

**Figure 6.** Proximate composition of bean varieties  
(Barros & Prudencio, 2016)

The second objective which wants to study the effect of peanut oil during the pre and post condition after irradiation was portrayed by the peanut oil that shows the low level of desirable limits for the acid, TBARS, and the iodine values through the research. The study concluded that peanut oils were classified as good oils to be used for human needs.

**Table 2**  
Effect of gamma irradiation and storage period on biochemical properties of peanut oil.

Treatment storage period (weeks)	Control	1 kGy	2 kGy	3 kGy	LSD 5%
<b>Acid value (mg KOH g<sup>-1</sup> oil)</b>					
0	1.78 ± 0.02	1.79 ± 0.00	1.78 ± 0.02	1.76 ± 0.01	0.02
12	3.44 ± 0.04	3.30 ± 0.06	3.37 ± 0.03	3.32 ± 0.07	0.10
LSD 5%	0.07	0.10	0.05	0.11	
<b>Peroxide value (mEqO<sub>2</sub> kg<sup>-1</sup> oil)</b>					
0	4.07 ± 0.04	4.47 ± 0.08	4.51 ± 0.01	4.71 ± 0.04	0.09
12	10.78 ± 0.07	11.24 ± 0.25	11.70 ± 0.42	12.17 ± 0.28	0.54
LSD 5%	0.13	0.43	0.67	0.46	
<b>TBA value (mg MDA kg<sup>-1</sup> oil)</b>					
0	0.018 ± 0.002	0.021 ± 0.001	0.019 ± 0.002	0.018 ± 0.001	0.002
12	0.028 ± 0.001	0.027 ± 0.001	0.028 ± 0.001	0.026 ± 0.001	0.001
LSD 5%	0.001	0.002	0.001	0.001	
<b>Iodine number (g I<sub>2</sub> 100 g<sup>-1</sup> oil)</b>					
0	107.24 ± 0.06	104.95 ± 1.03	104.08 ± 0.13	116.76 ± 1.17	1.48
12	98.64 ± 1.83	101.21 ± 0.33	100.90 ± 2.11	100.11 ± 0.37	2.67
LSD 5%	2.93	1.74	3.40	1.97	
<b>Saponification value (mg KOH g<sup>-1</sup> oil)</b>					
0	191.21 ± 1.09	188.58 ± 1.81	184.77 ± 5.37	187.69 ± 0.52	5.46
12	190.11 ± 0.19	190.04 ± 0.13	191.04 ± 0.51	190.60 ± 0.23	0.57
LSD 5%	1.77	2.90	8.65	0.91	

**Figure 7.** Effect of gamma radiation and storage period on biochemical properties of peanut oil (Al-Bachir, 2015).

## CONCLUSION

Through the research, it shows that peanuts oil is suitable for the use of printing ink today. The ink made from peanut oil is an ink that was eco-friendly to the world. It implemented better colors when it was stamped on surfaces, has low rub resistance compared to petroleum-based ink and this ink does not have higher volatile organic compounds (VOCs). Petroleum-based ink more likely to released VOC when it has dried and required higher usage of solvent to clean the printer press. It is safe to use ink from vegetable oil in the food packaging since it has low VOC. Creatively, with the innovation of this type of ink, it can help in the way of printing today. As it is an eco-friendly ink, it can generate a clean and conducive environment condition to humankind as well as introducing to a lot of excellent effects on the industries of printing.

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## REFERENCES

- Al-Bachir, M. (2015). Quality characteristics of oil extracted from gamma irradiated peanut (*Arachis hypogea* L.). *Radiation Physics and Chemistry*, 106, 56-60. doi:10.1016/j.radphyschem.2014.06.026.
- Aydemir, C., Yenidoğan, S., Karademir, A., & Kandirmaz, E. A. (2018). The examination of vegetable- and mineral oil-based inks' effects on print quality: Green printing effects with different oils. *Journal of Applied Biomaterials & Functional Materials*, 16(3), 137-143. doi:10.1177/2280800018764761.
- Bamboo Ink. (2019, March 03). Eco-friendly Ink: Vegetable Based and VOC Free: Printing. Retrieved June 10, 2020, from <https://bambooink.com/printing/eco-friendly-ink/>.
- Barros, M. D., & Prudencio, S. H. (2016). Physical and chemical characteristics of common bean varieties. *Semina: Ciências Agrárias*, 37(2), 751. doi:10.5433/1679-0359.2016v37n2p751.



- Co, C., Ku, A., Ma, S., & To, V. (n.d.). Soy-based Inks GRA634 - Special Project Final Report. Retrieved June 14, 2020, from [http://www.color.org/events/toronto/15-Special\\_Project\\_SoyInks.pdf](http://www.color.org/events/toronto/15-Special_Project_SoyInks.pdf).
- Erhan, S. Z., Bagby, M. O., & Cunningham, H. W. (1992). Vegetable oil-based printing inks. *Journal of the American Oil Chemists Society*, 69(3), 251-256. doi:10.1007/bf02635896.
- Kraft, S. (2019, July 29). 5 Reasons to Love Peanuts. Retrieved March 20, 2020, from <https://www.healthywomen.org/content/blog-entry/5-reasons-love-peanuts>.
- Nierenberg, C. (2017, July 21). The Science of Cooking Oils: Which Are Really the Healthiest? Retrieved June 13, 2020, from <https://www.livescience.com/59893-which-cooking-oils-are-healthiest.html>.

## NATURAL FIBRE USED AS A REINFORCEMENT IN CONCRETE- A REVIEW

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### ABSTRACT

*All living organisms and human beings on Earth continually exposed to ionizing radiation from natural radionuclides through the respiratory and digestive system, indoor areas and being exposed to man-made radiological sources. All are aware of the dangers caused by the radiation exposure. Nevertheless, there are also important benefits, particularly in the study of certain biological problems and in the treating of cancer. In so much further as we cannot eliminate the risk of radiation from our daily life, we have to take protective actions to minimize the effects of radiation. Shielding is the major precautions to take action on even though materials including lead and iron are efficient ray-proofing devices, and their technical and economical use is limited to certain particular places. Furthermore, as gamma rays are uncharged and have no mass, they can easily penetrate into matter and thus shielding against this kind of photons is very difficult. Therefore, concrete is amongst the most common and inexpensive materials used for radiation shielding in radioactive source and radiation generation facilities other than lead. Concrete has a high shielding potential against radioactive radiation and good long-term longevity relative to other building materials. It has a high density but a very weak structure and somehow poor durability.*

*Specific natural fibers then incorporated into conventional concrete to improve the strength and shielding performance. Moreover, as we know, currently, the more eco-friendly material is demanded across the world, where therefore most researchers around the globe focus on exploring new materials that would increase the efficiency of the environmental quality of products. In order to enhance the performance of concrete as a shielding, this study uses a cogon grass fibre, which is in the class of natural fibre as a reinforcement materials mix with concrete to enhance the performance of radiation shielding. Cogon grass is one of the worst weeds in the world, due to their ability to conquer, grow, and disrupt desirable vegetation efficiently. The use of cogon grass as an alternative fiber will improve the use of unused resources and reduce global demand for deforestation. In fact, the insertion of fiber to the concrete matrix has long been accepted as a way of enhancing strength absorption. These fibers can even provide a tolerance to post splitting, high-energy absorption and an increased fatigue resistance of cement based composites.*

## INTRODUCTION

There are various uses of radiation that lead to maintaining high quality and protection of our everyday lives for instances where smoke sensors was used to alert people when the fire occurs, x-ray devices that were able to detect concealed weapons, as well as other kinds of imaging are all used by society to search diseases. However, lack in handling the radiation, or securely secured, a person who has come into contact with them for more than a few minutes is likely to suffer permanent injury and cause deadly exposure within several minutes or one hour if not shielded. This is when the radiation shielding concrete come across to an act where it was built so that this harmful radiation can be shielded.

The ability of concrete to be used in many fields that required shielding of radiation sources is well recognized and acknowledged by most researchers. Furthermore, various reinforced concrete has been made in order to enhance the properties and performance of the concrete in construction and industry all around the world. It is well acknowledged that concrete is strong in compression but weak in tension, hence reinforcement also used to improve this matter. The adding of fibers as reinforced in concrete is one of the ways to enhance the performance of concrete especially in the aspect of energy absorption capacity. The purpose of adding natural fiber is to improve the strength and durability of the concrete. Hence, the performance of concrete as radiation shielding is also automatically improve and yet, natural fibers are suitable material as reinforcement in concrete. The use of natural fibers as reinforcement is the safest and environment friendly as it contribute no harm to the environment and it low in cost and ready availability to consume anytime [1].

In this study, natural fiber used as reinforcement in concrete to enhance the radiation shielding performance is "*Imperata Cylindrica*", usually known as Cogon grass or "*Lalang Grass*" in Malaysia. Among classification of natural fiber, cogon grass classified as a type of grass fiber together with bamboo, bagasse, Napier, corn and others [2]. Cogon grass is one of the ten worst weeds in the world because it is capable of quickly colonizing, spreading and displacing attractive species [3]. The growth of this exotic invasive species is still cannot be stoppable and might give major influence on either ecological or economic consequences at some area [3]. Therefore, the use cogon grass needs to be redefine whether in construction, manufacturing, or any other fields so that the creation of this tree is not just a waste. Therefore, cogon grass may be beneficial as it can be propose as an alternative fiber to be reinforce in concrete as a radiation shielding materials and at the same time enhancing the shielding performance.

## EXPERIMENTAL

### *Sample collection and preparation*

Cogon grass is an abundantly inexpensive weed growing in Malaysia, easily cultivated through seeds and large rhizome systems. Production of these grass fibers can turn the wasted leaves into renewable and low cost natural fibers that will be integrate in the concrete mixes. The *Imperata cylindrica* also known as cogon grass collected from the field area where it is also often visible as a luxurious yellowish-green grass on the roadside and usually in the full sun.

Later on, a few steps procedure is perform to prepare the samples of the cogon grass fiber. Firstly, cogon grass was cleaned with water to eliminate dust, waste, and any harmful materials and was then left to dry under the sunlight for a week. Secondly, the dried grasses were cut manually into fibers about 1 mm to 2 mm size for each fiber using knife or scissors. Eventually, it was placed in the airtight glass container after the cutting of the fiber was done and labelled as cogon grass (CGF).

### *Cogon grass characterization*

Known that natural fibres consist of some basic chemical compositions, which are cellulose, hemicellulose, pectin, lignin, and others. The cogon grass could be used as a reinforcement which as complement for the natural fiber including jute, kenaf, sisal, bamboo and other natural fibres, as it is highly available, rarely used in manufacturing and has high cellulose content, approximately 40 percent [4]. The sample was brought to analyse for its chemical characteristic. To determine the chemical compositions of sample, it can be accomplish by conducting a hydrolysis test also known as Chesson Method [5]. Furthermore, the cogon grass specimens have been studied with field emission scanning electron microscopy (FE-SEM) and atomic force microscopy (AFM) for their microstructural and surface characteristics. A small piece of specimen was placed onto a double-sided tape of the specimen stub. Before the specimen were submitted to SEM for visualization of the fibre surface morphological characteristics, the release paper was lightly pressed and covered with a thin layer of gold-palladium film [12].

### *Chemical Treatment on Natural Fibre*

To removes moisture content and increasing the strength of the fibers, chemical treatment on the fibers were done. In addition, the aim of chemical treatment is to eliminate the fragile boundary layers of natural fibers, which intended to protect the fiber but which do not resist the cement alkaline environments, and to create thin layers that can withstand the impact of alkaline attack [6]. For that, alkali treatment was utilized at which cogon grass fibers were soaked in sodium hydroxide (NaOH) solution for a certain period, at room temperature. Chemical treatment with NaOH removes moisture content from the fibers while increasing its strength [7]. Therefore, the fibers then immersed in 4% of NaOH concentration with the soaking duration of these fibers was 24 hours.

### *Concrete Specimen Preparation*

Ordinary Portland Cement (OPC) grade 53 used to prepare the samples tested. Fine sand, which passes by 4.75 mm to 63 $\mu$ m sieve size, while gravel (coarse aggregate) of 20 mm to 6.3 mm thickness has been used. Four concrete sample sets were produced utilizing different quantities of cogon grass fiber. Concrete mixtures of ratio 1:2:3.5 with a water-cement (w/c) ratio of 0.55 [8], and fiber content of 0 percent, 0.5 percent, 1 percent and 1.5 percent dosage by total dry volume added to the concrete mixture. Later on, the freshly mixed concrete was poured and spread out in a mold frame and the specimens were casting for 24 hours. After 24 hours, the concrete slab were demolded from the molds and then completely immersed and cured in pool of water for 28 days in which, proper curing of concrete is very necessary not only in order to obtain the required compressive strength, but also in needed to design strong concrete [9].

### *Gamma-Ray Linear Attenuation Coefficient Measurement*

The linear attenuation coefficients were measured as it was often being used to analyze the performance of radiation shielding of any types of materials. The linear attenuation coefficient ( $\mu$ ), described as the probability of radiation interacting with a material per unit length of path, where it is the most important quantity that characterizes the penetration and diffusion of gamma radiation in the medium [10]. Additionally, the linear coefficient of attenuation ( $\mu$ ) is the fraction of the attenuated incident photons per unit thickness of a substance [11]. This reflects the fraction of photons per unit thickness of the material separated from a monoenergetic beam [11].

The developed radiation concrete mix slabs brought to test in which to determine the measurement of linear attenuation coefficient of concrete, which contain different amount of natural fiber as an additive in the concrete. Linear attenuation coefficients of concrete were measured using the gamma spectrometer system containing the NaI (Tl) scintillation detector. It was also recorded using the MAESTRO-32 gamma spectroscopy software. Measurements were performed of gamma rays emitted from Cobalt-60,  $^{60}\text{Co}$  radioactive source at different gamma photon energies.

Next, the attenuation coefficients were determined by a calculation using the application of Beer-Lambert's law [11]. Attenuation due to absorption follows the Beer-Lambert's rule,  $I = I_0 e^{-\mu x}$  where  $x$  is the thickness of the sample under study,  $I_0$  is the number of counts represent the intensity of gamma-ray photons, at a specific energy, without attenuation, whilst  $I$  is the gamma ray counts that penetrated the absorber with attenuation in the sample and  $\mu$  is linear attenuation coefficient ( $cm^{-1}$ ) [10]. Rearrange and take the log of both sides gives the equation of  $\mu = -\left[\frac{\ln(I/I_0)}{x}\right]$  for linear attenuation coefficient [11].

## RESULTS AND DISCUSSIONS

### *Chemical properties of cogon grass fibre*

Table 1 below shows the chemical properties of cogon grass fibre which consist of cellulose, hemicellulose and lignin. For cellulose, cogon grass contain of 37.1% of cellulose [12], where it also share the same result reported by Mohd Kassim et al. (2016) [13]. Cellulose is a significant constituent because the increased cellulose content provides better quality and stronger materials. As for hemicellulose, cogon grass characterized by a relatively low content of hemicellulose that is 27.13 percent where this amount could make a significant contribution to the product's [12]. Lastly, for lignin, the lignin content in cogon grass is 5.67 % where considered as low [12] [13].

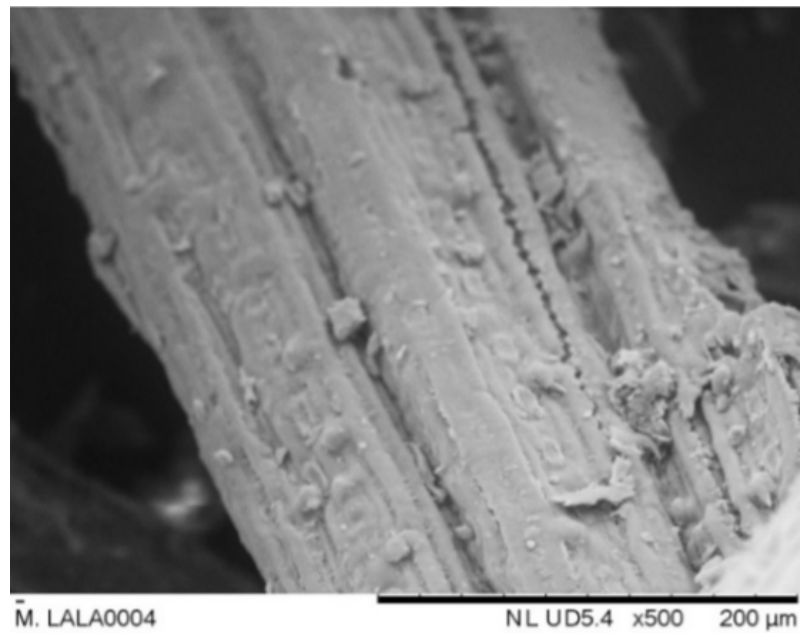
**Table 1.** Chemical compositions of cogon grass fiber.

Chemical composition of cogon grass fibre	Percentage of chemical composition (% w/w)
Cellulose	37.1
Hemicellulose	27.13
Lignin	5.67

### *Physical properties of cogon grass fibre*

#### *FE-SEM Analysis.*

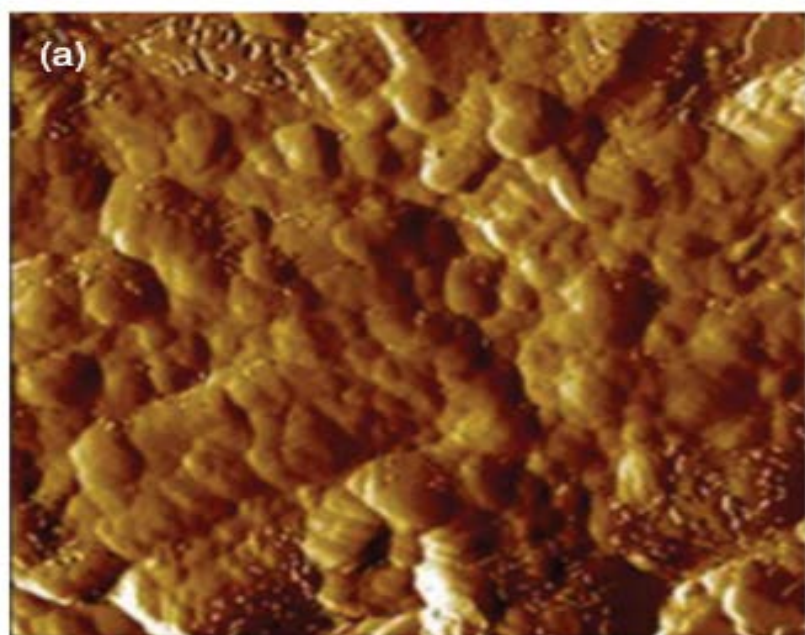
According to scanning electron microscopy images of cogon grass fibre, it shows that these fibres have a physical surface characteristic of jagged, rough surface, continuous and a non-uniform structure, as shown in Figure 1.



**Figure 1.** SEM images of cogon grass fibre

*AFM Analysis.*

After that, the AFM image of raw cogon grass fiber, as shown in Figure 2 illustrates that the cogon grass fiber appears to have a blocky and rough surface due to the cuticular waxy layer, which contain a long chain of fatty acids, lipids and phenolic compounds.

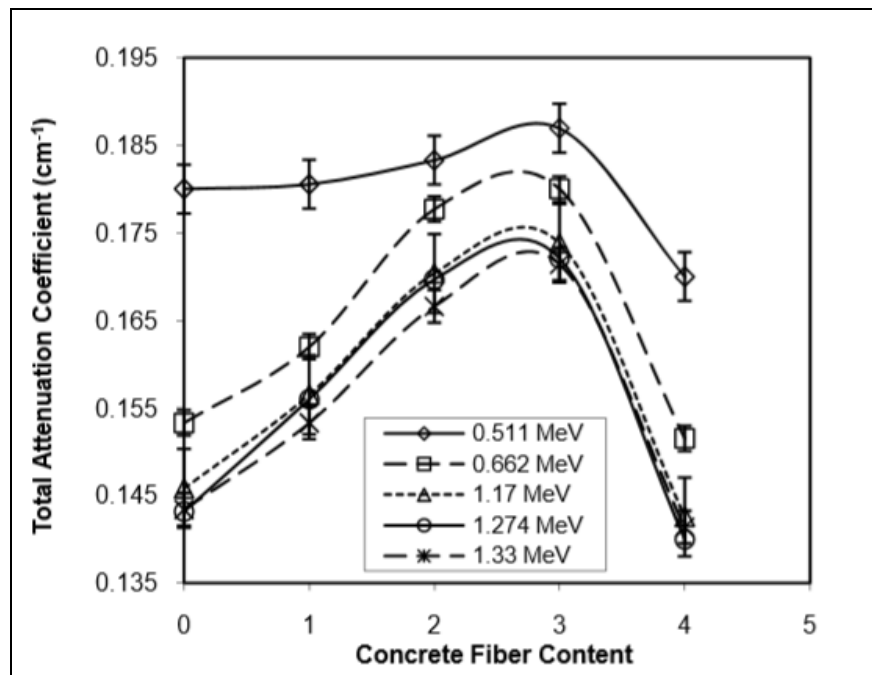


**Figure 2** AFM image of cogon grass fibre



### *Gamma Linear Attenuation Coefficient Analysis*

The measurement of linear attenuation coefficient were taken in order to analyze the effect of fiber reinforced in concrete for radiation shielding performance as the amount of fiber increases. The result of linear attenuation coefficients of different amount of fiber, for different gamma photon energies shows that the linear attenuation coefficient slightly increases as the increasing of percentage of the fiber in concrete for all tested gamma energies [14]. However, the linear attenuation decreases as the amount of energy of the gamma photon increases [14]. Besides, it found that the linear attenuation coefficient measured increases with the increasing of fiber content up to 3% [15]. However, the total linear attenuation decreased at 4% fiber content due to decreasing density. They also shows that the total gamma-ray linear attenuation coefficient decreases with the increasing of gamma-ray energies [15], as shown in Figure 3.



**Figure 3.** Effect of concrete fiber content on gamma ray total attenuation coefficient

### CONCLUSIONS

By comparing the results of the measurement of gamma ray linear attenuation coefficient of concrete with different percentages of fibre obtained from the previous studies, it indicates that adding fibre in the concrete can increase the gamma-ray linear attenuation coefficient in which at the same time, improves the performance of radiation shielding. Furthermore, it assumed that natural fibre has potential for use as reinforcement in concrete in enhancing the radiation shielding. This statement can be supported by research study of Abdo et al. (2003), where it mentioned that the addition of heavy minerals or heavy metal into the composite offer good shielding and radiation attenuation properties [16]. Hence, natural fibre may have the potential to be used as additives in the concrete to improve the performance of radiation shielding at the same time reduce the environment pollution. Furthermore, for future use, the radioactive materials can be used safely and less worries, as there is an improvement in radiation shielding.

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## REFERENCES

- Zakaria, M., Ahmed, M., Hoque, M., & Islam, S. (2016). Scope of using jute fiber for the reinforcement of concrete material. *Textiles and Clothing Sustainability*, 2(1). doi: 10.1186/s40689-016-0022-5
- Jamir, M.R.M., Majid, M.S.A., & Khasri, A. (2018). 8 - Natural lightweight hybrid composites for aircraft structural applications. In *Woodhead Publishing Series in Composites Science and Engineering, Sustainable Composites for Aerospace Applications*. Woodhead Publishing, 155-170. doi.org/10.1016/B978-0-08-102131-6.00008-6
- Jumaidin, R., Khiruddin, M., Asyul Sutan Saidi, Z., Salit, M., & Ilyas, R. (2019). Characteristics of Cogon Grass Fibre Reinforced Thermoplastic Cassava Starch Biocomposite: Water Absorption and Physical Properties. *Experimental Thermal and Fluid Science (EXP THERM FLUID SCI)*. 43-52.
- Setyawan, P & Sugiman, S. (2015). Mechanical Properties of Cogon Grass (*Imperata Cylindrica*) Fiber Reinforced Unsaturated Polyester Composites.
- Arsyad, M., Kondo, Y., Arman, Anzari, A., & Wahyuni, N. (2019). Effect of sodium hydroxide concentration on the tensile strength of coconut fiber. *Journal of Physics: Conference Series*, 1341, 05200. doi: 10.1088/1742- 6596/1341/5/052001
- Machaka, M., Basha, H., Abou Chakra, H. & Elkordi, A. (2014). Alkali Treatment Of Fan Palm Natural Fibers For Use In Fiber Reinforced Concrete Hisham Basha. *European scientific journal*. 1010. 1857-7881.
- Chandramohan, D., & Presin Kumar, A. J. (2017). Experimental data on the properties of natural fiber particle reinforced polymer composite material. *Data In Brief*, 13, 460-468. doi: 10.1016/j.dib.2017.06.020
- Babafemi, A. J., Kolawole, J.T., & Olalusi, O. B. (2019). Mechanical and Durability Properties of Coir Fibre Reinforced Concrete. *Journal of Engineering Science and Technology*. 14. 1482-1496.
- Gencel, O., Bozkurt, A., Kam, E., & Korkut, T. (2010). Determination and calculation of gamma and neutron shielding characteristics of concretes containing different hematite proportions. *Annals of Nuclear Energy*, 38(12), 2719-2723. doi: 10.1016/j.anucene.2011.08.010
- Medhat, M. (2009). Gamma-ray attenuation coefficients of some building materials available in Egypt. *Annals of Nuclear Energy*, 36(6), 849-852. doi:10.1016/j.anucene.2009.02.006
- AKÇA, B. (2016). Measurement of Linear Attenuation Coefficients of Compounds of Some Essential Major Elements. *Journal of Multidisciplinary Engineering Science and Technology*. 3. 5003.
- Mohd Kassim, A. S., Mohd Aripin, A., Ishak, N., & Zainulabidin, M. (2015). Cogon Grass as an Alternative Fibre for Pulp and Paper-Based Industry: On Chemical and Surface Morphological Properties. *Applied Mechanics and Materials*, 773-774, 1242-1245. doi: 10.4028/www.scientific.net/amm.773-774.1242
- Mohd Kassim, A.S., Mohd Aripin, A., Ishak, N., Hairom, N. H. H., Fauzi, N. A., Razali, N. F., & Zainulabidin, M. H. (2016). Potential of cogon grass (*Imperata cylindrica*) as an alternative fibre in paper-based industry. *Journal of Engineering and Applied Sciences*. 11. 2681-2686.
- Çakıroğlu, M. (2016). Investigation of Radiation Shielding Properties of Polypropylene Fiber Reinforced Shotcrete. *Acta Physica Polonica A*, 129(4), 705-706. doi: 10.12693/aphyspola.129.705
- Ikraiam, F. A., Ali, J. M., Abd El-Latif, A., & Abd ELazziz, A. (2009). Effect of Steel Fiber Addition on Mechanical Properties and gamma-Ray Attenuation for Ordinary Concrete Used in El-Gabal El-Akhdar Area in Libya for Radiation Shielding Purposes. *Egypt*.
- Abdo, A., Ali, M., & Ismail, M.R. (2003). Natural fibre high-density polyethylene and lead oxide composites for radiation shielding. *Radiation Physics and Chemistry*. 66. 185-195. 10.1016/S0969-806X (02)00470-X.

# WATERPROOF CHARACTERISTICS OF PACKAGING MATERIAL-A REVIEW

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## ABSTRACT

*Plastics become the most favourite use among society due to its own characteristics in aspect of barrier properties and strengthness, we are able to get them anywhere, plus they are cheap, resistible with water and very flexible. Also these days people would mould the polymer into any kind of shape. Lots of efforts have been done to reduce the amount of plastics but not work really well, even with the 3R program, reduce, reuse and recycle. For that reason, bioplastics are born to educate people for having better choices in saving the earth. Carbohydrate-based polymers were most famous as the polymers came from starch, cellulose, lactic acid and lactide, polyhydroxyalkanoates and chitosan which were easier to obtain, especially polymers from starch as it was the cheapest among others. Ratio of amorphous and crystalline regions play huge role in bioplastic. Using only starch and water is not enough to compete with polyethylene (PE) or polypropylene (PP). Therefore, plasticizers need to add in to enhance water barrier and mechanical strength. Plasticizers such as glycerol, sorbitol, citric acid and even beeswax have been tested in several studies for reducing water permeability. However, water permeability for bioplastic is quite high due to presence of water itself as plasticizer makes some bioplastic easier to attract water molecule. Fortunately, adding with other plasticizer will affect relative humidity (RH) where water content of material will follow it. Other than that, content of moisture test can tell the level of hydrophilicity of a material. Meanwhile, in contact angle measurement, sessile drop-let mostly used for examine wettability. Angle of  $0^\circ$  labelled as the most hydrophilic and  $180^\circ$  for superhydrophobic. When it comes to industrial use, gamma radiation and electron beams are generally involved. The reason for gamma radiation is because gamma rays are extreme in penetration and Cobalt 60 mainly used and often for sterilization purpose. Abstraction, recombination, disproportionation and polymerization are effect due to exposure of ionizing radiation which lead to crosslinking or degradation of the chemical bonds of polymer. Reaction of irradiation towards oxygen reported that formation of free radicals can occur. By the presence of free radical, crosslinking of the polymer may occur due to the potential possessed by the attacked chain. Nevertheless, result would not be equal for all polymer as different presence of molecule might react differently. In the end, the effect towards polymer can be figured out with examine molecular weight.*

## INTRODUCTION

Among all types of packaging material, plastic was one of the mainly used in the list. Unlike cupboards, metal and glass, plastics are flexible, lightweight, odorless, great in mechanical strength, hygienic and most important thing is low cost. Seems that most people have an obsession with plastic, the beloved planet becomes very dirty and unorganized as the plastics covered it since we used plastics for more than half a century. Polyethylene (PE), polypropylene (PP), polyester and

substituted olefins (Cantor et. al.,2011) are some categories under plastics. There are more variation of polymers invented under them, such as polyethylene can be divided into three more groups (Kim Y.T. et. al., 2014), low density polyethylene (LDPE), high density polyethylene (HDPE) and linear low density polyethylene (LLDPE). With all these variety, almost 40% from plastic production used in packaging sector (Zhao Li et. al., 2018) which is not worth it as it used up only for a moment but the lifetime of plastic is more than a century. Packaging material used a lot in markets, industries and households. Packaging waste reported over 67 million tons (Maulida et. al.,2016) leading to serious complication towards environment.

Nowadays, bioplastics has been well known among society as awareness keeps updated from time to time. Therefore, biodegradable things always become the first selection. As bioplastic known for its environmentally-friendly and easy to dispose of (Marichelvam et. al., 2019) due to its natural chain of polymer. In detail, bioplastic is a polymer that is based with biodegradable sources such as carbohydrate- or fat and oil –based. Starch got attention for accessible major feedstock. Amylose and amylopectin ratio is the key to achieve common plastic characteristics. Corn, wheat and potato mainly got attention due to major accessible feedstock. For example, 62.8 million tons of potato produced at same time 782 million tons of rice production and about 1,147 million thousand tons of corn production in 2018. Amylopectin is the major component present in starch as a crystalline region with range ratio in 75% - 85%, while (Jambrak et. al.,2010) the amylose is the opposite present in starch as amorphous region with range ratio in 20% - 25%.

*Table 2 Amylose and amylopectin ratios in several starches (Young et. al., 1984)*

Starch	Amylose (%)	Amylopectin (%)
Corn	28	72
Potato	20	80
Rice	18.5	81.5

Ability of attract water molecules is needed to pay attention to achieve waterproof or at least near to the hydrophobicity level but even so biodegradability needs to be maintained. Therefore, wettability depends on the water solubility of the bioplastics. In detail, moisture content percentage will be studied in change of bioplastic weight before and after dried up in the oven. Fortunately, adding with other plasticizer will affect relative humidity (RH) (Chaléat et. al.,2014) where water content of material will follow it. The lower the RH, the lower the water content will be when amount of plasticizer increase and vice versa. Therefore, contact angle measurement will be needed to measure hydrophobicity. Sessile droplet mostly (Yuan et. al.,2013) used for examine wettability. Angle of 0° labelled as the most hydrophilic and 180° for super hydrophobic for showing level hydrophobicity of the surface that able to resist the water attraction.

When it comes to industrial use, gamma radiation and electron beams are generally involved. The reason for gamma radiation is because gamma rays are extreme in penetration and Cobalt 60 mainly used and often for sterilization purpose. Unlike gamma radiation, electron beams have limitation for penetration. When radiation is exposed to high polymer, different reactions may occur. There are four, abstraction, recombination, disproportionation and polymerization. The effect of radiation (Khalil et. al.,2010) leads to crosslinking or degradation towards chemical bonds. In Title 21 of the Code of Federal Regulations (CFR), few packaging materials were listed (Paquette et. al.,2004)

irradiated in regulation 179.45(d) with maximum dose 60kGy. This shows that packaging material was already introduced with radiation for years.

## EXPERIMENTAL

### Material

Corn starch, potato starch, rice starch, glycerol, gelatine, sorbitol, citric acid, distilled water, PP plastic, PE plastic and polylactic acid (PLA) plastic. All of the materials will be purchased from distributors. PP, PE and PLA plastics will be used for comparison with bioplastic samples. There will be four different procedures for making bioplastics. For mixed starches, there will be combinations of corn-potato, corn-rice and potato-rice starches inspired by (Marichelvam et. al., 2019) study on rice and corn starches combination.

Pure starch with sorbitol:  5g of starch, 1.5g glycerol, 1g of sorbitol, 75g of distilled water, 1g of gelatin	Pure starch with citric acid:  5g of starch, 1.5g glycerol, 0.5g of citric acid, 75g of distilled water, 1g of gelatin
Mixed starches with sorbitol:  7g of first starch, 3g of second starch, 3g of glycerol, 2g of sorbitol, 2g of gelatin, 100g of distilled water	Mixed starches with citric acid:  7g of first starch, 3g of second starch, 3g of glycerol, 1g of citric acid, 2g of gelatin, 100g of distilled water

All ingredients will be mixed in a beaker for each type of mixture. Next will be stirring the mixture and heat until 100°C. Temperature should be checked always to prevent overheating towards the molecules of the mixtures as it might decrease the function or the properties of bioplastic. When the mixtures mix well, pour them into a mould or suitable plate. Leave them for a few days or at least 3 to 4 days for the mixture to relax and dry out.

### 2.2 Water contact angle analysis

Hydrophilicity has always become a problem for bioplastic development. By measuring the wettability of a bioplastic surface, we can determine hydrophilicity of the bioplastic. Contact angle is the surface analytical technique that is the most sensitive. This is because wettability is influenced by the top of the surface nanometre. By checking intersection angle, contact angle will be determined (Taylor, 2007). The test will run in a temperature- and humidity- controlled room to reduce random error when reading is taken. Also the test will use sessile droplet to interact with polymer molecules (Yasuda, 1994).

### 2.3 Content of moisture test

In this test, bioplastic samples will be weighted to get initial weight. Then, the bioplastic samples will be dry out using oven at 100°C -110°C. This test has similar aim with contact angle.

$$\text{Content of moisture} = \frac{(W_2 - W_1)}{W_1} \times 100\%,$$

with  $W_1$  = initial weight,  $W_2$  = final weight,



$W_2$  can be obtained by dry the bioplastic sample at 100°C -110°C.

#### 2.4 Test for biodegradability

Biodegradability will be determined by soil burial method. This method been chosen for consideration of landfill condition with duration at least 15 days and can lengthen the time if necessary. Using weight loss formula in percentage:

$$\text{Percentage of lose} = \frac{(W_0 - W)}{W} \times 100\% ,$$

with  $W$  = initial weight ,  $W_0$  = final weight,

$W_0$  can be collected after buried in soil for 15 days at least.

#### 2.5 Tensile strength test

For this test, we can figure out mechanical properties of the samples. Here we can collect data for the flexibility, stiffness and can compare the best effect of plasticizers. ASTM-D882 or ASTM-D638. Samples will be put in grip of the clamp and pull the samples until they break.

#### 2.6 Scanning Electron Microscope (SEM)

Using SEM, morphological study of the invention bioplastics can be done for investigation of sample surface and study the difference between pre-irradiation and post-irradiation to see any changes occur. Before sample being analyse, it need to be covered with layer of gold spray (Marichelvam, 2019).

#### 2.7 Fourier Transform Infrared (FTIR) Spectroscopy

FTIR were used to detect chemical molecule in the samples. This is because irradiation might be able to make the molecular properties change as crosslinking or degradation can happen on the samples. Functional group will be revealed in order to understand how the bonds of molecule work resulting in change of properties.

#### 2.8 Irradiation treatment

Those samples will undergo the gamma radiation with three different doses, 10 kGy, 25 kGy, 50 kGy. Start with 10 kGy because perhaps with rice, potato or corn starches presence in the samples might experience in change of molecular properties with low exposure dose.

## RESULTS AND DISCUSSIONS

Pure starches condition without adding sorbitol or citric acid were studied by (Daniel et. al.,2019) with water content 14.4% for potato starch, 10.78% for corn starch and 12.39% for rice starch but their tensile strength was 6.5 MPa, 7.8 MPa and 4.48MPa each with elongation 90%, 35% and 102% respectively. Study of mixed starches by (Marichelvam et.al.,2019) adding gelatine and citric acid produce a sample with moisture content 11.7%, with tensile strength 6.8 MPa and elongation only 6.8%. Not only that, water contact angle measured using sessile droplet resulting around 70° which compared to LDPE around 90°. A study by (Muhammad et. al.,2015) was reported about the effect of glycerol and sorbitol in starch bioplastic. There are combination of glycerol-sorbitol (GS) as well with concentration 15%, 30% and 45% resulting glycerol low tensile strength were improved by compromising sorbitol high tensile strength. The best result was GS-15% with 15.82 MPa. However, elongation at break was 15.1% due to high tensile strength.



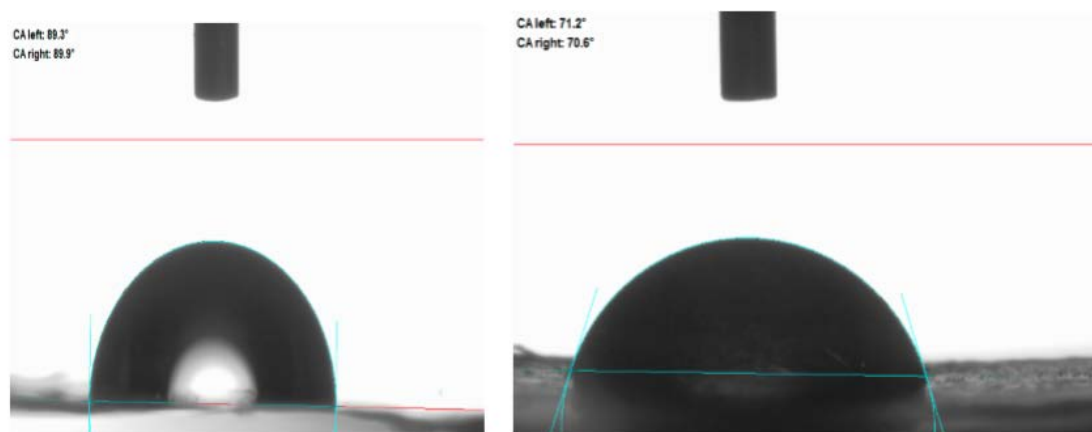


Figure 2 Left side: LDPE and right side :bioplastic sample (Marichelvam et. al.,2019)

According to (Gonzalez et al, 2009), sterilization processes with dry heat and moist heat method were used along with gamma radiation and ethylene oxide. For irradiation, Co-60 were used with 25 kGy for total dose at rate  $5.56\text{Gys}^{-1}$ . Reaction of irradiation towards oxygen studied by (Haji Saied et. al.,2007) can form free radicals. By the presence of free radical, crosslinking of the polymer may occur due to the potential possessed by the attacked chain. Lovaflex CH 130 film (Kim et. al.,2009) experienced tensile strength at break higher than the non-irradiated one with gamma irradiation dose up to 15 kGy and 25 kGy. Effect of improvement on film of rice starch properties was studied by (Nawapat et. al.,2011) using UV treatment. The starch film prepared with rice starch undergo gelatinization for 10 minutes at  $85^{\circ}\text{C}$ , added with glycerol and stirred for 2 minutes followed by sodium benzoate as photoinitiator. However, samples experienced decrease in transparency and crystallinity at 14.97%, yet swelling degree were the lowest with high production of gel fraction. Due to the presence of photosensitizer, the samples were having improvement in barrier properties.

## CONCLUSIONS

For the wettability, pure starch might have higher possibility with water contact angle lesser rather than mixed starch, not to forget moisture content might higher for pure starch than mixed starch. Even for tensile strength, mixed starch can have better result but cannot defeat with petroleum-based plastics. Sorbitol might perform better than citric acid as plasticizers. Compared to petroleum-based plastics, bioplastic samples have better biodegradability and polylactic acid as well but might need more time. With certain dose amount during irradiation treatment exposed to the samples; 10kGy, 25kGy and 50kGy, bioplastic samples might have improvement for tensile strength aspect but some of them can experience degradation as solubility have chance increase.

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## REFERENCES

- Byun, Y., Zhang, Y., & Geng, X. (2014). Plasticization and Polymer Morphology. *Innovations in Food Packaging*, 87–108. doi:10.1016/b978-0-12-394601-0.00005-9
- Chaléat, C., Halley, P. J., & Truss, R. W. (2014). Mechanical properties of starchbased plastics. *In Starch Polymers* (pp. 187-209). Elsevier
- Detduangchan, N., & Wittaya, T. (2011). Effect of UV-treatment on properties of biodegradable

film from rice starch. *World Academy of Science, Engineering and Technology*, 57(3), 464-469.

Domene-López, D., García-Quesada, J. C., Martín-Gullón, I., & Montalbán, M. G. (2019). Influence of Starch Composition and Molecular Weight on Physicochemical Properties of Biodegradable Films. *Polymers*, 11(7), 1084. doi:10.3390/polym1107108

Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782.

González, M. E., Lunati, C., Floccari, M., & Salmoral, E. M. (2009). Effects of Sterilizing Agents on the Biodegradation of a Bioplastic Material. *International Journal of Polymeric Materials*, 58(3), 129-140.

Haji-Saeid, M., Sampa, M. H. O., & Chmielewski, A. G. (2007). Radiation treatment for sterilization of packaging materials. *Radiation Physics and Chemistry*, 76(89), 1535-1541.

Khalil, S. A. (2010). Effect of ionizing radiation on the properties of prepared plastic/starch blends and their applications as biodegradable materials.

Kim, Y. T., Min, B., & Kim, K. W. (2014). General characteristics of packaging materials for food system. In *Innovations in food packaging* (pp. 13-35). Academic Press.

Kim, S., & Nho, Y. C. (2009). Controlling of degradation effects in radiation processing of polymers. Vienna: IAEA. 2009., 85.

Marichelvam, M. K., Jawaid, M., & Asim, M. (2019). Corn and rice starch-based bio-plastics as alternative packaging materials. *Fibers*, 7(4), 32.

Maulida, S. M., & Tarigan, P. (2016). Production of starch based bioplastic from cassava peel reinforced with microcrystalline cellulose avicel PH101 using sorbitol as plasticizer. In *J. Phys. Conf. Ser* (Vol. 710, p. 12012).

Paquette, K. E. (2004). Irradiation of Prepackaged Food: Evolution of the U.S. Food and Drug Administration's Regulation of the Packaging Materials. *Irradiation of Food and Packaging*, 182–202. doi:10.1021/bk-2004-0875.ch012

Yasuda, T., Okuno, T., & Yasuda, H. (1994). Contact angle of water on polymer surfaces. *Langmuir*, 10(7), 2435-2439.

Zhao Li and Muhammad Rabnawaz. (2018). Fabrication of Food-Safe Water-Resistant Paper Coatings Using a Melamine Primer and Polysiloxane Outer Layer. *ACS Omega* 2018 3 (9), 11909-11916

## EFFECT OF COBALT FERRITE ( $\text{CoFe}_2\text{O}_4$ ) IN SUGARCANE BAGASSE PAPER VIA RADIATION EXPOSURE- A REVIEW

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### ABSTRACT

*The global demand for wood fibre has increased due to increasing population and new applications throughout the world. Therefore, to supplement the limited wood fibre resources, non-wood fibres specially sugarcane bagasse have been introduced as alternatives in paper-based industries. This study addresses the analysis of magnetic sugarcane bagasse materials as substitute fibres in the papermaking. Paper is generally made with a cellulose fibre which has some specific features used for educational, packaging, and cleaning purposes. Sugarcane bagasse (*Saccharum officinarum*) is a remaining residue left broken for sugar extraction. It is considerably popular for its the cellulose, holocellulose, alpha-cellulose, and lignin that far more convenient than wood fibres. Meanwhile, demands of magnetic material in magnetic papermaking production has increase due to its excellent mechanical characteristics, low cost, and recyclability. As magnetic paper shows some superiority in properties such as renewable use and folding resistance. The introduction of filler in this study is to alter the paper properties such as texture, opacity, brightness, dimensional stability, ink absorbency, and overall printability. Nowadays, the requirement for fillers is to provide explicit upgrades to the quality of the sheets. Thus, the uses of cobalt ferrite ( $\text{CoFe}_2\text{O}_4$ ) magnet as a filler can enhance the paper properties. Moreover, cobalt ferrite is recognized as a hard-magnetic material with distinct properties such as good mechanical hardness and chemical stability, therefore it is much more convenient material for magnetic paper production. The integrity of the paper may decrease due to the presence of bacteria and fungi, therefore, to increase the integrity of the paper, the irradiation process by using gamma-ray can be done to the paper to avoid fungi and bacteria that can degrade the quality of the paper that caused by spot and stains.*

### INTRODUCTION

Paper is the materials which have been used entirely for writing and packaging. The Chinese, Cai Lun was the person who made a paper sheet of about 105 CE. Paper are a thin material which are produced by pressing the moist fibre together and then drying it into flexible sheets. Paper have many uses, such as writing, printing, packaging, and several hygiene products in a number of industries and construction processes and even as a food ingredient. Also, paper can be made from wood and non-wood material such as fibre from bagasse, banana fibre and pineapple leaves. [1]. Generally, the paper is widely made with a fibre called cellulose fibres which has some specific features uses. As nowadays paper largely comprises of wood, which is the main material for the manufacture of global pulp and paper. This phenomenon can make a significant contribution to the depletion of natural forests that have harmed the environment. Therefore, bagasse which is a non-

wood material that closely related to the wood element, apart from that it has a higher moisture content. It is also considerably popular as a supply of the production of the paper industry [3]. Next, bagasse is produced of non-wood fibre, therefore, it can be used as a substitute in the papermaking industry for the future. Sugarcane bagasse is an abundant lignocellulosic waste usually cultivated in open sugarcane processing countries. The sugar cane stalk includes two parts, the inner pit usually contains utmost sucrose and the outer rind containing lignocellulosic fibres. Throughout sugar processing, the sugar cane stalk is shredded in the process of extracting sucrose. This method generates a significant quantity of sugarcane bagasse residue which includes both pith fibres and crushed rind [14]. In addition, to improve the quality and efficiency of paper production, the addition of other material on paper preparation was important. The use of filler in wet and chemistry and paper retention aid requires a certain amount of understanding in paper production chemistry. This will lead to better paper formation retain as much as filler. For more than two centuries, filler has been used as an additive to enhance the quality of paper such as brightness, opacity, smoothness and printability also reducing production costs [15]. This study also provides a lot of benefit specially to paper industries to creates paper from sugarcane bagasse that will provide alternative ways to reduce environmental problems and cost-effective. Due to sugarcane bagasse is easier to get, simple and low cost compared to the process of making wood fibre as paper. The manufacture of sugarcane bagasse paper may help to minimize deforestation in the development of paper, which also contributes to the creation of biodegradable, biocompatible, and eco-friendly paper utilizing non-wood fibre. This would help the industry to develop sustainable technology in the current economy and environmental order. The introduction of magnetic material inside the paper that acts as a filler to improves and enhance the quality and strength of the paper is investigated in this study.

## LITERATURE REVIEW

### *Sugarcane Bagasse as Paper*

Sugarcane bagasse is known as (*Saccharum officinarum*) is a remaining residue composed in an enormous amount. This heterogeneous fiber residue remaining behind by sugarcane stalks broken for sugar extraction. Bagasse is closely related to the wood element, apart from that it has a higher moisture content. It is also considerably popular as a supply of the production of the paper industry [3].

### *Magnetic Material as Filler in Paper Production*

Nowadays, the interest magnetics paper has increased due to the hidden potential in a broad application [7]. Magnetite ( $\text{Fe}_3 \text{O}_4$ ) is one of the most commonly used magnetic material in magnetic papermaking production. Yet, Cobalt ferrite has an excellent mechanical characteristic thus it is more ideal to use in paper production [11]. The introduction of filler can improve the quality of the paper performances such as texture, opacity, and physical [8]. Besides that, the main reason associated with magnetic material is because magnetic paper exhibits some supercities such as softness, renewable use, and folding resistance [4].

### *Radiation Exposure on Magnetic Paper Production*

Besides, the paper cellulose fibres may also be degraded by microorganisms and pests that may affect their integrity. This damage can be used by the chemicals produced by the processes of metabolic fungi while using cellulose as a source of nutrients and pigmenting mycelium and spores as well. The enzymes could then be produced by the fungi that catalyzed the cellulose hydrolysis. The presence of these pillows and bacteria in the paper also poses a health risk that may affect the disinfection. The best way is irradiation for mass cleansing toward bacteria, microorganisms, and insects. As a function of ionizing radiation, gamma rays have been used as radiation control for the processing of paper. Gamma rays have higher penetrating power compared to alpha and beta. As

with other disinfectant treatments, irradiation has the preferred point of view that it does not leave the unsafe building on the material handled [6].

## EXPERIMENTAL

### *Material*

In the production of magnetic sugarcane bagasse paper, the main materials are sugarcane bagasse and cobalt ferrite ( $\text{CoFe}_2\text{O}_4$ ) magnets. In addition to the usage of sugarcane bagasse and cobalt ferrite magnet, other components used in the study included Sodium Hydroxide (NaOH). For radiation penetration of the magnetic sugarcane bagasse paper, Cobalt-60 Gamma cell 220 Source, was used to radiate the paper because of gamma radiation has a higher power of penetration through paper instead of using alpha and gamma radiation which has lower power of penetration. This gamma radiation needs to be used in different doses to shows the different effects on the paper and the output of the experiment.

### *Lumen-loading process*

In the production of magnetic sugarcane bagasse paper, the main materials are 10-15g sugarcane bagasse, 15-20% NaOH and 7.5g cobalt ferrite. Therefore, sugarcane bagasse pulp samples and magnetic material will undergo the lumen-loading process. The sugarcane bagasse paper was collected from juice shop after they were crushed by using a hand crushing machine. After that, the collected sugarcane bagasse allowed to dry under sunlight for 2 – 3 days. The sugarcane bagasse was cut into 100-200 mm each size and weighed 15g - 20g before mixed with 10%-15% Sodium Hydroxide (NaOH) solution. Sugarcane bagasse were boiled with Sodium Hydroxide (NaOH) solution for 60 minutes. Then, washed again with distilled water until pH 7 were maintained. The fibres were then dried at room temperature for 48 hours followed by oven drying at  $100^\circ\text{C}$  for 6 hours. The sugarcane bagasse was undergo beating process by blending it with 400ml distilled water until it become pulp about 7- 10 minutes. After beating process, the pulp was suspense with filler which is cobalt ferrite magnet, then was put into mold and deckle. The deckle was removed, and the paper was ready to dry under the sunlight for 2 -3 days. Magnetics sugarcane bagasse paper was prepared.

Then, the paper was cut into 4cm times 4cm to radiate in gamma cell irradiator. This is because, the lower the surface area, the higher the radiation can focus on the magnetic paper and the ionizing radiation particle. Sample characterization were obtained in order to fulfil the objective (properties, surface, structure) in this study. The samples of the magnetic sugarcane bagasse paper were observed pre and post-radiation to identify and observe the changes in the paper. The structure, properties, and characteristics of the magnetic sugarcane bagasse paper sample were identified by using Scanning Electron Microscope (SEM), Fourier Transformation Infrared Spectroscopy (FTIR), Tearing Tester Machine and pH meter. SEM was used to obtain the surface topography and composition, FTIR is to know the chemical bonding & functional group, tearing tester machine is to study the tearing strength of the paper while pH meter to determine the acidity and alkalinity of the paper.

## RESULTS AND DISCUSSIONS

In order to fulfill the objectives of this study, the results were obtained by other researchers that similar to this study. For the first objectives, a paper written by [9], shows the sugarcane bagasse samples were exposed to gamma radiation, and the difference in color, texture, bulk density, and morphology was observed [9].



### *Difference of Physical, Mechanical and Chemical Properties between Irradiated and Unirradiated Magnetics Sugarcane Bagasse on Scanning Electron Microscope (SEM) and Energy Dispersive X-ray (EDX).*

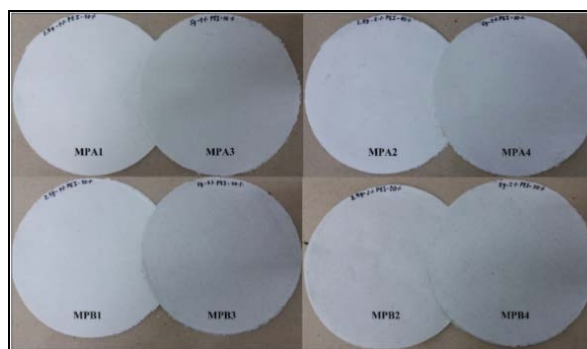
#### *Effect of Texture, Colour and Bulk Density*

The table shows that the colour of unirradiated sugarcane bagasse was off-white, which remains unchanged on gamma irradiation exposure up to 100 kGy. When the irradiation dose is rise to 500 kGy, the colour transforms to yellow while brown at 2000 kGy. At 500 kGy doses, the unirradiated sugarcane bagasse texture was hard and then fluffy when 500kGy and 1000kGy. While, at larger doses, 2000kGy it was entirely disintegrated into powder mixture [9]. Besides that, the bulk density of unirradiated sugar cane bagasse was quantified at 83 kg/m<sup>3</sup> which modify to 154 kg/m<sup>3</sup> at 2000 kGy [9].

**Table 1.** Gamma irradiation effect on colour, texture, and bulk density of sugarcane bagasse [9].

Dose, (kGy)	Colour	Texture	Bulk Density (kg/m)
Unirradiated	Off-white	Hard	83
100	Off-white	Hard	81
500	Yellow	Fluffy	86
1000	Yellow	Fluffy	95
2000	Brown	Powder	154

Even though [15] state that the utilization of filler in the chemistry and retention aid during the papermaking will lead to a better paper formation as it improves the paper properties such as opacity, brightness, smoothness, and printability [15]. Yet, in combination with cobalt ferrite to form a magnetic paper, the magnetic particles collected on the surface of the fibres shows reducing in ISO brightness and tensile index of customized magnetic papers. As shown in Figure 1, the brightness of the paper is reduced due to the attributable of the black colour of cobalt ferrite nanoparticles [11]. Also, there is a research shows a common finding by using unbleached kenaf pulp and magnetite nanoparticles [5].



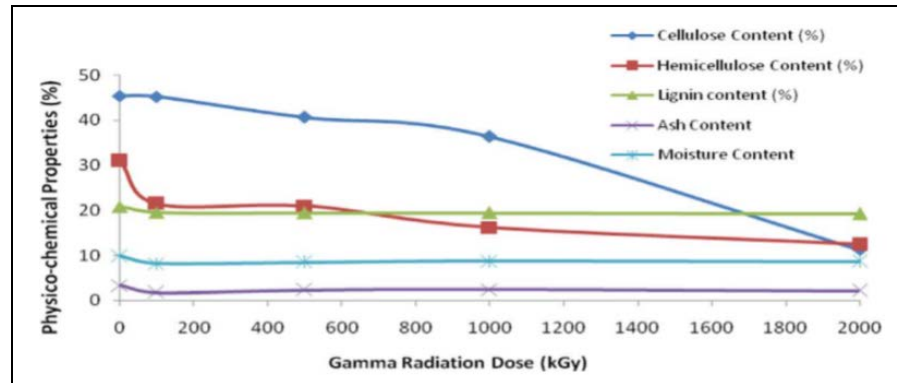
**Figure 1.** Effect of different temperature of reaction to RCO % of epoxidation [11].

#### *Effect of Chemical Constituents*

As shown in Figure 2, the irradiated sugarcane bagasse does not show much change in lignin, ash, and moisture content. The hemicellulose component of sugarcane bagasse gets most effected on radiation exposure, which is reduced on 100 kGy exposure and further decreased to at 2000 kGy dose. The content of cellulose of irradiated and unirradiated bagasse samples presents with no significant change in the cellulose content up to 100 kGy exposure. However, on further exposure to

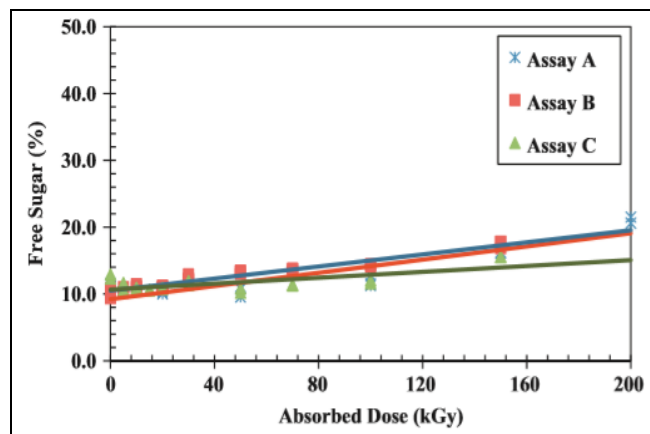


500 and 1000 kGy, the cellulose content decreases respectively. Further exposure of bagasse to 2000 kGy dose, the cellulose content reduced more [9].



**Figure 2.** Effect of exposure of  $\gamma$ -radiation on the physico-chemical properties of sugarcane bagasse [9].

Also, Figure 3 shows the radiation effect on the cellulose in the three essays presented an exponential trend with the provided absorbed dose. It can be considered that the cellulose was been insulated by lignin and hemicellulose [13].

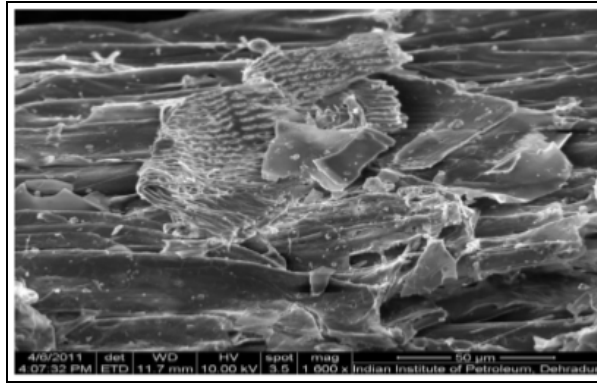


**Figure 3.** Decomposition of cellulose in sugarcane bagasse samples from assays A, B, C of the absorbed dose [13].

Celluloses are the core elements of secondary layers in lignocellulose fibres on the cell wall. These celluloses are prevalent in the surface layer, for instance, the outer layer of the fibres, where these polymers can act as adhesives to build a strong bond between the individual fibres in the three-dimensional web of a piece of paper [3]. Such high content of cellulose thereby increasing the quality of paper produced Since the cellulose shows no significant differences in the cellulose content either unirradiated or irradiated. This helps to prove that sugarcane bagasse another alternative that can be used in papermaking [2].

#### 4.1.3 Effect on Morphology

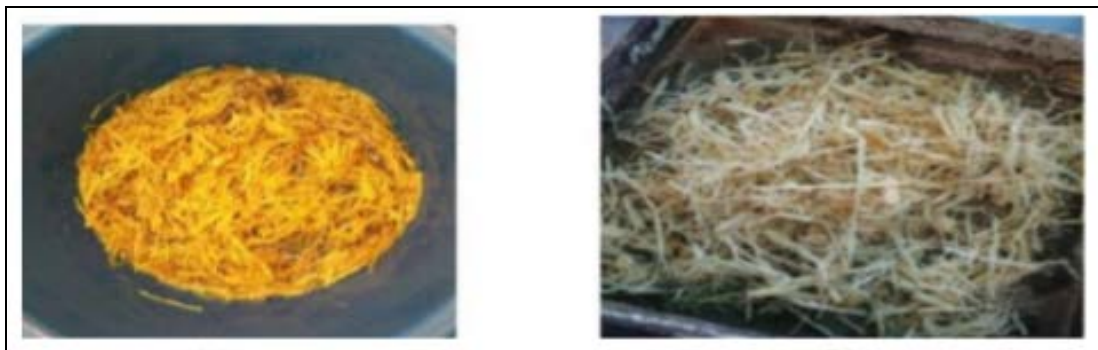
Figure 4 shows the morphology of bagasse irradiated with gamma-ray of 2000 kGy by using SEM. It shows the existence of pores in bagasse lignocellulosic components. Thus, it is evident from the micrographs that the pre-treatment exposure of gamma irradiation of sugarcane bagasse opens cellulose, making cellulose more accessible to acids and hydrolytic enzymes [9].



**Figure 4.** Gamma irradiated sugarcane bagasse by SEM image at 2000 kGy [9].

#### 4.1.4 Effect on pH Reading on Bagasse Paper

In the research by [10], As shown in Figure 5, after the chemical treatment of NaOH took place, the color of the treated bagasse fibres changed as the sugarcane bagasse fibres turn into yellowish. This may due to the removal of the impurities that exist on the surface of the fibre. Besides, it may be attributed to the elimination of the waxy layer and impurities from the surface of the fibre.



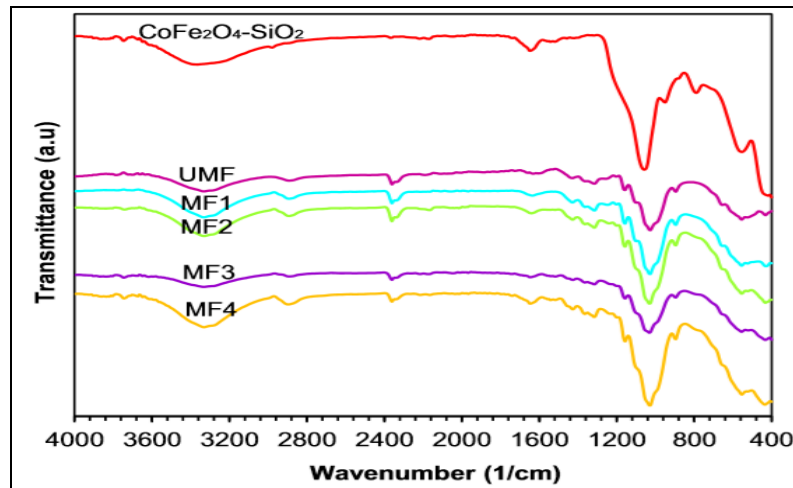
**Figure 5.** Bagasse fibre after treated in solution after 1 hour (a) 5% NaOH treated, (b) 5% HCL treated [10].

#### FTIR Analysis

The results for the FTIR spectra of cellulose fibres from magnetic sugarcane bagasse are similar to this research as it used magnetic in the paper. According to [11], the FTIR of cellulose fibres from spectra were obtained to investigate the surface functional groups of silica-coated cobalt ferrite nanoparticles as well as of unmodified and modified fibres. In Figure 4.8 shows the spectrum of  $\text{CoFe}_2\text{O}_4\text{-SiO}_2$  nanoparticles presents absorption bands at 555 and  **$432\text{ cm}^{-1}$** , which are associated with the stretching vibration of Fe–O bond in the tetrahedral site and the bending vibration of Co–O bond in the octahedral site, respectively. The band at  **$3363\text{ cm}^{-1}$** , corresponds to the OH bond vibration and the bands lie between 3363 and  **$1643\text{ cm}^{-1}$** , are due to the H–O–H bond bending vibration. These bands are related to adsorbed water molecules by magnetic nanoparticles. Moreover, this spectrum shows the vibration peaks of silica matrix at 1087, 948, 879 and  **$786\text{ cm}^{-1}$** , that are assigned to Si–O bonds vibration of the  $\text{SiO}_4$  tetrahedron and Si–O–Si asymmetric stretching vibration, Si–O–Fe and Si–O–H stretching vibration, Si–O–Si symmetric stretching vibration and vibration mode of the ring structure of  $\text{SiO}_2$  tetrahedral, respectively. The Si–O–Fe vibrations are due to the interaction between  $\text{Fe}^3$  ions and silica matrix [11].

The presence of these vibrations peaks indicates the formation of silica matrix generating new Fe–O–Si bonds, where Fe–O–H groups on nanoparticles surface are replaced by Fe–O– $\text{SiO}_3$ . A

spectrum of UMF sample shows absorption bands at 3325, 2885, 1620, 1026 and  **$655\text{ cm}^{-1}$** , that correspond to O–H linked shearing (polysaccharides), C–H symmetrical stretching (polysaccharides), C=O unconjugated stretching (xylans), C–O–C asymmetrical stretching (cellulose) and C–OH out of plane bending (cellulose), respectively. Besides, absorption bands between 1650 and  **$1620\text{ cm}^{-1}$** , are due to the OH bond vibration of adsorbed water by fibres. The spectra of MF1, MF2, MF3, and MF4 samples present absorption bands of magnetic particles and bleached fibres. Therefore, it signifies the effective interaction cellulose network of fibres and cobalt ferrite nanoparticles for papermaking [11].



**Figure 5.** FTIR spectra of silica-coated cobalt ferrite nanoparticles as well as modified fibers and unmodified fibers [11]

#### *Suitability of Magnetic Material on Sugarcane Bagasse Paper*

Sugarcane bagasse is likely attractive to produce magnetic paper. According to [11], usually, Magnetite ( $\text{Fe}_3\text{O}_4$ ) been commonly used in the production of magnetic paper. Since, cobalt ferrite ( $\text{CoFe}_2\text{O}_4$ ), which have controlling content, which is stronger than magnetite thus it is more ideal to produce magnetic paper. Cobalt ferrite is recognized as a hard-magnetic substance with distinctive properties like heavy magneto-crystalline anisotropy, broad magneto-optical coefficients at room temperature, high curie temperature, moderate saturation magnetization, reasonable mechanical toughness and chemical stability. Therefore, it can be concluded that the incorporation of sugarcane bagasse to be coated with magnetic material is suitable for paper making [11].

## CONCLUSIONS

In conclusion, this magnetic sugarcane bagasse paper will show better structure and strength. Based on the characterization and properties written by all researchers that work similar in this study, this innovation should work just like any other paper available in this world. Yet, due to its innovation, it will provide a lot of advantages to society, thus it can be commercialized for the paper industry in the future.

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## REFERENCES

- Al-Sulaimani, K., & Priy Brat, D. (2017). PRODUCTION OF HANMADE PAPERS FROM SUGARCANE BAGASSE AND, 5(3),16-20.
- Aremu, R. M. (2015). Pulp and Paper Production from Nigerian Pineapple Leaves and Corn straw as Substitute to Wood Source, 1180-1188.
- Azhar, S S.,Suhady, D., Farhana, D., M.Y Farizul Hafiz, K., & Harbant, S. (2007). Isolation and Characterization of Pulp from Sugarcane Bagasse and Rice Straw. *Journal of Material Engineering Volume 4 Issue February 2015*:Pg 109-114
- Calvo, S., Arias, N. P., Giraldo, O., Rosales-Rivera, A., & Moscoso, O. (2012). Thermal and magnetic behaviour of *Angustifolia* Kunth bamboo fibers covered with  $\text{Fe}_3\text{O}_4$  particles. *Physica B: Condensed Matter*, 407(16), 3267-3270. <https://doi.org/10.1016/j.physb.2011.12.083>.
- Chia, C. H., Duong, T. D., Nguyen, K. L., & Zakaria, S. (2007). Thermodynamic aspects of sorption of  $\text{Fe}^{2+}$  onto unbleached kraft fibers. *Journals of Colloid and Interface Science*, 307(1), 29-33. <https://doi.org/10.1016/j.jcis.2006.11.037>
- Coppola, F., Fiorillo, F., Modelli, A., Montanari, M., & Vandini, M. (2018). Effects of gamma-ray treatment on paper. *Polymer Degradation and stability*, 150 (January),25-30. <https://doi.org/10.1016/j.polymdegradstab.2018.02.004>
- Gao, D., Ma, J., Li, Z., & Liu, J. (2014). Preparation and characterization of a new white magnetic paper. *Materials letters*,137,487-490. [https://doi.org/10.1007/978-94-017-0756-5\\_4](https://doi.org/10.1007/978-94-017-0756-5_4)
- Gill, R. A. (1995). Fillers for papermaking. *Applications of Wet-End Paper Chemistry*, 54-75. [https://doi.org/10.1007/978-94-017-0756-5\\_4](https://doi.org/10.1007/978-94-017-0756-5_4)
- Kapoor K., Neelima, G., Diwanb R.K., Lalit V., & Ajay K. T. (2019). Study the Effect Of Gamma Radiation Pretreatment of Sugarcane Bagasse on Its Physico-Chemical Morphological and Structural Properties. *Radiation Physics and Chemistry* 141 (2017) 190-195.
- Nursuzailina Mohamed Sutan, Siti Masjida Mazlan, Siti Noor Linda Taib, Delsye Teo, Ching Lee, Alsidqi Hassan, Siti Kudnie Sahari, Khairul Anwar Mohamed Said, and Habibu Rahman Sobuz, 2017. Biomass Morphology Subjected to Different Chemical Treatment.
- Oscar, H. P., Emma, C. S., Adriana, P. H., Jorge, H. S., German, C. Q. (2020). Magnetic paper from sugarcane bagasse fibers modified with cobalt ferrite nanoparticles. *Springer Nature B.V.* 2020.
- Ramdhonee, A., & Jeetah, P.(2017). Production of paper from pineapple leaves. *Journal of Environmental Chemical Engineering*, 5(6), 4298-4306.<https://doi.org/10.1016/j.jece.2017.08.011>
- Ribeiro, M. A., Oikawa, H., Mori, M. N., Napolitano, C. M., Duarte, C. L.(2013). Degradation mechanism of polysaccharides on irradiated sugarcane bagasse. *Elsevier* 115-118
- Samariha A., & Khakifirooz, A. (2017). Application of NSSC pulping to sugarcane bagasse. *BioResources* 6(3), 3313-3323.
- Zakaria, S., Ong, B. H., & Van De Ven, T. G. M. (2004b). Lumen Loading magnetic paper II: Mechanism and kinetics. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 251(1-3), 31-36. [Gttps://doi.org/10.1016/j.colsurfa.2004.06.029](https://doi.org/10.1016/j.colsurfa.2004.06.029)

## THE INFLUENCE OF PART TIME EMPLOYMENT ON STUDENT ACADEMIC PERFORMANCE

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### ABSTRACT

*This scientific study investigated the influence of part-time employment on student academic performance. This is due to various factors that inspired students to do part time job while studying. Three independent variables were involved namely: part-time job employment, job satisfaction and job commitment. A questionnaire was adopted and adapted from Ismail (2014) and Ibrahim (2011) on work life balance, job performance and student success. A survey design was employed through a sample of 243 students and were randomly selected among 3<sup>rd</sup> and 4<sup>th</sup> year from different programmes at the Faculty of Leadership and Management (FKP) at Islamic Science University of Malaysia (USIM). Quantitative data analysis was utilized to answer research questions through mean of all means, correlation and multiple regression analysis (MRA). The result shows that among the three variables involved job commitment has partial positive influence on student performance. However, the least influence factor is job satisfaction. In addition, all factors were found to have 12.8% influence on student performance.*

**Keywords:** Academic performance, Part time employment, job satisfaction & job commitment

### INTRODUCTION

The nature of higher institution in nurturing its students keeps on changing as global economy affects all activities. Students in institution of higher learning are main source of live in all arena of knowledge. Their wellbeing is essential and understanding current financial status of them. Most of student nowadays believe that working during studies is necessary because of their financial burden. Although many of which are on government scholarship but still, engage themselves in part-time employment. This phenomenon is rampant among local and international students (Humayon, Raza, Ansari, Fatima, Batool & Haque, 2018). In general students do casual jobs in stores, restaurant and filling station. Conceptualizing this thought two school of thought emerge, claims that part-time job among students is a source of experience and work skills regardless of their respective financial status. However, some believe that part-time job is a source of distraction for students which lead to poor performance in the institution (Nasreen & Naz, 2013). Therefore, the involvement of higher institution students in part time employment has been part of experience gained by the students during studies. This experience is mostly common among 3<sup>rd</sup> and 4<sup>th</sup> year students (Ileas, 2019).

The Organization for Economic Co-operation and Development (2010) defined part time student employment as the involvement of students in higher institution who enroll for course load or educational program that requires less than 75% of full time (Woodfield, 2014). Although to determine the numbers of students involved in part-time jobs may seem impossible to have accurate figure about it. However, this experience continued to transpire by some students in institutions due to the economic instability in the global market (Fizer, 2013). Institutions of higher learning have



recorded that some studies found that between 50 and 60 percentage of all full-time high institution students engage in some form of part time employment (Woodfield, 2014). The reason behind involvement of students in part time job employment may be due to their respective backgrounds, some students are from a poor family struggling to have a degree to assist the family, some are from an average range family and some are rich. However, this is not a criterion for students to engage in part time employment. Some students may find it as fun and to gain an experience in life, associating and interaction with the society at large. Globally issue and uncertainty of cost of living had impacted the student engagement of part-time employments (Rozita, Nur Zafirah, & Amirul Fikri, 2018). They added that higher institution students are pressurized to uncertainties ascribed. These reasons contributed to student involvement in part time job employment. This situation has reach limitation graduate students acquire jobs because lack of experience in their various respective fields (Fizer, 2013). This is because institutions today do not train student and equip them with working experience. Thus, in return limits students from obtaining job after graduation. Working experience is very vital in the current global and technology advancement in the market arena.

### **Objectives**

To determine the level of student academic performance among 3rd and 4<sup>th</sup> year FKP students.

To examine the influence of part-time job employment, job satisfaction and commitment on student academic performance among 3rd year and 4<sup>th</sup> year student in FKP.

To determining the best predictor among factors part-time job employment, job satisfaction and commitment towards student academic performance.

### **Research Questions**

What is the current level of student academic performance among 3rd and 4th year of FKP students?

Are there any effect among part time job employment, job satisfaction and commitment with the level of student's performance in FKP?

Which of the three factors part-time job employment, job satisfaction and commitment are significantly in explaining the variation in student academic performance in FKP?

## **LITERATURE REVIEW**

### **Student Academic Performance**

Evaluating student academic performance in higher institution has gain attention in different areas of specialization in educational fields. The common measure set by institutions of higher learning is the Cumulative Grade Point Average (CGPA), to determine student academic performance. Therefore, performance of students has been defined as the participation of students to gain and grasp learning and teaching process in the class (Humayon et al., 2018). In addition (Humayon et al., 2018) found that the involvement of students in part-time employment have impacted on their performance, through a positive or negative influence. Although Sulaiman (2017) believes that student performance is determined by the capacity and ability of student to demonstrate creativity during learning and have a high CGPA in his/her performance in higher institution. Although some literatures also added that involvement of students in part-time employment motivates them to learn skill and fulfil their requirements through strategic learning style (Gbollie & Keamu, 2017). The performance of students has been debated in higher institution for decades, because their performance reflects the image of the institution. All higher institutions around the globe are very careful in monitoring the academic performance (Sulaiman, 2017). Competitiveness educational environment and conducive educational sector play vital role in student performance. In addition, the interaction and clear communication of academic staff have been found be an attractive attribute to student academic performance (Sulaiman, 2017).

Hassan and Hashim (2014) added that the engagement of student in communication and interaction is a main factor that contributed to the good communication and clear understanding for en-



couraging student academic performance. The research suggested three steps that could enhance student academic performance namely: learner-content interaction, learner-instruction and learner-learner interaction. These three kinds of learning process have been identified in higher institution and have contributed in the success of learning. In addition, factors have also been identified such as communication, learning facilities, proper and family influence, family stress, classroom schedules, classroom size, technology, academic environment, facilities in the library, computer lab lecturer guidance and stake holder role affects student academic performance (Sulaiman, 2017 & Al-Mutairi, 2011). Family background with parental support and parental income, influence by peers, university inputs, student abilities have positive effect on academic performance (Sattayanuwat, 2015). Sattayanuwat (2015) added that researches have indicated that one of the indicators of student academic performance is CGPA. However, this current research has proven otherwise. The result shows that average students with CGPA 2.50 - 2.99 perform better in the classroom. Adeyemi & Adeyemi, (2014) believed that the student interest and habits are good attributes to academic performance.

### **Part-time employment**

Students in most developed or developing countries part take in part-time employment because the financial because of high cost of living in those countries. Although most student have scholarship for their respective studies. Research has shown that students in these countries are involving in part-time job employment and keeps on increasing (Muluk, 2017). Some researchers have suggested that high cost of living in those countries contributed to immersion of student employment in and out of campus have been discussed extensively influence student academic performance OECD (2019). These views express that part-time student employment in campus has positive influence while out campus part-time employment has been found to have negative influence on student academic performance Mengwei Su (2018). Furr & Elling (2000) explained that positive atmosphere on-campus and interaction during employment is fulfilling for students to integrate with university's management for motivation to excel in their academic performance. Nazri (2012) emphasizes that higher institution students participating in part-time job use their ability, capability and skills to apply in various places and sometimes competitive. Consequently, part-time student employment could be perceived from two perspectives, the influence on their educational results and improvement in personal character (Mindrup, 2012). The Cumulative Grade Point Average (CGPA) has been vibrant during student learning at the same time their experience in the social level is adequately required. Despite the fact, CGPA been essential to students mostly in their 3<sup>rd</sup> and 4<sup>th</sup> year. Studies have been conducted in different level be it on subject or level of academic year (Mindrup, 2012). Muluk (2017) had examined 30 students were purposively sampled from the English Department, he had found that student CGPA were above average. The research concluded that the influence of part-time employment does not have negative effect of student performance. However, the results show that stress accumulation and study time completion. However, Ibrahim (2011) found that the learning environment, student employment reduces time students spent on unnecessary activities in the campus with accountability. Hakes (2010) asserted that situation faced by students may result to their involvement in part-time working, although their involvement is an unforgettable experience off the campus.

### **Job Satisfaction**

The satisfaction encounter by higher institution student is not only the positive emotional expression of fulfilment toward job satisfaction but it is often connected with self-motivation to achieve goals. Although job satisfaction of higher institution students during studies has been given required attention. A research conducted (Tessema, Ready, & Astani, 2014) found that students in higher institution engage in part-time employment feel satisfied and have a better academic performance. Nazri (2017) added that students are satisfied because of the motivation they receive from colleagues and friends. And it is difficult to gauge their level of satisfaction. The age of students is a factor discovered to influence their satisfaction due to experience gained during studies (Geel, 2012). The nature of work normally comes with stress, but the extrinsic motivation gained

like income or honorarium from the work and experience tend to be overwhelming. Student engage and dedicate their time for the job. Therefore, student's involvement in part-time job employment has gained attention by researchers and they have made some critical suggestions regarding how students can be satisfied through anxiety of part-time job employment (Tessema, et al., 2014 & Nazri, 2017). This satisfaction occurs through engagement of student leadership quality and supervisor-employee relationship which have positive relationship with their job satisfaction (Lopez & Whitney, 2018). Although leadership and managerial expertise is not required of students, but they acquire and learn more during this process. Van der Schyff, Botha, & Ellis (2018). Found that looking at student experience, gender, race, field of studies and all occupational dimensions of job satisfaction have no significance different among these demographic variables.

### **Job commitment**

Studies have shown that majority of higher institution students part take in part-time employment (Mengwei Su, 2018). It is not clear whether commitment during student work increases or decrease because the contributing factor is the financial status of the student that makes their commitment to job relevant. Research has described the reason that students are committed is to support their cost of living in the campus (Hakes, 2010). The findings were supported by researches that students are committed because the rate of cost of living in the campus and outside (Rokicka, 2014; Hakes, 2010). A contradictory finding states that students are facing challenges and personal problems in combining between part-time job and commitment which as a result affects their performance and dedication (Manthei & Gilj 2005 & Holford, 2015). The commitment student embark on may be a little bit challenging compared to when they are totally free from any attachment. Student commitment is the psychological state of mind to dedicate his or her time for studies. This state of mind is triggered by commitment to assignments, reading in the library, group discussions along with many more activities required from the students (Sulaiman, 2017). Psychological state of mind is attributed to studies and effect performance. Although research has shown that student commitment to their studies do not have negative impact on their achievement (Wilkins, Butt, Kratochvil & Balakrishnan, 2015). Therefore, student's commitment does not necessarily affect student academic performance. Moreover, challenges are coupled with the implication in balancing between commitment and part-time job employment.

### **RESEARCH HYPOTHESIS**

H<sub>0</sub>: There is no influence between part-time job employment, job satisfaction and commitment with the level of student academic performance in FKP.

H<sub>0</sub>: There is no significant difference among factors part-time job employment, job satisfaction, commitment in explaining the variation in student academic performance in FKP.

### **METHODOLOGY**

This study uses survey method consist of students from faculty of Leadership and management (FKP) Islamic Sciences University of Malaysia (USIM). The sample were quota and stratified consisted of 243 3<sup>rd</sup> and 4<sup>th</sup> year students from five programs namely: Da'wah and Islamic Management, Theology and Religious Studies, Counselling, Communication and New Media respectively. Data collected is to establish the influence part-time employment of student academic performance.

### **RESULTS**

This study is based on three research questions and were answered according to the appropriate statistical analysis for each question respectively. For research question one mean of All means was utilized.

1. What is the current level of student's performance (3th and 4th year) of FKP students?

**Table 1: Descriptive Analysis**

Variables	Mean	Std. Deviation
Students' Academic Performance	3.2658	0.86432
Job Employment	3.0395	0.58274
Job Satisfaction	3.5959	0.46228
Commitment	3.2626	0.33262

The current level of student academic performance of third year and fourth year FKP students (RQ1)

**Table 2: Mean of All means**

Variables	Mean	Total mean Score	Scale 1-5 (SD-SA)
Student Academic performance	3.2		
Job Employment	3.0		
Job Satisfaction	3.5		
Commitment	3.2		
Total	12.9	12.9/5	2.58

The result of the Mean of each variable were divided by the total scale of the quantitative instrument to get at the Mean of all Means. The variables involved were, job satisfaction (3.5) and followed by student academic performance (3.2), commitment (3.2) and for job employment (3.0). The total mean score is 12.9 divided by five scale used in questionnaire which is 1 for Strongly Disagree (SD) to 5 refer to Strongly Agree (SA) 2.58 was found. According to Howell (2014), the mean with 2.66 at a moderate level. The results show below recommended mean (2.58) which is supposed to be 2.66 and above. In other words, the current level of student academic performance of third year and fourth year FKP students is below the average.

## MULTIPLE REGRESSION ANALYSIS

2. Are there any effect among part-time job employment, job satisfaction and commitment with the level of student academic performance in FKP?

To examine the influence of part-time job employment, job satisfaction and commitment with the level of student academic performance among 3rd year and 4th year student in FKP (RQ2)

**Table 3: Model Summary**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.357 <sup>a</sup>	0.128	0.117		0.81230

**Table 4: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	23.089	3	7.696	11.664	.000
Residual	157.698	239	.660		
Total	180.787	242			

This ANOVA table above shows the regression result between part-time job employment, job satisfaction and commitment towards student academic performance. It shows that R Square is 0.128 and significant at 0.000. Therefore, the effect of part-time job employment, job satisfaction and commitment towards student academic performance is 12.8%.

3. Which of the three factors part-time job employment, job satisfaction, commitment is significantly explaining the variation in student academic performance in FKP?

Determining the best factor among the three factors towards student academic performance (RQ3)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	0.247	0.578		0.428	0.669
Part-time Job Employment	0.209	0.095	0.141	2.200	0.29
Job Satisfaction	-0.550	0.123	-0.29	-4.48	0.655
Commitment	0.791	0.170	0.304	4.654	0.000

The regression shows which of the proposed variable shows impact on student academic performance. It shows that the effect of job employment on student academic performance is 0.141 with significant value at 0.29. The effect of job satisfaction on student academic performance is -0.29 with significant value 0.655 while the influence of commitment towards student academic performance is 0.304 with significant value at 0.000. Therefore, the most contributing factor towards student academic performance is commitment because the significant value is 0.000 ( $p < 0.001$ ).

## CONCLUSION

This study investigated the influence of part-time job employment, job satisfaction and commitment on 3<sup>rd</sup> and 4<sup>th</sup> year student performance at (FKP) USIM. The research used employed two analyses to understand the current level and the influence of part-time job on student academic performance in the faculty among programs offered in the faculty. The results show that all variables proposed by the researchers have a partial positive influence on student academic performance.

## REFERENCES

- Adeyemi, A. M., & Adeyemi, S. B. (2014). Personal factors as predictors of students' academic achievement in colleges of education in South Western Nigeria. *Educational Research and Reviews*, 9 (4), 97-109.
- Ali, E. (2017). Impact of Part Time Work on the Academic Performance of International

- Students. *Journal of International Business, Economics and Entrepreneurship*, 2 (1), 17-22.
- Al-Mutairi, A. (2011). Factors Affecting Business Students' Performance in Arab Open University: The Case of Kuwait. *International Journal of Business and Management*, 6 (5), 146-155.
- Fizer, D. (2013). Factors Affecting Career Choices of College Students Enrolled in Agriculture. Master Thesis at University of Tennessee, Martin U.S.A.
- Furr, S.R. & Elling, T.W. 2000. The Influence of Work on College Student Development. *NASPA Journal*, 37(2) 454-470.
- Geel, R., & Backes-Gellner, U. (2012). Earning While Learning: When and How Student Employment is Beneficial. *Labour*. 26(3), 313-340.
- Gbollie, C. & Keamu, H.P. (2017). Student Academic Performance: The Role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school Students Learning. *Hindawi Education Research International*, 1-11.doi.org/10.1155/2017/1789084.
- Hassan,S.S.S & Hashim, N. (2014). Educational research trends in Information communication technology.Gombak IIUM Press.
- Holford, A. (2015). Youth employment and academic performance: Production functions and policy effects. Institute for Social and Economic Research University of Essex. Published by ISER.
- Howell, C. D. (2014). *Fundamental statistics for the behavioral sciences*. Jon-David Hague Publication.
- Humayon, A.A., Raza, S., Ansari, N., Fatima, Batool, A.J., Haque, M. (2018). Factors affecting part-time students' performance in Pakistan. *European Online Journal of Natural and Social Sciences*,7(1) 69-75.
- Ibrahim, N. (2011). Exploring factors affecting part-time students' academic success in Malaysian polytechnic institutions, Ph.D. Thesis in Iowa State University, U.S.A.
- Ileas, N.F.S (2019). The effect of part time job on student's performance (in education), a case study at faculty of leadership and management, undergraduate thesis at Islamic Science University Malaysia.
- Ismail. N. A. (2014). The relationship between work life balance and job performance among working adult students. Master thesis at Universiti Utara Malaysia (UUM).
- Lopez, C.C.& Whitney, W. (2018). Student Job Satisfaction and Leader Member Exchange: Relationships with Employers. *Academic leadership journal in student research*, 5 (2), 1-18.
- Manthei, R. & Gilmore, A. (2005). The Effect of Paid Employment on University Students' Lives. *Education and Training*, 47(3), 202-215.
- Mengwei Su (2018). The Impact of On-campus Employment on Chinese Undergraduate Students in the U.S. A Ph. D dissertation at faculty of The Patton College of Education of Ohio University. U.S.A.
- Mindrup, K.S. (2012). Academic and social experiences of undergraduate college students at a branch campus: a case study. Ph.D thesis at University of Iowa, U.S.A.
- Muluk, S. (2017). Part-Time Job and Students' Academic Achievement. Faculty of Teaching and Teacher Training, State Islamic University (UIN) Ar-Raniry, Banda Aceh, Indonesia.
- Nasreen, A. & Naz, A. (2013). A Study of Factors Effecting Academic Achievement of Prospective Teachers. *Journal of Social Science for Policy Implication*. (1), 23-31.
- Nazri, N.Y.M (2017). A Research on Student with Part-Time Job. *Researchhub*,3 (7), 15-21.
- OECD (2019). Measuring the Digital Transformation, <https://doi.org/10.1787/9789264311992-en>, based on OECD, STAN Database (<http://oe.cd/stan>), National Accounts Statistics, national sources and Inter-Country Input-Output Database (<http://oe.cd/icio>). Accessed 18June, 2020.

- Rokicka, M. 2014. The impact of students' part-time work on educational outcomes. ISER Working Paper Series.
- Rozita B., Nur Zafirah M. N. & M. Amirul Fikri H. (2018). Kerja Separuh Masa: Faktor, Status Pelajar dan Kesan Keatas Akademik Pelajar Institusi Pengajian Tinggi. *Journal of Business Innovation*. 3(1) Akademi Pengajian Islam, Kolej Universiti Islam Melaka.
- Sattayanuwat, W. (2015). Determinants of Student Performance in International Trade Course. *American Journal of Educational Research*, 3 (11), 1433-1437. Doi 10.12691/education-3-11-1.
- Sulaimam, I.F. (2017). Academic staff creativity and organizational communication at Bayero University Kano, Nigeria. Ph.D Thesis at International Islamic University Malaysia, IIUM.
- Tessema, M. T., Ready, K. J., & Astani, M. 2014. Does Part-Time Job Affect College Students' Satisfaction and Academic Performance? The Case of a Mid-Sized Public University. *International Journal of Business Administration*, 5(2), 50-59.
- Van der Schyff, R., Botha, D., & Ellis, S. (2018). Undergraduate students' perceptions of factors affecting job satisfaction. *SA Journal of Human Resource Management*, 16(1), 1-10.
- Wilkins, S., Butt, M.M., Kratochvil, D., & Balakrishnan, M.S. (2016), The effects of social identification and organizational identification on student commitment, achievement and satisfaction in higher education. *Studies in Higher Education*, 41(12), 2232-2252.
- Woodfield, R (2014) Undergraduate retention and attainment across the disciplines. HEA. available at: [www.heacademy.ac.uk/node/10293](http://www.heacademy.ac.uk/node/10293) (Accessed 18 June 2020).



## INSTRUMENTATION OF THE ABSTINENCE'S LIKELIHOOD SCALE IN DRUG ADDICTION (ALSDA-ACREDA)

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### ABSTRACT

**Purpose of the study:** This article attempts to explain the procedures to a self-developed scale on how to identify one's protective factors and risk factors integral to his or her likelihood of abstinence journey.

**Methodology:** The 81 items in 3 domains constructed in this scale were incorporated from the insights of library search and one-to-one and group interviews executed with recovering drug addicts in a rehabilitation institution. To establish the scale to be scientifically reliable, the scale was tested its reliability and validity before it was administered for the real population. The validity of this scale was conducted through face validity with few potential populations to confirm its feasibility while the content validity was done by 2 experts from psychology and drug addiction counselling respectively. Meanwhile, the reliability test of this scale was undergone through a pilot study upon 132 respondents and some tests in Statistical Package of Social Science Version 21.0 (SPSS) were used to measure the internal consistency of the scale.

**Main findings:** The consistency of the overall items of this scale was confirmed to be highly reliable with the value of Cronbach's Alpha, 0.951. The result of the split-half score for the first cluster of the scale recorded as 0.94 whereas the second cluster was 0.95. The internal consistency also could be glimpsed from its 'if items deleted' analysis where the scores are ranged in a small gap of values between 0.929 to 0.934 signifying the scale was well-constructed in term of its language clarity and balanced distribution of items between dimensions and constructs. The validity of this scale was conducted through face validity with few potential populations to confirm its feasibility while the content validity was done by 2 experts from psychology and drug addiction counselling respectively.

**Applications of this study:** This Abstinence's Likelihood Scale in Drug Addiction (ALSDA-ACREDA) instrument is developed by researchers in which the purpose is to measure the likelihood level of drug addicts towards abstinence.

**Originality/novelty:** The establishment of Self-developed instrument for Abstinence's Likelihood Scale in Drug Addiction (ALSDA-ACREDA)

**Keywords:** Relapse; protective factor; risk factor; instrumentation; reliability; validity

### INTRODUCTION

Drug addiction has been long recognized as the first enemy of this nation, thus any of its dealings be it the production, the spread, the treatment and prevention are enforceable governed by the laws such as Drug Policy Book and Drug Blueprint and specific authoritative body known as National Anti-Drug Addiction Agency, Malaysia (NADA). According to NADA (2019), the total of 26,080 cases of drug addiction has been statistically recorded in 2019 with 17, 506 new cases and 8,754 for relapse cases. As seen in the pattern of relapse cases from 2015 to 2019, the rate has been gradually ascending from 6379 cases skyrocketing to 8,754 cases (NADA, 2019). These figures have alarmed the related parties to this issue to take a closer look into our strategies in combating drug addiction in Malaysia. Simply put in a direct statement that of relapse is mere event of going back to drug, we should understand relapse is a part of abstinence processes in which there are ongoing situations taking place by stages and therefore can be interrupted and stopped at any point of time. United Nation Office on Drug and Crime (2017) further refines relapse as a process that creates, in stages, an irresistible craving earlier in our mind for drugs before we actually deciding to consume it again. This relapse event is a part of circularly process between abstinence and lapse.

Thus, due to this event as a phase towards abstinence, there might be the contributing factors concerned to be refined comprehensively that revolves the aspect of protective factor and risk factor. Recognizing the protective and risk factors to one in his or her abstinence journey is unequivocally paramount., in this respect, this study attempts to provide an adequate instrument for researchers or practitioners to identify the protective and risk factors of the recovering addicts as so the comprehensively suitable treatment can be best designed for them towards achieving the permanent abstinence.

## LITERATURE REVIEW

Many researchers categorize drug abuse as bio-psycho-social disease involving biological, psychological and sociological elements of humans (Brooks & McHenry, 2009; Hadijah Baba, Wan Shahrazad, Fauziah Ibrahim, & Norulhuda Sarnon, 2018). Therefore, drug abuse is clinically manifested as a compulsive behavior particularly at consuming drugs, craving over it and relapsing after a period time of recovery which is abstinence (Hadijah Baba *et.al*, 2018). Nora (2018) in NIDA Notes explains that the more risk factors a client has, the higher the likelihood for clients to engage in drug abuse. The protective factor, in turn, reduces the client's risk of getting involved in drug abuse.

### Relapse

According to Encyclopaedia Dictionary of Psychology, relapse can be defined as the recurrent symptoms of disease after a period of improvement (Fauziah, Bahaman, Mansor & Mohamad Shatar Sabran, 2012; Norazleen, & Norafifah, 2015). Marlatt & Witkiewitz (2005) state that the original account of relapse is derived from a medical field; however, it has been diluted and used to a variety of human behaviors including drug abuse. Based on Mahmood (1996), drug addiction relapse connotes the consumption of psychoactive substances after a person has completed the treatment and recovery of drug measured from the physical and psychological aspects (Dhamir, Wan Munira, & Azlina, 2018).

Relapse is known as the primary difficulty in treating drug abuse (Stewart, 2002; Marlatt & Witkiewitz, 2005; Norruzeyati, Mohammad Rahim, & Mohd Alif, 2020). It has been proved by the statistics from NADA that revealed the increasing in the number of imprisoned relapsed addicts from years to years (Fauziah & Kumar, 2009; Mustapha, Siti Zulaikha, Nor Hafizah, and Tuan Nooriani, 2017).

Based on Amin Al Haadi, Azad Athahiri, Norsayyidatina, Wan Ahmad Zakry, Nurul Ashikin, & Musa Mohamad (2018), relapse occurs when a drug addict is exposed to the triggering factor that causes the longing or craving of drugs. Relapse is considered as a normal part of the recovery process. Miller (2014) states that relapse is common when a drug addicts attempt to break the pattern of behavior. Sapkota, Khadka & Akela (2016) & NIDA (2018) also point out that relapse or return to drug use after an attempt to stop can be a part of the process. However, it possibly become a serious issue if the right

steps are not taken; thus, one of the ways to survive in abstinence is through identifying the protective and risk factors of the recovering addicts.

### **Protective and Risk Factor**

Risk factors and protective factors are environmentally and biologically nuanced. The risk factors have been defined as the factors that enhance the likelihood of a person that will be engaging in drug abuse or becoming dependent (Goliath & Pretorius, 2016). On other hand, protective factors refer to the factors associated with reduced potential in engaging in drug abuse. NIDA Notes (2003) and Goliath & Pretorius (2016) assert that the protective factor is the opposite of the risk factor. For example, good and strong family relationships between parents and children can have a significant impact in reducing the risk of being involved in substance abuse, while a difficult family situations or lack of a bond with family can be a significant impact to engage with substance abuse.

Social relationships play an important role in life survival, in fact, as a protective factor for drug addicts (Sapkota, Khadka, & Akela, 2016; López, García & Martí, 2018). NIDA Notes (2003) states that family members do have the potentiality to be protective factors in the event of strong family ties, parental involvement in children's life, parenting personalities in terms of financial, emotional, mental and emotional needs, social and consistent discipline. Meanwhile, Lander, Howsare & Byrne (2013); Atherton, Conger, Ferrer & Robins (2016) opine that individuals from single parent families, individuals living alone at home without adult supervision, lack of parental supervision and having siblings involved with less moral behaviours are those who are possessing higher risk factors for drug abuse.

Rozmi, Nor Azri, Fauziah & Salina (2017) in their study showed that subsequent results through multiple linear regression analysis confirmed that individual, family and social environment variables are significant in the regression model and that they are the major contributors to substance abuse among teenagers. Based on study of Jamshidi, Asadi, & Asadian (2019), data was collected among 1006 respondents by using Risk and Protective Factors of Drug Questionnaire. Data was analyzed by stepwise multivariate Regression analysis and showed that there is a significant and positive relationship between family factors (family conflicts, lack of monitoring children's behavior and positive attitude of parents to drug use) and drug use.

Bevilacqua and Goldman (2009) state that scientists formulate genes and the influence of environmental factors on gene expression - epigenetics contributes an estimated 40 to 60 percent risk to drug abuse risk. Studies show that the earlier a client begins to engage in substance abuse problems, the more likely to have a more serious problem (Substance Abuse and Mental Health Services Administration, 2014). This is due to a string of interrelationships between early social problems and biological risk factors.

### **Abstinence**

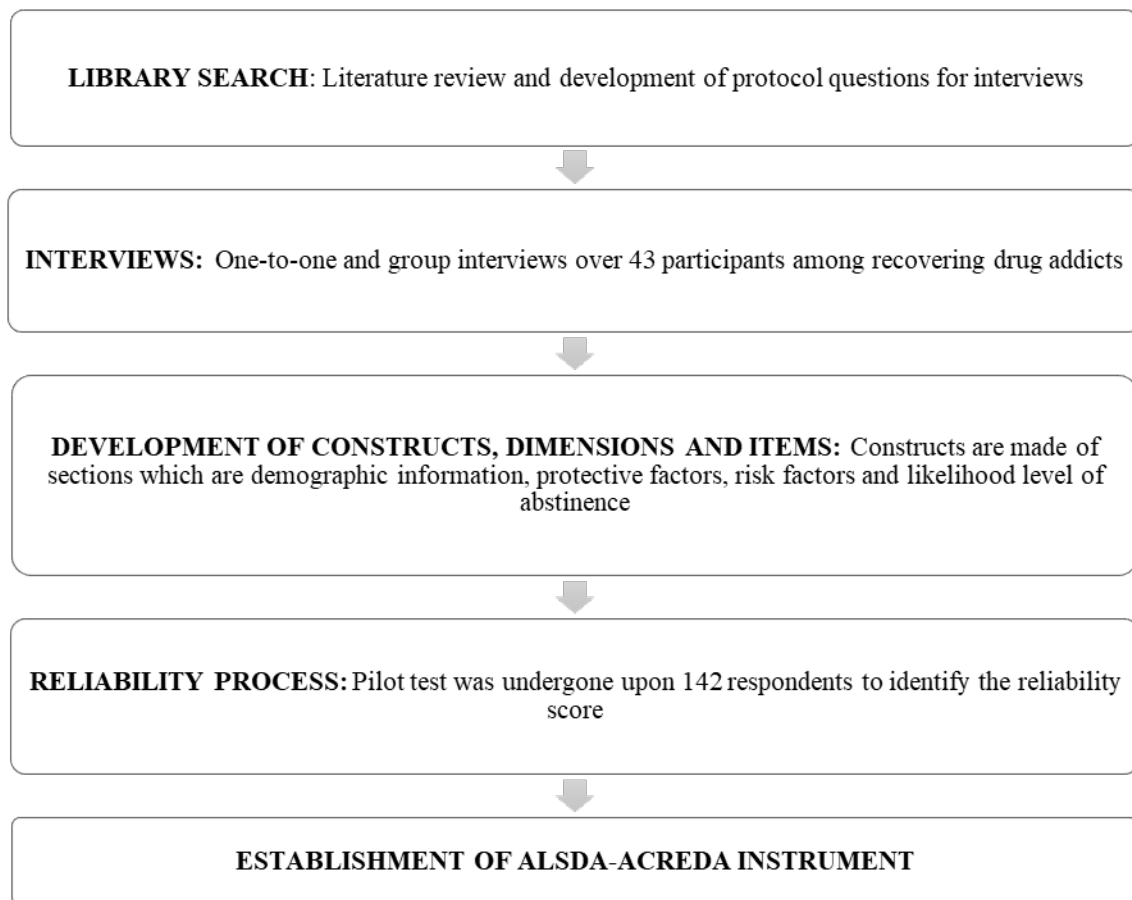
According to the Principles of Recover Substance Abuse and Mental Health Service Administration (SAMSHA), there are 6 criteria of abstinence: drug and substance use, rehabilitation support, employment, social functioning, readiness to change and psychological and mental health. The American Society of Addiction Medicine (2013) defines retention as intentional and consistent self-restraint to engage in the pursuit of negative things in return for reward and satisfaction in the form of substance or behavior abuse. Examples include drug abuse, video games, gambling, eating habits or harmful exercise as well as unusual sexual activity. In achieving a sustainable recovery process, recovery goes from abstinence to sobriety, from comfortable living to a meaningful, productive life and significant drug-free life (Abd. Halim Mohd Hussin, Mohd Rafidi Jusoh & Lasimon Matokrem, 2008).

## **MATERIALS AND METHODS**

The methodology of developing this scale was purely qualitative in nature. It was started from a rigorous library search for probing the theories enclosed in the existing literature that exhibit the concepts of abstinence, protective and risk factors in drug abuse as well as the related past studies (literature review) on the concerned scale to legitimize the need of the self-developed scale on likelihood of abstinence from drug addiction and an interview protocol was developed afterwards. DeVellis (2012) coins

that the development of instrument must be governed by the established theories as the guideline for the developer to enumerate the constructs and items of the questionnaire. According to Subahan, Kamisah, Effendi, Zanaton, Pramela, Denis & Diyana (2018), developing research instrument must be initiated from the process of conducting literature review to grasp the core elements of the variables measured. Gilmore & Falton (2010) assert that few of review over the related literature should be done before an instrument is established. Next, the one-to-one and group interviews were conducted upon 43 purposive participants with the criteria of being the in-house recovering addicts to gather their experiences towards abstinence journey by recognizing their protective and risk factors. After the themes of the interviews have been analysed, the drafted ALSDA-ACREDA scale comes into being. Enclosed below the flow of the instrumentation procedures:

**Diagram 1.0** The flow of the instrumentation procedures of ALSDA-ACREDA



***Constructs, Dimension and Items developed from the one-to-one and group interviews***

Table 1.0 below enlists the categorizations of ALSDA-ACREDA' constructs distributed into dimensions and items developed from the one-to-one and group interviews.

**Table 1.0** Constructs, dimension and Items of the questionnaire

No	Constructs	Dimensions	Items
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A&B	Demographic Info:  Personal profile Background of drug consumption	A. Drug consumption: The type of drug used Duration using drug  B. Treatments: Place/institutions of treatment Type of treatments Duration	A-9 B-10
C	Protective factors	Religious/spirituality of individual Support from family The influence of friend Support from community environment The drug knowledge The effectiveness of coping mechanism	34
D	Risk of factors	The lack of religiosity/ spirituality The influence of family The influence of friends Rejection from community The lack of drug knowledge The conflict faced by individual Drug availability	31
E	Abstinence factors after treatment	The knowledge and skills of individual The awareness about drug Self-control	16

**Table 1.1** Items for protective factors construct*Items Section C*

NO	QUESTION
1	Drawing close to God is one of the ways for myself to stay abstinent
2	Religion is the most powerful protective factor to stay abstinent
3.	<i>Solah</i> /prayer is the most powerful protective factor to stay abstinent
4.	I stay abstinent because I practice prayer
5.	<i>Dhikr</i> / Remembering God is one of the protective factors to stay abstinent
6.	Accepting the fate of God is the most powerful protective factor to stay abstinent
7.	Reading the scriptures (e.g: Quran) is the most powerful protective factor to stay abstinent

8.	In my opinion, traveling / migrating is one of the protective factors to prevent myself from relapse and stay abstinent
9.	Support from mother is an important factor that prevents me from relapse and to stay abstinent
10.	Support from siblings is an important factor that prevents me from relapse and to stay abstinent
11.	Support from spouse is an important factor that prevents me from relapse and to stay abstinent
12.	Support from father is an important factor that prevents me from relapse and to stay abstinent
13.	Support from child is an important factor that prevents me from relapse and to stay abstinent
14.	I stay abstinent because I got support from family
15.	I stay abstinent because I got forgiveness from my family
16.	I stay abstinent because I got support from loved ones
17.	Spending time with family is one of the protective factors from using drug and stay abstinent
18.	Being at home with my family is one of the protective factors from using drug and stay abstinent
19.	Mingling around with elderly exemplary has prevent myself from relapse and stay abstinent
20.	I stay abstinent because my community seclude me
21.	Having an objective daily schedule can prevent myself from relapse and stay abstinent
22.	I often undergo the scheduled treatments that can prevent myself from relapse and stay abstinent
23.	Support from friends has helped me from relapse and stay abstinent
24.	Controlling myself to getting closer from the old friends who are still on drugs is a factor that prevent myself from relapse and stay abstinent
25.	Choosing good friends prevents myself from relapse and stay abstinent
26.	Avoiding the old friends who were involved in drugs helps me to stay abstinent
27.	Having the supportive friends helps me to stay abstinent
28.	Repenting from mistake is the factor that prevent myself from relapse and stay abstinent
29.	Recognizing the negative effect over my physical is preventing myself from relapse and stay abstinent
30.	Mental endurance in encountering challenges is the factor that prevent myself from relapse and stay abstinent
31.	Having proper job is the factor that prevent myself from relapse and stay abstinent



32.	I stay abstinent because I am busy with work
33.	Having skills in managing life is the factor that prevent myself from relapse and stay abstinent
34.	I stay abstinent because I have a counselor around for consultation

**Table 1.2** Items for risk factors construct**Items Section D**

NO	QUESTIONS
1.	The influence from the peers who are on drugs is the risk factor for relapse
2.	Peers' persuasion is the risk factor to fall short of relapse
3.	The desire to possess the sense of belonging to a particular group of friends whom the drug addiction is affiliated is the risk factor for relapse
4.	The pressure from friends to reuse drugs is the risk factor for relapse
5.	The longing to have fun by taking drug is the risk factor for relapse
6.	The memories about the indulgence of drugs is the risk factor for relapse
7.	The influence addictive from spouse is the risk factor for relapse
8.	Trans gracing engagement is the risk factor for relapse
9.	Spending more time with friends is the risk factor for relapse
10.	Clubbing and partying activities are the risk factors for relapse
11.	The risk factor for me is when my family members are also involved in drug abuse
12.	I go relapse because I get influenced by my family's behaviour
13.	The divorce with spouse is the risk factor for relapse
14.	The divorce of parents is the risk factor for relapse
15.	The conflict among siblings is the risk factor for relapse
16.	Disabuses acceptance from family is the risk factor for relapse
17.	The imprisonment of parents is the risk factor for relapse
18.	The broken engagement is the risk factor for relapse
19.	The ineffective parenting education is the risk factor for relapse
20.	The wide contact of networking in drugs environment is the risk factor for relapse
21.	Diverting from Islamic/religious way of life leads me back to drugs
22.	Life pressure is the risk factor for relapse

23.	Self-isolation is the risk factor for relapse
24.	Self-harming due to stress leads me to relapse
25.	Having frequent conflict with surrounding people is the risk factor for relapse
26.	The need to stay awake is the risk factor for relapse
27.	I believe drugs enable me to work hard
28.	I believe drugs enable me to mingle around and have fun with friends
29.	Easy access to get drugs is the risk factor for relapse
30.	No knowledge about the drug danger is the risk factor for relapse
31.	The lack of social skills is the risk factor for relapse

**Table 1.3** Items for abstinence construct***Items Section E***

NO	QUESTIONS
1.	I got the suit training and skills after undergoing treatment at AADK
2.	I could discipline myself in managing life after undergoing treatment at AADK
3.	I gained strength in myself after undergoing treatment at AADK
4.	I could get along well with my family after undergoing treatment at AADK
5.	I have learned about coping skills after undergoing treatment at AADK
6.	I have learned about coping skills to not relapse
7.	I understand the dangers of drugs and psychoeducation method
8.	I could understand the feelings of family/wife after undergoing treatment at AADK
9.	I got knowledge about career after undergoing treatment at AADK
10.	I have the strength to cope with stress at work
11.	I have the strength to cope with stress at home
12.	I believe there is no such thing as uncontrollable desire for drug use
13.	Success of abstinence is always dependent on hard work and has nothing to do with one's fate
14.	I can still avoid drugs even if I am surrounded by friends who use them
15.	I have control of my drugs use behaviour
16.	Drugs are not needed to solve my problem

**Validity**

Next, the aspect of validity is also crucial to be discussed here. Research validity involves a dynamic process that demands for an examination of procedures and results in which the use of this information is to revise and improve assessment practices in a never-ending feedback loop (O'Neill, 2003). Kumar & Govindarajo (2014) connote that validity is an ability of a tool to measure what is particularly required to be measured in which the researcher will test, compare and measure the concept with its accuracy as well as the instrument needs to be ensured for its content, construct and face validity. A drafted questionnaire should always be ready for establishing validity. Validity is the amount of systematic or built-in error in questionnaire. Anderson & Sellborn (2015) assert that questionnaire's validity can be established by using a panel of experts examine the theoretical-based constructs of it. This means validity confirms how well the idea of a theoretical construct is represented in an operational manner (as presented in questionnaire).

Face validity captures what is on its face of the instrument that portrays good translation of the constructs. (Trochim, 2020). On the same note, validity is seen to be a superficial measure of validity, unlike construct validity and content validity because is not really about what the measurement procedure actually measures, but what it appears to measure (Brinkman, 2009).

### **Reliability**

Brinkmann (2009) contends a point that as conventionally done by previous researches on instrumentation procedures, the reliability and validity process are to be conducted before the instrument is permitted to be used in the real population and to be deemed as scientific. According to Drost (2011), reliability is the extent to which measurements are repeatable when different people perform the measurement on different occasion, under different condition, supposedly with alternative instruments which measure the construct or skill. It can also be defined as the degree to which the measure of a construct is consistent or dependable (Kubai, 2019). Reliability of ALSDA- ACREDA was done through pilot study upon 142 respondents sampled from a drug rehabilitation centre. Yusliza and Ramayah (2016) highlight that reliability test is done through the internal consistency evaluation in which the Cronbach's Alpha measure is employed. After the administration of the scale to the respondents, the data was keyed in and some internal consistency tests in SPSS Version 21.0 were run for reliability results. The results of SPSS analysis towards this ALSDA-ACREDA instrument's reliability value (Cronbach's alpha value) were to establish internal consistency in several tests such as overall items, split-half and if items deleted.

## **FINDINGS AND DISCUSSION**

Widely known, the main criteria of what it takes to be scientific research are based on how the central issue of reliability and validity of the measuring instrument is addressed before the data collection is made (Brinkman, 2009). The findings of this research present the results of SPSS-21 analysis towards this ALSDA-ACREDA instrument's reliability value (Cronbach's alpha value) to establish internal consistency such as overall items, split-half and if items deleted.

### **Reliability (Cronbach's alpha value- Internal Consistency)**

There are several types of reliability that have been used in instrumentation of research survey such as test-retest reliability, alternate - forms reliability, split -half reliability, and internal consistency reliability (Hajjar, 2018). Cronbach's alpha reliability coefficient normally ranges between 0-1. The normal indicator to indicate high reliability score is that the nearest the coefficient to the value of 1.0, the greater the internal consistency of the items (variables) in the scale. Internal consistency concerns the extent to which items on the test or instrument are measuring the same thing. The appeal of an internal consistency index of reliability is that it is estimated after only one test administration and therefore avoids the problems associated with testing over multiple time

periods (Bolarinwa, 2015). Wong & Kuok (2012) state that internal consistency is estimated via the split-half reliability index and coefficient alpha index (Tavakol & Dennick, 2011; Shaik *et al.*, 2014; Parry *et al.* 2001, Bolarinwa, 2015) which is the most common used form of internal consistency reliability. Sometimes, Kuder-Richardson formula 20 (KR-20) index was used (Miller, 2015). The tables below present the indications of the internal consistency of this ALSDA scale:

### i) Overall items

**Table 2.0:** The Cronbach's Alpha score for overall items (N: 142)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.951	.954	81

Table 2.0 above shows the Cronbach's Alpha score which is 0.951 over the 81 items that contain the variables of protective factors, risk factors and abstinence level. Cohen (2013) asserts that if inter-item correlation lies within 0.10 and 0.29, then there is a weak correlation for both positive and negative values, and when inter-item correlation lies within 0.30 and 0.49 a medium correlation, and lastly if inter-item correlation is between 0.50 and 1.00 a strong correlation. Moreover, Michael (2004) recommends that, in an empirical approach, if the score of the item-to-total correlations is more than 0.50 and the inter-item correlations exceed 0.30, the construct validity is satisfied. The high reliability scores according to Lin *et.al.* (2015) and Taber (2018) is starting from 0.70 of Cronbach's alpha. There is another opinion stating that starting from 0.75 to 1.00 is an indication of the high score for the instrument's reliability (Piaw, 2016). Thus, ALSDA-ACREDA instrument is tested to be highly reliable as the score lies within this range and the value it obtained was nearest to 1.0.

### ii) Split Half

Split- Half reliability technique was used to assess the reliability consistency of the scale. According to Nugent (2012), split-half reliability correlates responses from one half of a test with the other half. Heale & Twycross (2015) defined split-half reliability as a measure of consistency between two halves of a construct measure. This technique is done by splitting the items of the scale into two groups and computing and analyzing the correlation values. The reliability is considered high if the items in both groups are highly correlated. Rudner & Schafer (2005) also mention that split-half reliability coefficient is obtained by dividing the test into half, correlating the score by each half and correcting for length. The split is based on odd versus even items numbers, randomly selected items, or manually balancing content and difficulty. The advantage of this approach is that it only needs a single test administration. The table 2.1 below shows the split-half result of ALSDA-ACREDA instrument:

**Table 2.1** Split-half result

Reliability Statistics			
Cronbach's Alpha	Part 1	Value	.926
		N of Items	41 <sup>a</sup>
	Part 2	Value	.934
		N of Items	41 <sup>a</sup>

	N of Items	40 <sup>b</sup>
	Total N of Items	81
Correlation Between Forms		.549
Spearman-Brown Coef- Equal Length		.709
ficient Unequal Length		.709
Guttman Split-Half Coefficient		.692

The first part of the items which consists of 41 items scored 0.926 for its Cronbach's alpha value whereas the second part of it with 40 items go to 0.934. Both scores lie within the high reliable values. This means this ALSDA-ACREDA instrument demonstrates the stability and internally consistent items that constitutes to the reliability of this instrument to be used in the real population.

### iii) If items deleted

'Cronbach's alpha if item deleted' is included to measures the value of Cronbach's alpha coefficient after the removal of the corresponding item (Hajjar, 2018). The result of Cronbach's Alpha coefficient for the analysis 'if items deleted' is ranged from 0.929 to 0.934 (*Refer Appendix for detailed items*). This means if any one of the items is deleted, it would not affect the whole Cronbach's alpha coefficient as the score will only be resulted within those ranges in which the high reliability of the scale is secured.

### The Validity of Instrument

Validity test in this instrumentation was two-folded ways: i) Content Validity and ii) Face Validity. These methods were used in instrumentation process conducted by Zamanzadeh, Ghahramanian, Rassouli, Abbaszadeh, Alavi-Majd and Nikanfar (2015) naming them as validity by lay expert and professional expert. These two were done simultaneously in which the validity of this scale was conducted through face validity with 34 potential populations to confirm its feasibility while the content validity was done by 2 experts from psychology and drug addiction counselling respectively. Instrument developed must be fitted and understandable (by language and content) by whom the instrument is administered. In this research, the face validity was done with 34 similar populations to confirm its feasibility in which the language used is understandable in the context of Malaysian setting.

On the other note, content validity in this research was established through experts' checking on its several contention aspects such as the congruence of the items with research objectives, coherency between constructs or dimensions and language. Two expert panels that are well-proficient both in Malay and English language were appointed from counselling and psychology in drug addiction arena to execute these tasks. Some amends and commentaries given by the experts were disseminated and used to improve the final draft of the instrument before the pilot test is done. The result of the content's validity for this instrument was highly acceptable and feasible to be used for the purpose of measuring the protective and risk factors of an individual in drug addiction.

### CONCLUSION

In conclusion, the Abstinence's Likelihood Scale in Drug Addiction (ALSDA- ACREDA) was tested to be highly reliable and valid and ready to be used in the real population of researches in which the purpose is to measure the likelihood level of drug addicts towards abstinence. It was considered to be highly reliable with the fact that the value of Cronbach's Alpha was 0.951. Thus, this marks the scale was well-constructed in term of its language clarity and balanced distribution of items be-

tween dimensions and constructs. For future studies, more adaptations and translation of this scale are sought for researches concerned in assessing the likelihood level of drug addiction among the recovering addicts inside or outside the rehabilitation centre for more comparative studies on its reliability and validity score in different populations with different culture and contexts. This comparison would ensure the reliability and validity of instrument to collect a quality data possible.

## REFERENCES

- AADK. (2012). *Laman web Agensi Anti Dadah Kebangsaan*. [www.adk.gov.my](http://www.adk.gov.my).
- Abd. Halim Mohd Hussin, Mohd. Rafidi Jusoh, Lasimon Matokrem. (2008). *Kepulihan dan latihan pencegahan relapse dalam penagihan dadah*. Terbitan Khas Sempena Persidangan Kebangsaan Pencegahan Dadah 2008 (PREVENT2008). Universiti Sains Islam Malaysia.
- Amin Al Haadi, Azad Athahiri Anuar, Norsayyidatina Che Rozudi, Wan Ahmad Zakry Wan Kamaruddin, Nurul Ashikin Miskam, & Musa Mohamad. (2018). Menangani relaps dengan teknik terapi tingkah laku dan kognitif (CBT). *AL-'ABQARI: Journal of Islamic Social Sciences and Humanities*, 13, 39-47.
- Anderson, J.L., & Sellbom, M., (2015). Construct validity of the DSM-5 section III personality trait profile for borderline personality disorder. *J Pers Assess*, Vol 97:478-86
- Atherton, O. E., Conger, R. D., Ferrer, E., & Robins, R. W. (2016). Risk and protective factors for early substance use initiation: A longitudinal study of Mexican-origin youth. *Journal of Research on Adolescence*, 26(4).
- Bevilacqua, L., & Goldman, D. (2009). Genes and addictions. *Clinical pharmacology and therapeutics*, 85(4).
- Bolarinwa, O. A. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Postgraduate Medical Journal*, 22(4), 195.
- Brooks, F., & McHenry, B. (2009). A contemporary approach to substance abuse and addiction counseling. *Alexandra, VA: American Counseling Association*. López, J. A., García, R. F., & Martí, T. S. (2018). Drugs and mental health problems among the Roma: Protective factors promoted by the Iglesia Evangélica Filadelfia. *International journal of environmental research and public health*, 15(2).
- Cohen L., (2013). Research Methods in Education, Sixth Edition - STIBA Malang.URL: [www.stiba-malang.ac.id/.../RESEARCH%20METHOD%20COHEN%20ok...](http://www.stiba-malang.ac.id/.../RESEARCH%20METHOD%20COHEN%20ok...) by L Cohen - Cited by 12126.
- DeVellis R.F., (2012) *Scale Development: Theory and Applications*. 3<sup>rd</sup> ed. Thousand Oaks, California: SAGE
- Dhamir Audi Azizul, Wan Munira Wan Jaafar, & Azlina Mohd Khir. (2018). Faktor Luaran Relaps Dalam Kalangan Penagih Lelaki Dewasa di Cure and Care Service Centre, Kuala Pilah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 3(2), 159-168.
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and perspectives*, 38(1), 105.
- Fauziah Ibrahim & Kumar, N. (2009). Factors effecting drug relapse in Malaysia: An empirical evidence. *Asian Social Science*, 5(12), 37-44.
- Fauziah Ibrahim, Bahaman Abu Samah, Mansor Abu Taliby & Mohamad Shatar Sabran. (2012). *Penagih Dadah dan Keadaan Berisiko Tinggi Kembali Relaps (Drug Addicts and the High-risk Situations of Relapse)*. e-Bangi, 9(1).



- Gilmore, J. & Feldon, D. (2010). Measuring graduate students teaching and research skills through self-report: Descriptive findings and validity evidence. Paper presented at the *Annual Meeting of American Educational Research Association*, Denver, CO, April 30 – May 4, 2010.
- Goliath, V., & Pretorius, B. (2016). Peer risk and protective factors in adolescence: Implications for drug use prevention. *Social Work*, 52(1), 113-129.
- Hadijah Baba, Wan Shahrazad Wan Sulaiman, Fauziah Ibrahim, & Norulhuda Sarnon. (2018). Faktor-faktor penyumbang kecenderungan situasi berisiko tinggi dalam kalangan penagih dadah berulang di Malaysia. *Jurnal Psikologi Malaysia*, 32(2).
- Hajjar, S. T. (2018). Statistical analysis: Internal- consistency reliability and construct validity. *International Journal of Quantitative and Qualitative Research Methods*. Vol 6 (1), 27-38.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-based nursing*, 18(3), 66-67.
- Jamshidi, A., Asadi, M., & Asadian, S. (2019). The Relationship of Family Risk Factors and Protective factors with Drug Use among Adolescents. *Journal of Research in Behavioural Sciences*, 17(3), 416-423.
- Kubai. (2019). *Reliability and Validity of Research Instruments Correspondence*.
- Kumar M, D., & Govindarajo, N. S. (2014). Instrument development “intention to stay instrument” (ISI). *Asian Social Science*, 10(12), 1-21.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. SAGE.
- Lander, L., Howsare, J., & Byrne, M. (2013). The impact of substance use disorders on families and children: from theory to practice. *Social work in public health*, 28(3-4), 194-205.
- Lin, T.-C., Liang, J.-C., & Tsai, C.-C. (2015). Conceptions of memorizing and understanding in learning, and self-efficacy held by university biology majors. *International Journal of Science Education*, 37(3), 446–468.
- Marlatt, G. A., & Witkiewitz, K. (2005). *Relapse prevention for alcohol and drug problems*.
- Merz, F. (2018). United Nations Office on Drugs and Crime: World Drug Report 2017. 2017. *SIRIUS-Zeitschrift für Strategische Analysen*, 2(1), 85-86.
- Michael, R.S. (2004). Measurement: reliability and validity. *Y520 Strategies for Educational Inquiry*. URL: [http://www.indiana.edu/.../week.../reliability\\_validity\\_2up](http://www.indiana.edu/.../week.../reliability_validity_2up)
- Miller, G. (2014). *Learning the language of addiction counseling*. John Wiley & Sons.
- Mustapha, Siti Zulaikha, Nor Hafizah Mohamed Harith, & Tuan Nooriani Tuan Ismail. (2017). Issues and Challenges in Drug Treatment and Rehabilitation Program in Malaysia. *ICOPS2017 eProceedings*, 536.
- Mustapha, Siti Zulaikha, Nor Hafizah Mohamed Harith, & Tuan Nooriani Tuan Ismail. (2017). Issues and Challenges in Drug Treatment and Rehabilitation Program in Malaysia. *ICOPS2017 eProceedings*, 536.
- National Institute on Drug Abuse. (2003). Preventing drug use among children and adolescents. *A Research-Based Guide for Parents, Educators and Community Leaders*.
- National Institute on Drug Abuse. (2018). *Brains, and Behavior: The Science of Addiction*. National Institute on Drug Abuse website.
- Norazleen, & Norafifah. (2015). *Bab 21 Kerinduan Atau Ketagihan Terhadap Dadah Punca Belia Kecundang Dan Kembali Menagih*.
- Norruzeyati Che Mohd, Mohammad Rahim Kamaluddin, & Mohd Alif Jasni. (2020). Faktor Risiko Tingkah Laku Relaps Dadah dalam Kalangan Pelatih Wanita di Cure and Care Rehabilitation Centre (CCRC) (Risk Factors of Drug Relapse Behavior among Female Clients in Cure and Care Rehabilitation Centre (CCRC)). *Jurnal Psikologi Malaysia*, 34(2).

- Nugent, M. (2013). *Split-half reliability*. Retrieved from Psychology Dictionary: <http://psychologydictionary.org/split-half-reliability>
- O'Neill, P., (2003). Moving Beyond Holistic Scoring Through Validity Inquiry. *Journal of Writing Assessment*, Vol.1, No.1, pp.47-65.
- Parry, K. W., & Proctor-Thomson, S. B. (2001). Testing the validity and reliability of the Organizational Description Questionnaire (ODQ). *International Journal of Organisational Behaviour*, 4(3), 111-124.
- Piaw, C.Y., 2006. *Kaedah dan statistik penyelidikan: Asas Statistik penyelidikan*. Kuala Lumpur: McGraw16: 27-40. Hill Education
- Rozmi Ismail, Nor Azri Ahmad, Fauziah Ibrahim & Salina Nen (2017). *Pengaruh Faktor Individu, Keluarga dan Persekitaran Sosial Terhadap Tingkah Laku Penyalahgunaan Bahan dalam Kalangan Remaja (The Influence of Individual, Familial and Social Environmental Factors towards Substance Abuse Behavior among Adolescents)*.
- Rudner, L. M., & Schafer, W. D. (2001). Practical Assessment, Research and Evaluation, 2001. *Practical Assessment, Research and Evaluation*, 7, n23-26.
- Sapkota, S., Khadka, A., & Akela, G. (2016). *Contributing factors to relapse of drug addiction among clients attending rehabilitation centres of Dharan, Nepal*. *Journal of Chitwan Medical College*, 6(3), 20-25.
- Shaik, M. M., Hassan, N. B., Tan, H. L., Bhaskar, S., & Gan, S. H. (2014). Validity and reliability of the Bahasa Melayu version of the migraine disability assessment questionnaire. *BioMed research international*, 2014.
- Stewart, J. (2000). Pathways to relapse: the neurobiology of drug-and stress-induced relapse to drug-taking. *Journal of Psychiatry and Neuroscience*, 25(2), 125.
- Subhan Mohd Meerah, Kamisah Osman, Effendi Zakaria, Zanato Ikhsan, Pramela Krish, Denish Koh Choo Lian & Diyana Mahmood (2018). *Developing an instrument to measure research skills*. *Procedia- Social and Behavioural Sciences*, 60 (2012),630-636.
- Substance Abuse and Mental Health Services Administration. (2014). Results from the 2013 national survey on drug use and health: Detailed tables. *Table 2.41 B-Alcohol use in lifetime, past year, and past month among persons aged 18 or older, by demographic characteristics: Percentages, 2013 and 2014*.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- Trochim, W.M.K., (2020). *Research methods knowledge base*. Conjointly. Retrieved from <https://conjointly.com/kb/> (Access at July, 20, 20)
- Wong, K.-L & Ong, S.-F & Kuek, T.-Y. (2012). Constructing a survey questionnaire to collect data on service quality of business academics. *European Journal of Social Sciences*. 29. 209-221.
- Yusliza, M. Y., & Ramayah, T. (2012). Validity and reliability of human resource competencies scale. *World Applied Science Journal*, 16 (1): 94-98
- Vahid Zamanzadeh, Akram Ghahramanian , Maryam Rassouli, Abbas Abbaszadeh, Hamid Alavi-Majd and Ali-Reza Nikanfar (2015). Design and implementation content validity study: development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*. Vol 4(2): 165–178.

## Appendix

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Vari- ance if Item Deleted	Corrected Item-Total Correlation	Squared Mul- tiple Correla- tion	Cronbach's Alpha if Item Deleted
A1	424.53	1097.457	.011	.	.931
A2	423.86	1105.829	-.094	.	.934
A3	425.24	1099.208	-.062	.	.931
A4	425.31	1096.185	.048	.	.931
A5	423.58	1094.322	.047	.	.931
A6a	424.56	1097.928	-.015	.	.931
A6b	425.00	1097.695	-.009	.	.931
A7	422.95	1093.235	.043	.	.932
A8	424.15	1079.305	.206	.	.931
A9	421.30	1099.526	-.042	.	.932
B1	423.45	1094.661	.045	.	.931
B2a	425.03	1099.465	-.059	.	.931
B2b	424.46	1096.113	.128	.	.931
B2c	424.69	1098.048	-.016	.	.931
B2d	424.48	1096.817	.057	.	.931
B2e	424.49	1098.847	-.068	.	.931
B2f	424.48	1096.023	.107	.	.931
B2g	424.52	1095.656	.106	.	.931
B2h	424.79	1094.245	.103	.	.931
B2i	424.52	1094.359	.174	.	.931
B3a	425.07	1100.064	-.079	.	.931
B3b	424.48	1097.763	-.003	.	.931
B3c	424.84	1098.944	-.043	.	.931

B3d	424.67	1101.674	-.143	.	.931
B3e	424.63	1098.220	-.023	.	.931
B3f	424.54	1098.357	-.032	.	.931
B3g	424.66	1097.707	-.004	.	.931
B3h	425.02	1102.916	-.164	.	.931
B3i	424.66	1099.952	-.084	.	.931
B4a	424.91	1097.396	.004	.	.931
B4b	424.44	1097.149	.075	.	.931
B4c	424.48	1094.374	.211	.	.931
B4d	424.44	1099.470	-.211	.	.931
B4e	424.47	1097.045	.049	.	.931
B4f	424.48	1098.358	-.043	.	.931
B4g	424.53	1097.976	-.015	.	.931
B4h	424.66	1102.150	-.161	.	.931
B4i	424.55	1099.532	-.079	.	.931
B5	423.68	1088.341	.103	.	.931
B6	425.16	1093.692	.122	.	.931
B7a	425.20	1093.935	.133	.	.931
B7b	424.61	1097.431	.007	.	.931
B7c	424.45	1097.883	-.012	.	.931
B7d	424.43	1097.423	.059	.	.931
B7e	424.55	1100.570	-.134	.	.931
B8a	424.77	1103.830	-.199	.	.931
B8b	424.45	1096.738	.102	.	.931
B8d	424.43	1097.698	.012	.	.931
B8e	424.43	1097.759	.001	.	.931
B8f	424.95	1093.867	.110	.	.931

B8g	424.46	1096.586	.091	.	.931
B9	425.05	1097.135	.000	.	.931
B10	424.42	1099.926	-.063	.	.931
C1	421.68	1088.280	.309	.	.930
C2	421.90	1085.830	.260	.	.930
C3	421.76	1089.269	.196	.	.931
C4	422.04	1079.747	.361	.	.930
C5	421.92	1082.788	.355	.	.930
C6	422.14	1086.613	.191	.	.931
C7	421.89	1084.926	.317	.	.930
C8	422.34	1087.509	.159	.	.931
C9	422.05	1078.524	.376	.	.930
C10	422.10	1077.189	.403	.	.930
C11	422.31	1067.880	.469	.	.930
C12	422.07	1075.896	.438	.	.930
C13	422.40	1069.693	.436	.	.930
C14	421.91	1083.106	.371	.	.930
C15	422.02	1079.335	.398	.	.930
C16	421.89	1082.529	.355	.	.930
C17	421.92	1080.498	.368	.	.930
C18	421.95	1081.135	.381	.	.930
C19	422.20	1075.935	.418	.	.930
C20	422.21	1082.657	.323	.	.930
C21	422.27	1073.177	.485	.	.930
C22	422.27	1076.429	.444	.	.930
C23	422.36	1081.559	.335	.	.930
C24	422.30	1085.144	.193	.	.931

C25	422.07	1086.354	.259	.	.930
C26	421.99	1079.717	.394	.	.930
C27	421.97	1083.663	.376	.	.930
C28	421.94	1082.256	.436	.	.930
C29	422.11	1085.347	.267	.	.930
C30	422.08	1078.605	.445	.	.930
C31	422.07	1076.033	.435	.	.930
C32	422.07	1076.308	.429	.	.930
C33	422.14	1078.180	.442	.	.930
C34	422.02	1079.175	.376	.	.930
D1	422.37	1063.396	.554	.	.929
D2	422.55	1059.914	.564	.	.929
D3	422.75	1053.365	.592	.	.929
D4	422.77	1056.696	.578	.	.929
D5	422.62	1059.565	.572	.	.929
D6	422.70	1060.454	.522	.	.929
D7	423.09	1050.954	.549	.	.929
D8	422.66	1058.486	.596	.	.929
D9	422.76	1062.384	.492	.	.929
D10	422.67	1061.030	.495	.	.929
D11	422.95	1059.654	.431	.	.930
D12	423.68	1060.753	.407	.	.930
D13	423.06	1060.500	.478	.	.929
D14	423.27	1047.818	.601	.	.929
D15	423.08	1059.628	.488	.	.929
D16	422.84	1055.448	.558	.	.929
D17	423.37	1055.854	.487	.	.929



D18	423.20	1057.446	.493	.	.929
D19	423.15	1057.839	.500	.	.929
D20	422.77	1056.685	.615	.	.929
D21	422.67	1057.033	.516	.	.929
D22	422.68	1060.203	.590	.	.929
D23	422.81	1057.071	.554	.	.929
D24	423.31	1051.834	.541	.	.929
D25	423.21	1061.100	.462	.	.929
D26	423.35	1058.046	.466	.	.929
D27	423.41	1069.373	.304	.	.930
D28	423.40	1072.242	.282	.	.931
D29	422.78	1057.455	.558	.	.929
D30	422.78	1058.646	.527	.	.929
D31	423.07	1062.385	.480	.	.929
E1	422.12	1077.039	.474	.	.930
E2	422.08	1081.139	.428	.	.930
E3	422.08	1079.283	.430	.	.930
E4	422.03	1078.213	.465	.	.930
E5	422.11	1080.514	.433	.	.930
E6	422.10	1077.509	.458	.	.930
E7	422.17	1070.842	.531	.	.929
E8	422.02	1072.832	.535	.	.930
E9	422.16	1074.654	.459	.	.930
E10	422.23	1075.307	.492	.	.930
E11	422.20	1076.393	.495	.	.930
E12	422.29	1085.886	.220	.	.931
E13	421.97	1084.030	.319	.	.930

E14	422.33	1084.954	.199	.	.931
E15	422.40	1084.181	.206	.	.931
E16	422.02	1085.519	.240	.	.930

## POLYTECHNIC ENGLISH LECTURERS' BELIEFS ABOUT USING MOBILE APPS IN TEACHING COMMUNICATIVE ENGLISH

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### Abstract

*In the state of our nation facing Covid-19 pandemic, the Ministry of Education, Malaysia has urged higher learning institutions to use the online learning application. The use of technology is one of the teaching and learning media and the use of ' Mobile App ' is popular among students. This paper aimed to discover the English lecturers' beliefs about using mobile apps in teaching communicative English. This descriptive study was conducted survey method among polytechnic lecturers in order to extract opinion on how using mobile apps in teaching communicative English. A set of questionnaire was designed to collect data from the respondents. Moreover, this study will list down the use of mobile apps that the lecturers feel by using this mobile apps online learning method. The data collection was carried out to the 50 lecturers particularly among polytechnic lecturers who had used online activity which basically familiar with online teaching and learning. This study will provide a clearer idea about the perception and the use of mobile apps in helps the reader to understand the advantage on improving English language through mobile apps that lead to sustainable online learning. The finding of the previous studies revealed that mobile apps offers great experiences to the lecturers who want to teach English language effectively. Majority of the respondents agreed that using mobile apps significantly influence students in learning English in order fully prepare in terms of relating to speaking and listening. As conclusion, some ideas have been made in to encourage lecturers' participation to use mobile apps in teaching communicative English.*

**Keyword:** Mobile App, online learning, English

### INTRODUCTION

English language is considered the international language of the whole world and is commonly used in many fields as the main language for communication, business, education...etc. Thus, many learners around the world have directed their efforts to learn English and use it as their mother tongue and for many users as second language (SL) not mere a foreign language (FL). Most countries around the world have also recognized the importance of the English language in education and have addressed deficiencies by making English language learning a primary factor in their planning and strategy (Thomas, Costa, & Oliveira, 2016). Owing to the importance of the English language in non-native English-speaking countries, applying modern technologies to support learners in learning English is a critical issue (Cho & Chan, 2015). Meanwhile, learners face many problems while trying to learn English as a second or foreign language (ESL/EFL).

In addition to that, the appeal of internet-based learning cannot be denied. Mobile Apps are a new strategy in learning and education system which purposely launched to replace the old teaching method. Mobile Apps are also one of popular new web-based applications which rapidly used by all levels of education institutions to improve their learning programs. This system is expanding rapidly and widely used as an information system and teaching strategy for managing and controlling the activities of teaching and learning process. Moreover, Mobile Apps are enabling the student who lives in rural areas to conduct further studies. Mobile Apps effectively facilitate the process of learning with the use of the widespread methods on the Internet such as forums, email, and video chatting (Davies, Jo, and Martin Graff, 2005).

This study investigates English lecturers of all polytechnics in Malaysia. The focus of the study is centered on their beliefs about using Mobile Apps in teaching English in their classrooms. Teachers of English as a second language (ESL) and English as a foreign language (EFL) try their best efforts to maintain or improve English proficiency of their students. In this study the authors begin with describing the contextual factors that motivated the study. Then present the study objectives and questions, and briefly overview the study's approach to investigate the research questions, with relevant research literature as well as the research methodology.

## **PROBLEM STATEMENT**

Speaking English is a frustrating among English language learners, particularly the L2 English learners. Learners are aware of the importance of learning English but couldn't afford resisting the current trend of pursuing the popularity of using internet slang. They gradually become less concerned about the accuracy of speaking correct English. However, it's often said that the interference of internet slang has jeopardized the appropriate use of English. Over time, learners become less competent in constructing correct sentences.

This study was motivated by three contextual factors surrounding the problem of teaching English with the help of Mobile Apps in order to support learners to maintain or improve their English proficiency: the worldwide trend of English learning, the trends towards merging technology in the educational process and the problem of less or lack of accessibility to use Mobile Apps in teaching English in classrooms. Taking these factors into important consideration provides the rationale for this study. Based on the worldwide trend of English becoming "increasingly favored as a second language" (Crystal, 2012; Duff & Anderson, 2015; Leung, Davidson, & Mohan, 2014; McCargo, 2004), or "linguistic imperialism" (Canagarajah, 1999) a large number of English language learners invest their time, money and efforts to learn English with the best modern methods such Mobile Apps with or without the teachers support. Furthermore, one of the most challenges learners face on the way of their English accuracy is to use English correctly. So, in this study, the researchers aim to investigate about the English lecturers' beliefs in using the Mobile Apps to teach communicative English.

### **Objectives of the Study**

This study aims to meet its main objective which is to explore the polytechnic English lecturers' beliefs about using Mobile Apps for teaching communicative English. Through this study, the researchers also aim to reach these objectives: -

- To discover the challenges that polytechnic English lecturers' face in using Mobile Apps for teaching English.

- To identify the benefits of using Mobile Apps in teaching English.

- To recommend the use of Mobile Apps to other English lecturers in order to support English teaching and learning.

### **Research Questions**

This study is conducted to answer the following research questions:

What are the polytechnic English lecturers' beliefs in using Mobile Apps for teaching English?

What are the challenges that English lecturers face while using Mobile Apps for teaching English in classrooms?

What are the benefits of using Mobile Apps in teaching English?

### **Significance of the Research**

The findings of this study are expected to benefit the various parties such as students, teachers, scholars and the community. The interests of this research are the following:

Bring the awareness of English teachers and students towards utilizing Mobile Apps in teaching and learning especially the teachers who use Mobile learning system in teaching English language.

Identify the importance of students' using Mobile Apps effectively in order to achieve notable improvements in acquiring English.

Giving a boost to other learners and communities rather than Malaysia who choose mobile learning in preference to learn themselves English constantly.

This study will help in creating mobile learning awareness to all parties and promote for the effectiveness of teaching and learning English Grammar with the help of Mobile Apps among all public and private educational institutions in Malaysia.

### **Limitation and Recommendation of the study**

Although this study gives some understanding and shows the English teachers' thoughts about using Mobile Apps in secondary classrooms, there are some probable drawbacks in conducting the interviews, due that different teachers have different teaching practices and background of exposure to internet use. It might not be easy to get five voluntary English teachers who will be interested to share their feedback regarding the issue studied what may not provide the needed information. On other hand, the findings cannot be generalized because it will be conducted on a limited number of participants (5 teachers only) from only one school what reflects that the sample size might not be sufficient to produce a convincing generalization. In addition to that, the study focuses only on secondary level. Thus, further research is recommended in order to enhance the results of this study and provide more investigation on the benefits and shortages of using Mobile Apps in English classes for teaching grammar. Moreover, more research is recommended to be done on other levels such as primary and higher education level. With the existence of such possible limitations, future research should consider improving the design of the study instruments and apply mixed method or quantitative study to obtain a more comprehensive and conclusive claims. It is suggested that a more systematic and inclusive study to be conducted to prove the significance of using Mobile Apps in teaching grammar. Apart from that, further studies involving more samples and larger area could be conducted in order to include the use of Mobile Apps in the school curriculum. Nonetheless, the findings of the study are expected to be useful for teachers in other schools which are on par with the school studied.

## **REVIEW OF LITERATURE**

### **Introduction**

Teaching English to students is never an easy task for English teachers. They need to help their students how to use English accurately in order to write and speak correctly. They should push their students to speak up in front of the audience. Mostly, students have problems to speak English, due to some obstacles to produce words, phrases and arrange them into a good sentence to speak up. So, teaching English language skills with communicative and Mobile based activities and applications becomes a needed thing. In this part of research, the authors review the body of research relating teaching English and Mobile based applications as the following sections:

### **The role of the Mobile Apps in language learning**

With the application of ICT in education, learning is made much more easily accessible with using computers, tablets, smartphones and the Internet. The integration of ICT in school education covers from the implementation of digital board, VLE FROG, to mobile learning. Moving towards modernization, owning a mobile phone is more of a necessity, no longer a luxury compared to a decade ago. Mobile phones are not only important for communication, but also for the purpose of education. Malaysians are making efforts in adopting 21st century learning skills; hence, mobile phones especially the learning apps in the smartphones play significant roles in improving the learning of language skills, activating autonomy learning and even enhancing knowledge acquisition.

Eppard, Nasser & Reddy (2016), in their study on “Mobile Apps in the English language classroom”, made suggestions and developed a list of criteria for choosing Apps. The findings of their study highlight the significance of collaboration between mobile learning and language learning. According to Eppard, Nasser & Reddy (2016), there are new online apps constantly being created from time to time, hence it is impossible to keep up with all the English learning apps available for educational purposes. Their ultimate goal was to create a list of core apps relevant for English language learning. Their study notes that there were no guidelines on how to choose suitable Apps for educational purposes for tablet devices. After reviewing websites suggested by sustainable individuals and established institutions or organizations, this study intends to fill that gap. Eppard, Nasser & Reddy are hoping that other researchers would consider replicate a similar study by employing mixed method or quantitative study and consider creating a rubric that could generally be substantiated for specific, different and/or various context areas.

### **Mobile Apps improve language learning skills**

In the early 2010s, when smartphones were still not commonly used, SMS had begun to serve as part of mobile-assisted learning. Both Azabdaftari & Mozaheb (2012) and Alemi, Sarab & Lari (2012) who have conducted experiments on mobile assisted learning in vocabulary acquisition, have discovered that SMS in mobile phone-based vocabulary program (Spaced Repetition System) enables students to obtain better vocabulary retention. When smartphones become more common, Mobile Apps emerge to become an alternative access to effective mobile learning. This is supported by Shih, Lee & Cheng (2015) who agree that the utilization of Mobile Apps has developed students' confidence and capabilities in English spelling and thus students are able to make a good progress in the overall achievement of the language learning, especially in listening to vowels, phonemes, and syllables. (Al-Jarf, 2012) proves that the use of self-study MP3 L2 English lessons (Talk English) as an extra practice manages to improve learners in listening and speaking skills. Correspondingly, this is acknowledged by Kim (2013) who discovers that repeated listening practice using smartphone apps as a part of mobile-assisted language learning (MALL) improves listening skills effectively as learners find learning more favorable being exposed to authentic and meaningful learning resources, whereas Cavus (2016) highlights the use of developed intelligent mobile learning application makes the learning of pronunciation more enjoyable.

Wang and Smith (2013) investigated the feasibility and limitations of developing English reading and grammar skills through mobile phone interfaces. Results indicated that mobile-phone-assisted learning is perceived positively by students as an effective method for improving reading and grammar ability. Similarly, Chen (2013) investigated how students used tablets to learn English in informal settings outside class and how to foster more effective use of the tablet for independent language learning. Findings suggested that tablets or any mobile technology are ideal tools to foster learners' autonomy and ubiquitous learning in informal settings. Students also reported positive attitudes toward usability, effectiveness, and satisfaction with mobile technologies as language learning tools.

### **Mobile Apps promote autonomy learning**



The proliferation of MALL devices (e.g. smartphones and tablets) has facilitated the development and implementation of applications for educational purposes, including game applications and self-study applications. Mobile technology has been described as easily accessible and good for self-study. Applications in mobile technology focus on forms, primarily at the lexical level, and facilitate the development of receptive instead of productive skills (Kim & Kwon, 2012). They can also engage students in interactive activities outside the traditional classroom (Kim, Rueckert, Kim, & Seo, 2013). For example, they can allow traditional or non-traditional learners to access language input (e.g. iTunes U Materials) for casual learning purposes instead of form-focused learning (Rossell-Aguilar, 2013). Oberg & Daniels (2013) also agree that self-paced mobile learning instructional method promotes positive attitudes towards self-study. This is due to the accessibility and mobility of MALL that attract learners interest and further intentions to pursue more knowledge through the use of mobiles (Kim, 2013), also due to the fact that using mobile devices in the language classroom can leverage individual preferences to personalize learning and develop learner autonomy, and encourage lifelong language learning (Godwin-Jones, 2018). Similarly, Howlett & Waemusa (2019) also believe that mobile learning encourages autonomy learning, improves learning potential and satisfaction in acquiring 21st century learning skills.

### **Mobile Apps Make Learning Easier**

According to Cakir (2015), he explored the current use of mobile phones in a foreign language teaching from the prospective teachers' opinions and attitudes on exploiting the mobile phone as an instructional tool for foreign language learning purposes in the educational and instructional setting of foreign language teaching classrooms. Results showed that most of the participants liked to use their mobiles as instructional to help them in learning English. The results also gave some insights as to how foreign language teachers could employ suitable approaches to make the process of learning and teaching English meaningful and communicative. They suggested that the participants would like to make use of mobile phones for educational purposes when they become teachers of English. Alfaki and Alharthy (2014) studied the influence of using social networks to promote learners' English language. Their results disclosed that learning through social networks was more operative than old-style learning which looked to the classroom as a place of acquiring information. Besides, they discovered that teamwork was a useful learning strategy in improving one's foreign language, and WhatsApp encourages collaboration among students.

### **Criteria for English Learning Apps**

It is important to encourage students on how to best use Mobile Apps to learn English. As we know that the easy availability of apps on mobile devices means students will obviously using online resources to learn. It's also worth considering the benefits of Apps that can help students to organize and compare different sources as part of projects and revision. When using information online as an English learning resource, there are some criteria about the online English learning resources that need to be mentioned. Tomlinson (2010) stated the design of practical criteria for English resources. Some of them are as follows:

English materials should contain enough spoken and written text.

Language input in materials should be contextualized.

Learners should be exposed sufficient samples of language in authentic use.

English materials should include activities that provide critical thinking and encourage learners to visualize.

English materials should include interesting and engaging tasks.

According to Howard and Major (2004), a series of specific guidelines was listed for online English resources.

Online English resources should be stimulated interaction and be generative.

Learners are encouraged to develop learning skills and strategies when they use online English resources.

Online English resources should link to each other to develop a progression of skills, understandings and language items.

Online English resources have appropriate instructions.

Online English resources should be attractive and flexible.

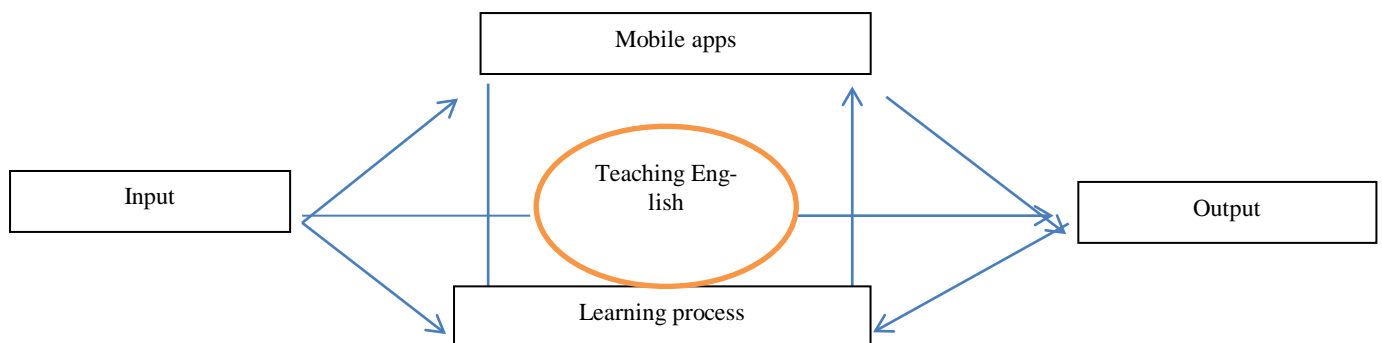
Ahmet (2013) mentioned that the updatability of Apps is one of the most important criteria. In terms of updatability, if students think there is a need for a change in the material depending on the needs and level of what they have learned, they can easily adapt the material. Moreover, when self-regulated students use their smartphones or iPads to learn English, updatability becomes more important, because English resources keep continuously updating every day. It means that high updatability can save their time, money and energy in the progress of learning English.

### Conceptual Framework of the Study

In this study, the research model integrates two main theories used in the study of the Language Acquisition: Krashen's Input Hypothesis and Social Constructivism Theory. This combined model is felt to offer a superior framework by which the drivers of using Mobile Apps in teaching communicative English can be identified.

In Figure (4), the authors provide an overview of the already discussed theories in a condensed form to make it easy for the readers to get an overall idea about the theories behind this study.

Figure 4: Research Conceptual Framework



## RESEARCH METHODOLOGY

### Research Design

This descriptive study using quantitative data collection methods, to gather data. The primary data collection methods will be used to describe the characteristics of the sample group (Sekaran, 2003). According to Hair (2006), the questionnaire more practical and effective tool use this because it can improve the accuracy and truth responses given by the participants and it also not affected by gestures researchers. The participants are free to express their own opinion to answer any item submitted in the questionnaire. In addition to getting a lot of information in a short time, (Nadelson, 2012) argued that the data collected is used for ensure the quality of the data obtained

is easily controlled and data processed by computer help. According Braxton (2013), Quantitative study provides a descriptive solution and description of the existing situation. The research design of this study was descriptive because its suitability for collecting information on the variables studied, information and particulars required (Loke 2013; Root 2013; Yin, 2013). This descriptive research aims to discover some new approach which not have been reviewed or investigate that could be new idea to the reader or scholars.

The population in this study was selected from Krejcie and Morgan (1970) diagram. The total respondents of 50 polytechnic lecturers were give respond to this study. The reason why this specific group was chooses as a respondent in this study because they have experience in teaching English courses with using e-learning. In the questionnaire there were two sections it was demography details and 11 questions regarding the use of mobile apps.

The data analysis utilized is the Statistical Package Social Science (SPSS). Frequency analysis is performed to examine the learners' responses with respect to using Mobile Apps in teaching English.

### **Validity**

In order to ensure the list of questionnaire questions is measuring what it's supposed to measure, it is examined and validated by two expertise in TESL field. The questionnaire is more flexibly carried out to give room for the respondents to respond freely. Since the respondents involved are qualified experienced English teachers.

### **Reliability**

Reliability is described as consistency of a measure. In purpose to increase the appropriateness of the instrument, a pilot test will be conducted on other three English teachers who are not the actual respondents of the study. Amendment and improvement are made to make the questions more direct and simpler. The same set of instruments will be used to predict the reliability of the possible outcomes.

### **Data analysis**

The data analysis was conducted among Polytechnic English lecturers which have experience in using online learning. The (SPSS) version 19 was accounted to analyse the respondent reply on questionnaire. In this study the demographic details, Factor Analysis and correlation analysis test was done in order to clarify the reliability of the research question and respondent perception one-learning.

### **Factor analysis**

Factor analysis is one statistical technique that can be used to provide a relatively simple description through reduction of the number of variables called factors. Factor analysis is a procedure for identifying items or variables based on similarity. The similarity is indicated by the high correlation value. Items that have a high correlation factor would form a crowd. The basic principle in the factor analysis is to simplify the description of the data by reducing the number of variables / dimensions. In this study the exploratory factor analysis was used to analyse weight if the each questions. Basically the researcher uses the exploratory factor analysis to identify what factors exist in the set of the item. Meanwhile confirmatory factor analysis is indicating the researchers designed a measuring instrument to seek and determines whether the measurement tool made really explain the fifth dimension (four point likert scale).

### **Correlation**

Correlation analysis is included in one of the measuring technique association / relationship (measures of association). Measurement of the association is an umbrella term that refers to a group of techniques in bivariate statistics was used to measure the strength of association between two variables. Among the many techniques of measurement of the association, there are two tech-

niques correlated highly popular until now, the Pearson Product Moment Correlation and Spearman Rank Correlation. Measurement of association impose numerical values to determine the level of association or the strength of the relationship between variables. Two variables are said to be associated if one variable that influences the behaviour of other variables. If there is no effect, then the second is called the independent variable.

## RECOMMENDATION

Due to the increasing e-learning scenarios in Malaysia the finding of this study suggested that e-learning (using mobile apps) must offer courses according to students' demand. In particular, the e-learning must be offer in various language this because Malaysia is a multicultural country. In other hand the e-learning field need to improve the adaptive nature of the student because the effectiveness of e-learning (using mobile apps) which not depending on normal class environment should have a perfect activity will lead to knowledge base society. Moreover, the researcher of this study personally recommended that e-learning instructor and developer should collaborate with developed countries that used e-learning (using mobile apps) in variety ways that will help to improve learners understanding by addressing critical e-learning factors. Using mobile apps in e-learning environment need to be collaborate with the several improvements such as adaptive, hyper Media, Intelligent Tutoring Systems and advance solution.

## CONCLUSION

This study has illustrated the importance of e-learning (using mobile apps) in enhancing students English language skills effectively. Moreover, some preliminary results show that when the researcher trying to clarify which factor was influencing the learners to improve their English skills through e-learning finally she found that the advance leaning strategy of English e-learning course was motivate the students to learn quickly without instructor. The findings of all the previous studies shows that student involvement in e-learning (using mobile apps) is depending on the flexibility of their schedule and self-motivation to participate in the e-learning activities.

## BIBLIOGRAPHY

- Alemi, M., Sarab, M., & Lari, Z. (2012). Successful learning of academic word list via MALL: Mobile assisted language learning. *International Education Studies*, 5(6), 99109. Retrieved from <http://www.ccsenet.org>
- Al-Jarf, R. (2012). Mobile technology and student autonomy in oral skill acquisition. In J. Díaz-Vera (Ed.), *Left to my own devices: Learner autonomy and mobile-assisted language learning innovation and leadership in English language teaching*. Bingley, UK: Emerald Group. Retrieved from <http://dx.doi.org>
- Ally, M. (2004). Foundations of educational theory for online learning. *Theory and Practice of Online Learning*, 2, 15-44.
- Azabdaftari, B., & Mozaheb, M. (2012). Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards. *The Eurocall Review*, 20(2), 4759. Retrieved from [http://www.eurocall-languages.org/review/20\\_2/index.html](http://www.eurocall-languages.org/review/20_2/index.html)
- Ballance, O. J. (2012). Mobile language learning: more than just "the platform". *Language Learning & Technology*, 16(3), 21-23.
- Cabrera, P., Castillo, L., Gonzalez, P., Quinonez, A. & Ochoa, C. (2018). The impact of using pixton for teaching grammar and vocabulary in the EFL Ecuadorian context. *Teaching English with Technology*, 18(1), 53-76, <http://www.tewjournal.org>
- Castañeda, D. A., & Cho, M. H. (2016). Use of a game-like application on a mobile device to improve accuracy in conjugating Spanish verbs. *Computer Assisted Language Learning*, 29(7), 1195-1204.
- Cavus, N (2016). Development of an intelligent mobile application for teaching English pronunciation. *Procedia Computer Science* 102, 365-369.

- Chambers, A. (2010). *Computer-assisted language learning: Mapping the territory* Michael Levy, *Computer-assisted language learning: Context and conceptualization*. Oxford: Clarendon Press, 1997. Pp. xv+ 298. ISBN 978-0-19-823631-3 (paperback). Carol A. Chapelle, *Computer applications in second language acquisition: Foundations for teaching, testing and research* (Cambridge Applied Linguistics Series). Cambridge: Cambridge University Press, 2001. Pp. xvii+ 215. ISBN 978-0-521-62646-0 (paperback). Mike Levy & Glenn Stockwell, *CALL dimensions: Options and issues in computer-assisted language learning*. Mahwah, NJ: Lawrence Erlbaum, 2006. Pp. xviii+ 310. ISBN 0-8058-5634X (paperback). *Language Teaching*, 43(01), 113-122.
- Cho, V., & Chan, A. (2015). An integrative framework of comparing SaaS adoption for core and non-core business operations: An empirical study on Hong Kong industries. *Information Systems Frontiers*, 17(3), 629-644.
- Coryell, J. E., & Chlup, D. T. (2007). Implementing E-Learning components with adult English language learners: Vital factors and lessons learned. *Computer Assisted Language Learning*, 20(3), 263-278. doi: 10.1080/09588220701489333
- Creswell, J. W. (2012). *Education research: Planning, conducting and evaluating quantitative and qualitative research*. Boston: Pearson.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Eppard, J., Nasser, O., & Reddy, P. (2016). The next generation of technology: Mobile apps in the English language classroom. *International Journal of Emerging Technologies in Learning*, 11(4).
- Evans, C. (2017). Analysing semi-structured interviews using thematic analysis: Exploring voluntary civic participation among adults. *SAGE Research Method Datasets*.
- Fikron, M. R. (2018). Grammatical competence within L2 communication: Language production, monitor hypothesis, and focus on forms instruction. *Pancaran Pendidikan FKIP Universitas Jember*, Vol. 7(1), 101-112. Retrieved from DOI:10.25037/pancaran.v7i1.140
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2016). *How to design and evaluate research in education* (9th edition). New York: McGraw-Hill.
- Godwin-Jones, R. (2018). *Using mobile devices in the language classroom*. Cambridge Papers in ELT series. Cambridge: Cambridge University Press.
- Hammarberg, K., Kirkman, M. & Lacey, S. D. (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, Vol 31(3), 498–501. Retrieved from <https://doi.org/10.1093/humrep/dev334>
- Helm, F., Bradley, L., Guarda, M., & Thouësny, S. (Eds.). (2015). *Critical CALL–Proceedings of the 2015 EUROCALL Conference*, Padova, Italy. Research-publishing. net.
- Helm, F., Bradley, L., Guarda, M., & Thouësny, S. (Eds.). (2015). *Critical CALL–Proceedings of the 2015 EUROCALL Conference*, Padova, Italy. Research-publishing. net.
- Herold, B. (2015). Why ed tech is not transforming how teachers teach. *Education Week*, 34(35), 8.
- Howlett, G. and Waemusa, Z. (2019). 21st century learning skills and autonomy: Students perceptions of mobile devices in the Thai EFL context. *Teaching English with Technology*, 19(1), 72-85.
- Kim, H., & Kwon, Y. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31-57.
- Kim, H. S. (2013). Emerging mobile apps to improve English listening skills. *Multimedia-Assisted Language Learning*, 16(2), 11-30.
- Kukulska-Hulme, A., Norris, L., & Donohue, J. (2015). *Mobile pedagogy for English language teaching: a guide for teachers*.
- Larsen-Freeman, D. (2001). Teaching grammar. *Teaching English as a second or foreign language*, 3, 251-266.
- Li, Z., & Hegelheimer, V. (2013). Mobile-assisted grammar exercises: Effects on self-editing in L2 writing. *Language Learning & Technology*, 17(3), 135-156.



- Ministry of Education (2012). Malaysia education blueprint 2013-2025-executive summary [Online]. Retrieved from <http://www.moe.gov.my/userfiles/file/PPP/Preliminary-Blueprint-Eng.pdf>.
- Ministry of Education Malaysia (2013). Malaysia education blueprint 2013-2025: Preschool to post-secondary education. Kuala Lumpur.
- Oberg, A., & Daniels, P. (2013). Analysis of the effect a student-centred mobile learning instructional method has on language acquisition. *Computer Assisted Language Learning*, 26(2), 177-196. Retrieved from <http://www.tandfonline.com>
- Paris, S., Paris, A. 2001, "Classroom Applications of Research on Self-Regulated Learning", *Educational Psychologist*, vol. 36, no. 2, pp. 89-101
- Park, Y. (2011). A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies into four types. *The International Review of Research in Open and Distributed Learning*, 12(2), 78-102.
- Salam, Z. A. A., & Mansur, A. (2005). MyGfL: A lifelong learning platform for Malaysian society. In *Proceedings of the 4th European Conference on e-Learning (ECEL 2005): ECEL2005* (p. 15). Academic Conferences Limited.
- Sandberg, J., Maris, M., & Hoogendoorn, P. (2014). The added value of a gaming context and intelligent adaptation for a mobile learning application for vocabulary learning. *Computers & Education*, 76, 119-130.
- Savage, K. L., Bitterline, G., & Price, D. (2010). *Grammar matters*. New York: Cambridge University Press.
- Shih, R.C., Lee, C. & Cheng T.F. (2015). Effects of English spelling learning experience through a mobile LINE app for college students. *Procedia - Social and Behavioral Sciences* 174, 2634 – 2638
- Son, J. B. (2016). Selecting and evaluating mobile apps for language learning.
- Soong, D. 2012, "A study on EFL students' use of e-learning programs for learning english -[59] taking a Taiwanese university as an example", *English Language Teaching*, vol. 5, no. 4, pp. 87-95.
- Thomas, K., & O'Bannon, B. (2013). Cell phones in the classroom: Preservice teachers' perceptions. *Journal of Digital Learning in Teacher Education*, 30(1), 11-20.
- Thomas, K. M., O'Bannon, B. W., & Britt, V. G. (2014). Standing in the schoolhouse door: Teacher perceptions of mobile phones in the classroom. *Journal of Research on Technology in education*, 46(4), 373-395.
- Thomas, M., Costa, D., & Oliveira, T. (2016). Assessing the role of IT-enabled process virtualization on green IT adoption. *Information Systems Frontiers*, 18(4), 693-710.
- Weihua, S. 2011, "A research of college students self-learning ability", from: <http://www.cnki.com.cn/Article/CJFDTotol-DAJI201120274.htm>
- Weller, M. (2011). *The digital scholar: How technology is transforming scholarly practice*: A&C Black.
- Weston-Sementelli, J. L., Allen, L. K., & McNamara, D. S. (2018). Comprehension and writing strategy training improves performance on content-specific source-based writing tasks. *International Journal of Artificial Intelligence in Education*, 28(1), 106-137.
- Winne, P.H. & Perry, N.E. 2000, "Measuring self-regulated learning", In P. Pintrich, M. Boekaerts, & M. Seidner (Eds.), *Handbook of self-regulation* (p. 531-566). Orlando, FL: Academic Press.
- Yang, J. (2013). Mobile assisted language learning: review of the recent applications of emerging mobile technologies. *English Language Teaching*, 6(7), 19-25.
- Yin, R. K. (2013). *Case study research: Design and methods*: Sage publications.



## Appendix A: Teachers' pre-questionnaire

Purpose: The aim of this questionnaire is to collect information to identify prior knowledge about the use of Mobile Apps as a digital tool for teaching English

### Part 1: Background information

Gender: Male ( ), Female ( )

Teaching Experience: 0-2 years ( ), 3-5 years ( ), 6-10 years ( ), 11-15 years ( ), 15 years and above ( )

Age: \_\_\_\_\_.

### Part 2: Lecturers' Beliefs on Mobile Apps

Are you using Mobile applications for teaching English?

Yes ( ) No ( )

Do you think that Mobile Apps are useful for teaching English in the classroom?

Yes ( ) No ( )

Do you think that using Mobile Apps is effective for teaching in the classroom?

Yes ( ) No ( )

What are the challenges you encounter when teaching English using Mobile applications?

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What are the benefits of using Mobile Apps in teaching English?

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Do you think that the use of Mobile Apps for teaching English is motivating?

Yes (    ), No (    )

Why do you consider that the use of Mobile Apps for teaching English is motivating / not motivating?

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Would you recommend using Mobile Apps for teaching English?

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Thanks for your cooperation

## THE RELATIONSHIP BETWEEN SPIRITUALITY AND QUALITY OF LIFE OF FLOOD VICTIMS IN MALAYSIA

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### ABSTRACT

*This paper examines the relationship between spirituality and quality of life of flood victims. Two questionnaires were administered to 1300 respondents in 9 states in Malaysia. The 9 states were divided into 4 zones. The questionnaires that were culturally adapted and used in this study are The Spiritual Inventory and The Sweeney Well-Being Inventory in measuring the spiritual and life quality variables. The results indicated that the relationship between spirituality and quality of life of the flood victims was significant ( $p < 0.05$ ,  $r = .323$ ). The results also proved that the relationship between all the dimensions of spirituality and quality of life was significant (dimension of worldview ( $p < .05$ ,  $r = .253$ ), dimension of religion of personality ( $p < .05$ ,  $r = .249$ ) and dimension of spirituality effects ( $p < .05$ ,  $r = .279$ ). This paper discusses the outcome of the study such as for policy making, conducting programmes and projects for the well-being and quality of life of the flood victims. It is also hoped that the output of this study will be used to conduct programmes in terms of financial assistance, information resources, and community organisation for the betterment and well-being of flood disaster victims.*

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**Keywords:** Social support, spirituality, Quality of life (QOL)

### INTRODUCTION

Flood is one of the most common and severe forms of natural disasters in Malaysia and has resulted in direct economics and property losses, disruption in land (Noorazuan et al, 2011), government building, tourism industry (Hamzah et al, 2012), death, physical and psychological injuries (Nasir, Zainah & Khairudin, 2012). It has been estimated that at least 3.5 million people live on flood plains and are vulnerable to flood of varying probabilities (Chan, 1995). Furthermore the increasing number of rural-urban migration, land pressures, river flow discharge (Gasim et al, 2012), poverty and other structural forces are anticipated to be contributing factors to the increasing occurrence of flood. Like any natural disaster, flood affects people from various psychological and emotional perspectives. Many studies are in agreement that majority of the flood victims have to suffer from loss and stress due to economic and psychological factors (Najib Ahmad Marzuki et al, 2015; Nasir, Zainah & Khairudin, 2012). Apart from that, studies on the effects of flood have examined the consequences of disasters on social support (Najib Ahmad Marzuki et al, 2015, Sapora Sipon et al, 2015), spirituality (Sapora Sipon et al, 2015 and Rafeah Saidon et al, 2018)) and the quality of life of the victims (QoL) (Hobfoll 1988, Kaniasty & Norris. 1993, Victoria,

Holly, & Dominic, 2010). As such, this research aims to explore the relationship between social support, spirituality and quality of life of flood victims in Malaysia. The information gathered from this research is very useful in the understanding of the psychological effects of flood on the victims and the relationship between social support, spirituality and well-being among flood victims

## LITERATURE REVIEW

Studies on natural disasters are gaining prominent in the disaster literature. Research in this areas has grown in the past decade as scholars document how disaster has impacted various elements of the flood victims. Among the factors that have impacted flood victims are their spirituality (Ginexi, Weihs, Simmens & Hoyt, 2000, Tyler & Hoyt, 2000), social support (Cook & Bickman, 1999; Kaniasty & Norris, 1993) and quality of life (Hobfoll 1988, Kaniasty & Norris. 1993, Victoria, Holly, & Dominic, 2010 ).

It is accepted that early works on the impact of disaster were inclined to be descriptive in nature. The studies were without well-defined concepts and hypotheses. This has witnessed a gradually shifted scholarship writings where it is moving towards the understanding of the psychological and well-being underpinnings of these events within advanced theoretical models (Eranen & Liebkind, 1993). The psychological effects of disaster impact include how an individual thinks, feels and reacts spiritually. The way human connects and engage during disaster is also an important element to be studied in a disaster situation. As human beings are social creatures, social connection and engagement helps disaster victims to feel and know that they are not alone. It helps them to feel safe and normalizes their lives to some extent (Najib Ahmad Marzuki et al, 2015). As Cohen (2004) states that social support is considered a coping resource and is considered as a social “fund” where it contains emotional and material resources from which people may draw when handling demanding and stressful circumstances.

The importance of social support in enhancing the disaster victims’ quality of life is prevalent. One pertinent reason on the importance of social support in a disaster setting is it helps disaster victims to keep connected. Not only that, it also helps disaster victims to be able to cope with life and thus maintain a better well being of an individual. Previous study such as Sarason, Sarason, & Gurung (2001) has examined the association between social support and better physical and mental health outcomes. The beneficial effects of social support with regard to such outcomes have also been well established by studied conducted by Lincoln, Chatters, & Taylor (2005) and Song & Lin (2009). Nasir, Zainah and Khairudin (2012) point out that social support from people who are well-equipped with knowledge skills in the management of stressanxiety and other psychological problems is needed to elevate the flood victims qulaity of life.

Studies on the relationship between social support and quality of life have been positively proven by Song & Lin (2009) and Chan (1995) which have proved that social support of people was significantly correlated with health-related quality of life. Some researchers believe that social support not only improves quality of life directly, but it also exerts an indirect positive influence on quality of life through facilitating post-disaster recovery among victims (Cook. & Bickman, 1999). Empirical evidence generally points to the psychological benefits of supportive relationships to the quality of life of flood disaster victims.

Religion plays an important role in many people's lives and this has an impact on their mental health especially in a disaster setting. Within the psychology of health context, an important contribution made by researcher in psychology of religion is the significant relationship between religiosity and mental well-being. The relationship between spirituality and various dimensions of health and quality of life has been extensively examined during the past decade (Fry, 2010). A large number of studies show positive effects of religiosity on the QoL of the flood victims.

In the past decade, research on flood disasters has witnessed impacted outcomes such as spirituality and social support. Several studies (Schuster et al, 2001; Koenig et al., 2001; Spouse, 1993) have investigated the relationship between spirituality involvement and social support. A study conducted by Salhah Abdullah et al (2014) found that there was significant relationship between spirituality and social support of flood victims. Rafeah Saidon et al (2018) have looked into the importance of providing professional psychospiritual support to mitigate any long term adverse psychological impact following any disaster. They believe in the importance connection of religion and spirituality with health and wellness of an individual life. The study of the role of spirituality and social support in fostering resilience in flood survivors may advance the understanding of human adaptation and coping to flood trauma

The psychological and spirituality impacts of flood from the multi-layered context need to be examined imperatively. This study investigates the sociodemographic variables of household income, gender, age, and education in relation to the psychological and spirituality aspects of the flood victims.

## OBJECTIVE

The main purpose of this study is to determine the relationship between social support, spirituality and quality of life.

## RESEARCH METHODOLOGY

Respondents were selected among flood victims in Malaysia. The method employed in this study was the quantitative design using cross sectional survey. The quantitative analysis was done via the Statistical Package for the Social Sciences (SPSS) version 19.0.

### Samples

The selection of the respondents was based upon the locations of zones. The sampling technique that was used in this research was random sampling. The population for this study was flood disaster victims during the flood disaster of 2015. 1300 questionnaires were distributed. Categorisation is based on six zones, namely Northern Zone (Perlis, Kedah, Penang, and Perak), Central Zone (Selangor, Wilayah Persekutuan, and Negeri Sembilan), Southern Zone (Johor and Melaka), and Eastern Zone (Kelantan, Terengganu, and Pahang). For each state, flood-prone areas were identified and the number of samples was determined.

Table.3: Sample by zone

Zone	State	Sample
Northern	Perlis	114

	Kedah	128
	Perak	94
	Pahang	304
Eastern	Terengganu	273
	Kelantan	88
Central	Selangor	100
Southern	Johor and Melaka	105
	<b>Total</b>	<b>1300</b>

## INSTRUMENTS

The questionnaires that were adapted and used in the collection of data in this study are as follows: Social support inventory, Spirituality inventory and Quality of Life Inventory. The data collected was analysed through SPSS. The method employed in this study was a quantitative design. The questionnaire was classified into different parts. The first part of the questionnaire was about the socio-demographic characteristics of the respondents. The second part comprised the information about spirituality. The third part of the questionnaire comprised questions about social support. Finally, the questionnaire consists of the quality of life of flood victim. Likert scale was used in the questionnaire.

### Social Support

#### Social Support

Social support has been defined as the “assistance and protection given to others, especially to individuals. It was measured using the Social Support Rating (SSR) which has been shown to have high reliability and validity. Modified version of social support inventory consists of 21 items to assess self-perception toward social support. The instrument using five Likert scale and respondents were asked to use a 5 point scale (1= strongly disagreed and 5 strongly agreed). The study showed high reliability of Cronbach Alpha is .931. Procedures were asked to sign a consent form before taking part in this study. A copy of the consent form was provided to each participant that explained the purpose of the study, assured confidentiality and explained that participation was voluntary.

### Quality of Life

The quality of life is a combination of the concept of quality of life from WHO Quality of Life – BREF (WHOQOL-BREF) (1996) and The Impact of Event Scale – Revised (IES-R) measurement



(Weiss & Marmar, 1997, & Nygaard & Heir, 2012). It refers to the perceptions of the flood victims on the function, state and position in their daily lives having confronted with flood disaster. The concept of quality of life used covers the aspect of the psychological state, physical health, an attachment with the surrounding, level of freedom, social relationship, and personal belief. The questionnaire showed a high reliability of Cronbach Alpha which is .79

### **Spirituality**

It consists of 3 factors with 11 items. The instrument is using five Likert scale and respondents were asked to use a 5 point scale (1= strongly disagreed and 5 strongly agreed). The study showed high reliability of Cronbach Alpha .739.

## **RESULT**

This section consists the result of the study.

### **Demography**

1300 questionnaires were distributed. Out of this, 670 (51.5%) respondents were female, while 630 (48.5%) were male. In terms of age, the majority of the group were aged between 31 to 40 years old, which consisted of 306 respondents (23.5%), followed by 41 to 50 years old (20.9%), and 21 to 30 years (20.9%), consecutively. The number of respondents aged less than 20 years old was 245 (18.8%), while respondents above 51 years old were the least, consisting of 213 (16.4%).

A majority of the respondents did not have permanent income earnings (557 respondents, 42.8%), followed by income earnings of RM1,001 to RM2,000 (255 respondents, 19.3%), and respondents with income earnings of less than RM1,000 (248 respondents, 19.1 %). Respondents earning above RM3,001 were 122 (9.4%). The rest of the respondents (116, 8.9%) earned between RM2,001 to RM3,000.

A majority of the respondents lived in wooden and cement houses, 535 (42.4%) followed by 530 respondents (42.2%) who lived in terrace houses, 94 respondents (7.2%) lived in bungalow houses, 74 respondents (5.7%) lived in wooden houses, and 51 respondents (3.9%) lived in semidetached houses. Four (6.3%) respondents lived in flats/apartments, while 12 respondents (0.9%) did not give any response to the questionnaire.

The findings of the data revealed that 237 respondents (18.2%) owned bicycles, 672 respondents (51.7%) owned motorcycles, and 594 respondents (45.7%) owned cars. Only 37 respondents (2.8%) of the flood victims owned vans and 18 respondents (1.8%) owned lorries. In terms of sickness, 9 respondents (0.7%) had leukemia, 29 respondents (2.2%) had heart attacks, while 88 respondents (6.8%) had diabetes. 20 respondents (1.5%) had other diseases and 199 respondents (15.3%) had other disabilities.

### **Social Support, Spiritual And Quality Of Life in Flood Victims.**

The Pearson correlation analysis was used to identify whether there was a relationship between social support and quality of life of the respondents. The result of the study showed that there was a significant relationship between social support and quality of life of the flood victims ( $p < .05$ ,  $r = .118^{***}$ ). The relationship among all the dimensions revealed that all the three dimensions were

significantly related with family dimensions ( $p < .05$ ,  $r = .178^{***}$ ), dimension of friends ( $p < .05$ ,  $r = .075^{***}$ ) and dimension of significant others ( $p < .05$ ,  $r = .067^{***}$ ). This result indicated that good social support increases the quality of life.

The result showed that the relationship between spiritual and quality of life of the flood victims was significant ( $p < .05$ ,  $r = .323^{***}$ ). The result also proved that the relationship between all the dimensions of spiritual and quality of life were significant, which include the dimension of Islamic worldview ( $p < .05$ ,  $r = .253^{***}$ ), dimensions of religion of personality ( $p < .05$ ), and dimension of spiritual effort ( $p < .05$ ,  $r = .279^{***}$ ). This result indicated that high level of spirituality increases the flood victims quality of life.

Variables	Quality of life
Social support	.118***
- Family dimensions	.178***
- Dimensions of friends	.075***
- Dimension of significant others	.067***
Spiritual	.323***
- Islamic worldview	.253***
- Religion of personality	.249***
- Spiritual effort	.279***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 2: Correlation between social support, spirituality and quality of life

#### Predictor for Quality of Life

The linear regression test was carried out to test the influence of spirituality and social support on quality of life. The outcome of the analysis established that spirituality and social support influenced the quality of life of the flood victims. The two variables contributed 10.5 percent on the quality of life of the victims. The F value of 151.704 was significant at the confidence level of  $p < .001$ ) and spirituality ( $t = 12.317$ ,  $p < .001$ ) had a significant influenced on the level of quality of life of the victims. Based on the beta value, analysis showed that spirituality ( $\beta = .861$ ) was the strongest predictor towards quality of life among the respondents compared to social support ( $\beta = -.132$ ).

Table 3: Linear Regression On Quality Of Life

Variable	B	Beta	t	P
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<b>Spirituality</b>	.861	.323	12.317	.000
<b>Social support</b>	.132	.116	4.277	.000

$R^2 = .105$ , Adjusted  $R^2 = .104$ ,  $F = 39.331$ ,  $p < .001$ .

#### Predictor for Quality of Life

Through the regression analysis carried out, the predictors that influences the quality of life of flood victims are spirituality and social support. Spirituality received during the recovery process is seen as an important factor that helps to elevate the psychological well-being and quality of life of the flood victims. Meanwhile, social support was also found to be predicting the quality of life. Flood gives a great impact to the human psychosocial needs and mental healing which will increase their quality of life.

## DISCUSSION

Living through a disastrous disaster contributes to mental and physical impairment among survivors. The aim of this study was to examine the relationship between social support, spirituality and quality of life of flood victims. In general, the results indicated that there were positive relationships among the variables. The study has confirmed that there was a significant relationships among social support, spirituality with quality of life. Higher level of social support seeking behavior are associated with higher quality of life. These findings are consistent with the views of Cook (1993), Sarason, Sarason & Gurung (2001) and Nasir, Zainah & Khairuddin (2012) that aspect of social support is important in helping the flood victims.

It is also consistent with Norris (2005) in which social support is seen as a factor that may overcome the effects experience by victims. Mossakowaski and Zhang (2014) are in agreement as to the importance of social support to the quality of life of flood victims. They argued that when disaster victims are given unfair treatment, families are seen as the best providers of emotional support when it comes to reducing the psychological stress. Najib Ahmad Marzuki et. al (2015) and Sapora Sipon et al (2014) state that social support is regarded as a delivery of information which makes one feel cared for and loved, respected and feel that they are part of the community members who from a network of collective responsibility. In addition, receiving social support helps to enhance the preservation or recovery of other valued resources from the disaster. Nevertheless, a study conducted by Rafeah Saedon et al (2018) proved that despite the importance of religion, their exploratory study on the existing psycho-spiritual support system finds there is an absence of support system which comprehensively adopts specific criteria and methods of psycho-spiritual support from the religious point of view for disaster victims.

This study has also confirmed that there was a significant relationship between spirituality and quality of life of the respondents. This finding supports the views of previous studies (Adeola, 2009; Sapora Sipon et. al, 2015 and Mohamed Haji Yusuf et al 2000) which indicated that flood changes the disaster victims' belief about themselves and their spiritual aspect of life. Disaster survivors also turn to their ministries, priests and rabis for practical assistance, emotional support, and rituals, and meanings.

## LIMITATION

In discussing the results of the paper, interpretations should be made with great caution on several counts. The limitation is that although relationship was found between independent and dependent variables, it is acknowledged that a cross-sectional study is not able to assign cause-and-effect relationship between the variables. This study uses survey in the data collection. The second limitation of this study is only a single research methodological approach, that is survey, was conducted. This method of collecting data may not have elicited informed or accurate responses as compared to the previous study. Future research would benefit from the examination of a broader range of contexts because experiences can differ across disaster and between countries. The present study captured perceptions at a particular point in time. More longitudinal research on a variety of samples is needed to more accurately map social support, spirituality and well-being. For future research, researcher must increase the sample size of respondents.

## CONCLUSION

To conclude, this study has proved that social support and spirituality were significantly related to quality of life of the flood victims. This study has added to our knowledge two prevalent factors that affects the quality of life of flood victims in Malaysia. From this perspective, the researchers conclude that social support and spirituality play vital roles in the well-being and the flood victims' quality of life.

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## REFERENCES

- Adeola, O. (2000). Mental Health & Psychosocial Distress Sequele of Katrina: An Empirical Study of Survivors. *Human Ecology Review. Society for Human Ecology*, 16 (2), 195-210.
- Bolger, N, Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology*, 79(6), 953-961.
- Chan, N.W. (1995). "A contextual analysis of flood hazard management in peninsular Malaysia". Unpublished PhD Thesis.
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59, 676–84.
- Cook, J., D. & Bickman, L. (1999). Social support and psychological symptomatology following a natural disaster. *Journal of Traumatic Stress*, 3(4), 541-556.
- Eranen, L., & Liebkind, K. (1993). Coping with disaster: The helping behavior of communities and individuals. pp. 957-964, International

Fry (2010). Religious involvement, spirituality and personal meaning for life: Existential predictors of psychological wellbeing in community-residing and institutional care elders. Published online: 09 Jun 2010

Gasim, M. B., Mokhtar, M., Surif, S., Toriman, M. E., Abd Rahim, S. . S., & Lun, P. I. (2012). Analysis of thirty years recurrent floods of the Pahang River, Malaysia. *Asian Journal of Earth Sciences*, 5(1), 25-35. <https://doi.org/10.3923/ajes.2012.25.35>

Ginexi, E. M., Weihs, K., Simmens, S. J., & Hoyt, D. R. (2000). Natural disaster and depression: A prospective investigation of reaction to the 1993 midwest floods. *American Journal of Community Psychology*, 28, 495-518.

**Hamzah, J., Habibah, A., Buang, A., Jusoff, K., Toriman, M.E., Mohd Fuad, M.J., Er, A.C. and Azima, A.M. (2012). Flood Disaster, Impacts and the Tourism Providers ' Responses : The Kota Tinggi Experience. *Advances in Natural and Applied Sciences*, 6(1), 26–32.**

Hobfoll, S.E. (1988). *The ecology of stress*. Hemisphere. Publishing. New York  
Kaniasty K & Norris F.H. (1993). A test of the social deterioration model in the context of natural disaster. *Journal of Personality and Social Psychology*. 64, 395-408

Kaniasty, K., & Norris, F. N. (1993). A Test of the social support deterioration model in the context of natural disaster. *Journal of Personality and Social Psychology*, 64(3), 395-408.

Lincoln, K. D., Chatters, L. M., & Taylor, R. J. (2005). *Social support, traumatic events, and mental health*, 19(1), 51-69.

Mohamed Haji-Yusuf, Adi Fahrudin, Beddu Salam Baco & Mohd Dahlan HA Malek (2000). Disaster and Post Trauma Psychological Impact: A case study in Sabah, Malaysia. Paper presented at the International Conference on Disaster Management. Lessons to be learnt. Organized by Universiti Utara Malaysia at City Bay View Hotel, Kuah, Langkawi Malaysia, 29-30 April 2000.

Mossakowski K.N & Zhang. W (2014). Does social support buffer the stress of discrimination and reduce psychological distress among Asian Americans?. *Social Psychology Quartely*, vol 77, pp 273-295.

Najib Ahmad Marzuki, Che Su Mustaffa, Johana Johari & Nur Hafiza Rahama (2015). Stress and Social Support as Predictors of Quality of Life. A Case Among Flood Victims in Malaysia. *International Journal of Psychology and Behavioural Sciences*. Vol 9, No 10.

Nasir, R, Zainah A, & Khairuddin R (2012). Psychological effects on victims of the Johor flood 2006/2007. *Asian Social Science*. Vol 8, No 8.

Noorazuan Md Hashim, Sulong Muhamad, Kadaruddin Aiyub & Norhayati Yahya. (2011) *Jurnal E.Bangi*. Land forest development and flash flood phenomenon: A case of Sungai Lembing, Pahang. Volume 6, Number 2. 155-169

Norris, F. H (2005). Psychosocial consequences of natural disasters in developing countries. What does past research tell us about the potential effects of the 2004 tsunami. Retrieved from [http://www.eird.org/cd/ibis/guidelines/franNorris\\_tsunami.doc](http://www.eird.org/cd/ibis/guidelines/franNorris_tsunami.doc)

Nygaard E & Heir, T (2012). World assumptions, posttraumatic stress and quality of life after a natural disaster: a longitudinal study. *Health and life outcomes*. Vol 10, no 76.

Rafeah Saidon, Siti Khadijah Ab. Manan, Noorul Huda Sahari, Asmak Husin, Fairuz Nazri, Rosilawati Sueb & Nurul Sakinah Aziz (2018). Critical analysis on the existing psycho-spiritual support models for disaster victims. The Turkish Online Journal of Design, Art and Communication. Special Edition, p.1300-1306

Salhah Abdullah, SaporaSipon, Nik Nadian Nisa NikNazli, Nurul Huda Puwasa. (2015). The Relationship between Stress and Social Support among Flood Victims. *Procedia Social and Behavioral Sciences*. Volume 192, 24. Pages 59-64

Sapora Sipon, Mohd Fo'ad Sakdan, Che Su Mustaffa, Najib Ahmad Marzuki, Mohamed Sukeri Khalid, Mohd Taib Ariffin, Nik Nadia Nisa Nik Nazli (2015). Spirituality and Social Support in Flood Victims. *Procedia-Social and Behavioural Sciences* 185, 361-364

Sapora Sipon, Siti Khadijah Nasrah, Nik Nadian Nisa NikNazli, Salhah Abdullah, Khatijah Othman (2014). Stress and Religious Coping among Flood Victims. *Procedia Social and Behavioral Sciences*. Volume 140, 22, Pages 605-608

Sapora Sipon. Mohd Fo'ad Sakdan, Che Su Mustaffa, (2015) Spirituality among Flood Victims: A Comparison between Two States. *Procedia - Social and Behavioral Sciences* Volume 185, Pages 357-360.

Sarason, B. R., Sarason, I. G., & Gurung, R. A. R. (2001). Close personal relationships and health outcomes: A key to the role of social support. In B. Sarason & S. Duck (Eds.), *Personal relationships: Implications for clinical and community psychology* (pp. 15-41). Chichester, UK: Wiley.

Song, L., & Nan Lin. 2009. Social capital and health inequality: Evidence from Taiwan. *Journal of Health and Social Behavior*, 50, 149-63.

Tyler, K. A. & Hoyt, D. R. (2000). The Effects of an Acute Stressor on Depressive Symptoms Among Older Adults: The Moderating Effects of Social Support and Age. *Research on Aging*, 22, 143

Victoria M, A. Holly U, & Dominic, C. (2010). The psychological impact of exposure to floods. *Psychology, Health & Medicine*, 15(1), 61-73.

Weiss & Marmar (1997). Weiss, D.S & Marmar, C.R (1997). The impact of Event Scale Revised" in J.P Wilson, & T.M Keane (Eds), 339-441. Assessing Psychological Trauma and PTSD. A practitioner's Handbook. New York: Guildford Press.

Zimmet G.D, D,Dahlem, N.W, Zimet, S.G (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, no 1, pp 30-41



# **CORPORATE REPUTATION ANTECEDENTS AND OUTCOME ASSOCIATED WITH HIGHER EDUCATION INSTITUTIONS IN MALAWI: THE MODERATING EFFECT OF STAKEHOLDER GROUPS**

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## **ABSTRACT**

*The study aims at establishing the relationship of corporate reputation with its antecedents and outcome of stakeholder loyalty in higher education institutions in Malawi. It also examined the moderating effect of stakeholder groups between corporate reputation and stakeholder loyalty. To achieve these aims, the researchers surveyed 438 employees and undergraduate students drawn from four public higher education institutions. The public higher education institutions are: The University of Malawi, Lilongwe University of Agriculture and Natural Resources, Malawi University of Science and Technology, and Mzuzu University. The researchers selected the respondents using a stratified random sampling procedure. For the data analysis, the researchers used IBM SPSS for data preparation and descriptive analysis, while SmartPLS 3.3.2 was used to analyze the corporate reputation relationships with its antecedents and outcomes. The study established that all the identified antecedents are positively and significantly related to corporate reputation. In turn, corporate reputation has a significant impact on stakeholder loyalty. Besides, the relationship between corporate reputation and stakeholder loyalty is moderated by stakeholder groups. The findings of the study would enable the management of higher education institutions to come up with strategies of overcoming competition by attracting and retaining competent staff and excellent students. The identified strategies should differentiate between employees and students. This study integrated three theoretical perspectives and tested stakeholder groups as a moderating variable for the relationship between corporate reputation and stakeholder loyalty. Such an integration provides a better understanding of the relationship between corporate reputation and stakeholder loyalty in higher education institutions.*

**Keywords:** *Corporate reputation, stakeholder groups, stakeholder loyalty, Higher education institutions, social capital, media exposure*

## **INTRODUCTION**

The increased competition that higher education institutions (HEIs) are facing requires repositioning and advancing new strategies for attracting and retaining employees and students. One such approach is the management of corporate reputation. A strong corporate reputation is not only the essential intangible asset for differentiation between competitors but also contribute immensely to business performance (Alniacik et al., 2012; Kaushal & Ali, 2019). Also, HEIs are in the business of offering education services that are difficult to evaluate beforehand, and corporate reputation acts as an indicator of the HEIs' ability to meet stakeholder expectations (Suomi et al., 2014).

In the context of Malawi, a robust corporate reputation of the HEIs could attract research funding, competent students, and prestigious employees. Accordingly, HEIs would be doing themselves a favour by focusing on building a strong corporate reputation (Aula & Tienari, 2011). Despite its significance in HEIs, corporate reputation building, and maintenance face challenges due to conflicting expectations from different stakeholders (Walker & Dyck, 2014). The authors argued that reputation perception differs across stakeholders, and this has an implication on how to develop,

improve, and maintain the corporate reputation. In HEIs, for example, employees and students may have different perception of the corporate reputation. Similarly, factors or criterion used by stakeholders to assess the corporate reputation is also specific to firm or context (Helm & Klode, 2011; Schaarschmidt et al., 2017). Therefore, antecedents and outcomes of corporate reputation in HEIs could be different from those investigated in the corporate world.

Previous empirical research has focused on the outcome of corporate reputation in HEIs, especially loyalty (De Leaniz & Del Bosque Rodríguez, 2016; Kaushal & Ali, 2019; Thomas, 2011; Vogler et al., 2016) and antecedents, such as teaching and research (Delgado-Marquez et al., 2012), mass media (Meadows & Meadows, 2016) and resources such as social capital (Ho & Peng, 2016). However, some of these studies pay little attention to the integration of various theoretical perspectives that may provide building blocks for corporate reputation and its outcome. Also, few of the studies consider stakeholder differences in corporate reputation assessment in HEIs. Nevertheless, most scholars heeded Fombrun's recommendation that researchers should study both antecedents and consequences of corporate reputation (Fombrun, 2012).

Since that call, corporate reputation, along with satisfaction and loyalty, are used most frequently in applied research, but they remain relevant. The number of studies in corporate reputation is steadily increasing and is still considered as a critical driver for competitive advantage in organizations (Irina & Zait, 2016; Sheehan & Stabell, 2010). Therefore, this study first investigates the relationship of corporate reputation with its antecedents and outcome in HEIs in Malawi. Second, it examines the moderating effect of stakeholder groups on the relationship between corporate reputation and stakeholder loyalty. Two stakeholder groups, employees and students, have been identified, and both are essential to the corporate reputation building in HEIs. Employees contribute to the enhancement of corporate reputation at no cost and, in turn, impact their organizational commitment (Almeida & Coelho, 2019; Kaushal & Ali, 2019). In contrast, students are willing to recommend and patronize the university with a favourable corporate reputation (Sridhar & Mehta, 2018; Thomas, 2011).

The following is how the article will flow: First, we review corporate reputation with a focus on its antecedents and outcome. This review will culminate in a theoretical framework and hypothesis development. Second, we describe the study's design, test the hypotheses, and present the results. Finally, we interpret the results, along with the conclusion and implication of the study.

## **LITERATURE REVIEW AND HYPOTHESES**

The research integrated three perspectives that included stakeholder theory, the Rindova reputation model, and social capital theory from economics, management, and sociology fields, respectively, to develop the study's model. Two perspectives, signaling and institutional theories, were integrated to create the Rindova reputation model (Boyd et al., 2010). In the current study, stakeholder theory underpinned the research, and both social capital theory and the Rindova reputation model were applied to model the relationship of corporate reputation with its antecedents and outcome in HEIs in Malawi. Individually, the perspectives contribute to a better understanding of reputation building and together create a competitive edge for the HEIs.

### **Corporate reputation in HEIs**

Many scholars are still grappling with the definition of corporate reputation in the corporate world, mostly for measurement purposes (Dowling, 2016; Walker, 2010). A similar challenge presents itself in HEIs, but this time includes the issue of stakeholders. Sheehan and Stabell (2010) stated that corporate reputation is a net perception of external stakeholders regarding the success of a firm's cumulative performance. On the contrary, corporate reputation should be regarded as the collective perception of all organizational stakeholders, both internal and external (De Leaniz &

Del Bosque Rodríguez, 2016; Suomi et al., 2014). Therefore, Sontaite and Bakanauskas (2011) defined corporate reputation in HEIs as " subjective and collective recognition, perception, attitude and evaluation of higher education institution established between all stakeholder groups (internal and external) of higher education institution during a specific time that is based on quality indicators, past behaviour, communication, symbolism, and possibility as well as potential to satisfy future expectations comparing to competitors."

As can be inferred from the definition, managing reputation in HEIs can be a challenge due to conflicting expectations and perceptions of different stakeholders (De Leaniz & Del Bosque Rodríguez, 2016; Suomi et al., 2014). The reason is stakeholder groups assess the corporate reputation based on how the HEIs have met specific stakeholder's expectations. Despite the challenges outlined above, corporate reputation can benefit HEIs in several ways. Financially, corporate reputation can help in (1) delaying rival mobility in the industry, (2) charging price premium on customers, (3) attracting higher-quality and larger amounts of investments from the stock market, (4) maintaining a high spirit among employees, (5) enjoying a cost advantage due to lower remuneration rate among employees and (6) supporting and enhancing new product introduction and recovery strategies in the event of a crisis terms, (De Leaniz & Del Bosque Rodríguez, 2016). In the context of HEIs, the benefits include (1) increase permeability of established borders by attracting international students (2) attract top tier teachers (3) affect student priorities in social and academic life and (4) attractive to students due to better carrier prospective (Delgado-Marquez et al., 2012). Based on the preceding benefits HEIs in Malawi must take advantage of the benefits and embark on building a positive corporate reputation for themselves.

### **Quality of students**

The quality of students is one of the opportunities that can enhance corporate reputation in the HEIs. However, quality is a subjective and relative term and is difficult to define (Aksu, 2018). Nevertheless, Aksu (2018) documented three different approaches to defining and determining quality indicators, especially in HEIs context. The first is the "quantitative 'input' indicators" that focus on issues such as the number of faculty members with Ph.D., number of volumes in the library, number of research projects and publications, and number of minority students admitted. These indicators put less emphasis on the quality of students. The second approach is the "out-put oriented measures," which focus on competencies and achievements of a student before they graduate from the university. Critical thinking and scores on entry examinations or any other academic record can be examples of the skills. The third is the "value-added" approach, which can be determined by the extent to which an education programme has contributed or added value to the student's desired outcomes, such as desired characteristics, skills, life, and career outcomes.

Among the three approaches, the out-put oriented measures, which focus on the student, is more appealing. Aksu (2018) described quality students as those who come to university with high academic achievements, eager to participate in co-curriculum activities and devote substantial time and effort to their education. According to Tsiniidou et al. (2010), academic staff, administration services, library services, curriculum structure, university location, career prospects, and infrastructure are some of the determinants of quality in HEIs. Oplatka and Nupar (2013) stated that the quality of students is an integral part of the parents' perception of a school reputation. Similarly, higher quality students is related to the business school's corporate reputation (Boyd et al., 2010). The arguments of the previous studies lead to the following hypothesis:

H1: Quality of students positively influence corporate reputation in HEIs.

### **Faculty expertise**

Expertise can be applied to both an organization and an individual. At the organization or company level, expertise, is described as "how competent and capable is the company in delivering the products they advertise" (Alcañiz et al., 2010). While at an individual level, expertise can be con-

ventionally defined by qualification, track record, professional standing, and experience (Burgman et al., 2011). All these attributes are considered as ingredients in faculty expertise, which is associated with academic staff in HEIs. The previous literatures document the relationship between expertise and corporate reputation. Both salesperson experts and hotel reviewers experts had a positive impact on corporate reputation (Ou et al., 2012; Xie & So, 2018). Similarly, prior knowledge that include expertise, positively affected destination reputation (Yamashita & Takata, 2020). Based on the evidence that expertise affects corporate reputation, we developed the following hypothesis:

H2: Faculty expertise positively influence corporate reputation in HEIs.

### **Degree prestige**

Boyd et al. (2010) described degree prestige as the level of the degree-granting institution relative to other institutions. One could equate that level to a position that an institution or a department occupies relative to others. Prior studies have investigated degree prestige under different variant names such as doctoral degree prestige (Bedeian et al., 2010), external prestige (Casidy & Wymer, 2016; Ciftcioglu, 2010; Mishra, 2013), and organizational prestige (Vieira et al., 2019). Doctoral degree prestige does not only make the holder proud by enhancing self-esteem, but also determine early and late career opportunities (Bedeian et al., 2010). Similarly, the type of degree could determine the level of student satisfaction and, ultimately, loyalty (Retamosa et al., 2020).

Several studies have investigated the importance of prestige in organizations. Casidy and Wymer (2016) found a weak relationship between perceived external prestige and student behavioral outcomes such as word of mouth and loyalty in HEIs. Other studies also found that perceived external prestige had an indirect and negative impact on turnover intention for both employees and students (Ciftcioglu, 2010; Mishra, 2013). The findings of these studies suggest that prestige could be associated with positive behavioral intention, loyalty, and word of mouth of both employees and students. Due to the weak relationship between perceived external prestige and student behavioral outcomes, point to a mediation or moderation effect and corporate reputation could be a mediator between perceived external prestige and loyalty, for example. Based on the established relationships of degree prestige as outlined above, we propose the following hypothesis

H3: Degree prestige positively influence corporate reputation in HEIs

### **Media exposure**

As a third-party endorsement for firms, media exposure refers to access to news about the firms from different media channels (Cabral, 2016; Carroll, 2010). Currently, stakeholders can access news reports about a firm from mainstream media, social media platforms, and word of mouth. When the majority of the media cover an issue, it becomes instrumental in setting the agenda, be it political or business (Fan et al., 2013). The media exposure has the advantage of creating awareness of a firm's existence and diffuses good news about a firm's performance but can also spread bad news quicker (Cabral, 2016). Scholars that have examined the relationship between media exposure and corporate reputation have found the results significant (Meadows & Meadows, 2016; Vogler et al., 2016; X. Zhang, 2018). Therefore, we propose the following hypothesis:

H4: Media exposure positively influence corporate reputation in HEIs

### **Social capital**

The acquisition of resources through networks of social relationships is at the heart of social capital theory (Brien et al., 2012; Warren et al., 2015). These resources and social networks can be in the custody of individuals or organizations with an influential position. Parents, teachers, and institutions, for example, can be a source of resources and connections. Previous scholars have documented various forms of social capital, such as bonding, bridging, and linking (Fenenga et al., 2015; Hill, 2011; Sias & Duncan, 2018).

Bonding social capital involves close tie relationships, such as parents and other family members. While bridging social capital requires weak ties such as workmates, fellow students, and lecturers.

The last form is linking social capital, which is a connection between an organization and institutionalized power or those with authority. Past studies have established relationship between bonding social capital and career satisfaction and achievement (Zhang et al., 2010), organization identification (Sias & Duncan, 2018), part-time employment (Hill, 2011) and corporate reputation as a mediator between social capital and institutional performance (Ho & Peng, 2016).

Similarly, bridging social capital has an impact on entrepreneurship (Redondo & Camarero, 2019), student persistent and retention (Skvoretz et al., 2020), and corporate reputation (Ho & Peng, 2016). Finally, linking social capital motivates people to enroll in health insurance (Fenenga et al., 2015) and leadership reputation (Nguyen, 2014). Consistent with the relationships outlined above, we propose the following hypotheses:

H5: Bonding social capital positively influence corporate reputation in HEIs

H6: Bridging social capital positively impact corporate reputation in HEIs

H7: Linking social capital positively influence corporate reputation in HEIs

### **Stakeholder loyalty**

Any institution, HEIs inclusive, aims at attracting loyal stakeholders for survival. Loyal employees, students, customers, and suppliers, for example, are beneficial to an organization. Loyal employees commit themselves to the success of an organization, while loyal students recommend to others and patronize the institution in the future (Doña Toledo & Luque Martínez, 2020; Gill, 2011). Research on customer loyalty distinguishes two approaches to its analysis, the behavioral component, and the attitudinal component (De Leaniz & Del Bosque Rodríguez, 2016). However, some researchers also use the composite measure of the loyalty construct (Hashim et al., 2015). Due to its importance, scholars continue investigating the loyalty construct, especially its antecedents. One of the antecedents is corporate reputation, which has a significant impact on loyalty among employees and students in HEIs (Dehghan et al., 2014; Kaushal & Ali, 2019; Thomas, 2011). These previous studies findings lead us to propose the following hypothesis:

H8: Corporate reputation positively influence stakeholder loyalty in HEIs

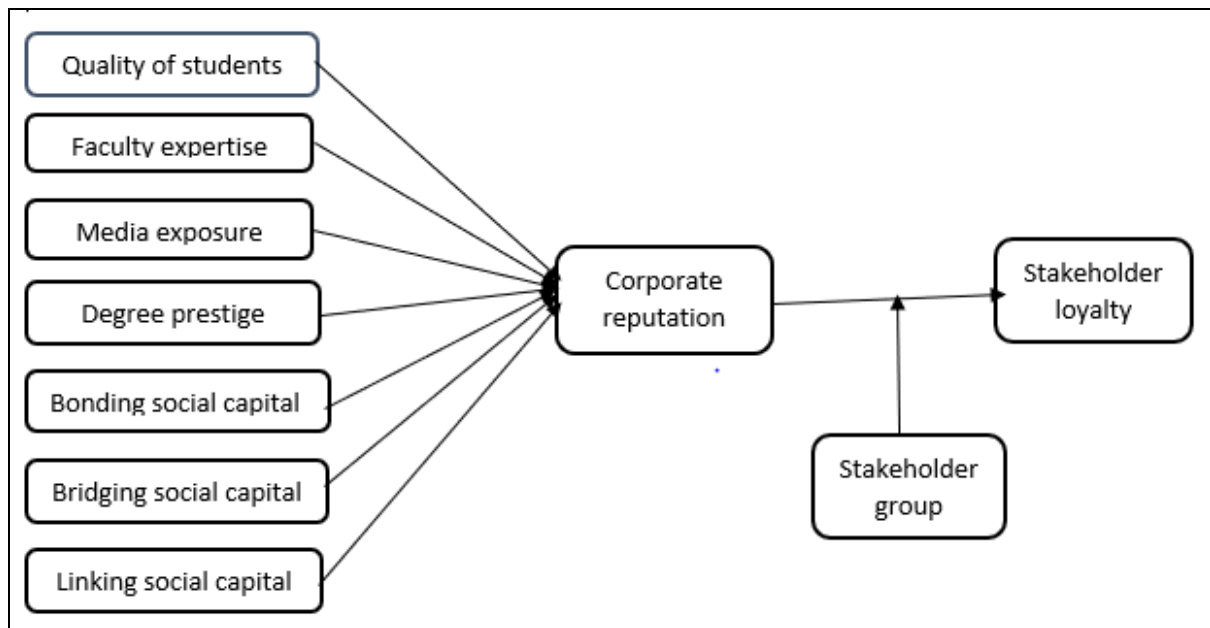
### **Stakeholder groups**

In the context of HEIs, the most critical stakeholder groups are employees, academic and administrative, and students (Hailat et al., 2019; Suomi et al., 2014). These are all internal stakeholders, but each stakeholder has a different perception of an organization depending on the fulfillment of specific expectations. Hetze (2016) stated that the most studied stakeholder groups on the understanding of corporate social responsibility in the literature are the customers or consumers and employees. Employees are primarily influenced by attributions and organizational commitment, while values and attribution influence consumers (Hetze, 2016). Prior studies confirm these differences in the relationship between corporate patriotism and corporate reputation (Puncheva-Michelotti et al., 2014) and corporate social responsibility and corporate reputation (Walker & Dyck, 2014). These studies concluded that there were differences across stakeholder groups in rating the importance of corporate patriotism and corporate social responsibility as predictors of corporate reputation. Also, the stakeholder-employment relationship was more durable than the stakeholder-consumption link (Puncheva-Michelotti et al., 2014). Based on the findings of the prior studies, we propose the following hypothesis:

H9: The positive relationship between corporate reputation and stakeholder loyalty in HEIs will be stronger for employees than students.

Figure 1 below illustrates the relationships hypothesized in this study.





**Figure 1: Conceptual model**

## METHODOLOGY

We distributed a self-administered questionnaire to collect data for this study. The questionnaire had four sections, and the first section collected data on antecedents or factors of corporate reputation in the HEIs. We selected seven factors from literature, and these are: quality of students, faculty expertise, degree prestige, media exposure, bonding social capital, bridging social capital, and linking social capital. The second part collected data on the corporate reputation construct, which is an endogenous latent variable in this study. The third section collected data on the outcome variable, stakeholder loyalty. Finally, we collected the research participants' demographic data that comprised of gender, age, stakeholder group, university affiliation, and field of study.

All items in section one to section three of the questionnaire are adopted from previous related studies but adapted to the HEIs context. Also, we measured items for quality of students and media exposure on a 5-point Likert scale, and we measured the rest of the scales on a 7-point Likert scale with 1 representing strongly disagree and 7 representing strongly agree. We randomly sampled employees (academic and administrative) and final year students from the four public universities using a stratified sampling procedure. The four universities are, University of Malawi, Mzuzu University, Lilongwe University of Agriculture and Natural Resources, and Malawi University of Science and Technology.

We distributed a total of 710 questionnaires to both employees and students and received 438 complete usable questionnaires, representing a 61 percent response rate. Hair et al. (2017) recommended a sample size of not less than 100 for quantitative research that uses structural equation modeling for data analysis. To obtain the sample size, which is adequate to reach the desired level of statistical power, we used G\*power software (Faul et al. 2009) to determine the minimum sample size for this study. Based on the software's calculation, 153 respondents are the minimum sample size for the study.

## DATA ANALYSIS

We employed IBM SPSS for Windows, version 25.0 for data preparation, and descriptive statistics analysis, such as the demographic profile of the respondents. To test the conceptual model and perform Multi-Group Analysis (MGA), we used SmartPLS 3.3.2 (Ringle et al., 2015) to analyze corporate reputation relationships with its antecedents and outcome. The reason for employing Partial Least Squares Structural Equation Modeling (PLS-SEM) is because it is a sophisticated multivariate data analysis method or technique. It involves the application of statistical methods



that simultaneously analyze multiple variables and incorporate unobservable variables measured indirectly by indicator variables such as MGA (Hair et al., 2017; Jorg Henseler et al., 2016).

## RESULTS

### Characteristics of respondents

A total of 430 participants took part in this study. Out of this number, 176 are employees, and 262 are students. The majority of the employee respondents are males, who accounted for 57.4 percent, and the remaining percentage are females. On the contrary, the majority of student respondents are female and comprised of 60.7 percent, and 39.3 percent are males. Although many female students completed the questionnaire, male students outnumber females in HEIs in Malawi.

Regarding the age, the majority of employees are within the ranges of 26 to 55 years. But more than a third of student respondents are below the age of 25. Considering that majority of the students are pursuing undergraduate courses and programs, having a young student population is reasonable.

Both majority of employee and student respondents are studying and working with the University of Malawi (UNIMA). The other three public universities contributed about half of the total student respondents, and less than 40 percent of the employee respondents. In terms of field of study, the majority of the students are pursuing science-related courses and programmes, while the majority of the employee respondents specialized in humanities-related courses. Table 1 summarizes demographic information about the respondents.

Table 1. Profile of respondents

Characteristics	Frequency		Percentage (%)	
	Employees (N=176)	Students (N=262)	Employees	Students
Gender				
Male	101	103	57.4	39.3
Female	75	159	42.6	60.7
Age (years)				
below 25	6	227	3.4	86.6
26-35	61	31	34.7	11.8
36-45	67	4	38.0	1.5
46-55	36	0	20.5	0
56 above	6	0	3.4	0
University				
LUANAR	23	35	13.0	13.4
MZUNI	3	50	1.7	19.1
MUST	29	53	16.5	20.2
UNIMA	121	124	68.8	47.3
Field of study				
Social sciences	22	4	12.5	1.5
Humanities	73	70	41.5	26.7
Sciences	55	154	31.2	58.8
Technology	26	34	14.8	13.0

### PLS-SEM path modeling

We followed the two-step process to test the model in this study (Hair et al., 2019; Jorg Henseler et al., 2016). The two steps are measurement model and structural model. The former involves issues to do with reliability and validity, while the latter tests the relationships within the model. In other words, we specified and fitted the measurement model before doing the same with a structural model. Figure 2 illustrates the hypothesized research model in SmartPLS.

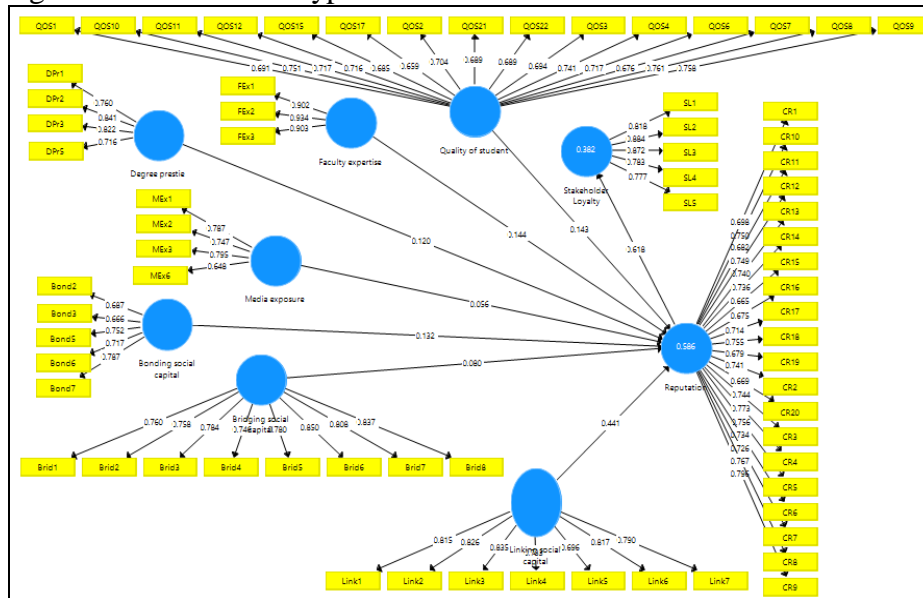


Figure 2. Research model in SmartPLS

### Measurement model analysis

The acceptability of the model is based on three assessment criteria (Jörg Henseler et al., 2015). The requirements are internal consistency, convergent validity, and discriminant validity for a reflective model. To determine the internal consistency, we used Cronbach's alpha and the composite reliability. The loadings met the threshold as they ranged from 0.659 to 0.934, and both the composite reliability (CR) and Cronbach's alpha for all the constructs are not less than 0.7. Such finding confirms the reliability of the measurement items (Hair et al., 2017). As a confirmation of convergent validity, all items loaded high on their construct, and the average variance extracted (AVE) scores are higher than 0.5. Table 2 portrays the results of reliability and validity analyses, which are acceptable.

Table 2. Summary results of the measurement model

Construct	Items	Load- ing	CR	AVE	$\alpha$
Bonding so- cial capital	Bond2	0.687	0.845	0.53	0.77
				3	1
	Bond3	0.666			
	Bond5	0.752			
	Bond6	0.717			
	Bond7	0.787			
	Brid1	0.760	0.930	0.62	0.91
				6	6
	Brid2	0.758			
	Brid3	0.784			
Bridging so- cial capital	Brid4	0.746			
	Brid5	0.780			
	Brid6	0.850			
	Brid7	0.808			
	Brid8	0.837			
Corporate reputation	CR1	0.698	0.958	0.53	0.95
				1	3
	CR2	0.741			
	CR3	0.744			
	CR4	0.773			
	CR5	0.756			
	CR6	0.734			
	CR7	0.726			
	CR8	0.767			
	CR9	0.796			
	CR10	0.750			
	CR11	0.682			
	CR12	0.749			
	CR13	0.740			
	CR14	0.736			
	CR15	0.665			
	CR16	0.675			
	CR17	0.714			
	CR18	0.755			
	CR19	0.679			
	CR20	0.669			
Degree Pres- tige	DPr1	0.760	0.866	0.61	0.79
				8	3
	DPr2	0.841			
	DPr3	0.822			
Faculty ex- pertise	DPr5	0.716			
	FEx1	0.902	0.938	0.83	0.90
				4	1
	FEx2	0.934			
Linking so- cial capital	FEx3	0.903			
	Link1	0.815	0.920	0.62	0.89
				3	1

Note: CR= Composite Reliability; AVE= Average Variance Extracted;  $\alpha$ = Cronbach's alpha

We also assessed the validity of the model by applying the Fornell-Larcker criterion, cross-loadings and Heterotrait-Monotrait Ratio of Correlations (HTMT). The indicators loaded higher on the assigned latent variable than on other latent variables. Also, the assessment using Fornell-Larcker show that the square root of the AVE on the diagonal is higher than the correlation on the off-diagonal. Further evaluation of the discriminant validity using the HTMT bootstrapping technique showed that the confidence interval did not include the value of 1 on any of the constructs. Based on the criteria of the past literature (Jörg Henseler et al., 2015), we confirmed the discriminant validity of the scales.

### Structural model assessment

We examined the relationship between the seven predictors and corporate reputation and its impact on stakeholder loyalty. Results of the path coefficient assessment reveal that all paths or relationships have a t-value  $\geq 1.645$ , which is significant at 0.05 level of significance. Specifically, all the predictor variables, quality of student ( $\beta = 0.143$ ,  $p < 0.05$ ), faculty expertise ( $\beta = 0.144$ ,  $p < 0.05$ ), degree prestige ( $\beta = 0.120$ ,  $p < 0.05$ ), media exposure ( $\beta = 0.056$ ,  $p < 0.05$ ), bonding social capital ( $\beta = 0.132$ ,  $p < 0.05$ ), bridging social capital ( $\beta = 0.080$ ,  $p < 0.05$ ) and linking social capital ( $\beta = 0.441$ ,  $p < 0.05$ ) are positively and significantly related to corporate reputation. Together, these antecedents explain 58.6% of the variance in corporate reputation. Also, corporate reputation ( $\beta = 0.618$ ,  $p < 0.05$ ) is positively and significantly related to stakeholder loyalty. The reputation construct explains 35.6 percent of the variance in stakeholder loyalty.

Based on the results outlined above, all the hypotheses, H1, H2, H3, H4, H5, H6, H7 and H8 are supported. Table 3 summarizes the structural model assessment involving path coefficient, coefficient of determination, effect size, and predictive relevance. The coefficient determination values for both corporate reputation and stakeholder loyalty, 0.586 and 0.356, indicate a substantial model. Based on the table, linking social capital has the most substantial effect on corporate reputation compared to other predictors.

<i>Hypothesis</i>	<i>Relationship</i>	<i>Std Beta</i>	<i>Std Error</i>	<i>t-value</i>	<i>Decision</i>	<i>R<sup>2</sup></i>	<i>f<sup>2</sup></i>	<i>Q<sup>2</sup></i>	<i>q<sup>2</sup></i>
H1	Quality -> reputation	0.143	0.038	3.809*	Supported		0.037		0.013
H2	Faculty expertise -> reputation	0.144	0.054	2.659*	Supported		0.029		0.010
H3	Media exposure -> reputation	0.056	0.036	2.054*	Supported		0.007		0.003
H4	Degree prestige -> reputation	0.120	0.042	2.878*	Supported		0.023		0.007
H5	Bonding -> reputation	0.132	0.046	2.861*	Supported		0.032		0.010
H6	Bridging -> reputation	0.080	0.040	2.004*	Supported		0.012		0.004
H7	Linking -> reputation	0.441	0.060	7.389*	Supported	0.586	0.356	0.305	0.112
H8	Reputation -> Loyalty	0.618	0.034	18.024*	Supported	0.382	0.619	0.255	0.255

**Table 3. Summary results of structural model assessment**

Note: Beta=path coefficient,  $R^2$ = coefficient of determination,  $f^2$ =effect size,  $Q^2$ = predictive relevance and  $q^2$ =effect size on  $Q^2$

One-tailed level of confidence: \*  $p < 0.05$ ,  $t = 1.645$

### Multi-stakeholder group analysis

We tested the moderating effect of stakeholder groups on the relationship between corporate reputation and stakeholder loyalty using Multi-stakeholder group analysis (MGA). Where the categorical variable is used as a moderator, MGA is similar to moderator analysis (Matthews, 2017). To perform the PLS-MGA, we first generated data groups of 176 employees and 262 students. These two groups are large enough and comparable for the analysis. After that, we performed the measurement of invariance analysis using the measurement invariance of composites (MICOM) procedure that Jörg Henseler et al. (2016) recommended. Three tests are required to establish a measurement of invariance. We established both configural and compositional invariances. The constructs are demonstrated compositional invariances by having the original correlations greater than 5.0 quantile correlations.

Regarding the final step, we obtained a partial invariance for the stakeholder loyalty construct, which is our focus. After establishing the invariance, the focus shifted to the path coefficient of the relationship between corporate reputation and stakeholder loyalty for the employees and students. Table 4 illustrates the results of the permutation procedure. As can be seen in the last row of the table, the relationship between corporate reputation and stakeholder loyalty is significantly different between employees and students ( $p$ -value = 0.046). Therefore, H9 is supported.

**Table 4. Result of permutation test path coefficient**

Relationship	$\beta$ -employees	$\beta$ -Students	$\beta$ -Differ-ence	Mean	CI-5.00%	CI-95.00%	p-value
Bonding social capital -> Reputation	0.251	0.053	0.197	0.001	-0.157	0.166	0.024
Bridging social capital -> Reputation	0.072	0.064	0.008	-0.001	-0.137	0.136	0.458
Degree prestige -> Reputation	0.065	0.174	-0.109	0.003	-0.132	0.138	0.087
Faculty expertise -> Reputation	0.222	0.104	0.119	-0.002	-0.180	0.183	0.143
Linking social capital -> Reputation	0.483	0.432	0.051	0.000	-0.213	0.198	0.373
Media exposure -> Reputation	0.081	0.042	0.039	0.001	-0.122	0.123	0.312
Quality of student -> Reputation	0.040	0.175	-0.135	-0.001	-0.128	0.128	0.040
Reputation -> Stakeholder Loyalty	0.699	0.580	0.119	0.000	-0.117	0.115	0.046

### DISCUSSION

This study investigated the relationship of corporate reputation with its antecedents and outcome of stakeholder loyalty among employees and students of HEIs in Malawi. We also examined the differences between employees and students in the relationship between corporate reputation and stakeholder loyalty. Based on the integration of stakeholder theory, social capital theory, and Rindova reputation model, we developed and analyzed a casual model for the hypothesized relationships. There are a total of 10 constructs that formed relationships in the model, and we performed SmartPLS analysis to establish the significance of the links.

The findings of this study indicate empirical support for the proposed relationships in the model for the HEIs context. Consistent with prior literature (Boyd et al., 2010; Oplatka & Nupar, 2013), our research indicates a positive and significant relationship between the quality of students and corporate reputation. This finding implies that excellent students contribute to the corporate reputation of HEIs, and management should devise strategies to admit outstanding students and enhance the quality of the current students.

Similarly, faculty expertise is another crucial antecedent for corporate reputation. Prestigious faculty members do raise the profile of a university, thereby enhancing its favourable reputation. Prior studies (Ou et al., 2012; Xie & So, 2018; Yamashita & Takata, 2020) found similar results that confirmed expertise as a predictor of corporate reputation. Also, prestigious faculty are likely to produce students with high-quality degrees. This study established that degree prestige, does not only contribute to the employability of the degree holder, but it also enhances the corporate reputation of the degree-granting institution. In our case, degree prestige is a predictor of corporate reputation in HEIs. This finding supports previous studies (Ciftcioglu, 2010; Mishra, 2013) that found a significant relationship between expertise and corporate reputation in various contexts.

Furthermore, media exposure is also a significant predictor of corporate reputation in HEIs. The amount and frequency of media coverage of the HEIs that employees and students' access can contribute to corporate reputation. As highlighted by previous studies (Meadows & Meadows, 2016; Vogler et al., 2016; X. Zhang, 2018), media exposure does not only have a high predictive power for corporate reputation, but also attracts relevant stakeholders to an institution. Therefore, this study recognizes the influence of mass media and its role in shaping the corporate reputation of the HEIs.

Our study also supports the relationship between social capital aspects (bonding social capital, bridging social capital, linking social capital) and corporate reputation. All three elements are positively and significantly related to corporate reputation. The result implies that access to resources found in networks, such as family, distant friends, co-workers, and institutions, contributes to the competitive advantage of an organization. Establishing alliances and partnerships, for example, is an effective way of getting resources to improve the productivity of an institution. Previous studies (Ho & Peng, 2016; Nguyen, 2014) also found the utility of social capital aspects in shaping corporate reputation in HEIs.

As an endogenous variable, corporate reputation predicted stakeholder loyalty in this study. The results of this study indicate a direct and significant relationship between corporate reputation and stakeholder loyalty of both employees and students in HEIs. Following increased competition among HEIs has enhanced the importance of stakeholder loyalty as a competitive advantage (Thomas, 2011) through fighting for students, faculty, and administrative staff. Previous studies (Dehghan et al., 2014; Doña Toledo & Luque Martínez, 2020; Kaushal & Ali, 2019) confirmed the importance of corporate reputation in shaping stakeholder loyalty. Therefore, this study has established a corporate reputation as one of the predictors of stakeholder loyalty in HEIs.

Finally, the established relationship between corporate reputation and stakeholder loyalty varies based on the stakeholder groups in HEIs. Factors that influence consumers are different from those that affect employees (Hetze, 2016). For example, employees are more loyal to an organization compared to students or customers. This study's results confirm that there is a difference between employees and students related to corporate reputation and stakeholder loyalty. Such a conclusion is consistent with previous studies (Hetze, 2016; Puncheva-Michelotti et al., 2014; Walker & Dyck, 2014) that found the stakeholder-employment relationship more durable than the stakeholder-consumption link. Therefore, employees and students in HEIs require different treatment to meet their specific expectations.

## CONCLUSION



This research has presented factors that shape corporate reputation in HEIs among employees and students. It has also confirmed that corporate reputation is a driver of stakeholder loyalty. However, the level of commitment among employees is significantly different from that exhibited by students. Employees are more committed, as long as their expectations are met compared to students. Based on the design and execution of the study, the researcher identified several contributions, limitations, and provide suggestions for future research.

Three aspects of contributions are identified in this research, methodological, practical and theoretical. Methodologically, the study applied SmartPLS to analyze data. Additionally, we used the MGA, which is an extension of the structural model analysis. The application of SmartPLS in the HEIs context in Malawi is not common practice. Therefore, future researchers in the area would be inspired to apply the analytical software in their future studies. Practically, the confirmation of the relationship between corporate reputation and its antecedents provides a better understanding of the formation of corporate reputation. Also, the impact of corporate reputation on stakeholder loyalty and the moderation effect of stakeholder groups offer guidelines for strategy formulation to achieve a competitive advantage. Theoretically, the study integrated three theoretical perspectives to develop a model, which the researcher has validated through the findings of this study. Besides, the moderation effect of stakeholder groups, which is significant, constitute another theoretical contribution.

Despite these contributions, the research identified three limitations of this study. First, the study included a sample from the public HEIs only, effectively excluding employees and students from the private HEIs. Second is a common method bias, which is a recurring problem in research. We used a single questionnaire among both employees and students to measure the constructs of the study. Ideally, each construct could be responded to by different samples, such as loyalty by employees and corporate reputation by customers or employers. Finally, we adopted a composite stakeholder loyalty measure. For a better understanding of the construct, attitudinal and behavioral loyalty measures could be more practical.

This work has also given rise to possibilities for future research. Future studies can compare the external and internal stakeholders on the relationship between corporate reputation and university prominence. Another area for prospective study is how HEIs manage conflicting needs and expectations of various stakeholders and the effects of such management to corporate reputation. Finally, future studies could investigate the amount of media coverage accorded to HEIs and the implication to corporate reputation.

## REFERENCES

- Aksu, T. (2018). The concept of quality in higher education. *Journal of Educational and Instructional Studies in the World*, 8(1), 28–35. <https://doi.org/10.1088/0004-6256/139/6/2200>
- Alcañiz, E. B., Cáceres, R. C., & Pérez, R. C. (2010). Alliances Between Brands and Social Causes: The Influence of Company Credibility on Social Responsibility Image. *Journal of Business Ethics*, 96(2), 169–186. <https://doi.org/10.1007/s10551-010-0461-x>
- Almeida, M. da G. M. C., & Coelho, A. F. M. (2019). The Antecedents of Corporate Reputation and Image and Their Impacts on Employee Commitment and Performance: The Moderating Role of CSR. *Corporate Reputation Review*, 22(1), 10–25. <https://doi.org/10.1057/s41299-018-0053-8>
- Alniacik, E., Alniacik, U., & Erdogmus, N. (2012). How do the dimensions of corporate reputation affect employment intentions. *Corporate Reputation Review*, 15(1), 3–19. <https://doi.org/10.1057/crr.2011.25>
- Aula, H. M., & Tienari, J. (2011). Becoming “world-class”? Reputation-building in a university merger. *Critical Perspectives on International Business*, 7(1), 7–29. <https://doi.org/10.1108/17422041111103813>
- Bedeian, A. G., Cavazos, D. E., Hunt, J. G., & Jauch, L. R. (2010). Doctoral degree prestige and

- the academic marketplace: A study of career mobility within the management discipline. *Academy of Management Learning and Education*, 9(1), 11–25.  
<https://doi.org/10.5465/AMLE.2010.48661188>
- Boyd, B. K., Bergh, D. D., & Ketchen, D. J. (2010). Reconsidering the reputation-performance relationship: A resource-based view. *Journal of Management*, 36(3), 588–609.  
<https://doi.org/10.1177/0149206308328507>
- Brien, A., Ratna, N., & Boddington, L. (2012). Is Organizational Social Capital Crucial for Productivity Growth? An Exploration of “Trust” within Luxury Hotels in New Zealand. *Journal of Human Resources in Hospitality and Tourism*, 11(2), 123–145.  
<https://doi.org/10.1080/15332845.2011.648840>
- Burgman, M., Carr, A., Godden, L., Gregory, R., McBride, M., Flander, L., & Maguire, L. (2011). Redefining expertise and improving ecological judgment. *Conservation Letters*, 4(2), 81–87. <https://doi.org/10.1111/j.1755-263X.2011.00165.x>
- Cabral, L. (2016). Media exposure and corporate reputation. *Research in Economics*, 70(4), 735–740. <https://doi.org/10.1016/j.rie.2016.07.004>
- Carroll, C. E. (2010). Should firms circumvent or work through the news media? *Public Relations Review*, 36(3), 278–280. <https://doi.org/10.1016/j.pubrev.2010.05.005>
- Casidy, R., & Wymer, W. (2016). Linking prestige perception with consumption experience, loyalty, and WOM. *Marketing Intelligence and Planning*, 34(4), 540–558.  
<https://doi.org/10.1108/MIP-06-2015-0113>
- Ciftcioglu, A. (2010). The relationship between perceived external prestige and turnover intention: An empirical investigation. *Corporate Reputation Review*, 13(4), 248–263.  
<https://doi.org/10.1057/crr.2010.22>
- De Leaniz, P. M. G., & Del Bosque Rodríguez, I. R. (2016). Corporate Image and Reputation as Drivers of Customer Loyalty. *Corporate Reputation Review*, 19(2), 166–178.  
<https://doi.org/10.1057/crr.2016.2>
- Dehghan, A., Dugger, J., Dobrzykowski, D., & Balazs, A. (2014). The antecedents of student loyalty in online programs. *International Journal of Educational Management*, 28(1), 15–35.  
<https://doi.org/10.1108/IJEM-01-2013-0007>
- Delgado-Marquez, B. L., Bondar, Y., & Delgado-Marquez, L. (2012). Higher Education in a Global Context : Drivers of Top-universities’ reputation. *Problems of Education in 21st Century*, 40, 17–25.
- Doña Toledo, L., & Luque Martínez, T. (2020). How loyal can a graduate ever be? The influence of motivation and employment on student loyalty. *Studies in Higher Education*, 45(2), 353–374.  
<https://doi.org/10.1080/03075079.2018.1532987>
- Dowling, G. (2016). Defining and Measuring Corporate Reputations. *European Management Review*, 13(3), 207–223. <https://doi.org/10.1111/emre.12081>
- Fan, D., Geddes, D., & Flory, F. (2013). The toyota recall crisis: Media impact on toyota’s corporate brand reputation. *Corporate Reputation Review*, 16(2), 99–117.  
<https://doi.org/10.1057/crr.2013.6>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fenenga, C. J., Nketiah-Amponsah, E., Ogink, A., Arhinful, D. K., Poortinga, W., & Hutter, I. (2015). Social capital and active membership in the Ghana National Health Insurance Scheme - a mixed method study. *International Journal for Equity in Health*, 14(1), 118.  
<https://doi.org/10.1186/s12939-015-0239-y>
- Fombrun, J. C. (2012). The building blocks off corporate reputation: Definitions, antecedents and consequences. In P. T. G. Barnett, Michael L. (Ed.), *The Oxford Handbook of Corporate Reputaion* (pp. 94–113). Oxford University Press.
- Gill, R. (2011). Using Storytelling to Maintain Employee Loyalty during Change. *International Journal of Business and Social Science*, 2(15), 23–32.

- Hailat, K. Q., Alshreef, A. A., Azzam, I. A., & Darabseh, F. (2019). Stakeholder approach and the impact of brand image within higher education in the Middle East: Student and staff perspective. *Journal of Public Affairs, February*. <https://doi.org/10.1002/pa.1941>
- Hair, Hult, T. G. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publication. <https://doi.org/10.1007/s10995-012-1023-x> [doi]
- Hair, J. F., Ringle, C. M., Risher, J. J., & Sarstedt, M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hashim, N. A. Bin, Abdullateef, A. O., & Sarkindaji, B. D. (2015). The moderating influence of trust on the relationship between institutional image/reputation, perceived value on student loyalty in higher education institution. *International Review of Management and Marketing, 5*(3), 122–128.
- Helm, S., & Klode, C. (2011). Challenges in Measuring Corporate Reputation. In *Reputation Management* (pp. 99–110). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-19266-1\\_11](https://doi.org/10.1007/978-3-642-19266-1_11)
- Henseler, Jorg, Hubona, G., & Ray, Pauline, A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems, 116*(1), 2–20.
- Henseler, Jörg, Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, Jörg, Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review, 33*(3), 405–431. <https://doi.org/10.1108/IMR-09-2014-0304>
- Hetze, K. (2016). Effects on the (CSR) Reputation: CSR Reporting Discussed in the Light of Signalling and Stakeholder Perception Theories. *Corporate Reputation Review, 19*(3), 281–296. <https://doi.org/10.1057/s41299-016-0002-3>
- Hill, S. (2011). Making connections: the role of social capital in the enhancement of employability of first generation business studies graduates. *Widening Participation and Lifelong Learning, 13*(2), 33–50. <https://doi.org/10.5456/wpll.13.2.33>
- Ho, S. S. H., & Peng, M. Y. P. (2016). Managing Resources and Relations in Higher Education Institutions: A Framework for Understanding Performance Improvement. *Educational Sciences: Theory & Practice, 16*(1), 279–300. <https://doi.org/10.12738/estp.2016.1.0185>
- Irina, I., & Zait, A. (2016). Corporate reputation, satisfaction and loyalty - analysis of possible causal relationships. *Romanian Journal of Marketing, 2*, 47–56.
- Kaushal, V., & Ali, N. (2019). University Reputation, Brand Attachment and Brand Personality as Antecedents of Student Loyalty: A Study in Higher Education Context. *Corporate Reputation Review*. <https://doi.org/10.1057/s41299-019-00084-y>
- Matthews, L. (2017). Applying Multigroup Analysis in PLS-SEM: A step-by-step process. In H. Latan & R. Noonan (Eds.), *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications* (pp. 1–414). Springer International Publishing. <https://doi.org/10.1007/978-3-319-64069-3>
- Meadows, C. Z., & Meadows, C. W. (2016). Corporate reputation on mass media, public opinion, and YouTube: Examining the factors influencing reputation of fortune 500 companies. *Corporate Reputation Review, 19*(4), 345–356. <https://doi.org/10.1057/s41299-016-0011-2>
- Mishra, S. K. (2013). Perceived external prestige and employee outcomes: Mediation effect of organizational identification. *Corporate Reputation Review, 16*(3), 220–233. <https://doi.org/10.1057/crr.2013.9>
- Nguyen, T. A. N. (2014). Social Capital , Leadership Reputation and Labour Force Motivation in an Enterprise. *Journal of Comparative Economic Studies, 9*, 89–97.
- Oplatka, I., & Nupar, I. (2013). The Components and Determinants of School Reputation: Insights from Parents' Voices. *Education and Society, 30*(1), 37–52. <https://doi.org/10.7459/es/30.1.04>

- Ou, W. M., Shih, C. M., Chen, C. Y., & Tseng, C. W. (2012). Effects of ethical sales behaviour, expertise, corporate reputation, and performance on relationship quality and loyalty. *Service Industries Journal*, 32(5), 773–787. <https://doi.org/10.1080/02642069.2010.531268>
- Puncheva-Michelotti, P., McColl, R., Vocino, A., & Michelotti, M. (2014). Corporate patriotism as a source of corporate reputation: a comparative multi-stakeholder approach. *Journal of Strategic Marketing*, 22(6), 471–493. <https://doi.org/10.1080/0965254X.2014.885989>
- Redondo, M., & Camarero, C. (2019). Social Capital in University Business Incubators: dimensions, antecedents and outcomes. *International Entrepreneurship and Management Journal*, 15(2), 599–624. <https://doi.org/10.1007/s11365-018-0494-7>
- Retamosa, M., Millán, Á., & Moital, M. (2020). Does the Type of Degree Predict Different Levels of Satisfaction and Loyalty? A Brand Equity Perspective. *Corporate Reputation Review*, 23(2), 57–77. <https://doi.org/10.1057/s41299-019-00073-1>
- Ringle, C. M., Wende, S., & Becker, J. . (2015). *SmartPLS3*. SmartPLS GmbH. <http://www.smartpls.com>
- Schaarschmidt, M., Ivens, S., & Walsh, G. (2017). Effects of customer-based corporate reputation on perceived risk and relational outcomes: empirical evidence from gender moderation in fashion retailing. *Journal of Product and Brand Management*, 26(3), 227–238. <https://doi.org/10.1108/JPBM-07-2016-1267>
- Sheehan, N. T., & Stabell, C. B. (2010). Reputation as a driver in activity level analysis: Reputation and competitive advantage in knowledge intensive firms. *Corporate Reputation Review*, 13(3), 198–208. <https://doi.org/10.1057/crr.2010.19>
- Sias, P. M., & Duncan, K. L. (2018). Not Just for Customers Anymore: Organization Facebook, Employee Social Capital, and Organizational Identification. *International Journal of Business Communication*, April. <https://doi.org/10.1177/2329488418765930>
- Skvoretz, J., Kersaint, G., Campbell-Montalvo, R., Ware, J. D., Smith, C. A. S., Puccia, E., Martin, J. P., Lee, R., MacDonald, G., & Wao, H. (2020). Pursuing an engineering major: social capital of women and underrepresented minorities. *Studies in Higher Education*, 45(3), 592–607. <https://doi.org/10.1080/03075079.2019.1609923>
- Sontaite, M., & Bakanauskas, A. (2011). Measurement Model of Corporate Reputation at Higher Education Institutions : Customers ' Perspective. *Management of Organizations: Systematic Research (Organizacijų Vadyba: Sisteminiai Tyrimai)*, 59, 115–130. <https://doi.org/10.2307/2095030>
- Sridhar, M., & Mehta, A. (2018). The Moderating and Mediating Role of Corporate Reputation in the Link between Service Innovation and Cross-Buying Intention. *Corporate Reputation Review*, 21(2), 50–70. <https://doi.org/10.1057/s41299-018-0044-9>
- Suomi, K., Kuoppakangas, P., Hytti, U., Hampden-Turner, C., & Kangaslahti, J. (2014). Focusing on dilemmas challenging reputation management in higher education. *International Journal of Educational Management*, 28(4), 461–478. <https://doi.org/10.1108/IJEM-04-2013-0046>
- Thomas, S. (2011). What Drives Student Loyalty in Universities: An Empirical Model from India. *International Business Research*, 4(2), 183–192. <https://doi.org/10.5539/ibr.v4n2p183>
- Tsinidou, M., Gerogiannis, V., & Fitsilis, P. (2010). Evaluation of the factors that determine quality in higher education: An empirical study. *Quality Assurance in Education*, 18(3), 227–244. <https://doi.org/10.1108/09684881011058669>
- Vieira, V. A., da Silva, J. D., & Gabler, C. (2019). Overcoming over-identification: The power of organizational prestige in optimizing sales performance. *Marketing Intelligence & Planning*, 37(3), 258–270. <https://doi.org/10.1108/MIP-07-2018-0261>
- Vogler, D., Schranz, M., & Eisenegger, M. (2016). Stakeholder group influence on media reputation in crisis periods. *Corporate Communications*, 21(3), 322–332. <https://doi.org/10.1108/CCIJ-01-2016-0003>
- Walker, K. (2010). A systematic review of the corporate reputation literature: Definition, measurement, and theory. *Corporate Reputation Review*, 12(4), 357–387. <https://doi.org/10.1057/crr.2009.26>



- Walker, K., & Dyck, B. (2014). The primary importance of corporate social responsibility and ethicality in corporate reputation: An empirical study. *Business and Society Review*, 119(1), 147–174. <https://doi.org/10.1111/basr.12028>
- Warren, A. M., Sulaiman, A., & Jaafar, N. I. (2015). Understanding civic engagement behaviour on facebook from a social capital theory perspective. *Behaviour and Information Technology*, 34(2), 163–175. <https://doi.org/10.1080/0144929X.2014.934290>
- Xie, K. L., & So, K. K. F. (2018). The Effects of Reviewer Expertise on Future Reputation, Popularity, and Financial Performance of Hotels: Insights from Data-Analytics. *Journal of Hospitality and Tourism Research*, 42(8), 1187–1209. <https://doi.org/10.1177/1096348017744016>
- Yamashita, R., & Takata, K. (2020). Relationship between prior knowledge, destination reputation, and loyalty among sport tourists. *Journal of Sport and Tourism*, 0(0), 1–11. <https://doi.org/10.1080/14775085.2020.1763192>
- Zhang, L., Liu, J., Loi, R., Lau, V. P., & Ngo, H. Y. (2010). Social capital and career outcomes: A study of Chinese employees. *International Journal of Human Resource Management*, 21(8), 1323–1336. <https://doi.org/10.1080/09585192.2010.483862>
- Zhang, X. (2018). Developing a New Measure of Media Reputation. *Corporate Reputation Review*, 21(2), 71–83. <https://doi.org/10.1057/s41299-018-0043-x>

## A DEVELOPMENT OF MULTI WAY WI-FI SOCKET (MWWS) FOR DIGITAL HOME

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### ABSTRACT

*Digital home provides an intelligent interface that monitors and create a comfortable home environment. The integrated system promising easier life and provide some energy efficiency savings by interacting with users remotely. Smart technology provides part of the system for managing the smart home. This paper purposely aims to develop a multi way Wi-Fi socket (MWWS) to solve the limitation of existing automation product based on cost over functionality. The MWWS was design to control a multiple electrical appliances with certain time, light and temperature sensor and controlled via wireless communication. This device required low-power, high-performance technology platforms that provide a robust and reliable solution.*

**Keywords:** artificial intelligence, technology, issues, impact, human beings

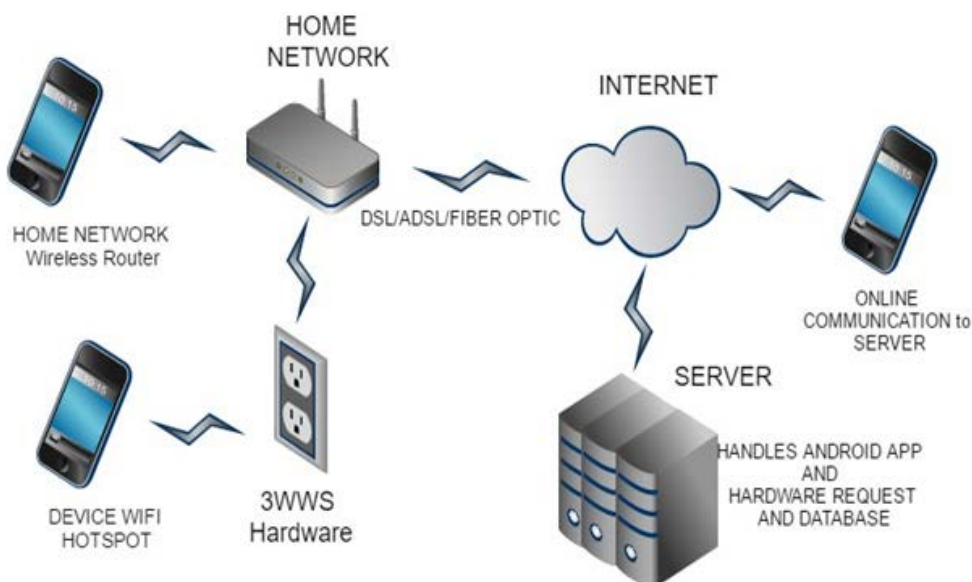
### 1. INTRODUCTION

The digital home technology are developing rapidly in advanced technological systems that allow the automation of domestic tasks. Currently, there are numerous technologies and applications that can be installed in digital homes. Enabling communication between home appliances and users, and enhance home appliances' automation, monitoring and remote control capabilities. Most digital homes have a central communication device incorporated with wireless technology which enables users to control home appliances remotely. Hence, wireless technologies have benefits such as lower cost of equipment and installations and greater flexibility. Other than that, digital home is an intelligent space that has their specific characteristic and able to respond accordingly to the behavior of residents (Yuan et al., 2014). The operation can include the scheduling and automatic operation to prepare desired conditions for a comfortable home environment such as heating and air conditioning, lighting, and food preparation appliances.

The basic aim of home automation is to control or monitor signals from different appliances, or basic services. A smart phone can be used to control or monitor the home automation system. A control message must be sent to the device to be acted and the control messages are sent by any



one of a number of defined home automation protocols. There are a wide variety of technology platforms, or protocol to build a digital home. Each one is essentially, its own language. Each language speaks to the various connected devices and instructs them to perform a function (Chaudry, V. et.al, 2016). The recent developments in technology which permit the use of Bluetooth and Wi-Fi have enabled different devices to have capabilities of connecting with each other (Aru et al., 2013). Using a Wi-Fi shield to act as a Micro web server for the Arduino eliminates the need for wired connections between the Arduino board and computer which reduces cost and enables it to work as a standalone device. The Wi-Fi shield needs connection to the internet from a wireless router or wireless hotspot and this would act as the gateway for the Arduino to communicate with the internet. Therefore, this MWWS are designed to be capable of controlling more than one output with easy to use android application and allowed full control in either inside or outside home network (Figure 1) without the need of extra devices and accessories such as gateways to allow the device to communicate over internet.



**Figure 1** The networking structure

## 2. METHODOLOGY

The project is implemented by several processes as shown in Fig. 2 below :

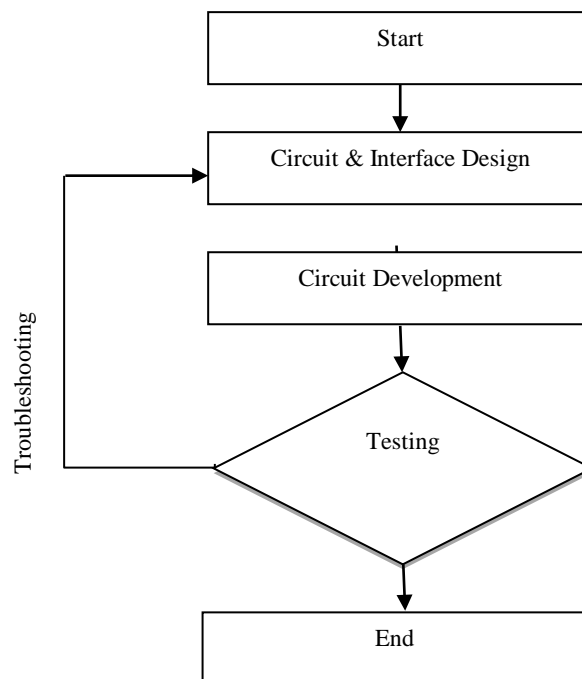


Figure 2 : Design and development flow

### Circuit development

#### a. Design the circuit

Design a circuit based on hardware requirements such as microcontroller, sensors and wireless controller.

#### b. Selection of the components

Selecting suitable components type for selected such as DIP and SMD components.

#### c. Mounting the components on proto board

Arranging the components on prototyping board before begin soldering.

#### d. Soldering the components on the proto board.

Soldering the components to make it fixed in place.

#### e. Testing the circuit

After soldering the circuit is tested and uploaded a firmware for the microcontroller. Testing is the process of running a system with the intention of finding errors as shown in figure (3) and figure (4)

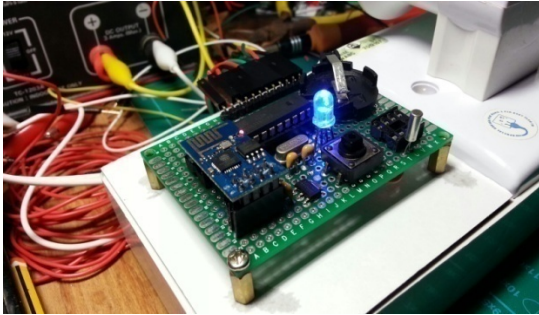


Figure 3 : The main controller boards



Figure 4 : The hardware and program testing

## Programming

### a. Android application programming

The android application serves as remote control and change settings for the hardware. The application communicates to the hardware by WiFi network and using web based http protocol over TCP. Eclipse IDE software is used to develop the application that is written in java programming language as shown in figure (5).

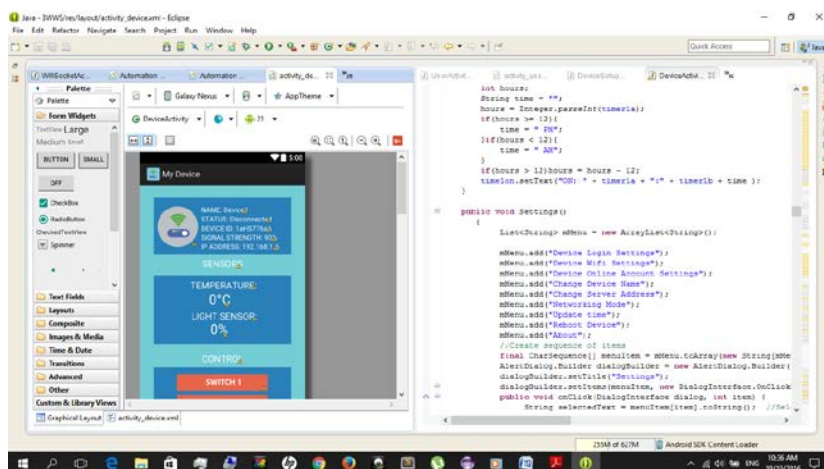


Figure 5 : Android Programming Environments.

## b. Hardware and web API

The hardware consists of two separate programming. At the heart of this system is the atmega328p microcontroller which is capable of functioning as a micro web server and the interface for all the hardware modules. All communication and controls in this system pass through the microcontroller. To enable connectivity on the microcontroller, the Wi-Fi module is used. Arduino can sense the surroundings by receiving input signal from a variety of sensors. It is used to compile the source code and using sublime text editor to write the code. The web API is written in sublime text editor as shown in figure (6).

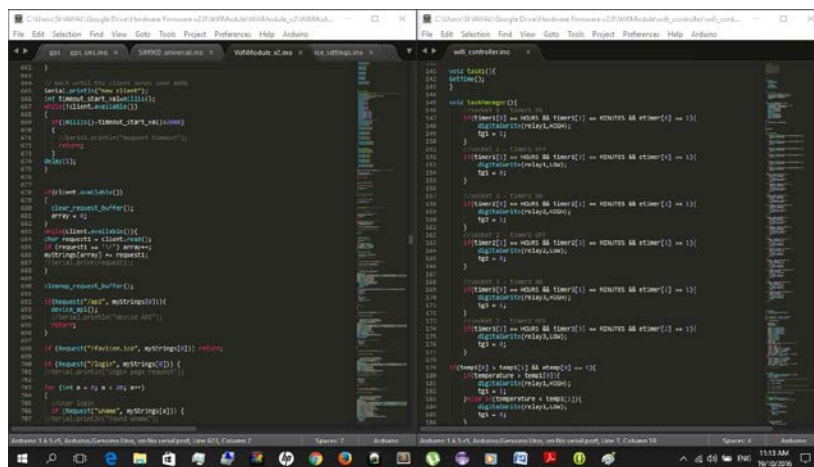


Figure 6 : Hardware programming

## 3. RESULTS

The MWWS has 3 ways Wi-Fi socket could be use. The user must register through the android application before using the MWWS. In order to provides a safety to the user, MWWS can manually reset the operation. There are also button on each socket to control on or off condition of the devices. For time being, the MWWS can control 3 devices in a time which is device 1 for air conditioner, device 2 for heater, and device 3 for the lamp. A sensor has been embedded to MWWS system so that the timer could be set for on or off remotely. However, the users have the priority to declare specific appliances to be control.

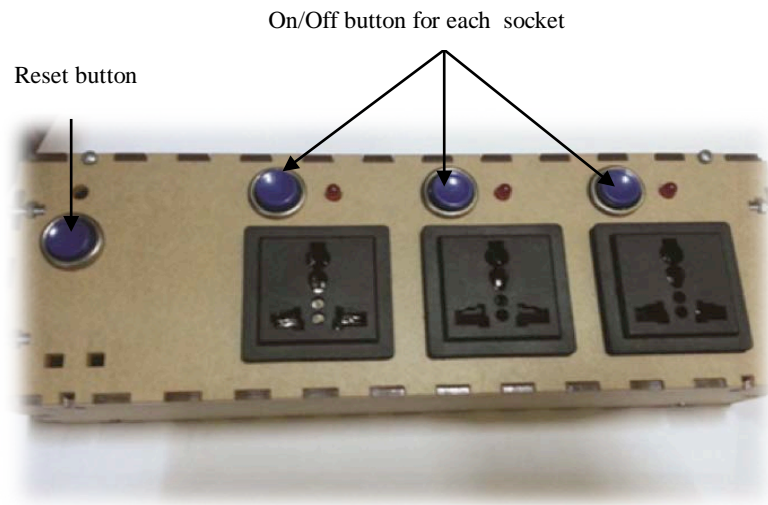
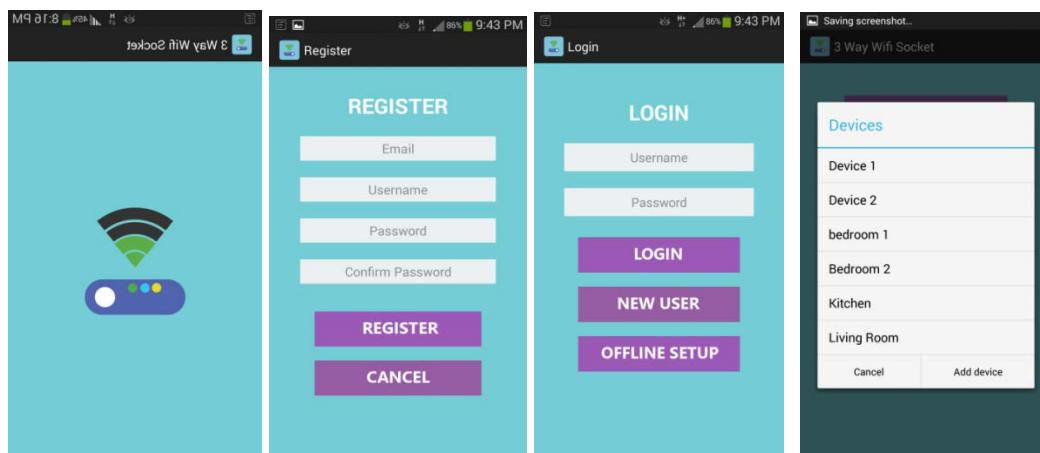


Figure 7 : MWWS hardware

The main function of timing is setting timer for controlling the condition of the devices. Users could set custom labels for timers and set the start date and start time. The device which is plugged into MWWS will automatically execute the command switch on or off when the alert is triggered. The android application contains a Wi-Fi module which interfaces with the micro-controller and allows the android smart phone to communicate with the micro-controller effectively and efficiently. The android application allows the user to control devices and monitor conditions in home using the Wi-Fi connection. The android application is efficient, flexible and has a user friendly Graphic User Interface (GUI). The application (Figure 7) has a user authentication page to verify that the authorized user is logged in and has full control of the home-appliances.



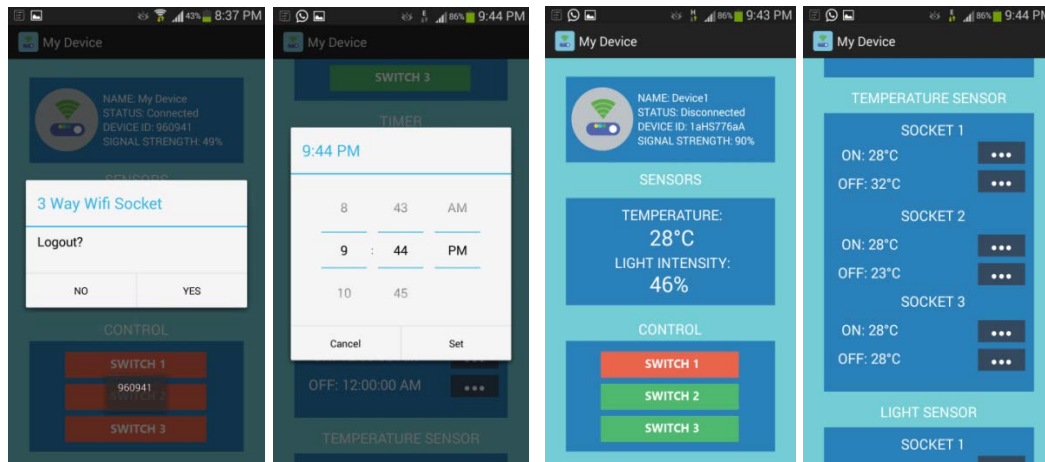


Figure 8 : MWWS User interface (Android application)

## CONCLUSION

Based on the current situation of the development of digital home, this paper proposes a low cost, user friendly application, remotely controlled solution. We put forward a new scheme of household controlling system by mobile phone. Smart phone with built in support for Wi-Fi enables the user to control various home appliances from a remote location, thus minimizing power consumption. It hence makes a versatile system which expands the mobility of the user. Finally the MWWS is not only making people's lives simpler and better especially in their home environments but also to reduce the consuming of resources such as power, time, energy etc.

## REFERENCES

- Aru, O. E., Ihekweaba, G., Opara F. K. (2013). Design Exploration of Microcontroller Based RF Remote Control 13 amps Wall Socket. *IOSR-JCE*, 11(1), 56-60.
- Chaudry, V. et.al. (2016). Design and Implementation of Wi-Fi based Smart Home System. *International Journal Of Engineering & Computer Science*, 5(2), 15852-15855.
- David, N. et.al. (2015). Design of a Home Automation System using Arduino. *International Journal of Scientific & Engineering Research*, 6(6), 795-801.
- Xu, C. Y. et.al. (2017). The Design & Implementation of a Low Cost and High Security Smart Home System based on Wi-Fi & SSL Technologies. *Journal Of Physics: Conf Ser*, 806.
- Yuan, D., Fang, S. & Liu, Y. (2014). The Design of Smart Home Monitoring System based on Wi-Fi Electronic Trash. *Journal of Software*, 9(2), 425-428.



## FORMALISTIC APPROACH ANALYZE MALAY ARTEFACT (KUKURAN) INTO ITS ZOOMORPHIC CLASSIFICATION

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### ABSTRACT

*The design of kukuran evolved in accordance to aesthetics preference of the previous Malay community. They incorporated zoomorphic design into their work of arts. Zoomorphism refers to the symbolism of animal characteristics in designs. The formal analysis is the work of describing and assessing the visual and material appearance of artworks. This formal analysis stressed the development of a technical language for description of the art work, so that the analysis can be depicted and addressed. It establishes categories of systematic definitions and thought to express point of view of kukuran characteristics. The analysis embarks on three major stages which are characteristics extraction, characteristics comparison, and classification techniques. The characteristics extraction stage captures the visual formal composition qualities of kukuran. After extracting the required characteristics, the image than been compare to the characteristics in appropriate manner. Then, these characteristics classified accordingly to its analysis of the extraction characteristics. Finally, the finding concludes that zoomorphic kukuran design are divided into four major group which are Zoomorphic Simple Design, Zoomorphic Full Ornamental, Zoomorphic Stylized Ornament Design and Zoomorphic Semi Ornament Design. Prior to the Zoomorphic Stylized Ornament Design, this group is divided into three more subgroups; Zoomorphic Stylized Animal Representations, Zoomorphic Abstract Animal Representations and Zoomorphic Stylized Mystical Creatures. Therefore, the underlying concept of the kukuran design composition adhered to the concept of Islamic art but not all of its visual forms are clearly revealed and manifested in other aspects of Malay art design and custom.*

**Key Words:** formalistic approach, artefact, Malay, kukuran, zoomorphic, classification

### INTRODUCTION

Zoomorphic designs have long existed in many cultures and civilization throughout the world. These animal symbols have remained attached in the consciousness as signs of good prosperity and

wealthiest. Indeed, it also connected with the mystical, spiritual and real world. They incorporated local motifs and techniques of zoomorphic design in their ceramics, metalwork, and carving woodworks. The connotations of the zoomorphic design have related to the entrenched sources of inspiration of a particular tradition. Zoomorphic refers to the representations of animal characteristics in the designs. It shaping of an object or design into animal form. It is assumed that craftsmen could possible enhances the meaning and emotional expression of form designs (Sharp, H. and Preece, J., 2011). Furthermore, it could be argued the interrelation of the *kukuran* design with the animal references characteristic form, expression, emotion and appearance. Thus, the animal characteristics are mainly the morphology of ideas and thoughts of the Malay people long time ago. Generally, the elements of living beings are not widely used in Malay traditional design because Islam does not encourage the creation of living creatures (Muhammad Afandi Yahya, 1995. Accordingly, the forms of these animals carry own meaning.

It can be concluded that the symbolism is a form of emphasis or cultural expression of society itself. This idea has a function and is an embodiment of the time and the people who actually cosmology. In addition, the symbolism is also a method to reveal the truth of nature and the advantages is the people themselves who create and use the symbol. However, the symbolism of Malay art forms is the fusion of the traditional belief and Islamic to their utilitarian objects and work of arts. Local craftsmen also seem to incorporate a variety of traditional decoration techniques, motifs and decorative styles into their work of art (Islamic Arts Museum Malaysia, 2001). The zoomorphic *kukuran* illustrates a form of representation on the main structure. However, it is sometimes difficult to recognize the type of animal. The forms of these animals have been stylised and abstract from animal origin. Craftsmen were mostly made around the animal shelter as a source of inspiration to produce this type of sculpture. The Malay *kukuran* precisely aimed to be comprehended on aesthetic interests and free from all elements of religious consideration.

## METHDOLOGY

In understanding the work of art, the existence of two major aspects is form and content. The form is simply the visual appearance of artistic materials. The formal analysis is the work of describing and assessing the visual appearance of artworks. Form is restricted in definition to the pictorial (two dimensional or three dimensional), material means the representation of qualities such as line, tone, colour, shape, composition, modelling, surface texture, space, rhythm, movement and so on. This formal analysis stressed the development of a technical language for description of the art work, so that the analysis can be depicted and addressed. According to D'Alleva (2010), formal

analysis includes those methods and questions concern the visual and physical aspects of the work of art. In formal analysis, the visual effect of the work of art by looking to the artists or craftsmen intention through visual means. Formal analysis describes the work of art and trying to understand the artists or craftsmen want to convey. She explain how artistic and why it changes over time and varies between individuals and groups.

According to Panofsky's (1972), the pre-iconographic description relates to the scientific, fundamental and easily understandable aspects of a work. In the pre iconographic interpretation stage, this action is called formalistic analysis and form basis approach for the description. The adaptation of Panofsky's pre-iconographical develops a guideline to describe the control pre-interpretation principles of *kukuran*. The identifications and interpretations would depend on equipment and controlled by the principle of interpretation. In pre-iconographical, artefacts were expressed by artistic motifs. Specific themes tend to express craftsmen thoughts. Measurements of the various types of themes are finally divided into specific groups according to the classification attributes in groups. According to Gombrich (1991), Vasari has placed the objects or artists into groups accordingly to schools and styles. Vasari accepted the need for classifying the standard quality of arts regarding to their own characteristics. Meanwhile, Feldman (1996) emphasizes categories is based on the observation of common qualities and characteristics. Ackerman (1963) suggested that the concept of styles is the establishing characteristic relationships among individual works of art. Thus, the *kukuran* can be considered as resemble of the scientific classification work of art. Furthermore, the classification may be recognized by the physical characteristics and the overall quality the *kukuran* seems to express. The quality of *kukuran* constitutes the basis characteristics for its classification

In the classification process (Figure 1), the collected visual images are converted into line drawing. This could constantly sharpen the analytical understanding of the studied of visual composition characteristics of *kukuran*. Conversely in first phase, visual images have divided into the line drawing images according to specific groups based on the visual composition. These purposive line drawings are used to allocate the *kukuran* into its certain characteristic. A detailed line drawing distributes *kukuran* into groups that ultimately determine the type of each group. The task of classification is to distinguish *kukuran* into its variety of form morphology. The classification is based on the formal elements of the composition. In second phase, classification embarks on three major stages which are characteristics extraction, characteristics comparison, and classification techniques. The characteristics extraction stage captures the visual formal composition qualities of *kukuran*. The visual compositions are form, shape, texture, colour, materials and techniques that consists information contained in an image of line drawing. After extracting the required character-

istics, the image than been compare to the characteristics in appropriate manner. Later, these visual images have describes and clarifies the visual composition and ornaments representational in order to reveal its significance characteristics (phase 3). Finally, these characteristics had classifies the images of *kukuran* according to its analysis of the extraction characteristics. These visual images are analysed into formalistic values in order to reveal to its characteristics. It establishes categories of systematic definitions and thought to express point of view about the *kukuran* characteristics (phase 4).

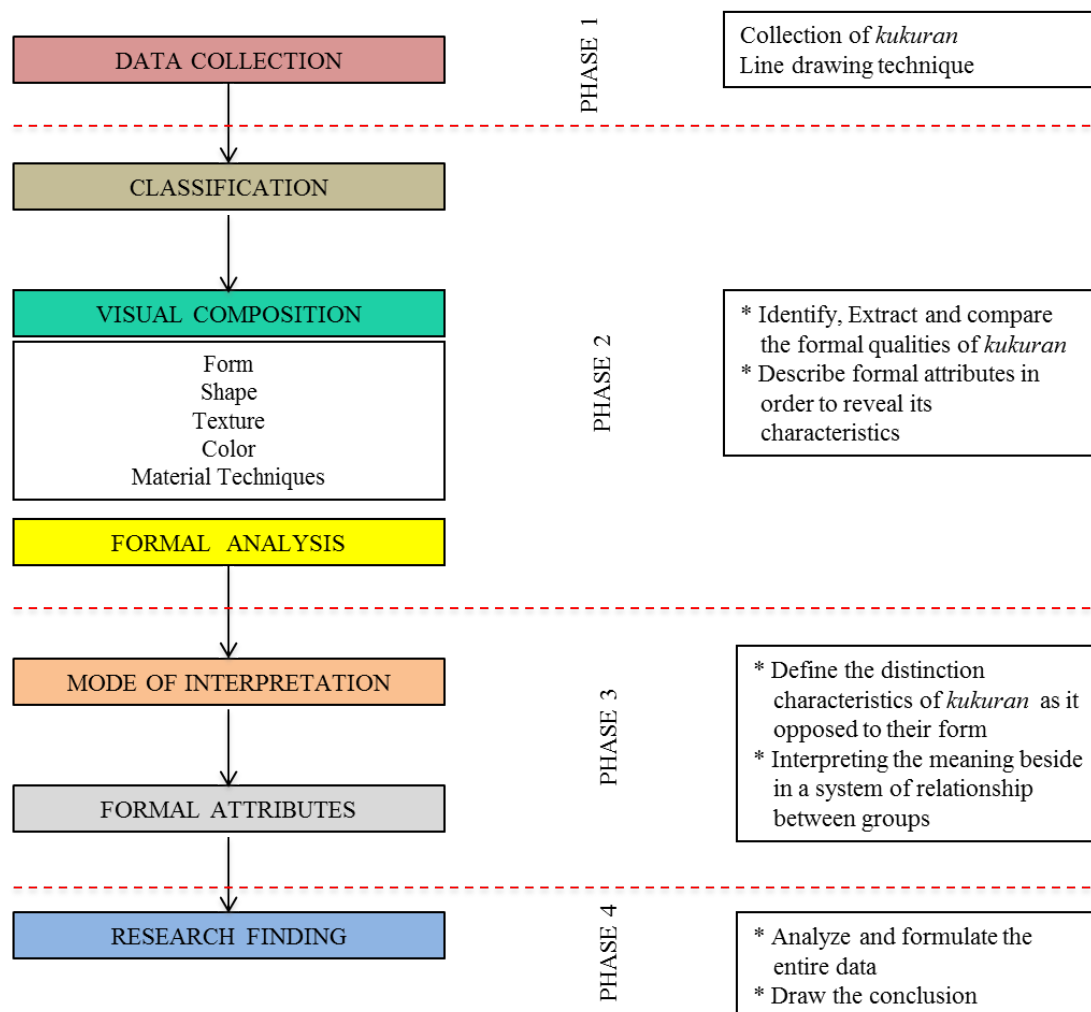


Figure 1: Methodology of Formal Analysis

## FINDINGS

The distribution of the zoomorphic design in *kukuran* has produced the four main group of classification. These characteristics are referred to in order to gauge any similarities or differences with the work under study. After identifying the characteristics relationship, these *kukuran* are classified into its groups. The identification of certain characteristic led to the grouping of *kukuran*. The classification of *kukuran* is important because it is from these characteristics that one is able to un-

derstand the underlying aesthetic theories and principles of art. The finding briefly concludes that formations of zoomorphic *kukuran* are divided into four groups (Figure 2). Generally, the zoomorphic Malay *kukuran* characteristics are exact or stylized animals a-like shape (triangular mouth, curving tail, belly, legs and genitalia), metal tips, surface (texture/smooth), line (curvy/wavy/spiral), colour (natural/paint/lacquer), materials (wood), ornament (motifs/semi abstract) and techniques (full, medium and low relief). It can be classified into Zoomorphic Simple Design, Zoomorphic Full Ornamental, Zoomorphic Stylized Ornament Design and Zoomorphic Semi Ornament Design. Prior to the Zoomorphic Stylized Ornament Design, this group is divided into three more subgroups; Zoomorphic Stylized Animal Representations, Zoomorphic Abstract Animal Representations and Zoomorphic Stylized Mystical Creatures.

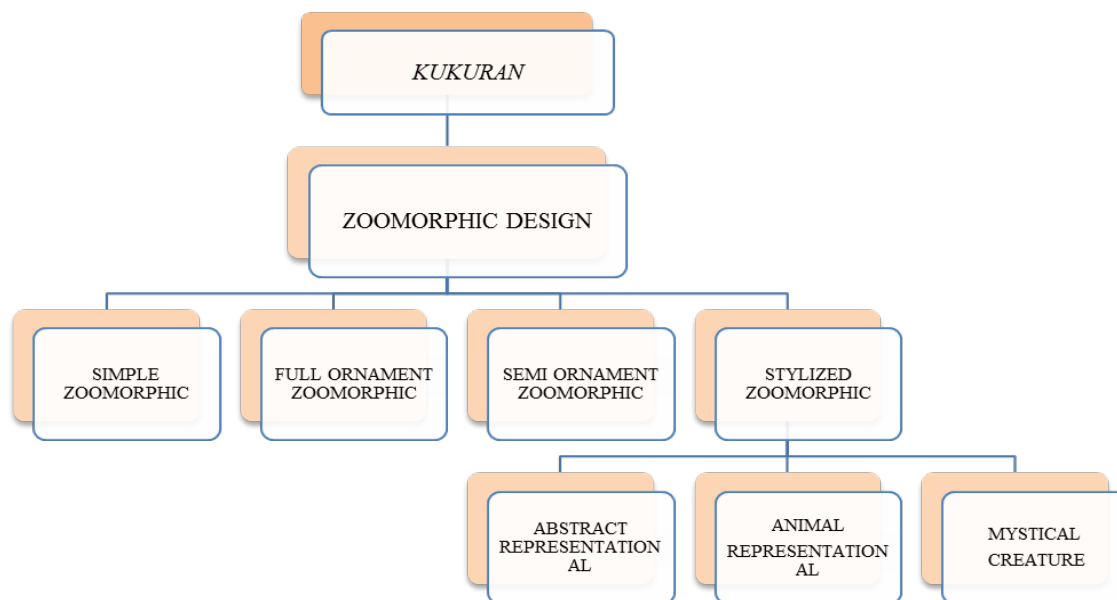


Figure 2: The Classification of Zoomorphic *Kukuran*

Zoomorphic Simple Design (Figure 3) shows a design of zoomorphic representation on the main structure of stylized animal-like or in the exact shape of an animal. It consists of modest characteristics such as metal tips, triangular mouth, curving tail, belly, legs and genitalia. The main characteristic appears such mere zoomorphic design but still meet its necessity as kitchen utensils or implements. The other zoomorphic design characteristics are metal tips, surface (smooth/without decoration), line (curvy/wavy/spiral), colour (natural/paint/lacquer), materials (wood) and ornament (non/abstract). The structural form appears in the types of *kukuran* is relatively non-figurative shape and ambiguously abstracted zoomorphic designs. The composition ornaments are almost never been found in the body structure. Sometimes, low relief (half relief) shows less undercuts and it can be seen in the body, head or legs of this types of *kukuran*. Occasionally, the subject matter for motif is circumscribed to the abstract, geometric forms and simple plant forms.

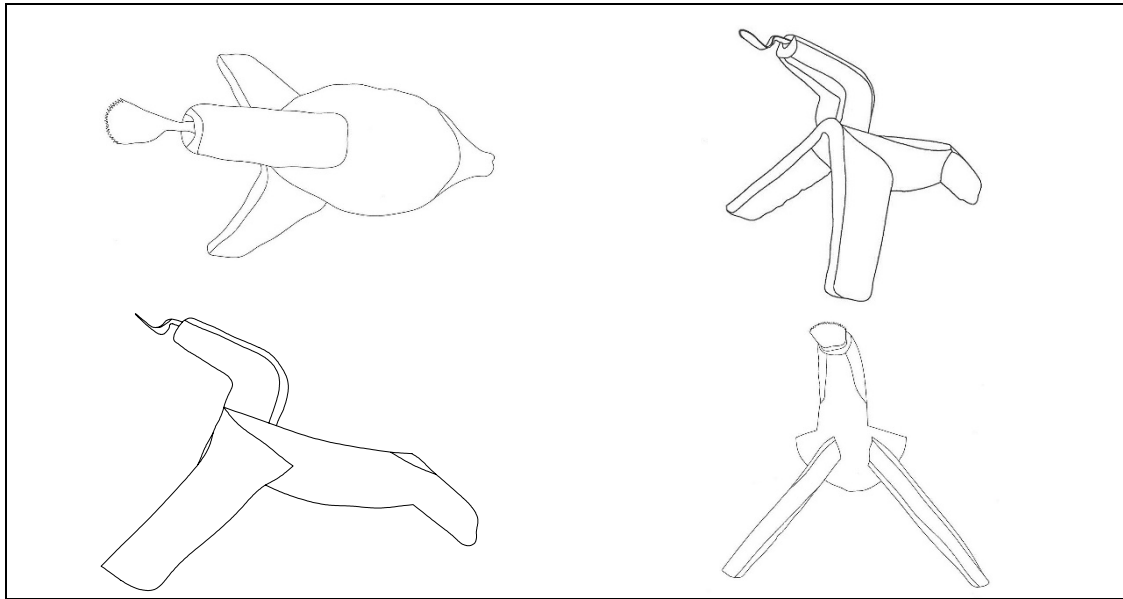


Figure 3: 55 cm x 40 cm x 40 cm, Collection of Muzium Negara.

Zoomorphic Full Ornamental (Figure 4) is another theme of decoration in *kukuran* design. The characteristics of this group are exact or stylized muscular animals alike shape (triangular mouth, curving tail, belly, legs and genitalia), surface (texture), line (curvy/wavy), colour (natural/paint/lacquer), materials (wood), ornament (motifs/geometry/full embellished) and techniques (full, medium and low relief). This foremost characteristic of this zoomorphic design is widely embellished with fully decorative motifs. The motifs are chiefly foliage or vegetal ornaments. In which the design of an animal form is extremely filled with the stylized foliage motifs and flowered decorative motifs represented through a half relief carving techniques.

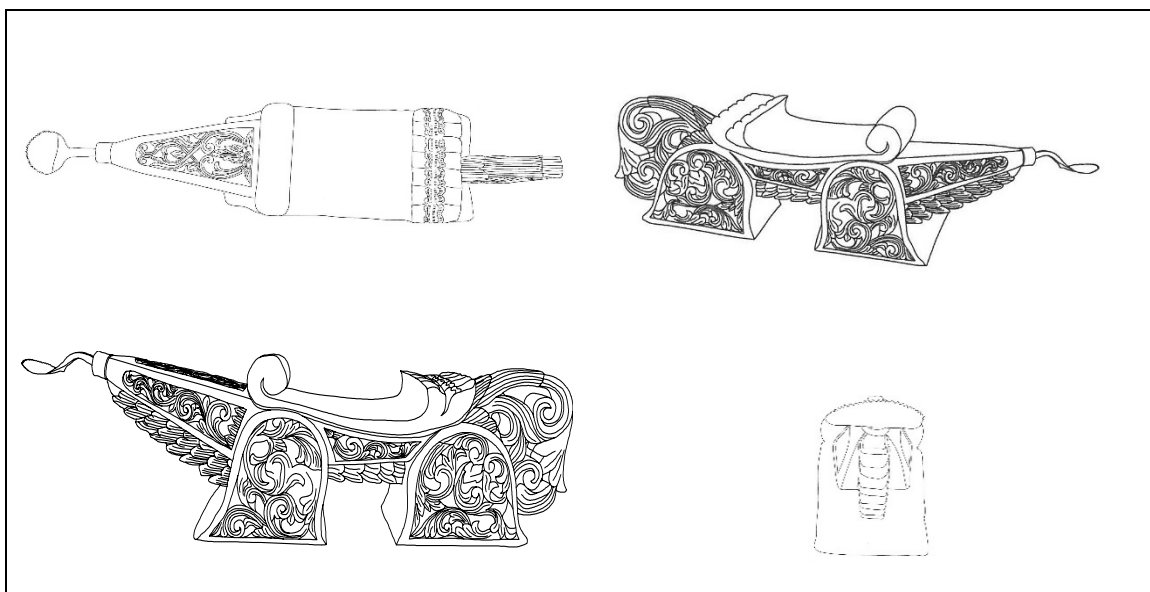


Figure 4: 65 cm x 39 cm x 20 cm, Collection of Muzium Negara.



Zoomorphic Semi Ornamental Design (Figure 5) has incorporation ornaments on the main structural. This type provides its own identity and values. The zoomorphic semi ornament design characteristics are exact or stylized animals alike shape (triangular mouth, curving tail, belly, legs and genitalia), metal tips, surface (semi invented texture/embellish), line (curvy/wavy), colour (natural/paint/lacquer), materials (wood), ornament (motifs/geometric) and techniques (full, medium and low relief). Although such a form has stylized and processed to adhere to the values of Islam, Malay carving decoration has been applied to the main structure of *kukuran*. It reflects the look and spirit and soul of Malay. Each one has a decorative carving a unique composition and corresponding to the concept of Malay beauty. Malay carving beauty principles has influenced the evolution of these *kukuran* motifs.

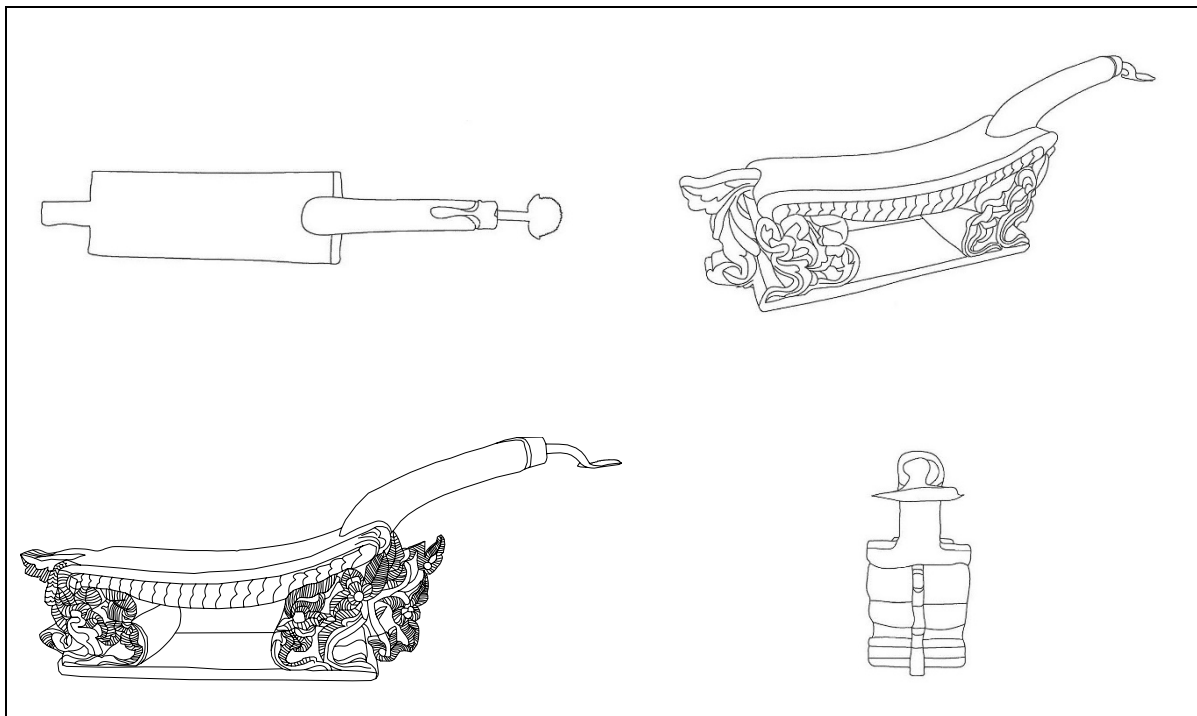


Figure 5: 47 cm x 13 cm x 22 cm, Collection of Kandis Resource Center.

Zoomorphic Stylized Design is extensively embellished of ornaments. The zoomorphic stylized design are abstract animal like shape, surface (texture), line (unbroken outline), colour (natural/paint/lacquer), materials (wood), ornament (embellished with abstract or near abstract relief) and techniques (full, medium and low relief). The main source of ornament is foliage or vegetal ornament. In which the design of an animal form is extremely filled with the stylized foliage motifs. These motifs, however, are always subordinated to the main decorative tendencies. The characteristic of ornament preserve a clear, unbroken outlines and surfaces of foliage in the space it decorates. Therefore, the modelling of relief carvings in details can be seen in the limited depth space.

The three dimensional foliage ornament flow can be seen as the movement of petals and leaves curls backwards and forward at their extremities, leaves grow out from behind the stalks, and tendrils wind around the stalks. Prior to the Zoomorphic Stylized Ornament Design, this group is divided into three subgroups; Zoomorphic Stylized Animal Representations, Zoomorphic Abstract Animal Representations and Zoomorphic Stylized Mystical Creatures.

Zoomorphic Stylized Animal Representation (Figure 6) is clearly reflects a series of stylized animal's choices of designs. The zoomorphic stylized animal representations characteristics are stylized animal like shape, surface (texture), line (unbroken outline), colour (natural/paint/lacquer), materials (wood), ornament (embellished with abstract or near abstract relief) and techniques (full, medium and low relief). The ornaments decoration clearly appeared on the body structure of *kukuran*. Motif appears on the main structure is compact geometric motifs, repetitive and also some foliage tendrils. The choice of colour on a *kukuran* has made it more attractive and fascinating work of arts. This type of design shows a stylized representation of the animal representation. The composition is fundamentally based on a simple decorative frieze shape but are repeated in complex spaces. The geometrical pattern shows cross-hatching pattern, wavy pattern and dotted pattern. The symmetrical and the repetition of design elements tend to be found in *kukuran* design. Most of these *kukuran* are painted in natural colour, some of its still have the original paint throughout the whole figurative design.

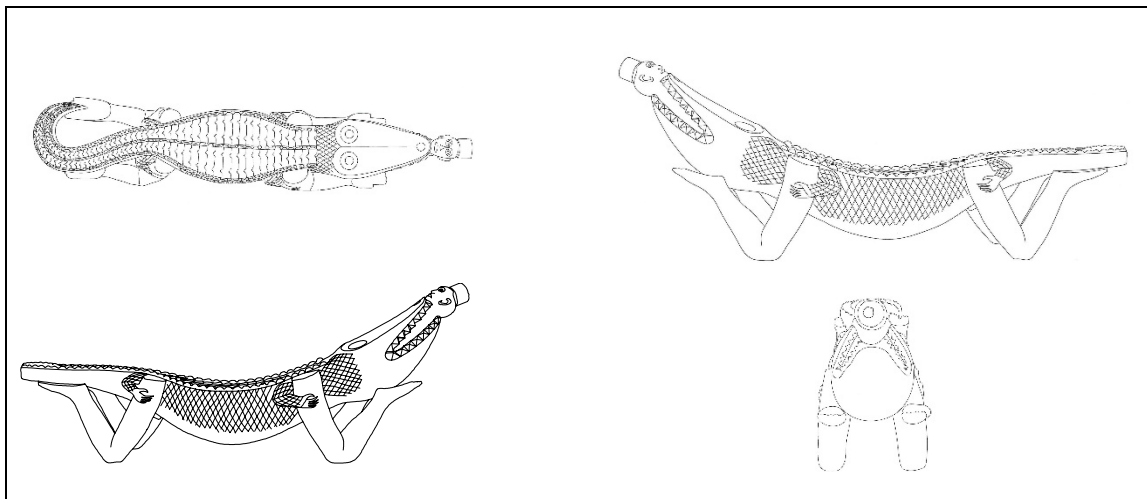


Figure 6: 59 cm x 15 cm x 23 cm, Collection of Muzium Negara.

Zoomorphic Stylized Animal Abstract Representation (Figure 7) is stylized abstract animal like shape, metal tips, surface (texture), line (unbroken outline), colour (natural/paint/lacquer), materials (wood), ornament (embellished with abstract or near abstract relief) and techniques (full, medium and low relief). The *kukuran* shows a plain arrangement of a single geometrical shape but more

complex geometry composition. The angle of triangular head and metal tip is in tilted angle suggests as it looking upward. The subject matter for motif is circumscribed to the geometrical pattern. Low relief (half relief) shows less undercuts and it can be seen in the body, tail and legs section of this *kukuran*. The composition is based on a simple “u” decorative frieze shape but were repeated in most spaces. The formation of pattern creates a sense of plainness in its design. The symmetrical and the repetition of pattern tend to be found in this *kukuran*. The geometric motif is transformed into more linear motion and generally in scattered pattern (*corak bertabur*).

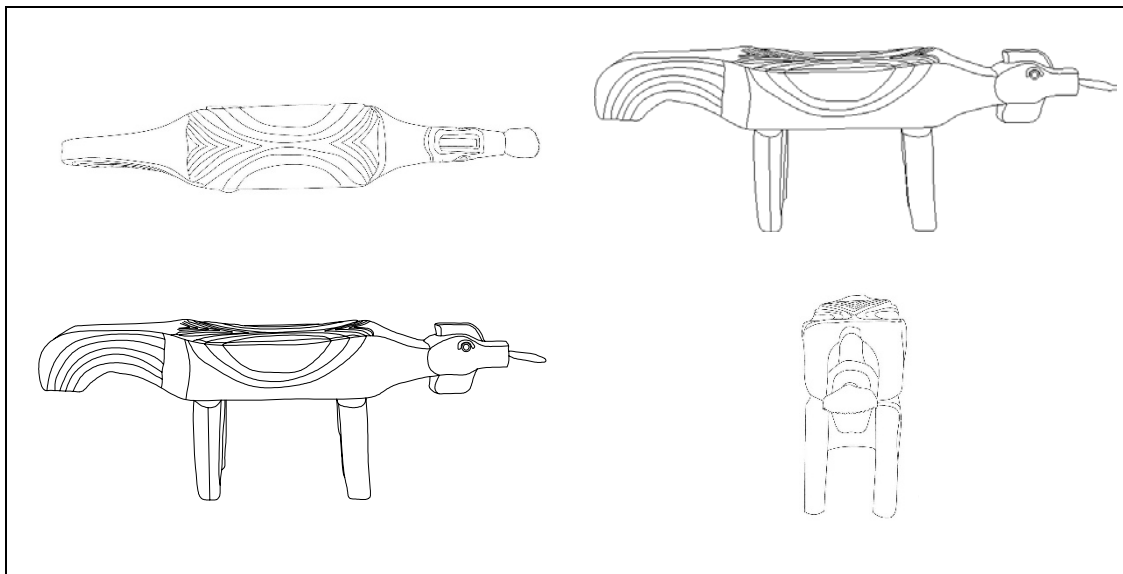


Figure 7.0: 35 cm x 14 cm x 17 cm, Collection of Muzium Negara.

Zoomorphic Stylized Mystical Creature (Figure 8) is stylized unknown creature like shape, metal tips, surface (texture), line (unbroken outline), colour (natural/paint/lacquer), materials (wood), ornament (embellished with abstract or near abstract relief) and techniques (full, medium and low relief). This formation includes the protective mythical creatures, religious arts, Hinduism and Buddhism figurine iconography of sculptures. It had long been embedded and being part of their traditional myths and beliefs. The main characteristics of this type of *kukuran* are unidentified representation design of figurative shapes. The most frequent iconography mystical creatures appeared in this region are in the design of lion, *Naga*, *Garuda*, dragon, unicorn, bull, tiger and elephant (Chandra, P, 1985). All of these mystical creatures has symbolized and embedded in Malay culture.

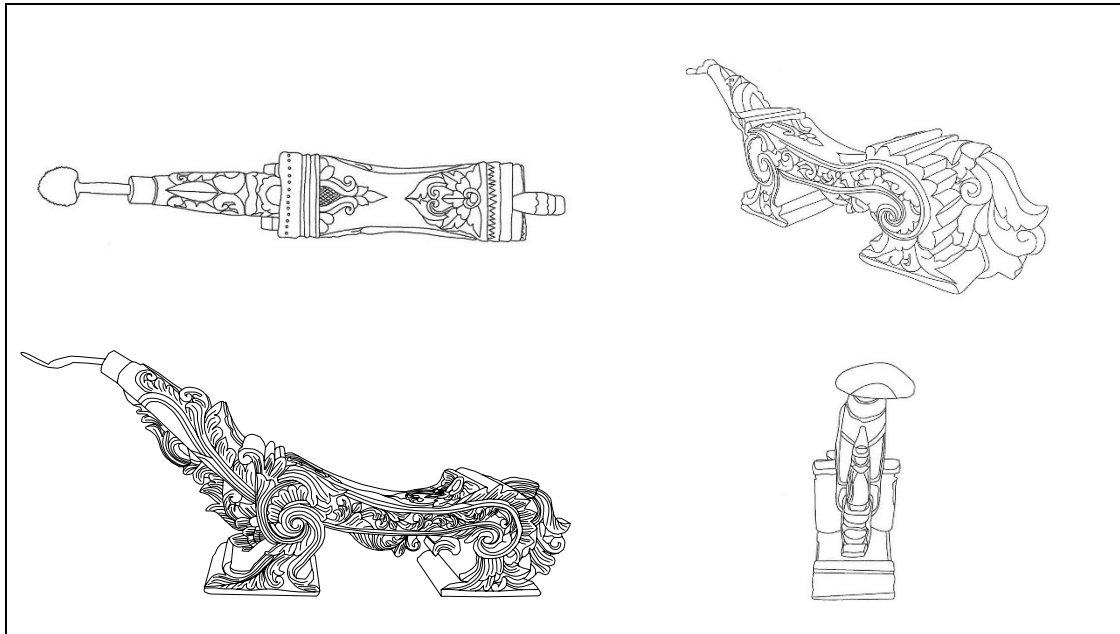


Figure 8: 50 cm x 17 cm x 19 cm, Collection of Muzium Negeri Kelantan

## CONCLUSION

Zoomorphic designs have long existed in many cultures and civilization throughout the world. The connotations of the zoomorphic form of design have related to the entrenched sources of inspiration in legendary, philosophical and historical of Malay culture. This zoomorphic is mainly the morphology of ideas and thoughts of the Malay people long time ago. The *kukuran* has its own identity and value that reflect the form and soul of the Malay culture. *Kukuran* is intended for a utilitarian purpose but without neglecting its aesthetic value. Generally, the designs of these animals have been stylised and abstract from animal origin. Craftsmen were mostly made around the animal shelter as a source of inspiration. Figurative elements in the art designs were modified to conform to the Islamic values. Anything that is in contrast with Islamic values was gradually discarded. The pre-Islamic motifs and carvings have also influences the development of the design of the Malay *kukuran*. With the coming of Islam, the Malay *kukuran* had manifested the teaching of Islam by achieving to the do's and don'ts in any creative endeavour. The underlying message is in the understanding concept of tawhid in Islam. Thus, figurative animal forms were not necessary representing any particular animal or human forms.

In conclusion, curved animal forms were adapted to create sense of pleasure. The zoomorphic geometry is readily understandable and easily scaled to the animal proportions. As a result, zoomorphic *kukuran* is subdivided into four small groups. The groups are Zoomorphic Simple Design, Zoomorphic Full Ornamental, Zoomorphic Stylized Ornament Design and Zoomorphic Semi Ornament Design. Prior to the Zoomorphic Stylized Ornament Design, this group is divided into three more subgroups; Zoomorphic Stylized Animal Representations, Zoomorphic Abstract Animal Representations and Zoomorphic Stylized Mystical Creatures. This type of design was developed and assumed to have many shape of designs. Conclusively, most typical Malay *kukuran* style emerged with almost triangular mouth, curving tail and deeply belly with animal-decorated legs attached. Some of these *kukuran* appeared to have obvious genitalia which signify as male *kukuran*.

## REFERENCES

- Ackerman. J. S. and Carpenter. R. (1963). *Art and Archeology*. Prentice Hall Inc., New Jersey.
- Chandra, P. (1985). *The Sculpture of India: 3000 B.C. to 1300 A.D.* New Haven: Eastern Press. Inc.,
- D'Alleva. A. (2010). *How to Write Art History: Second Edition*.
- Feldmen, E. B. (1996). *Philosophy of Art Education*. New Jersey: Prentice Hall,
- Gombrich. E. H. (1991). *Topics of Our Time: Twentieth-century Issues in Learning and in Art*. London: Phaidon Press Ltd.
- Islamic Arts Museum Malaysia, (2001). *Six Centuries of Islamic Art in China*.
- Muhammad Afandi Yahya. (1995). *Simbolisme dalam Seni Bina Rumah Melayu*. Kuala Lumpur: Dewan Bahasa dan Pustaka,
- Panofsky, E. (1972). *Studies in Iconology: Humanistic Themes in the Art of the Renaissance*. Icon Editions, Harper & Row Publishers.
- Sharp, H. and Preece, J. (2011). *Human Computer Interaction*. John Woley and Sons Ltd.
- Syed Ahmad Jamal. (1994). *Form and Soul*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

# HUBUNGAN ANTARA PENGURUSAN DAN PENTADBIRAN, RAKAN SEKERJA, KRITERIA KECEMERLANGAN DENGAN KESEDIAAN TERHADAP PERUBAHAN: SATU KAJIAN TINJAUAN DI KOLEJ KOMUNITI KEPALA BATAS PULAU PINANG

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## ABSTRAK

*Kajian ini dilakukan bertujuan untuk mengkaji hubungan antara pengurusan dan pentadbiran, perhubungan rakan sekerja dan kriteria kecemerlangan dengan kesediaan untuk berubah dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang. Kajian ini mempunyai tiga objektif iaitu (i) Mengenalpasti tahap kesediaan terhadap perubahan di Kolej Komuniti Kepala Batas, Pulau Pinang dan tahap pengurusan pentadbiran, perhubungan rakan sekerja dan kriteria kecemerlangan di Kolej Komuniti Kepala Batas, Pulau Pinang; (ii) Mengenalpasti hubungan antara pengurusan pentadbiran, perhubungan rakan sekerja dan kriteria kecemerlangan dengan kesediaan terhadap perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas, Pulau Pinang dan (iii) Mengenalpasti perbezaan kesediaan untuk berubah dalam kalangan staf Kolej Komuniti Kepala Batas berdasarkan faktor demografi (umur dan tahap pencapaian akademik tertinggi). Seramai 74 responden iaitu staf Kolej Komuniti Kepala Batas, Pulau Pinang telah dipilih secara rawak mudah untuk menjawab soalan-soalan dalam borang soal selidik yang telah diedarkan oleh pengkaji. Data ini telah dianalisis menggunakan "Statistical Package for Social Science" (SPSS) Versi 21.0. Dapatan dari kajian ini mendapati bahawa tahap kesediaan terhadap perubahan adalah berada pada tahap tinggi ( $M=3.58$ ,  $SP=.49$ ), pengurusan dan pentadbiran adalah berada pada tahap tertinggi ( $M=3.48$ ,  $SP=.38$ ), perhubungan rakan sekerja adalah berada pada tahap sederhana ( $M=3.17$ ,  $SP=.47$ ), dan kriteria kecemerlangan adalah berada pada tahap tinggi ( $M=3.57$ ,  $SP=.44$ ). Ujian Kolerasi Pearson pula mendapati bahawa terdapat hubungan yang signifikan di antara pengurusan pentadbiran dengan kesediaan terhadap perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas, Pulau Pinang ( $r = .666$ ,  $p < .01$ ), Namun begitu Ujian Anova Sehalu pula mendapati bahawa tidak terdapat perbezaan yang signifikan di antara umur dengan kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas, Pulau Pinang  $F(2,51) = .307$ ,  $p > .05$ . Ujian Anova Sehalu juga mendapati bahawa tidak terdapat perbezaan yang signifikan antara pencapaian akademik tertinggi dengan kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas, Pulau Pinang  $F(3,61) = .567$ ,  $p > .05$ . Secara keseluruhannya, dapatan kajian ini menunjukkan bahawa faktor kesediaan untuk berubah dalam kalangan staf Kolej Komuniti Kepala Batas adalah berada pada tahap yang tinggi.*

**Kata Kunci:** Pengurusan dan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan



## PENGENALAN

Malaysia akan menjadi negara berpendapatan tinggi dan maju berlandaskan wawasan kemakmuran bersama pada tahun 2030 memerlukan tenaga kerja yang bersemangat tinggi dan berwawasan serta berkualiti untuk memastikan negara dapat terus berdaya saing dan berdaya tahan, lebih-lebih lagi dalam era globalisasi yang berlandaskan pengetahuan, serta bertunjangkan sains dan teknologi. Pembangunan pendidikan negara yang selari dengan kehendak pasaran pekerjaan dan organisasi yang lebih tersusun dan bermatlamat bagi memastikan negara mencapai kejayaan dalam persekitaran yang mencabar sekiranya sumber manusia yang ada pada negara berusaha dengan lebih tekun, berpengetahuan bagi meningkatkan produktiviti, kecekapan dan daya saing, serta meningkatkan kemampuan inovasi dan kreativiti

Kolej Komuniti merupakan ejen perubahan dalam masyarakat memainkan peranan penting dalam menyediakan keperluan latihan dan kemahiran pada semua peringkat dan memberi peluang pendidikan kepada lepasan menengah sebelum ke pasaran tenaga kerja atau melanjutkan pendidikan ke peringkat lebih tinggi. Bagi menjayakan hasrat ini, kesediaan terhadap perubahan di kalangan staf Kolej Komuniti memerlukan komitmen yang tinggi terhadap organisasi, sentiasa bersedia terhadap perubahan dalam organisasi, mempunyai ciri-ciri kecemerlangan dalam tugas, sentiasa menjalin hubungan baik dengan rakan sekerja dan sentiasa membantu pihak pengurusan dan pentadbiran. Menurut Joris Van der Voet, BS. Kuipers & S. Groeneveld (2015) perubahan juga boleh dilaksanakan menerusi proses yang lebih tersusun merangkumi struktur, persekitaran, budaya kerja dan amalan yang biasa dilakukan. Perubahan merupakan satu proses yang sentiasa berlaku dalam organisasi. Perancangan, pelaksanaan dan pengukuhan program atau aktiviti di Kolej Komuniti memerlukan dorongan, sokongan, komitmen semua pensyarah bagi menentukan perubahan atau kejayaan sesebuah organisasi.

Pihak pengurusan dan pentadbiran perlu memastikan perubahan yang akan dilakukan itu berkesan dan tidak mendatangkan penentangan walaupun mungkin ada di kalangan staf tidak setuju dengan idea perubahan yang akan dilaksanakan. Menurut Musa Ali (2015) pendekatan perubahan perlu mempunyai pendidikan dan komunikasi, penyertaan dan penglibatan, kemudahan dan sokongan, perundingan dan kesepakatan, manipulasi dan penyertaan bersama, dan paksaan secara implisit dan eksplisit. Menurut Hussain, Talib & Shah, (2014) kepemimpinan selalunya dikaitkan dengan proses seseorang mempengaruhi orang lain supaya mengikutnya untuk melaksanakan tugas-tugas organ-

isasi agar matlamat organisasi tercapai. Malah, pemimpin juga perlu sering berusaha untuk mempertingkatkan tahap keperluan dan

kebolehan orang bawahnya supaya lebih bertanggungjawab dan berjaya menyelesaikan tugas organisasi ke peringkat maksimum walaupun terpaksa menghadapi pelbagai cabaran dalam mencapai visi dan misi organisasi.

Setiap individu mempunyai keperluan sosial, iaitu keinginan untuk dihormati dan diterima sebagai sebahagian daripada organisasi. Pengawasan yang berkesan akan dapat menjana keseronokan, keyakinan, dan semangat dalam melakukan kerja, dan memupuk suasana kerjasama dan kepercayaan. Perubahan dalam organisasi memerlukan gandingan dan persefahaman di kalangan rakan sekerja yang begitu baik. Rakan sekerja merupakan individu atau kumpulan individu yang bekerja bersama-sama di dalam sesuatu organisasi sama ada pada tahap profesional yang sama atau pihak atasan, mahupun bawahan mengikut struktur hierarki di dalam organisasi itu (Lussier & Achua, 2015). Pengaruh rakan sekerja merupakan faktor utama dalam kepuasan kerja pekerja bagi meningkatkan transformasi dalam organisasi (Ibrahim, Wan Sulaiman, & Hafidz, 2018). Kesiediaan terhadap perubahan bagi meningkatkan kecemerlangan organisasi memerlukan pekerja dan rakan sekerja yang cerdas, bertanggungjawab, suka menolong, ramah dan tidak berkira tentang kerja serta tidak suka gossip pada pihak pengurusan dan pentadbiran (Lan, X.M. & Chong, 2015). Bekerja dalam kumpulan akan mewujudkan tingkah laku kumpulan, tahap produktiviti, dan pergaulan dengan rakan sekerja juga akan meningkatkan perubahan yang positif dalam organisasi.

Pekerja organisasi selalunya akan memberi komitmen yang kuat kepada organisasi sekiranya mereka dapat merasakan organisasi mengambil berat mengenai masa depan mereka (Sang, Chin, Muhammad, B.H.A., & Owee, 2016). Program pembangunan kerjaya menjadi unsur yang penting bagi membolehkan staf melihat potensi yang ada pada diri mereka dan bagaimana ia boleh dikembangkan untuk organisasi. Setiap staf perlu mempunyai kehendak individu ke arah kecemerlangan (Mohd Yusoff & Saidin, 2017). Pemimpin yang baik dapat membantu staf dalam kecemerlangan. (Jamilah Man, Yahya Don & Siti Noor Ismail. (2017). Kajian ini akan memfokus kepada hubungan pengurusan dan pentadbiran, rakan sekerja dan kriteria kecemerlangan terhadap perubahan kalangan staf Kolej Komuniti.

## **PERNYATAAN MASALAH**

Sesebuah organisasi itu akan menghadapi pelbagai halangan dan rintangan dari stafnya sekiranya organisasi tersebut ingin membuat perubahan. Terdapat banyak factor yang boleh mempengaruhi kesediaan terhadap perubahan di sesebuah organisasi. Antaranya adalah seperti factor pengurusan dan pentadbiran, perhubungan rakan sekerja dan kriteria kecemerlangan. Malah factor-faktor lain banyak lagi dan boleh diambil kira namun begitu, kajian ini secara khususnya akan melihat perhubungan factor pengurusan pentadbiran, perhubungan rakan sekerja dan kriteria kecemerlangan dengan kesediaan terhadap perubahan kalangan staf di Kolej Komuniti Kepala Batas, Pulau Pinang.

## **OBJEKTIF KAJIAN**

1.3.1 Mengenalpasti Tahap Kesediaan Terhadap Perubahan, Pengurusan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dalam kalangan staf di Kolej Komuniti Kepala Batas.

1.3.2 Mengenalpasti hubungan antara Pengurusan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas.

1.3.3 Mengenalpasti pemboleh ubah bebas yang menjadi faktor-faktor berpengaruh kepada Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas, Pulau Pinang.

1.3.4 Mengenalpasti perbezaan bagi umur dan pencapaian tertinggi akademik dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas.

## **Persoalan Kajian**

1.4.1 Apakah Tahap Kesediaan Terhadap Perubahan, Pengurusan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang?

1.4.2 Adakah terdapat hubungan yang signifikan antara Pengurusan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dengan kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang?

1.4.3 Apakah pemboleh ubah bebas yang berpengaruh bagi Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang?

1.4.4 Adakah terdapat perbezaan yang signifikan antara Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang berdasarkan umur dan pencapaian akademik tertinggi?

## **Hipotesis Nul:**

H01 Tidak terdapat hubungan yang signifikan antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang

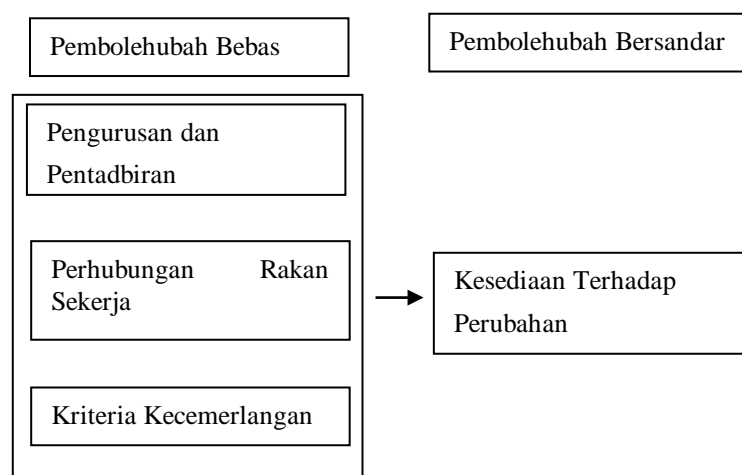
H02 Tidak terdapat hubungan yang signifikan antara Perhubungan Rakan Sekerja dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang

H03 Tidak terdapat hubungan yang signifikan antara Kriteria Kecemerlangan dengan Kesiediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala batas Pulau Pinang

H04 Tidak terdapat pembolehubah-pembolehubah bebas yang menjadi faktor peramal yang signifikan kepada pemboleh ubah bersandar dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang

H05 Tidak terdapat perbezaan yang signifikan antara umur dengan Kesiediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang

H06 Tidak terdapat perbezaan yang signifikan anantara pencapaian tertinggi akademik dengan Kesiediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang.



Rajah 1 Kerangka Kajian

## Kepentingan Kajian

Kajian ini penting kepada pihak pengurusan dan pentadbiran Kolej Komuniti Kepala Batas dan rakan-rakan kolej komuniti yang lain kerana faktor-faktor yang dikaji ini boleh dijadikan sebagai panduan apabila ingin melakukan perubahan di kolej. Kajian ini juga penting kepada pembuat dasar terutama kepada pihak Jabatan Pendidikan Kolej Komuniti. Bagi Bahagian Pembangunan dan Latihan sedia ada di kolej komuniti atau di jabatan boleh mengaplikasikan hasil kajian ini untuk memantapkan lagi program-program atau kursus yang dirancang untuk staf kolej komuniti demi kecemerlangan kolej komuniti.

## Definasi Operational

**Pengurusan dan Pentadbiran:** ditakrifkan sebagai pengaruh yang kuat dalam mencorak budaya yang positif dalam organisasi agar lebih kreatif dan inovatif bagi membangunkan tenaga kerja yang berkemahiran, berpengetahuan, pakar, dedikasi, profesional dan mempunyai semangat kerja yang

tinggi dan berdaya maju serta melahirkan kepimpinan yang berkesan pada semua peringkat (Mansor & Hamzah (2015). Menurut Kushner dan Poole (1996), keberkesanan sesebuah organisasi dapat dinilai apabila wujudnya lima elemen dalam sesebuah organisasi iaitu kepuasan kumpulan, kemudahan sumber, penggunaan sumber dengan berkesan, pencapaian matlamat dan kebolehterimaan terhadap perubahan persekitaran.

**Perhubungan Rakan Sekerja:** Nor Azzah (2015), menjelaskan bahawa pekerja perlu meletakkan matlamat bekerja dan perhubungan komunikasi yang baik sesama rakan sekerja. Perhubungan pesonal sukar dengan pihak pentadbir dan sekerjweia menjadi stres kepada pekerja. Punca stress pekerja adalah berpunca daripada gossip di pejabat, politik kerja, bebanan tugas dan karenah pentadbir boleh mendorong atau melemahkan semangat untuk bekerja. Pekerja yang mempunyai prestasi kerja yang baik dapat meningkatkan produktiviti organisasi yang mana secara langsung akan meningkatkan pengurusan dan pentadbiran yang lebih baik. Sebaliknya, pekerja yang kurang bermotivasi akan menyebabkan kelemahan di dalam sistem pentadbiran sesebuah organisasi akibat kurangnya komitmen sewaktu menjalankan tugas yang diberikan (Samsudin, 2015).

**Kriteria Kecemerlangan:** Staf yang cemerlang diberi penghargaan dan pengiktirafan ke atas sumbangan serta dedikasi yang ditunjukkan bagi menggalakan persaingan sihat di kalangan staf bagi memenuhi ciri-ciri kenaikan pangkat berdasarkan penilaian yang telah ditetapkan. Kakitangan yang cemerlang dalam menjalankan tugas adalah berdasarkan aspek kepakaran teras utama, kepimpinan, pembangunan diri dan sumbangan yang telah ditetapkan oleh jawatankuasa kenaikan pangkat (Taba, 2018).

**Kesediaan Terhadap Perubahan:** Kesiediaan untuk berubah didefinisikan sebagai tahap komitmen terhadap perubahan dan efikasi perubahan yang ditunjukkan oleh setiap lapisan warga organisasi bagi melaksanakan program pelaksanaan perubahan dalam organisasi (Mohamad, Don & Ismail, (2016). Menurut Weiner (2009) turut mengambil kira pandangan pakar-pakar pengurusan perubahan yang menekankan kepentingan bagi mewujudkan kesiediaan organisasi untuk perubahan yang melibatkan usaha secara kolektif yang terletak dalam ruang lingkup perspektif kepimpinan. Elemen kepimpinan telah dikenal pasti sebagai agen perubahan yang utama (Yukl, 2010) dan merupakan faktor penyumbang kepada kelestarian pelaksanaan strategi perubahan dalam organisasi (Jamelaa, 2012). Penekanan harus diberikan kepada warga dalam kalangan staf agar sentiasa berkomunikasi berkesan (Ahlam, 2016) dengan staf di semua peringkat bagi meningkatkan komitmen perubahan secara lebih efektif.

Pentadbir merupakan dimensi utama aktiviti kepimpinan yang mampu mempengaruhi prestasi, inovasi, perubahan organisasi secara positif (Nur Ashikin, 2015). Justeru bagi meningkatkan kemung-

kinan kejayaan usaha-usaha perubahan, fokus harus diberikan kepada keupayaan barisan kepimpinan untuk memimpin dan menangani sebarang perubahan yang dengan meningkatkan elemen kesediaan perubahan dalam organisasi (Trioctavia, Hamid & Mukzam, 2016). Walau bagaimanapun Aamir & Jianguo, (2016) menegaskan bahawa sesebuah organisasi perlu terlebih dahulu bersedia untuk melaksanakan perubahan dalam usaha untuk mencapai objektif penambahbaikan secara berterusan. Kesediaan untuk berubah dan komitmen bagi melaksanakan program perubahan dalam kalangan warga memerlukan kerjasama semua dalam organisasi.

## **KAJIAN-KAJIAN LEPAS**

### **Pendahuluan**

Keseluruhan bab ini memberi tumpuan mengenai konsep, teori dan kajian-kajian lepas yang berkaitan dengan pembolehubah utama yang digunakan di dalam kajian ini iaitu Kesediaan Terhadap Perubahan, Pengurusan dan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan.

### **Latar Belakang Teoritikal Dan Kajian-Kajian Lepas**

Hasil kajian Mohamad, Don dan Ismail (2016) terhadap 54 warga institusi pendidikan vokasional

penerbangan yang berpusat di Pantai Timur Semenanjung Malaysia berjaya membuktikan bahawa wujudnya hubungan positif yang signifikan antara amalan kepimpinan strategik dengan tahap kesediaan perubahan organisasi. Kajian Cara Koppenhoefer (2014) terhadap 210 pekerja di lima Syarikat Insuran Kesihatan di Amerika Syarikat, kasil kajian menunjukkan wujudnya perhubungan bagi dimensi kepimpinan transformasi dengan ada niat berhenti kerja(turnover).

Aamir dan Jiangou (2016) menggunakan 250 pekerja Industri Tekstil yang berbeza di Pakistan dan kajian oleh Lan dan Chong (2015) menggunakan 274 pekerja pengurusan pentadbiran atasan syarikat yang terletak di China. Dapatan kaji selidik ini melaporkan bahawa peranan kepimpinan transformasi yang diaplikasikan oleh seorang pemimpin organisasi berupaya meningkatkan rasa bermakna, cekap, boleh membuat keputusan dan memberi impak yang positif kepada pekerja dalam melaksanakan tugas dengan tahap kesediaan perubahan organisasi. Kepimpinan transformasi menegaskan bahawa interaksi antara pemimpin dan pengikut dalam menguruskan fungsi organisasi boleh memberi inspirasi kepada pengikut melampaui kepentingan diri mereka untuk menyokong kepentingan organisasi



Kajian di Belanda turut menganalisis faktor-faktor berhubung dengan pentadbiran dan pengurusan yang mempengaruhi terhadap perubahan organisasi (Kool

Dierendonck, 2012). Dapatan kajian terhadap 135 pekerja pelbagai syarikat mendapati bahawa oleh seorang ketua jabatan di sesebuah organisasi telah memberi sumbangan yang besar terhadap perubahan organisasi. Sehubungan itu, dalam kajian Melchar dan Bosco (2010), mereka mendapati bahawa amalan pentadbiran dan pengurusan dalam organisasi membantu penyesuaian terhadap pengurusan perubahan serta dapat meningkatkan kecemerlangan organisasi. Pengurusan dan pentadbiran seorang ketua jabatan merupakan suatu keperluan penting dalam proses pengurusan perubahan bagi menggerakkan organisasi mencipta idea-idea baharu yang kreatif dan inovatif untuk kecemerlangan organisasi (Ibrahim & Don, 2014).

Kajian Naser Valaei (2016) telah mengkaji hubungan di antara kepuasan kerja dengan komitmen organisasi dan hasil daripada kajian adalah berdasarkan 256 pekerja-pekerja daripada Teknologi Informasi dan Komunikasi - Perusahaan Kecil dan Sederhana (ICT-SMEs). Hasil kajiannya mendapati bahawa kesediaan pekerja untuk menerima perubahan dalam organisasi. Manakala hasil kajian Mohamad, Jamalul Lail & Ruzita (2016) telah mengkaji hubungan tahap kepuasan kerja guru dengan pencapaian sekolah terdiri daripada 138 orang guru yang dipilih secara rawak mudah dari 12 buah sekolah kebangsaan Daerah Ledang, Johor. Hasil kajian mereka menunjukkan tahap kepuasan kerja guru di sekolah daerah Ledang berada pada tahap tinggi dan signifikan kepuasan kerja guru berdasarkan tahap pencapaian sekolah. Pemimpin boleh memainkan peranan yang penting dalam membantu pekerja untuk merealisasikan potensi mereka (Porath, Gerbasi, & Schorch, 2015).

Kajian Ruth Maria Tappin (2014) ke atas 300 orang pekerja yang aktif dengan berlatarbelakangkan dari pelbagai kelulusan. Pekerja ini dipilih dari beberapa buar syarikat di beberapa kawasan di Amerika Syarikat. Hasil Kajiannya mendapati bahawa trait personaliti boleh meramalkan kesediaan pekerja untuk menerima perubahan. Walau bagaimanapun peningkatan kelulusan akademik pekerja pula tidak mempunyai hubungan dengan tarit personaliti untuk untuk membuat pengubahsuaian ke atas kesediaan pekerja untuk menerima perubahan.

Pengurusan dan pentadbiran seorang ketua jabatan merupakan gaya kepimpinan yang berpusat individu di mana pemimpin perlu bekerjasama dan mengambil berat tentang pekerja di bawahnya. Dengan cara ini dapat membantu pekerja mengambil peluang yang ada dan menaikkan aspirasi

mereka untuk maju dalam kerjaya yang ada hubungkaitnya dengan perubahan organisasi (suzanah 2015).

## **Metodologi Kajian**

### **Pendahuluan**

Dalam bab ini pengkaji menerangkan tentang kaedah yang telah digunakan dalam menjalankan kajian ini seperti reka bentuk kajian, persampelan, instrument kajian, kajian rintis, prosedur memungut data dan prosedur menganalisa data.

### **Reka Bentuk Kajian**

Reka bentuk kajian ini berbentuk kajian tinjauan menggunakan set borang soal selidik untuk mencapai objektif kajian ini. Reka bentuk kajian ini dipilih kerana bilangan sampel responden yang diambil dapat mewakili keseluruhan populasi yang hendak dikaji iaitu staf Kolej Komuniti Kepala Batas Pulau Pinang.

### **Persampelan**

Responden dalam kajian ini adalah staf yang bekerja di Kolej Komuniti Kepala Batas Pulau Pinang. Jumlah keseluruhan staf yang bekerja 86 orang. Menurut Krejcie dan Morgan (1970), daripada jumlah keseluruhan staf hanya 74 orang staf sudah memadai sebagai sampel responden yang mewakili keseluruhan populasi staf dalam kajian ini. Kaedah ini pengkaji dapat menjimatkan tenaga, kos dan masa. Sampel responden dipilih dengan menggunakan kaedah persampelan rawak mudah.

### **Instrument Kajian**

Kajian ini adalah kajian kuantitatif. Instrument kajian ini adalah menggunakan set boring soal selidik. Satu set borang soal selidik dibangunkan oleh pengkaji dan set soalan borang soal selidik dibahagikan kepada lima bahagian iaitu: (1) Butiran peribadi (ii) Pengurusan dan Pentadbiran (iii) Perhubungan Rakan Sekerja (iv) Kriteria Kecemerlangan (v) Kesiediaan Terhadap Perubahan. Terdapat 74 soalan dalam set borang soal selidik dan tempoh menjawab boring soal selidik ini dianggarkan mengambil masa 20 minit sahaja.

### **Kajian Rintis**

Sebelum kajian sebenar dijalankan, pengkaji telah menjalankan kajian rintis untuk ujian kesahan dan kebolehpercayaan borang soal selidik dijalankan terhadap 10 sampel staf melalui kaedah *pilot test*. Para staf terlebih dahulu diberi penerangan oleh pengkaji tentang tujuan kajian ini dijalankan sebelum mereka menjawab borang soal selidik yang telah diberikan. Kebolehpercayaan borang soal selidik ini telah diuji dengan menggunakan *Cronbach's alpha* ( $\alpha=.95$ ) iaitu melebihi  $\alpha=.70$ . Ini bermakna instrument kajian ini adalah sesuai dan boleh dipercayai serta boleh digunakan untuk kajian ini.

### **Prosedur Memungut Data**

Satu set borang soal selidik telah diedarkan kepada para staf. Sebelum diedarkan set soal selidik, satu taklimat ringkas diberikan terlebih dahulu sebelum staf menjawab. Setelah selesai menjawab, para staf memulangkan semula set borang soal selidik kepada pengkaji.

### **Prosedur Menganalisis Data**

Analisis data telah dijalankan dengan menggunakan perisian *Statistical Package for the Social Science* (SPSS versi 21.0). Setiap data yang dimasukkan ke dalam computer telah dikodkan secara ringkas dengan menggunakan singkatan yang mudah difahami oleh pengkaji.

Data deskriptif seperti butiran peribadi staf seperti umur, pencapaian akademik tertinggi, pengalaman bertugas, gred jawatan dipegang boleh dianalisis dengan menggunakan statistik deskriptif untuk mendapat bilangan dan peratusannya. Pengkaji juga telah membahaginya kepada tiga tahap iaitu Tahap Tinggi, Tahap Sederhana dan Tahap Rendah bagi menentukan tahap ke atas pembolehubah-pembolehubah bebas dan pembolehubah bersandar. Pengkaji juga menggunakan min dan sisihan piawai untuk mengetahui tahap pengurusan dan pentadbiran, tahap perhubungan rakan sekerja, tahap kriteria kecemerlangan dan tahap kesediaan terhadap perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang.

Statistik inferensi yang digunakan oleh pengkaji adalah ujian Korelasi *Pearson* yang digunakan untuk menguji hipotesis nul H01 hubungan antara pengurusan pentadbiran, hipotesis nul H02 pertalian antara perhubungan rakan sekerja dan H03 hubungan antara kriteria kecemerlangan dengan kesediaan terhadap perubahan. Ini adalah kerana data pembolehubah bebas adalah data interval dan data pembolehubah bersandar iaitu kesediaan terhadap perubahan juga adalah data interval.

Untuk menguji hipotesis nul H04 Statistik inferensi yang digunakan oleh pengkaji adalah ujian Regresi Berganda. Ujian ini digunakan untuk mengenalpasti pembolehubah bebas seperti Pengurusan dan Pentadbiran, Perhubungan rakan Sekerja dan Kriteria

Kecemerlangan yang mungkin merupakan penyumbang(pengaruh) kepada perubahan dalam pembolehubah bersandar (kesediaan terhadap perubahan).

Bagi menguji nul H05 untuk melihat perbezaan antara kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas berdasarkan umur, diuji dengan menggunakan kaedah Anova Sehalu. Ini Adalah kerana ianya melibatkan satu pembolehubah bebas iaitu umur dengan empat kategori (18-25, 26-35, 36-45 dan 45 tahun ke atas) dan satu pembolehubah bersandar iaitu Kesediaan Terhadap Perubahan.

Bagu menguji hipotesis H06 untuk melihat perbezaan antara pencapaian akademik tertinggi dengan kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang, ia diuji dengan menggunakan kaedah ujian ANOVA Sehalu. Ini adalah kerana ianya melibatkan satu pembolehubah bebas iaitu pencapaian akademik tertinggi dengan lebih daripada dua kategori pencapaian akademik tertinggi dan pebolehubah bersandar iaitu kesediaan terhadap perubahan.

## **ANALISIS DAPATAN**

### **Pendahuluan**

Kajian ini dijalankan di Kolej Komuniti Kepala batas Pulau Pinang dengan melalui kaedah mengedarkan borang soal selidik kepada para staf. Seramai 74 responden yang terlibat dalam kajian ini. Kesemua boring soal selidik dapat dikumpul semula oleh pengkaji. Walau bagaimanapun, ujian normality telah dijalankan mdengan menggunakan perisian *Statistical Package for the Social Science* (SPSS versi 21.0) untuk membuang data outlier supaya data yang diperolehi adalah bertaburan normal.

### **Profil Respoden**

Kajian ini dijalankan di Kolej Komuniti Kepala Batas Pulau Pinang. Sebanyak 74 set borang soal selidik telah diedarkan kepada para staf secara rawak mudah. Staf yang telah dipilih untuk menjawab soalan soalan selidik ini adalah berdasarkan kepada senarai nama yang telah ditentukan oleh penyelidik. Penyelidik memilih 74 responden dari senarai 86 orang staf Kolej Komuniti Kepala Batas secara rawak mudah. Kesemua 74 set borang soal selidik telah berjaya dikutip dan dikumpul

semula dalam masa yang ditetapkan. Sungguh pun begitu, ujian normality telah dijalankan untuk melihat samaada ada responden menunjukkan ciri yang berlainan daripada data sebenar atau ekstrem kepada data yang lebih tinggi (*outlier*). Proses pembersihan data *outlier* dilakukan dan didapati paparan *box plot* tidak terdapat data yang *outlier*. Maka data yang dikutip berada dalam taburan normal. Profil responden dapat dipaparkan dalam jadual yang disediakan di bawah ini.

**Jadual 4.2.1** Umur Responden

Umur	Bil	Peratus
26 – 35 tahun	6	10.5
36 – 45 tahun	41	71.945
45 tahun dan ke atas	10	17.5
Jumlah	57	10

Jadual 4.2.1 di atas menunjukkan bahawa daripada 57 responden, 6 orang adalah berumur antara 26 hingga 35 tahun (10.5%), seramai 41 orang berumur antara 36 hingga 45 tahun (71.9%) dan seramai 10 orang berumur lebih dari 45 tahun (17.5%)

**Jadual 4.2.2** Pencapaian Akademik Tertinggi Responden

Kelulusan	Bil	Peratus
Diploma	11	14.9
Sarjana Muda	24	32.4
Sarjana	21	28.4
Lain-lain	18	24.3
Jumlah	74	100.0

Jadual 4.2.2 Menunjukkan pencapaian akademik tertinggi responden, Didapati paling ramai responden kerkelulusan Sarjana Muda Iaitu seramai 24 orang (32.4%), diikuti seramai 18 orang lain-lain kelulusan (24.3%) dan yang paling rendah bilangannya yang berkelulusan Diploma iaitu 11 orang (14.9)

**Jadual 4.2.3** Pengalaman Bekerja Responden

Pengalaman(tahun)	Bil	Peratus
1-3	0	0
4-8	2	3.5
9-12	13	22.8
13-15	18	31.6
15 tahun dan ke atas	24	42.1
Jumlah	57	100.0

Jadual 4.2.3 Menunjukkan tempoh pengalaman bekerja responden. Daripada jumlah 57 responden, didapati majoriti responden telah berkhidmat antara 4 hinggg 8 tahun seramai 2 oarang (3.5%), Dii-ikuti responden yang telah berkhidmat antara 9 hingga 12 tahun seramai 13 orang (22.8%), 13 hingga 15 tahun seramai 18 orang (31.6%), 1 hingga 3 tahun seramai 0 orang (0%) dan hanya 24 orang telah berkhidmat melebihi 15 tahun (42.1 %).

### Analisis Statistik Deskriptif

Soalan Kajian: Apakah Tahap Kesediaan Terhadap Persediaan, Pengurusan dan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang?

Penentuan tahap Tahap Kesediaan Terhadap Perubahan, Pengurusan dan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang adalah berdasarkan kepada interpretasi skor min seperti jadual 4.3.1 di bawah.

**Jadual 4.3.1** Interpretasi Skor Min bagi setiap Pembolehubah Bebas dan Bersandar

Skor Min	Tahap
0.1 hingga 1.67	Rendah
1.68 hingga 3.34	Sederhana
3.35 hingga 5.00	Tinggi

**Jadual 4.3.2** Kategori Tahap Pembolehubah Bebas dan Bersandar

Pembolehubah Min	Sisishan Piawai	Tahap
Persediaan Terhadap Perubahan		



3.58 .49 Tinggi Pengurusan dan Pentadbiran

3.48 .38 Tinggi Perhubungan Rakan Sekerja

3.17 .47 Sederhana Kriteria Kecemerlangan

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3.57	.44	Tinggi
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Berdasarkan jadual 4.3.2, dapat kajian menunjukkan majoriti staf di Kolej Komuniti Kepala Batas Pulau Pinang berpersepsi bahawa kesemua faktor bagi pembolehubah bebas adalah berada pada tahap tinggi kecuali faktor perhubungan rakan sekerja. Manakala faktor pembolehubah bersandar iaitu kesediaan terhadap perubahan juga berada pada tahap tinggi (min=3.58, S.P=.49). Faktor kriteria kecemerlangan (min=3.57, S.P=.44) merupakan factor pembolehubah bebas yang paling tinggi,. Seterusnya faktor pengurusan dan pentadbiran (min=3.48, S.P=.38) mengikut interpretasi min oleh J.W Creswell (2003).

Adakah terdapat hubungan yang signifikan antara pengurusan dan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang?

### Pengujian Hipotesis

H01: Tidak terdapat hubungan yang signifikan antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang.

Bagi menguji hipotesis nul pertama di dalam kajian ini, statistik inferensi yang digunakan adalah ujian Kolerasi Pearson untuk menguji hipotesis nul hubungan antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan. Ini adalah kerana data pembolehubah bebas iaitu Pengurusan Pentadbiran adalah data interval dan data pembolehubah bersandar iaitu Kesediaan Terhadap Perubahan juga adalah data interval. Selain itu data juga diambil daripada responden yang sama.

**Jadual 4.3.3** Korelasi Pearson antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan

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Pengurusan	Kesediaan Terhadap
Pentadbiran	Perubahan

---

Pearson Correlation	1.000	.666**
Sig. (2-tailed)		.000
N	73	64

\*\*. Korelasi adalah signifikan pada aras 0.01 (2-tailed)

Dapatan analisis korelasi dalam Jadual 4.3.3 menunjukkan bahawa terdapat hubungan yang signifikan antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan dalam kalangan staf ( $r = .666$ ,  $p < 0.1$ ). Maka hipotesis nul pertama di dalam kajian ini dapat ditolak.

Ini menunjukkan bahawa terdapat hubungan yang signifikan antara Pengurusan Pentadbiran dengan Kesediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang. Kesimpulan Kesiediaan Terhadap Perubahan di Kolej Komuniti Kepala Batas Pulau Pinang dipengaruhi oleh faktor Pengurusan dan Pentadbiran.

H02: Tidak terdapat pertalian yang signifikan antara Perhubungan Rakan Sekerja dengan Kesiediaan Terhadap Perubahan dalam Kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang

Bagi menguji hipotesis nul kedua di dalam kajian ini, statistik inferensi yang digunakan adalah ujian Kolerasi Pearson untuk menguji hipotesis nul hubungan antara Perhubungan Rakan Sekerja dengan Kesiediaan Terhadap Perubahan. Ini adalah kerana data pembolehubah bebas iaitu Perhubungan Rakan Sekerja adalah data interval dan data pemboleubah bersandar iaitu Kesiediaan Terhadap Perubahan juga adalah data interval. Selain itu data juga diambil daripada responden yang sama.

**Jadual 4.3.4** Korelasi Pearson antara Perhubungan Rakan Sekerja dengan Kesiediaan Terhadap Perubahan

Perhubungan Rakan Sekerja	Kesiediaan Terhadap Perubahan	
Pearson Correlation	1.000	-.170
Sig. (2-tailed)		.171
N	74	66

\*\*. Korelasi adalah signifikan pada aras 0.01 (2-tailed)

Dapatan analisis korelasi dalam Jadual 4.3.4 menunjukkan bahawa tidak terdapat pertalian yang signifikan antara Perhubungan Rakan Sekerja dengan Kesiediaan Terhadap Perubahan dalam kalangan staf ( $r = -$

.170,  $p > .01$ . Maka Hipotesis nul kedua di dalam kajian ini gagal ditolak. Ini menunjukkan bahawa tidak terdapat pertalian yang signifikan antara Perhubungan Rakan Sekerja dengan Kesiediaan Terhadap Perubahan di Kolej Komuniti Kepala Batas Pulau Pinang. Kesimpulannya Kesiediaan Terhadap Perubahan di Kolej Komuniti Kepala Batas Pulau Pinang tidak dipengaruhi oleh factor Perhubungan Rakan Sekerja.

H03: Tidak terdapat hubungan yang signifikan antara Kriteria Kecemerlangan dengan Kesiediaan Terhadap Perubahan dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang.

Bagi menguji hipotesis nul ketiga di dalam kajian ini, statistic inferensi yang digunakan adalah ujian Korelasi Pearson untuk menguji hipotesis nul hubungan antara Kriteria Kecemerlangan dengan Kesiediaan terhadap Perubahan. Ini adalah kerana data pembolehubah bebas iaitu Kriteria Kecemerlangan adalah data interval dan data pembolehubah bersandar iaitu Kesiediaan Terhadap Perubahan juga adalah data interval. Selain itu data juga diambil daripada responden yang sama.

**Jadual 4.3.5** Korelasi Pearson antara Kriteria Kecemerlangan dengan Kesiediaan Terhadap Perubahan

Perhubungan Kecemerlangan	Kesiediaan Terhadap Perubahan	
Pearson Correlation	1.000	.234
Sig. (2-tailed)		.091
N	54	54

\*\*. Korelasi adalah signifikan pada aras 0.01 (2-tailed)

Dapatan analisis korelasi dalam Jadual 4.3.5 menunjukkan bahawa tidak terdapat hubungan yang signifikan antara Kriteria Kecemerlangan dengan Kesiediaan Terhadap Perubahan dalam kalangan staf ( $r =$

.025,  $p > .01$ ). Maka hipotesis nul ketiga di dalam kajian ini gagal ditolak. Ibi menunjukkan bahawa tidak terdapat hubunganyang signifikan antara Kriteria kecemerlangan dengan Kesiediaan Terhadap Perubahan di Kolej Komuniti Kepala Batas Pulau Pinang. Kesimpulannya kesiediaan Terhadap Perubahan di Kolej Komuniti Kepala Batas Pulau Pinang tidak dipengaruhi oleh faktor Kriteria Kecemerlangan.

H04: Tidak terdapat pembolehubah-pembolehubah bebas (Pengurusan Pentadbiran, Perhubungan Rakan Sekerja, dan Kriteria Kecemerlangan) yang menjadi faktor peramal dan signifikan kepada pembolehubah bersandar (Kesiediaan Terhadap Perubahan) dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang.

Statistik inferensi yang digunakan untuk menguji hipotesis nul keempat iaitu Tidak terdapat pembolehubah bebas yang menjadi faktor peramal dan signifikan kepada pembolehubah bersandar dalam kalangan staf di Kolej Komuniti Kepala Batas Pulau Pinang ialah Ujian Regresi Berganda.

Ujian Regresi Berganda digunakan untuk mengenalpasti perubahan dalam pembolehubah bebas (Pengurusan Pentadbiran, Perhubungan Rakan Sekerja dan Kriteria Kecemerlangan) yang menyumbang kepada perubahan dalam pembolehubah bersandar (Kesiediaan Terhadap Perubahan). Data Pembolehubah bebas dan satu pembolehubah bersandar adalah data interval. Selain itu data juga diambil daripada responden yang sama. Ujian Kenormalan data-data yang terlibat telah dilakukan. Semua data pembolehubah ini adalah bertabur secara normal. Menurut Tabachnick dan fidel (2013), cara mudah untuk menentukan samaada data tertabur secara normal atau tidak, memadai dengan melihat carta Histogram dengan paparan Lengkungan Normal.

Bagi menentukan factor-faktor peramal yang berpengaruh daripada ketiga-tiga faktor ini, kaedah penyelesaian 'stepwise' digunakan. Mathematics, A. (2016), prosedur 'stepwise' mempunyai kelebihan berbanding dengan regresi berganda lain kerana ia lebih ekonomi serta ia juga dapat mengelakkan masalah 'multicollinearity' yang wujud akibat korelasi yang kuat antara pembolehubah-pembolehubah peramal.

Keputusan analisis regresi berganda menggunakan prosedur 'stepwise' menunjukkan bahawa bagi sample ini ( $n=52$ ), factor Pengurusan dan Pentadbiran merupakan peramal yang signifikan [ $F(2,50)=24.81$ ,  $p=.000$ ] bagi Kesiediaan Terhadap Perubahan.

Memandangkan nilai kebarangkalian yang diperolehi daripada SPSS (.000) kurang daripada nilai alfa yang ditentukan (.025), maka hipotesis nol ditolak. Terdapat bukti-bukti yang kukuh untuk

membuat kesimpulan bahawa Pengurusan dan Pentadbiran merupakan peramal yang signifikan dalam membuat anggaran mengenai Kesiediaan Terhadap Perubahan dalam kalangan Pensyarah di Kolej Komuniti Kepala Batas Pulau Pinang. Pembolehubah peramal ini

menyumbang sebanyak 50% varians dalam pembolehubah criterion ( $R^2 = .50$ ). Ini bererti bahawa Pengurusan Pentadbiran ( $\beta = .761$ ),  $p = .05$ ) dapat meramalkan Kesiediaan Terhadap Perubahan dalam kalangan Staf Kolej Komuniti.

Hasil keputusan regresi berganda boleh dirujuk dalam jadual 1.

**Jadual 1:** Ringkasan Analisa Regresi Berganda Faktor Pengurusan Pentadbiran Mempengaruhi Kesiediaan Terhadap Perubahan Di Kolej Komuniti

Pembolehubah(Peramal)				
B	Beta( $\beta$ )	t	P	
Konstan	-.627			
Pengurusan		5.12		
Pentadbiran		1		
.762	.547		.000	

*Nota: \*p, .05; B = instandardized regression coefficient;  $\beta$  = standardized coefficient*

*Adjusted R Square =*  
 $R = .706$   $R^2 = .498$   $.478$   
 $F = 24.811$   $P = .000$

*Pembolehubah bersandar: Kesiediaan terhadap Perubahan*

H05: Tidak terdapat perbezaan yang signifikan di antara kategori umur dengan Kesiediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang.

Bagi menguji hipotesis nul yang kelima didalam kajian ini, kaedah Anova Sehalu digunakan kerana ianya melibatkan satu pembolehubah bebas iaitu umur dengan empat kategori (18-25 tahun, 26-35 tahun, 36-45 tahun, dan 45 tahun ke atas) dan satu pembolehubah bersandar (interval) iaitu Kesiediaan Terhadap Perubahan.

**Jadual 4.3.6** Keputusan Ujian Anova Sehalu Perbezaan  
 Antara Kategori Umur  
 dan Kesiediaan Terhadap Perubahan

SS	Dk	MS	F	Sig.
Antara pulan	Kum-			
.247	2	0.123	.505	.606
Dalam pulan	Kum-			
12.464	51	.244		
Jumlah				
12.711	53			

Jadual 4.3.6 menunjukkan keputusan Ujian Anova Sehala Kesediaan Terhadap Perubahan berdasarkan umur. Setelah analisis Ujian Anova Sehala dilakukan, ujian *Levene* didapati tidak signifikan ( $p >$

.05). Keputusan ini menunjukkan varians di antara staf berumur antara 26 hingga 35, antara 36 hingga 45 dan lebih 45 tahun adalah sama dan telah memenuhi andaian kehormogenan varians antara kategori umur dalam Kesediaan Terhadap Perubahan. Setelah Ujian Anova Sehala dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $F(2,51) = .505$ ,  $p .05$ . Oleh itu hipotesis nul kelima dalam kajian ini tidak boleh ditolak. Justeru itu, tidak terdapat perbezaan yang signifikan di antara kategori umur dengan Kesediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang.

H06: Tidak terdapat perbezaan yang signifikan antara kategori pencapaian tertinggi akademik dengan kesediaan Terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang.

Statistik infrensi yang digunakan untuk menguji hipotesis nul keenam iaitu perbezaan antara kategori pencapaian tertinggi akademik dengan Kesediaan Terhadap Perubahan terhadap Perubahan adalah ujian Anova Sehala. Ujian Anova Sehala digunakan kerana kerana data pembolehubah bebas iaitu pencapaian tertinggi akademik mempunyai 6 kategori (Sijil, Diploma, Sarjana Muda, Sarjana, Kedoktoran dan lain-lain) dan satu pembolehubah bersandar (interval) iaitu Kesediaan Terhadap Perubahan. Selain daripada itu, data juga diambil daripada responden yang sama.

**Jadual 4.3.7** Keputusan Ujian Anova Sehala Kategori Pencapaian Tertinggi Akademik dan Kesediaan



Terhadap Perubahan.

SS	Dk	MS	F	Sig.
Antara Kumpulan				
.406	3	0.135	.567	.639
Dalam Kumpulan				
14.527	61	.238		
Jumlah				
14.9323	64			

Jadual 4.3.7 menunjukkan dapatan Ujian Anova Sehala antara Kategori Pencapaian Tertinggi Akademik dan Kesiediaan Terhadap Perubahan. Setelah analisi dilakukan, keputusan ujian *Levene* adalah tidak signifikan ( $p > .05$ ). Keputusan ini menunjukkan varians di antara staf yang pencapaian tertinggi mereka samada Diploma, Ijazah Sarjana Muda, Sarjana, Kedoktoran dan lain-lain adalah sama dan telah memenuhi andaian kehormogenan varians antara kategori pencapaian tertinggi akademik dalam Kesiediaan terhadap Perubahan. Setelah Ujian Anova Sehala dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $F(3,61) = .567$ ,  $p >$

$.05$ ). Oleh itu, hipotesis nul keenam dalam kajian ini gagal ditolak. Maka, tidak terdapat perbezaan yang signifikan di antara kategori Pencapaian Tertinggi Akademik dengan Kesiediaan terhadap Perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang.

## PERBINCANGAN

Dapatan kajian menunjukkan pengurusan pentadbiran dan faktor kriteria kecemerlangan berada pada tahap tertinggi. Secara keseluruhannya faktor-faktor pembolehubah bebas (pengurusan dan pentadbiran, dan kriteria kecemerlangan) berada pada tahap tertinggi dan termasuk juga faktor pembolehubah bersandar(interval) iaitu kesiediaan terhadap perubahan.

Kesiediaan untuk berubah di kalangan staf berkadar secara langsung iaitu mempunyai hubungan yang signifikan dengan pengurusan dan pentadbiran yang diamalkan oleh pihak pengurusan Kolej Komuniti Kepala Batas Pulau Pinang. Sepertimana yang ditunjukkan oleh hasil kajian Blunder (2004), Adler (2002) dan Elmhorst (2002). Hasil dapatan kajian ini selari dengan kajian lepas

Reece, Brandt dan Howie (2011) yang menegaskan bahawa keberkesanan pengurusan pentadbiran organisasi yang cekap dan teratur akan menyumbang kepada tahap motivasi, komunikasi dan kepuasan bekerja yang tinggi dalam kalangan ahli organisasi terhadap hubungannya dengan pelaksanaan perubahan. Impaknya segala kerja dan tanggungjawab yang diserahkan oleh pihak pengurusan pentadbiran akan dilaksanakan dengan sempurna oleh pekerja dalam organisasi.

Kesediaan terhadap perubahan di kalangan staf berkadar secara langsung iaitu mempunyai hubungan yang signifikan dengan pengurusan pentadbiran yang diamalkan oleh pihak pengurusan Kolej Komuniti Kepala Batas Pulau Pinang. Pengurusan dan pentadbiran Kolej Komuniti Kepala Batas menunjukkan contoh kepimpinan melalui tauladan yang baik kepada staf bagi mencapai visi dan misi Kolej Komuniti. Ini menggambarkan pihak pengurusan dan pentadbiran menghargai usaha-usaha yang telah dilaksanakan dan akan dilaksanakan oleh staf. Staf merasa dihargai dan akan melakukan apa sahaja pekerjaan tanpa mengira semasa menjalankan tugas yang diberikan bagi mencapai visi dan misi organisasi.

Persepsi perubahan yang ditunjukkan oleh staf Kolej Komuniti Kepala Batas tidak dipengaruhi faktor umur terhadap kesediaan untuk menerima perubahan. Ini kerana tiada perbezaan yang signifikan kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas berdasarkan umur. Begitu juga dengan kesediaan terhadap perubahan dalam kalangan staf Kolej Komuniti Kepala Batas Pulau Pinang iaitu tidak mempunyai perbezaan berdasarkan pencapaian akademik tertinggi. Ini menunjukkan bahawa staf yang berkelulusan rendah atau tinggi adalah sama berdasarkan kesediaan terhadap perubahan di Kolej Komuniti Kepala Batas Pulau Pinang. Semoga kajian ini menjadi rujukan dan galakan kepada penyelidik-penyelidik akan datang menyambung dan meneruskan kajian ini.

## **KESIMPULAN DAN CADANGAN**

Pihak pengurusan dan pentadbiran perlu cekap dalam mengurus, melaksanakan tugas yang diamanahkan, boleh mengawal organisasi, menganalisis perubahan yang berlaku dalam organisasi yang dipimpin, merancang dan mempunyai hubungan rakan sekerja yang komited bagi memastikan perubahan dalam kecemerlangan sesebuah organisasi yang ditadbir (Ab. Aziz 2000). Dalam melaksanakan agenda perubahan, pemimpin tidak mungkin dapat memenuhi setiap tuntutan, kehendak dan keperluan staf semasa melaksanakan perubahan, tetapi

perubahan yang dilakukan perlu berlandaskan persekitaran yang terbuka, telus dan ikhlas. Staf merasa dihargai dan seronok untuk bekerja bagi mencapai perubahan kecemerlangan organisasi. Sehubungan itu kajian sebegini amat perlu dijalankan agar gambaran yang jelas dapat diperoleh untuk merangka sebarang usaha intervensi yang lebih komprehensif ke arah menyokong elemen kesediaan organisasi dalam pelaksanaan perubahan (Amin, 2012).

## RUJUKAN

Joris Van der Voet, BS. Kuipers & S. Groeneveld (2015). *Implementing Change In Public Organizations: The Relationship Between Leadership And Affective Commitment To Change In A Public Sector Context*, 18, 842-865.

Musa Ali. (2015). *Transformasi Organisasi: Konsep Dan Teknik Pelaksanaan*. Pulau Pinang: Penerbit: Universiti Sains Malaysia.

Hussain, H. K., Talib, N. A., & Shah, I. B. M. (2014). *Transformational Leadership: A Case For Innovation In Iraqi Public Universities*. International Journal, 2(7), 664-671.

Lussier, R., & Achua, C. (2015). *Leadership: Theory, Application, & Skill Development*. Cengage Learning.

Ibrahim, M. A., Wan Sulaiman, W. S., & Hafidz, M. S.W. (2018). *Organizational Citizenship Behavior As A Mediator In The Relationship Between Job Satisfaction And Organizational Commitment Towards Task Performance Among University Lecturers*. Sains Humanika, 10(3), 47-56.

Lan, X.M. & Chong, W.Y. (2015). *The Mediating Role Of Psychological Empowerment Between Transformational Leadership And Employee Work Attitudes*. Procedia – Social and Behavioral Sciences 172, 184 – 19. Doi: 10.1016/j.sbspro.2015.01.353

Sang, L.C., Chin, F.G., Muhamad, B.H.A., & Owee, K.T. (2016). *Transformational Leadership, Empowerment, And Job Satisfaction: The Mediating Role Of Employee Empowerment*. Human Resources for Health, 14(73), 1-14.

MohdYusoff, S., & Saidin, K. (2017). *Tahap Iklim Sekolah, Tahap Komitmen Guru Serta Hubungan Di Antara Iklim Sekolah Dengan Komitmen Guru Sekolah-Sekolah Menengah Daerah Machang, Kelantan*. Proceedings of the ICECRS, 1(1), 635-646.

Jamilah Man, Yahya Don & Siti Noor Ismail. (2017). *Kepimpinan Transformasional Dan Kualiti Guru Generasi 'Y'*. JuPiDi: Jurnal Kepimpinan Pendidikan, 3(1), 29-42.

Mansor, R., & Hamzah, M. I. M. (2015). *Kepimpinan Berkualiti: Perspektif Mengenai Kompetensi Yang Diperlukan Untuk Memimpin Dengan Berkesan*. Jurnal Pengurusan, 45, 143-154.

Kushner, R. and Poole, P. (1996). *Exploring Structure-Effectiveness Relationship In Nonprofit Arts Organizations*. Nonprofit Management and Leadership. 6 (2): 171-180.

Nor Azzah Kamri. (2015). *Etika Pengurusan Islam Aplikasi Dan Implikasi*. Kuala Lumpur: Penerbit Universiti Malaya.

Samsudin, N. H. (2015). *Faktor-Faktor Peningkatan Motivasi Pekerja Institusi: Analisis Menurut Perspektif Al-Qur'an*. Disertasi sarjana tidak diterbitkan, Universiti Sains Malaysia Pulau Pinang.

Taba, M. I. (2018). *Mediating Effect Of Work Performance And Organizational Commitment In The Relationship Between Reward System And Employees' Work Satisfaction*. Journal of Management Development, 37(1), 65–75.

Weiner, B.J. (2009). *A Theory Of Organizational Readiness For Change*. Implementation Science, 4(1), 67.

Yukl G. (2010). *Leadership In Organizations*. New Jersey: Prentice Hall

Jamelaa Bibi Abdullah. (2012). *Amalan Kepimpinan Instruksional Dan Sikap Terhadap Perubahan Dalam Kalangan Pengetua Sekolah Menengah Di Negeri Pahang*. Tesis Ph. D. tidak diterbitkan. Universiti Kebangsaan Malaysia.

Ahlam Abdul Aziz. (2016). *Peranan Teknologi Komunikasi Dan Sumbangannya Ke Arah Perkembangan Komunikasi Dalam Organisasi Yang Berkesan*. forum komunikasi, 11(2), 51-64.

Nur Ashikin Lakman (2015). *Kepemimpinan Transformasi Dalam Ptv Di Politeknik. (Tesis Sarjana Yang Tidak Ditebitkan)*. Kolej Universiti Teknologi Tun Hussien Onn Malaysia.

Trioctavia, J., Hamid, D., & Mukzam, M. D. (2016). *Peranan Pemimpin Dalam Mengembangkan Budaya Organisasi (Studi Kasus Pada Pt. Asuransi Jiwasraya (Persero) Malang Regional Office)*. Jurnal Administrasi Bisnis, 40(1), 150-159.

Aamir, M. S. K. & Jianguo, D. (2016). *Relationship Between Transformational Leadership Style And Organizational Commitment: Mediating Effects Of Psychological Empowerment*. Journal of Business and Finance Management Research, 1(1), 001-015.

Mohamad, M., Don, Y., & Ismail, S. N. (2016). *Kepimpinan Strategik Dan Hubungannya Dengan Kediaan Perubahan Warga Organisasi*. Jurnal Kepimpinan Pendidikan, 3(2), 1-14.

Koppenhoefer, (2013). *The Impact Of Leadership Style On Organizational Commitment In Medical Health*

*Insurance Call Centers*, Dissertation submitted to the faculty of graduate studies in leadership and the graduate school in partial fulfilment of the require.

Lan, X.M. & Chong, W.Y. (2015). *The Mediating Role Of Psychological Empowerment Between Transformational Leadership And Employee Work Attitudes*. Procedia - Social and Behavioral Sciences 172, 184 – 19. Doi: 10.1016/j.sbspro.2015.01.353.

Kool, M., & Dierendonck, D. V. (2012). *Servant Leadership And Commitment To Change, The Mediating Role Of Justice And Optimism*. Journal of Organizational Change Management, 25(3), 422-433.

- Melchar, D. E., & Bosco, S. M. (2010). *Achieving A High Organization Performance Through Servant Leadership*. The Journal of Business Inquiry, 9(1), 74-88.
- Ibrahim, I., & Don, Y. (2014). *Kepimpinan Servant Dan Pengaruhnya Terhadap Pengurusan Perubahan Di Sekolah*. Jurnal Pendidikan Malaysia, 39(1), 19-26.
- Nor Mohamad Zulhairi Ismail, Jamalul Lail Abdul (2016). *Kepuasan Kerja Guru Dan Perbezaannya Berdasarkan Pencapaian Sekolah (Teacher Job Satisfaction And Performance Based Schools Difference)*. Personalia Pelajar 19(1) (2016): 49-54
- Porath, C. L., Gerbasi, A., & Schorch, S. L. (2015). *The Effects Of Civility On Advice, Leadership, And Performance*. Journal of Applied Psychology, 100(5), 1527-1541.doi :10.1037/apl0000016
- Suzanah. (2015). *Pembangunan kerjaya dalam organisasi*. Portal Intelektual JPANS.
- Krejcie, V. D., & Morgan, W, (1970). *Determining Sample Size For Research Activities*. Educational And Psychological Measurement, 30, 607-610
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics(6ed)*. New York: Pearson

## KAJIAN PERSEPSI PESERTA PSH TERHADAP KURSUS PENSIJILAN PROFESIONAL DI KOLEJ KOMUNITI KEPALA BATAS

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### ABSTRAK

*Pusat Teknologi Kenderaan Hibrid dan Elektrik (PTKHEK) Kolej Komuniti Kepala Batas (KKKB) dilancarkan pada tahun 2013 oleh YAB Timbalan Perdana Menteri, Tan Sri Muhyiddin Bin Haji Muhammad Yassin dan dirasmikan oleh Menteri Pendidikan II, Dato' Seri Idris bin Jusoh pada tahun 2014 bagi memenuhi Dasar Automotif Nasional (NAP 2014) bagi menjadikan Malaysia sebagai hub kenderaan cekap tenaga (EEV – Energy Efficient Vehicle). Pusat Hibrid bekerjasama dengan Institute of The Motor Industry (IMI), United Kingdom bagi menawarkan kursus Pembelajaran Sepanjang Hayat melalui pensijilan profesional tahap satu (1) hingga tahap tiga (3) kepada pemain industri automotif bagi tujuan peningkatan kemahiran (up-skilling) dan melatih semula (re-skilling). Pengiktirafan pensijilan ini bertaraf professional dan antarabangsa dimana ia diterima di seluruh dunia. Pada tahun 2019 sahaja, seramai 270 penyertaan telah diterima bagi menyertai kursus latihan professional ini. Program latihan ini bukan sahaja telah menarik minat peserta tempatan malah menarik minat peserta dari pelbagai negara luar. Kajian ini adalah untuk melihat tahap persepsi peserta kursus pensijilan profesional Teknologi Kenderaan Hibrid dan Elektrik terhadap kursus yang dikendalikan oleh pusat ini. Sebanyak 160 responden telah dipilih secara rawak bagi menjawab soalan kajian ini yang terdiri dari pekerja industri, agensi-agensi kerajaan, pelajar dan orang awam yang menghadiri kursus ini diambil sebagai sampel kajian. Dapatan kajian menunjukkan kursus yang ditawarkan ini menepati keperluan kemahiran yang diperlukan dalam industri automotif selain penceramah yang kompeten dalam mengendalikan kursus berkenaan. Cadangan penambahbaikan diberikan oleh peserta adalah KKKB perlu menaik taraf kemudahan fasiliti yang ada selain mereka mengharapkan agar dapat menawarkan Pensijilan tahap 4 IMI. Kesimpulannya keseluruhan peserta sangat berpuas hati terhadap kursus yang dijalankan dan amat berminat untuk menghadiri kursus pada masa akan datang bagi menambah kemahiran yang diperlukan.*

**Kata Kunci:** *Sijil Profesional, Teknologi Kenderaan Hibrid dan Elektrik, Peserta Kursus, Pendidikan Sepanjang Hayat.*

### PENGENALAN

Teknologi Revolusi Industri 4.0 dalam bidang industri automotif semakin berkembang pesat dan lebih cenderung ke arah menghasilkan kenderaan yang lebih mesra alam. Pelbagai kajian turut dilakukan bagi menggantikan petrol sebagai sumber utama bagi menjana tenaga kepada sesebuah kenderaan. Antara penyelesaian yang telah ada ialah kenderaan hibrid dan elektrik (EV). Di Malay-



sia dan rantau Asia Tenggara khususnya, jumlah bilangan kenderaan EV semakin bertambah saban hari. Ini kerana harga bahan api semakin meningkat, begitu juga dengan tahap pencemaran yang semakin tinggi. Ditambah pula dengan sokongan dan inisiatif dari kerajaan, tidak mustahil penggunaan kenderaan enjin akan digantikan dengan kenderaan elektrik pada masa hadapan. Berdasarkan hamparan rasmi parlimen di Dewan Negara oleh Timbalan Menteri Pengangkutan, Datuk Kamaruddin Jaffar, data terkini sehingga 31 Mac 2019 terdapat 46,981 kenderaan hibrid dan 5,403 kenderaan elektrik yang berdaftar di Malaysia seperti yang ditunjukkan dalam Jadual 1.1. Pertambahan bilangan kenderaan elektrik dilihat agak ketara dalam tempoh suku pertama tahun 2019 iaitu sebanyak 5,214 buah. Dengan pertambahan yang ketara ini ia akan merancakkan lagi industri automotif yang melibatkan teknologi EV.

NEGERI	HYBRID	ELEKTRIK
Perlis	107	12
Kedah	519	107
Pulau Pinang	4230	428
Perak	1937	64
Selangor	3147	2791
Wilayah Persekutuan	25360	504
Negeri Sembilan	861	29
Melaka	949	111
Johor	5218	202
Pahang	653	114
Terengganu	308	9
Kelantan	451	8
Sabah	1278	774
Sarawak	1963	250
<b>Jumlah</b>	<b>46981</b>	<b>5403</b>

**Jadual 1.1: Kenderaan Berdaftar Bagi Kereta Menggunakan Kuasa Elektrik dan Hibrid (sehingga 31 mac 2019)**

*(sumber: Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia - MAMPU)*

Pusat Teknologi Kenderaan Hibrid dan Elektrik Kolej Komuniti Kepala Batas (PTKHEK) telah dilancarkan 16 November 2013 semasa Karnival My3L Peringkat Nasional. Majlis pelancaran ini disempurnakan oleh Timbalan Perdana Menteri Tan Sri Muhyiddin Bin Haji Muhammad Yassin. Pada 20 Mei 2014 PTKHEK telah dirasmikan oleh Menteri Pendidikan II iaitu Dato' Seri Idris Bin Jusoh sebagai pusat bertauliah dibawah Insitute of The Motor Industry (IMI) United Kingdom dengan menawarkan kursus PSH.

Menerusi Pendidikan Sepanjang Hayat (PSH), memberi peluang pendidikan berterusan kepada semua golongan masyarakat menerusi kursus-kursus yang ditawarkan bagi sesebuah institusi (Wan Ahmad, Wan Rashid, Mohd Hasyim, M.H.2011). Manakala menurut Ghazalan (2015), PSH adalah merupakan latihan yang diadakan di institusi pendidikan untuk peningkatan prestasi dan kualiti kerja, pengetahuan, kemahiran serta tahap pendidikan individu. . Dengan itu, PTKHEK telah mengambil inisiatif dengan menawarkan latihan kepakaran melalui Pembelajaran Sepanjang Hayat (PSH) dalam bidang Teknologi Kenderaan Hibrid dan Elektrik tahap 1, 2 dan 3 sejak tahun 2014. Peserta yang mengikuti kursus ini akan ditauliahkan dengan sijil profesional pensijilan IMI peringkat antarabangsa dari IMI United Kingdom setelah peserta tamat dan lulus ujian penilaian yang telah ditentukan oleh IMI.

### **Penyataan Masalah**

Oleh kerana teknologi kenderaan EV adalah merupakan masih merupakan perkara yang baharu di kalangan pemain industri automotif Malaysia, maka tidak banyak pusat latihan yang bertauliah menawarkan kursus yang berkaitan. Selain itu, kenderaan ini juga mempunyai voltan tinggi dan pengendali yang melakukan kerja-kerja pembaikan dan penyelenggaraan perlulah mengetahui kaedah yang betul agar cara kendaliannya adalah selamat. Peserta yang menghadiri kursus di PTKHEK pada asasnya mereka telahpun mempunyai pengetahuan dan kemahiran asas bagi menyelenggara kenderaan biasa. Namun mereka tidak pernah terdedah dengan mengikuti kursus yang berstruktur kepada kaedah penyelenggaraan yang betul bagi mengelakkan kejadian kemalangan yang tidak diingini sekiranya dikendalikan secara tidak betul. Keadaan ini boleh menyebabkan mereka akan terdedah kepada bahayanya kewujudan voltan tinggi ketika melakukan kerja-kerja penyelenggaraan bagi kenderaan berkenaan. Tenaga pengajar yang mengendalikan kursus ini adalah merupakan pensyarah di Kolej Komuniti Kepala Batas (KKKB) yang kompetan dan mahir serta telah mendapat pensijilan Profesional dari IMI dari tahap 1 sehingga tahap 4, selain kesemua mereka ini telah mendapat akreditasi bertauliah dari

IMI sebagai pengajar berdaftar. Menurut Phil (2005), kritikan yang selalu diterima terhadap tenaga pengajar dalam bidang kemahiran, mereka kurang berpengalaman dalam industri yang berkaitan selain kurang terdedah kepada perkembangan teknologi semasa disebabkan kekurangan fasiliti. Oleh itu, kajian ini akan melihat sejauh mana kejayaan kursus yang dijalankan dengan meninjau persepsi peserta kursus PSH yang telah mengikuti kursus di PTKHEK.

## **OBJEKTIF KAJIAN**

Objektif utama kajian ini adalah untuk :

Menentukan keberkesanan kandungan kursus yang diikuti oleh peserta kursus;

Mengenalpasti tahap kompetensi kordinator yang mengendalikan kursus professional IMI ini;

Mengetahui tahap kemudahan fasiliti yang terdapat di pusat berkenaan.

## **METODOLOGI KAJIAN**

Metodologi kajian adalah sangat penting bagi menjalankan penyelidikan bagi tujuan memperolehi maklumat yang tepat serta keesahan yang tinggi. Dalam kajian ini, populasi peserta kursus yang mengambil pensijilan profesional IMI adalah seramai 270 orang (Jadual 1.3) sahaja. Dengan menggunakan jadual penentuan saiz sampel oleh Krejcie dan Morgan (1970), minimum jumlah sampel kajian adalah seramai sekurang-kurangnya 159 responden. Dalam kajian ini, seramai 160 responden telah diambil secara rawak. Kajian rintis dilakukan bagi menguji sejauh mana instrument yang digunakan mengandungi konstruk yang tepat. Bagi menentukan pekali kebolehpercayaan instrument, kajian telah dilakukan ke atas 20 orang peserta kursus. Dalam kajian ini, nilai Cronbach Alpha bagi kesemua konstruk dalam kajian rintis berada di antara 0.743 dan 0.935.

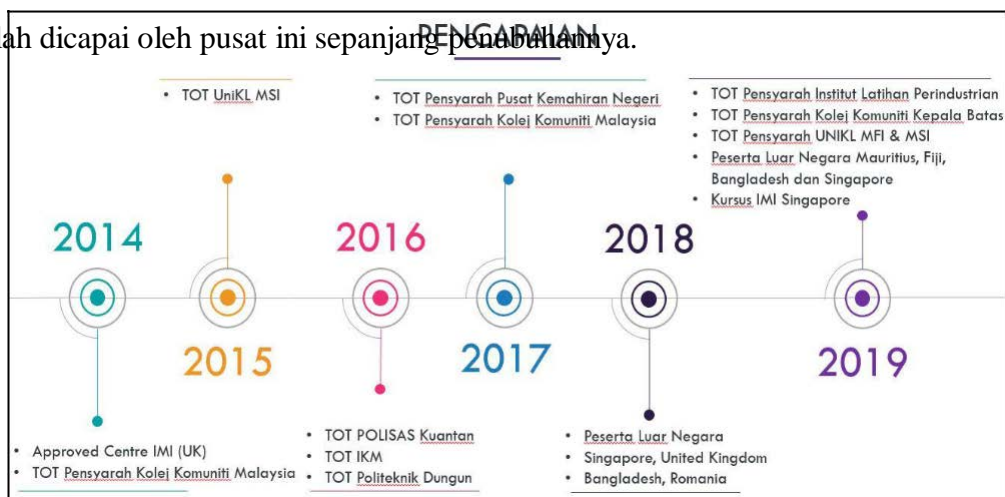
Kajian ini dijalankan secara kajian deskriptif dengan menggunakan soal-selidik. Kajian ini menggunakan kaedah kualitatif dan data-data dikumpul bersandarkan kepada sumber data utama yang diperolehi terus daripada cerapan responden melalui kaedah edaran soal selidik menggunakan melalui 'Google Form', di mana peserta kursus dikehendaki mengisikan soal selidik berkenaan. Tempoh kajian ini diambil bermula dari bulan Februari 2019 sehingga Oktober 2019. Seterusnya data berkenaan dikumpul dan dianalisis menggunakan SPSS versi 25.

## Limitasi Kajian

Perlaksanaan kajian ini menfokuskan kepada peserta-peserta kursus tempatan yang mengambil pensijilan professional IMI dari tahap 1 sehingga tahap 3 sahaja. Tujuannya adalah untuk memberi fokus terhadap keperluan peserta tempatan sahaja.

## SOROTAN KARYA

Sepanjang hampir enam tahun PTKHEK beroperasi pelbagai pencapaian kursus telah diperolehi di mana kursus yang dilaksanakan melibatkan peserta dari komuniti, pemain industri automotif, institusi kemahiran awam dan swasta. Menurut Tapomoy (2005), kemahiran ialah proses yang sistematik dan dirancang untuk tujuan peningkatan pengetahuan, kompetensi serta tingkah-laku pekerja. Pada tahun 2018 pusat ini mengorak langkah dengan menawarkan kursus kepada peserta dari luar negara. Peserta dari luar negara terdiri daripada negara Singapura, Thailand, Mauritius, Fiji dan Bangladesh. Kursus yang dianjurkan bukan sahaja di Malaysia malah ada kursus yang dijalankan di luar negara iaitu di Singapura kerana terdapat permintaan dari pemain industri automotif negara tersebut. Rajah 1.1 menunjukkan pencapaian dan kemajuan yang telah dicapai oleh pusat ini sepanjang penubuhannya.



Rajah 1.1 : Pencapaian PTKHEKKB

Dalam Jadual 1.2 pula menunjukkan statistik penyertaan peserta kursus sepanjang tahun 2014 hingga 2019 (dengan pensijilan dan tanpa pensijilan IMI). Sehingga pertengahan tahun 2019 Pusat Teknologi Hibrid telah menerima 4,941 penyertaan dimana para peserta terdiri daripada komuniti, pelajar, agensi kerajaan serta pemain industri automotif dalam dan dari luar negara.

Bermula dari tahun 2018 sehingga pertengahan tahun 2019, seramai 64 orang peserta kursus dari negara luar seperti Bangladesh, Fiji, Singapura dan lain-lain turut menyertai kursus di pusat ini.

TAHAP	TAHUN					
	2014	2015	2016	2017	2018	2019
Level 1: Award in Electric/Hybrid Vehicle Awareness	647	167	294	538	413	455
Level 2: Award in Electric/Hybrid Vehicle Hazard Management for Emergency and Recovery Personnel	521	117	161	243	175	105
Level 3: Award in Electric/Hybrid Vehicle System Repair and Replacement	420	174	108	138	110	118
<b>JUMLAH</b>	<b>1588</b>	<b>458</b>	<b>563</b>	<b>919</b>	<b>698</b>	<b>715</b>

Jadual 1.2 : Penyertaan Kursus Teknologi Kenderaan Hibrid Dan Elektrik

(Merangkumi Kursus Profesional dan Tidak Profesional)

Manakala Jadual 1.3 pula menunjukkan statistik penyertaan kursus pensijilan profesional IMI untuk tahap 1 hingga tahap 3. Jelas menunjukkan sehingga tahun 2019, berlakunya peningkatan yang sangat ketara dan tertinggi sepanjang sejarah penubuhan peserta kursus semenjak tahun 2014. Peningkatan yang ketara ini disebabkan penawaran kursus kepada peserta dari luar negara. Ianya sejajar dengan peningkatan jumlah kenderaan hibrid dan EV. Permintaan untuk hibrid dan EV di Malaysia sahaja menunjukkan peningkatan dari anggaran 100 unit pada tahun 2013 kepada 52,384 unit pada 31 Mac 2019 (The Malaysian Reserve, 3 Julai 2019).

TAHAP	TAHUN					
	2014	2015	2016	2017	2018	2019
Level 1: Award in Electric/Hybrid Vehicle Awareness						
Level 2: Award in Electric/Hybrid Vehicle Hazard Management for Emergency and Recovery Personnel	129	30	111	87	210	270



Level 3: Award in Electric/Hybrid Vehicle System Repair and Replacement						
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Jadual 1.3 : Penyertaan Kursus Pensijilan Antarabangsa IMI

Semenjak menjadi pusat tauliah badan antarabangsa iaitu dari IMI, PTKHEK berjaya mematuhi segala bentuk piawaian dan garis panduan yang telah ditetapkan oleh pihak IMI. Setiap tahun pusat ini akan diaudit sebanyak dua kali iaitu pada bulan Mei dan November. Tujuan audit ini dijalankan adalah bagi memastikan pusat yang telah ditauliahkan oleh IMI mematuhi segala prosedur dan manual operasi yang telah ditetapkan bagi menjamin kualiti pensijilan yang ditawarkan kepada peserta

### Dapatan Kajian

Dalam kajian ini, soal-selidik dirangka kepada 5 komponen utama. Soalan yang dibina adalah berdasarkan kepada persepsi peserta pendidikan sepanjang hayat (PSH) terhadap kursus pensijilan profesioanl IMI yang diikuti di KKKKB. Soalan terbahagi kepada 5 komponen. Komponen A adalah bagi mendapatkan latar belakang peserta kursus. Manakala komponen B adalah untuk mengetahui keberkesanan objektif kursus. Bagi komponen C pula, adalah berkaitan teknik penyampaian dan bahan kursus yang disediakan oleh tenaga pengajar kepada peserta. Bagi komponen D, adalah untuk mengetahui kemahiran dan pengetahuan tenaga pengajar. Komponen E adalah merangkumi fasiliti yang terdapat di bengkel kursus. Seterusnya, komponen F adalah berkaitan dengan pencapaian sendiri peserta kursus. Bagi komponen B hingga F, setiap item mempunyai 5 pilihan aras menggunakan skala likert iaitu sangat tidak setuju (1), tidak setuju (2), tidak pasti (3), Setuju (4) dan dan sangat setuju (5).

Skala Likert 5	Skala 3 Pemeringkatan
Pemeringkatan	
1 (STS)	Tidak Setuju
2 (TS)	
3 (TP)	Tidak Pasti
4 (S)	Setuju
5 (SS)	

Jadual 3.1 : Pemeringkatan Skala Likert

Mohd Majid (1994) menjelaskan pemahaman terhadap soalan yang dikemukakan adalah hak individu berkaitan. Oleh itu pengkaji membuat takrifan sekiranya responden memberi jawapan bersetuju, ia bermaksud persepsi yang positif dan sebaliknya, manakala bagi jawapan yang tidak pasti tidak akan diambil kira dalam perbincangan kajian ini. Selain itu, pengkaji akan mem-

buat penetapan julat peratusan bagi mengetahui persepsi responden berdasarkan kepada Jadual 3.2 di bawah :

<b>PERATUSAN</b>	<b>TAHAP</b>
0-49	Rendah
50-79	Sederhana
80 - 100	Tinggi

Jadual 3.2: Darjah Peratusan Penilaian Responden

Menurut Mohd Majid juga (1994), nilai min yang didapati dalam analisa kajian akan dapat menentukan tanggapan positif atau negatif terhadap aspek yang dikaji, dan boleh dibahagikan kepada 3 kategori utama iaitu rendah, sederhana dan tinggi seperti dalam Jadual 3.3 :

<b>MIN</b>	<b>TAHAP</b>
1.0 – 2.33	Rendah
2.34 – 3.67	Sederhana
3.68 – 5.00	Tinggi

Jadual 3.3 : Darjah Min Pernilaian Responden

### **Bahagian A - Demografi Peserta**

		<b>Bilangan</b>	<b>Peratus</b>
Kategori	Pelajar IPT	13	8.1
	Industri	119	74.4
	Agensi Kerajaan	21	13.1
	Komuniti	7	4.4
	Jumlah	160	100

Jantina	Lelaki	152	95
	Perempuan	8	5
	Jumlah	160	100
Bangsa	Melayu	121	75.6
	Cina	16	10
	India	15	9.4
	Lain-lain	8	5.0
	Jumlah	160	100
Umur	18–20	9	5.6
	21–30	56	35.0
	31–40	76	47.5
	41 tahun ke atas	19	11.9
	Jumlah	160	100
Tahap Pendidikan	SPM	46	28.7
	Sijil	56	35
	Diploma	37	23.1
	Ijazah Sarjana Muda	13	8.1
	Ijazah Sarjana	5	3.1
	Doktor Falsafah	3	1.0
	Jumlah	160	100
Pengalaman Kerja	Tiada Pengalaman	12	7.5
	Kurang 5 tahun	31	19.4
	6 – 10 tahun	72	45
	11 – 15 tahun	30	18.8

	18 – 20 tahun	9	5.6
	21 tahun ke atas	6	3.8
	Jumlah	160	100

Jadual 3.4 : Demografi Peserta Kursus

Dalam Jadual 3.4, peserta yang paling ramai mengikuti kursus ini adalah dari pemain industri automotif iaitu sebanyak 74.4%, diikuti oleh agensi kerajaan sebanyak 13.1% dan 8.1% lagi dari pelajar IPT. Manakala seramai 95% peserta kursus adalah lelaki dan bakinya adalah perempuan. Ini memandangkan pekerja bidang automotif sememangnya didominasi oleh lelaki. Peserta kursus yang paling ramai adalah dari bangsa Melayu iaitu 75.6% diikuti bangsa Cina 10%, India 5% dan lain-lain 8%. Bagi usia peserta kursus, antara 31-40 tahun iaitu sebanyak 47.5% diikuti 35% berusia 21-30, manakala peserta kursus yang berusia melebihi 41 tahun ke atas sebanyak 11.9%. Bagi kelayakan akademik, 35% responden memiliki sijil, merangkumi sijil akademik mahupun sijil kemahiran, manakala 28.7% lagi adalah berpendidikan diperingkat Sijil Pelajaran Malaysia (SPM), 8.1% memiliki diploma dan diikuti dengan kelulusan yang lain. Pengalaman kerja responden pula menunjukkan sebanyak 45% peserta kursus adalah terdiri dari mereka yang mempunyai pengalaman kerja 6 hingga 10 tahun, manakala 19.4% lagi berpengalaman kerja kurang dari 5 tahun, diikuti 18.8% mempunyai pengalaman kerja antara 11 hingga 15 tahun, selebihnya seperti yang ditunjukkan dalam Jadual 3.4, sebanyak 7.5% responden tidak mempunyai pengalaman kerja kerana mereka ini terdiri dari pelajar institusi pengajian tinggi yang masih lagi menuntut pengajian.

## BAHAGIAN B - OBJEKTIF KURSUS

Dalam Jadual 3.9, menunjukkan taburan kekerapan, peratusan dan min setiap item soalan yang berkaitan objektif kursus. Merujuk kepada jadual ini, ia menunjukkan keputusan keseluruhan objektif kursus adalah tercapai, iaitu sebanyak 87.5% responden menjawab kandungan program adalah bersesuaian dengan objektif kursus dengan min yang diperolehi adalah 4.3 dan berada pada min tahap tinggi.

No.	Respon (% : Bilangan Responden)	Min
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Item	Pernyataan Soalan						Skala Likert
		STS	TS	TP	S	SS	
		(1)	(2)	(3)	(4)	(5)	
B1	Kandungan program ber-sesuaian dengan objektif	1.3%	5%	6.3%	36.3%	51.2%	4.3
		(2)	(8)	(10)	(58)	(82)	
		6.3%		6.3%	87.5%		
B2	Kandungan program yang dijalankan adalah terancang	0%	1.3%	3.1%	31.9%	63.7%	4.6
		(2)	(5)	(51)	(102)		
		1.3%		3.1%	95.6%		

Jadual 3.9 : Objektif Kursus

Manakala sebanyak 95.6% responden juga berpendapat kandungan program yang dijalankan adalah terancang dan sistematik dengan nilai min sebanyak 4.6 dan berada pada tahap tinggi. Ini memandangkan tenaga pengajar adalah merupakan mereka yang berpengalaman dan telah melibatkan diri sebagai pengendali kursus semenjak 2014 lagi.

### BAHAGIAN C – TEKNIK PENYAMPAIAN DAN BAHAN KURSUS

Merujuk kepada Jadual 3.10 di bawah, hasil dapatan responden terhadap kaedah penyampaian yang mudah difahami dengan 98.2% penilaian responden berada pada tahap tinggi dengan nilai min sebanyak 4.7, berada pada tahap tinggi. Bagi item bahan modul kursus, sebanyak 97.5% responden menyatakan ianya adalah bersesuaian dengan nilai min sebanyak 4.6, berada pada



tahap tinggi. Untuk item kualiti nota yang dibekalkan, sebanyak 98.1% responden menyatakan ianya adalah baik dan berada pada darjah peratusan responden tahap tinggi dengan nilai min 4.7. Ini memandangkan nota-nota yang disediakan adalah modul yang telah ada dalam sistem E Pembelajaran IMI untuk kursus pensijilan profesional ini, dan ianya adalah nota terkini

No.  Item	Pernyataan Soalan	Respon (% : Bilangan Responden)					Min  Skala  Likert
		STS  (1)	TS  (2)	TP  (3)	S  (4)	SS  (5)	
C1	Cara penyampaian yang mudah difahami	0%  (0)	0.6%  (1)	1.3%  (2)	29.4%  (47)	68.8%  (110)	4.7
		0.6%		1.3%	98.2		
C2	Bahan modul kursus adalah bersesuaian	0%  (1)	0.6%  (3)	1.9%  (52)	32.5%  (104)	65.0%	4.6
		0.6%		1.9%	97.5%		
C3	Kualiti nota yang dibekalkan adalah baik	0%  (1)	0.6%  (2)	1.3%  (49)	30.6%  (108)	67.5%  (108)	4.7
		0.65%		1.3%	98.1%		
C4	Kualiti alat bantu audio visual ter-	0%  (63)	0%  (97)	0%	39.4%  (63)	60.6%  (97)	4.6
		0%		0%	100%		

	baik						
	Jangkamasa kur-	0%	1.9%	5.6%	54.4%	38.1%	
	sus	(3)	(9)	(87)	(61)		
C5	adalah bersesuaian	1.9%	5.6%	92.5%			4.3

Jadual 3.10 : Teknik Penyampaian dan Bahan Kursus

## BAHAGIAN D – TENAGA PENGAJAR

Berdasarkan Jadual 3.11 di bawah, 100% responden bersetuju bahawa tenaga pengajar di PTKHEK mempunyai kemahiran yang tinggi berkaitan dengan kursus yang diajar dengan darjah peratusan penilaian responden adalah sangat tinggi, manakala nilai min adalah 4.7 dan berada pada tahap tinggi. Kesemua tenaga pengajar adalah mereka yang kompeten dan memiliki kelayakan pensijilan profesional kemahiran dalam bidang selain berpengalaman. 99.4% responden menyatakan 99.4% tenaga pengajar mempunyai pengetahuan yang tinggi berkaitan dengan kursus yang diajar dengan nilai min 4.8 pada tahap tinggi. Bagi item pengetahuan terkini berkaitan kursus yang diajar, 92.5% responden menjawab tenaga pengajar mempunyai pengetahuan yang terkini dengan penilaian nilai min sebanyak 4.5 pada tahap tinggi. 93.8% responden mengemukakan maklumbalas yang pusat ini menyediakan bahan kursus yang bersesuaian, nilai min 4.4 pada tahap tinggi. Bagi item penggunaan waktu, sebanyak 91.3% menyatakan ia digunakan secara berkesan dengan nilai skor min 4.3 pada tahap tinggi. Masa yang diambil untuk melengkapkan kesemua 3 tahap adalah selama 4 hari. Ianya bersesuaian dengan kandungan modul dan kebanyakan peserta datangnya dari industri automotif yang tidak membolehkan mereka menghadiri dalam tempoh yang panjang kerana akan menjejaskan perniagaan. Bagi item menjawab pertanyaan peserta dengan tepat dan cepat, sebanyak 93.1% responden sangat berpuas hati dengan respon setiap soalan yang dikemukakan dengan nilai min 4.5 berada pada tahap tinggi. Pengalaman dalam memberi latihan oleh tenaga pengajar ini telah membantu untuk mereka membuat persediaan awal dan berkeyakinan untuk menjawab soalan-

soalan yang dikemukakan oleh peserta. Sebanyak 90% responden berpuas hati pada tahap tinggi berkaitan penggunaan alat bantu mengajar yang digunakan sepanjang kursus dengan nilai skor min 4.4, pada tahap tinggi. Manakala bagi item tenaga pengajar memberi ruang kepada peserta untuk berbincang, sebanyak 95% responden menjawab yang mereka diberi ruang untuk berbincang, kerana sepanjang mereka berada dalam program ini, peserta perlu lulus dalam penilaian yang ditetapkan oleh pihak IMI bagi melayakkan mereka mendapat pensijilan. Berbincangan antara peserta dan tenaga pengajar akan membolehkan mereka bukan sekadar bertukar pandangan, malah membolehkan mereka didedahkan dengan pengetahuan terkini. Secara keseluruhannya bagi item D, kesemua nilai skor min berada pada tahap tinggi, yang menunjukkan pengajar adalah sangat berkompentensi dan berpengalaman.

No.  Item	Pernyataan Soalan	Respon (% : Bilangan Responden)					Min  Skala  Likert
		STS  (1)	TS  (2)	TP  (3)	S  (4)	SS  (5)	
D1	Mempunyai kemahiran tinggi berkaitan kursus yang diajar	0%	0%	0%	30.0% (48)	70.0% (112)	4.7
		0%		0%	100%		
D2	Mempunyai pengetahuan yang tinggi berkaitan kursus yang diajar	0%	0%	0.6% (1)	21.3% (34)	78.1% (125)	4.8
		0%		0.6%	99.4%		
D3	Mempunyai pengetahuan terkini berkaitan kursus yang diajar	0%	2.5% (4)	5.0% (8)	35% (56)	57.5% (92)	4.5
		2.5%		5.0%	92.5%		
D4	Menyediakan bahan kursus yang bersesuaian	0.6% (1)	2.5% (4)	3.1% (5)	39.4% (63)	54.4% (87)	4.4
		3.1%		3.1%	93.8%		
D5	Penggunaan waktu	1.9% (3)	4.4% (7)	2.5% (4)	43.8% (70)	47.5% (76)	4.3

	secara berkesan	6.3%		2.5%	91.3%		
D6	Menjawab pertanyaan peserta	0.6% (1)	2.5% (4)	3.8% (6)	30.6% (49)	62.5% (100)	4.5
	dengan tepat dan cepat	3.1%		3.8%	93.1%		
D7	Menggunakan alat bantu mengajar yang sesuai	1.3% (2)	4.4% (7)	4.4% (7)	34.4% (55)	55.6% (89)	4.4
		5.7%		4.4%	90.0%		
D8	Memberi ruang kepada peserta untuk berbincang	0.6% (1)	0.6% (1)	3.8% (6)	29.4% (47)	65.6% (105)	4.6
		1.2%		3.8%	95.0%		

Jadual 3.11 : Tenaga Pengajar

### Kemudahan Fasiliti Bengkel

Berdasarkan Jadual 3.12, 96.6% responden berada pada tahap tinggi dan berpuas hati dengan khidmat urusetia yang agak sistematik dengan skor nilai min adalah 4.6, pada tahap tinggi. Manakala bagi item bilik kuliah/bengkel yang selesa, 95% responden menyatakan mereka berpuas hati dan berasa selesa dengan bilik kuliah/bengkel yang ada dengan nilai min 4.5 pada tahap tinggi. Bagaimanapun, 61.9% responden tidak bersetuju yang peralatan dan kemudahan di bengkel yang terkini, manakala skor nilai min adalah 2.1 berada pada tahap rendah. Semenjak tahun 2014, tiada apa-apa naik taraf terhadap kemudahan dan fasiliti di pusat latihan ini. Kelemahan yang ketara dari segi ketinggalan peralatan dan fasiliti terkini yang ada, seperti pusat latihan ini tidak mempunyai kenderaan elektrik EV, kereta dari jenis 'plug in Hybrid', 'insulated tools' dan sebagainya selari dengan perkembangan terkini. Ketiadaan naik taraf yang diperolehi ini menyebabkan pusat ini jauh ketinggalan dari segi keperluan teknologi terkini. Sepatutnya EV adalah merupakan kelengkapan wajib bagi membolehkan pusat ini mena-

warkan kursus pensijilan profesional tahap 4, yang merupakan tahap tertinggi pensijilan yang ditawarkan oleh IMI.



No.  Item	Pernyataan Soalan	Respon  % : Bilangan Responden)					Min  Skala  Likert
		STS  (1)	TS  (2)	TP  (3)	S  (4)	SS  (5)	
E1	Khidmat urusetia  yang sistematik	0%	0%	3.1%	31.3%	65.6%	4.6
				(5)	(50)	(105)	
		0%		3.1%	96.9%		
E2	Bilik  kuliah/bengkel yang  selesa	0%	0%	5.0%	43.1%	51.9%	4.5
				(8)	(69)	(83)	
		0%		5.0%	95.0%		
E3	Peralatan dan kemudahan di  bengkel yang  terkini	37.5%	24.4%	26.9%	8.8%	2.5%	2.1
		(60)	(39)	(43)	(14)	(4)	
		61.9%		26.9%	11.3%		
E4	Jadul aktiviti  program disusun dengan baik	0%	0%	8.8%	38.8%	52.5%	4.4
				(14)	(62)	(84)	
		0%		8.8%	91.3%		
E5	Kudapan yang  sesuai	0%	0%	9.4%	36.3%	54.4%	4.5
				(15)	(58)	(87)	
		0%		9.4%	90.7%		

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Jadual 3.12 : Kemudahan Fasilitas Yang Terdapat Di Bengkel

Pada bulan Ogos 2019, Jabatan Pendidikan Politeknik dan Kolej Komuniti (JPPKK), telah menghantar 3 orang pegawai untuk mengikuti latihan di Farnborough, United Kingdom bagi mengikuti pensijilan tahap 4 selama 5 hari iaitu 'IMI Level 4 Awards in Diagnosis Testing and Repair Electric/Hybrid Vehicles and Components'. Sekembalinya mereka dari latihan tahap 4 ini, pusat ini telah mengemukakan permohonan kepada IMI untuk menawarkan kursus Level 4 IMI, yang setakat hari ini tahap 4 hanya boleh diambil di United Kingdom dan utara Ireland sahaja. Pusat ini adalah satu-satunya pusat yang diberi kebenaran beroperasi di luar United Kingdom dan utara Ireland. Namun pusat ini mestilah melengkapkan segala fasiliti yang terkini sebelum membolehkan mereka menawarkan kursus pada tahap 4 IMI. Bagi item jadual aktiviti program disusun dengan baik, sebanyak 91.3% responden berpuas hati dengan susunan jadual sepanjang kursus dilaksanakan dengan kadar nilai min 4.4 pada tahap tinggi. Bagi kudahan yang disediakan pula, 90.7% responden berpuas hati pada tahap tinggi dengan nilai min 4.5 pada tahap tinggi.

### **Pencapaian Kendiri**

Jadual 3.13 menunjukkan peratusan responden terhadap pencapaian kendiri. 100% responden bersetuju selepas mereka mengikuti kursus ini, mereka telah berjaya meningkatkan pengetahuan baharu dalam teknologi automotif berkaitan hybrid dan EV, dengan nilai min 4.8 pada tahap tinggi. Dari segi keupayaan menggunakan pengetahuan baharu di tempat kerja, 100% responden juga bersetuju yang mereka berkemampuan menggunakan pengetahuan yang dipelajari di pusat ini boleh digunakan di tempat kerja dengan nilai min 4.6 pada tahap tinggi. Sebanyak 88.1% responden bersetuju mereka mampu untuk berkongsi pengetahuan yang dipelajari sekembalinya mereka dari kursus ke tempat kerja, dengan nilai skor min 4.4 pada tahap tinggi. 100% responden bersetuju selepas mengikuti kursus ini, mereka mampu dan berkeupayaan meningkatkan kualiti kerja berkaitan hibrid dan EV dengan nilai min 4.8 pada tahap tinggi. Responden juga 100% bersetuju yang kemahiran dan pengetahuan yang diperolehi menyumbang kepada pencapaian organisasi dengan nilai skor min 4.5 pada tahap tinggi.

No.  Item	Pernyataan Soa- lan	Respon  (% : Bilangan Respond- en)					Min  Skala  Likert
		STS	TS	TP	S	SS	
		(1)	(2)	(3)	(4)	(5)	
F1	Peningkatan pengetahuan ba- haru dalam teknologi automotif	0%	0%	0%	23.8% (38)	76.3% (122)	4.8
		0%		0%	100%		
F2	Keupayaan menggunakan pengetahuan ba- haru di tempat kerja	0%	0%	0%	37.5% (60)	62.5% (100)	4.6
		0%		0%	100%		
F3	Dapat berkongsi ilmu ditempat ker- ja	0%	0%	11.9% (19)	37.5% (60)	50.6% (81)	4.4
		0%		11.9%	88.1%		
F4	Keupayaan meningkatkan  kualiti kerja	0%	0%	0%	23.8% (38)	76.3% (122)	4.8
		0%		0%	100%		
F5	Kemahiran dan  pengetahuan yang  diperolehi  menyumbang kepada pencapaian organisasi	0%	0%	0%	38.1% (61)	61.9% (99)	4.6
		0%		0%	100%		

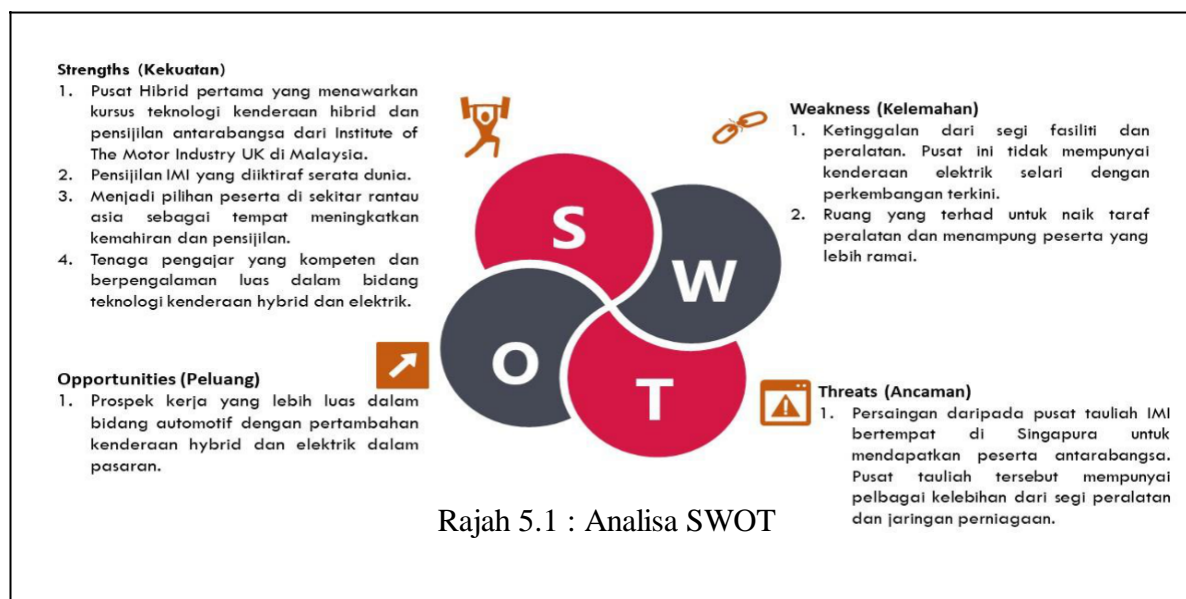
Jadual 3.13 : Pencapaian Kendiri Peserta Kursus

## PERBINCANGAN DAPATAN

Dapatan kajian yang diperolehi daripada hasil analisa soal selidik di atas, jelas menunjukkan bahaya persepsi peserta kursus tempatan yang mengikuti kursus pendidikan sepanjang hayat (PSH) melalui kursus pensijilan profesional IMI tahap 1 hingga 3, mereka sangat berpuas hati dengan latihan kemahiran yang diikuti sepanjang kursus. Pencapaian objektif kursus adalah pada tahap tinggi, dan memenuhi objektif pelaksanaan kursus yang telah ditetapkan. Manakala bagi teknik penyampaian tenaga pengajar adalah sangat berkesan serta peserta kursus dapat memahami penerangan, panduan dan tunjuk ajar kemahiran yang diberikan. Bagi bahan kursus yang disediakan pula, responden sangat berpuas hati dan edaran bahan kursus sangat menepati keperluan kepada membantu peserta kursus sebagai sumber rujukan utama ketika menjawab penilaian yang diberikan oleh IMI bagi melayakkan mereka mendapat pensijilan profesional. Responden juga sangat berpuas hati dengan kompetensi dan kemahiran yang dimiliki oleh kesemua tenaga pengajar. Mereka bukan sahaja boleh berinteraksi dua hala semasa berkursus, malahan tenaga pengajar sangat banyak membantu mereka memahami keperluan kemahiran teknikal utama semasa mengendalikan penyenggaraan kenderaan hibrid. Seterusnya, bagi kemudahan yang terdapat di bengkel, masalah utama adalah pusat ini tidak mempunyai Hibrid Plug-In (PHV), stesen alat pengecas EV dan kereta elektrik. Dari 2014 sehingga kini, PTKHEK hanya mempunyai sebuah kenderaan hibrid *Toyota Prius C*, sebuah simulator *Toyota Prius C*, satu 'Hybrid Vehicle Systems Panel Trainer', set scanner dan beberapa peralatan kelengkapan lain. Kelengkapan peralatan sedia ada tidak mencukupi bagi penyampaian kursus secara berkesan. Oleh yang demikian, keperluan peralatan tambahan adalah amat kritikal bukan sahaja bagi memenuhi keperluan kursus malah ianya bagi memenuhi keperluan pelaksanaan kriteria penilaian audit pensijilan IMI. Kajian juga mendapati peserta kursus sangat berpuas hati kursus yang dihadiri dan mendapat pengetahuan serta kemahiran dan teknik yang betul bagi mendengali kenderaan hibrid dan elektrik dan seterusnya pengetahuan dan kemahiran yang diperolehi tersebut berjaya meningkatkan kualiti kerja serta meningkatkan kemahiran yang diperlukan oleh organisasi mereka bekerja. Peserta juga mencadangkan agar kursus tahap 4 IMI perlu ditawarkan secepat yang mungkin.

## KESIMPULAN DAN CADANGAN

Mulai tahun 2020, Pusat Teknologi Kenderaan Hibrid dan Elektrik KKKKB mengorak langkah untuk menawarkan pensijilan tahap 4 iaitu IMI Level 4 Awards in Diagnosis, Testing and Repair Electric/Hybrid Vehicles and Components. Ianya adalah sebahagian dari usaha menyahut hasrat kerajaan melalui Dasar Automotif Nasional (NAP) 2020 dengan menawarkan program kursus yang bersesuaian selain memberikan khidmat konsultansi kepada pemilik kenderaan hibrid dan elektrik. PTKHEK juga sedia menggalas tanggungjawab sebagai peneraju kepada program Automotif Teknologi Kenderaan Hibrid. Melalui kajian yang dijalankan ini, jelas keseluruhan responden sangat berpuas hati dan mendapat banyak pendedahan kemahiran teknikal dalam menyenggara kenderaan hibrid dan elektrik. Namun kemudahan yang terdapat di pusat ini perlulah dinaik taraf selari dan seiring dengan perubahan revolusi industri 4.0 yang pantas bergerak. Pengkaji telah merumuskan keseluruhan hasil perbincangan dalam kajian ini melalui analisa SWOT dalam Rajah 5.1.



## BIBLIOGRAFI

Arziana Mohmad Azaman (10 Julai 2019). : “Sinar Harian : Kenapa Kita Perlu Guna Kereta Elektrik”.  
<https://www.sinarharian.com.my/article/36644/LIFESTYLE/Trend/Kenapa-kita-perlu-guna-kereta-elektrik>. Dicapai pada 15 Julai 2019

Datuk Kamaruddin Jaafar (2019). “Pengurangan Cukai Jalan 50 Peratus Galak Guna Kenderaan Elektrik, Hibrid”. Sinar Harian.  
<https://www.sinarharian.com.my/article/24746/BERITA/Nasional/Pengurangan-cukai-jalan-50-peratus-galak-guna-kenderaan-elektrik-hibrid>. Dicapai pada 15 Julai 2019.

Datuk Kamaruddin Jaafar (2019). Hansard Dewan Negara. <https://paultan.org/2019/04/23/sebanyak-5403-ev-dan-46981-kereta-plug-in-hybrid-didaftarkan-sehingga-31-mac-2019-timbangan-menteri/>

Electric Vehicles Gain Momentum in Malaysia, But Power Supply Remains a Problems (2019). <https://themalaysianreserve.com/2019/07/03/electric-vehicles-gain-momentum-in-malaysia-> The Malaysian Reserve, 3 Julai 2019. Dicapai pada 15 Julai 2019.

Ghazalan, M.S. (2015). Tahap Kesediaan Peserta Program Pembelajaran Sepanjang Hayat (PSH) Dalam Kencenderungan Menceburi Keusahawanan di Kolej Komuniti Negeri Johor. (Master Thesis). Universiti Tun Hussein Onn Malaysia.

Hirata (8 October 2019). “Lima Soal Jawab Utama Tentang Kereta Elektrik (EV) Yang Perlu Anda Tahu”. <https://pandulaju.com.my/5-soal-jawab-utama-tentang-kereta-elektrik-ev-yang-perlu-anda-tahu/>. Dicapai pada 15 Oktober 2019.

Kajian Konsep Pengoperasian Industry on Campus (IOC), Kolej Komuniti Sungai Petani dan Kolej Komuniti Taiping (2019). Unit Penyelidikan dan Inovasi, Kolej Komuniti Sungai Petani, KPM.

Krejcie, R.V., & Morgan, D.W. (1970). “Determining Sample Size for Research Activities:.. *Educational and Psychological Measurement*.

Ministry of International Trade and Industry (2020). “National Automotive Policy 2020”. Perpustakaan Negara Malaysia. Diterbitkan 21 Februari 2020.

Mohd Majid Konting (1994). Kaedah Penyelidikan Pendidikan. Kuala Lumpur. Dewan Bahasa dan Pustaka.

Pendaftaran Kenderaan Elektrik & Hibrid di Malaysia (2019). *Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia – MAMPU*. Ministry of Science, Technology and Innovation. <http://www.data.gov.my/data/dataset/kenderaan-elektrik-hibrid>.

Phil Loveder (2005). “World Trends in Staff Development: Implication on the Performance of Technical Education Institutions:.. National Centre of Vocational Education Research Ltd.

Ross Hadi. “Apa Itu Sebenarnya Kenderaan Elektrik (EV)” (July 13, 2019). <https://www.gohedgostan.com/2019/07/nissan-menjelaskan-erti-kenderaan-elektrik-ev/>. Dicapai pada 15 Julai 2019.

Tapamoy Deb (2006). “Training and Development: Concept and Application”. Ane Books India.

Thomas George (2007). “Human Innovation in Meeting National Global Competitiveness”. Ministry of Human Resource Malaysia.



Wan Ahmad, Wan Rashid;Mohd Hashim, M.H. (2011). Pelaksanaan Program Pendidikan Sepanjang Hayatdi Kolej Komuniti Kementerian Pengajian Tinggi Malaysia, (Thesis). Universiti Tun Hussein Onn Malaysia.

## **KEPERCAYAAN RAKYAT DALAM BUDAYA MATERIAL: TINJAUAN ETNOGRAFI SOSIO-BUDAYA MELAYU BRUNEI.**

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### **PENGENALAN**

MASYARAKAT MELAYU TRADISI memang kaya dan sangat intim dengan kepercayaan dan pantang larang. Kepercayaan membawa satu konotasi makna sebagai fahaman dogmatis yang terjalin erat dengan adat istiadat hidup dari pelbagai suku bangsa yang masih kuat pegangannya atau berfahaman ortodoks. Ia dianggap penting bagi mengelak daripada ditimpa sebarang musibah bukan sahaja kepada individu berkenaan bahkan juga seluruh ahli keluarga atau masyarakat di tempat tinggalnya. Ketetapan serta persetujuan ramai mengawal pemikiran dan tindak tanduk individu. Pemikiran lebih berorientasikan tradisi leluhur yang menyediakan satu model kehidupan yang lebih hakiki dan sempurna. Walau bagaimanapun sesetengah daripada kepercayaan dan pantang larang tersebut masih lagi menjadi ikutan dan amalan sehingga pada hari ini. Manakala setengahnya pula sudah ditinggalkan kerana tidak sesuai dengan peredaran zaman dan nampak bercanggah daripada akidah dan syiar agama.

Skeat (1965) dalam *Malay Magic: An Introduction to the Folklore and Popular Religion of the Malay Peninsular* mengkaji unsur kepercayaan Melayu dalam konteks pra-Islam yang berkait rapat dengan amalan animisme. Skeat menegaskan bahawa masyarakat Melayu belum dapat berganjak kepada satu fasa ketamadunan kerana masih terikat dengan sistem pemahaman yang masih cenderung kepada pelbagai unsur kepercayaan rakyat yang konservatif. K.M Endicott (1970) pula telah mengaitkan konsep keramat dengan semangat dalam kepercayaan masyarakat Melayu yang mengaitkannya dengan konsep kuasa magis atau ajaib (*supernatural*) yang terdapat pada benda atau objek luar biasa. Sementara Ahmad Johari Moain (1990) ada menyentuh tentang kepercayaan orang Melayu terhadap suatu kuasa ghaib dan magis serta semangat yang khususnya dikaitkan dalam skop pertanian.

Dalam *Malay Folk Beliefs An Integration of Disparate Elements* tulisan Mohd Taib Osman (1989) ada menerangkan bahawa masyarakat Melayu dahulunya memiliki satu konsep kepercayaan yang berpandukan kefahaman animisme, iaitu kepercayaan kepada 'semangat', benda-benda ghaib dan benda-benda ganjil. Mereka mempercayai bahawa setiap bentuk alam yang ganjil dianggap mempunyai 'semangat' dan kuasa luar biasa sehingga menganggap benda-benda itu bersifat suci dan sakral menyamai tuhan mereka. Justeru oleh kerana timbulnya perasaan takut kepada tuhan, maka mereka menyembah dan memuja benda-benda ganjil berkenaan. Menurut kepercayaan masyarakat Melayu lagi, segala kejadian yang berlaku sama ada berupa baik atau buruk sebenarnya ada perkaitan dan dipengaruhi oleh benda-benda yang dipuja itu. Berdasarkan fahaman animisme, masyarakat Melayu dahulu kala mempercayai semangat, makhluk-makhluk halus seperti hantu, penunggu, orang bunian dan lain-lain. Selain itu, mereka juga mempercayai dukun, bomoh atau pawang yang memainkan peranan penting sebagai penyampai atau penghubung antara makhluk-makhluk tersebut dengan manusia biasa. Kepercayaan dengan yang demikian menjadi sebahagian daripada amalan hidup masyarakat zaman silam. Amalan tersebut dipercayai boleh mengurangkan perasaan kebimbangan dan tekanan yang melampau. Ini dapat memberi keyakinan kepada seseorang semasa menghadapi krisis hidup.

Hal ini diperakui oleh Amran Kasimin (2006) yang mengatakan bahawa kepercayaan animisme sering dikaitkan dengan masyarakat yang mengamalkan kehidupan sederhana, jauh dari arus kemodenan dan juga mereka yang kurang berpendidikan. Menurutnya lagi kepercayaan seumpama ini wujud secara menyeluruh pada setiap lapisan masyarakat termasuk mereka yang terdiri daripada golongan elit, terpelajar dan hidup di bandar. Kepercayaan ini terus mempengaruhi cara berfikir sebahagian daripada masyarakat yang menganggap bahawa makhluk ghaib boleh memberi perlindungan, kebahagiaan dan membantu menghasilkan sesuatu tujuan atau ikhtiar alternatif. Mereka juga menganggap bahawa makhluk ghaib boleh menyebabkan berlakunya keburukan serta kecelakaan kepada manusia. Dari sinilah timbulnya pelbagai upacara dan adat istiadat yang melibatkan amalan kebatinan.

Noriah Taslim (2010) turut menjelaskan bahawa kepercayaan kepada unsur magis atau ghaib dalam masyarakat tradisional atau primitif sebenarnya wujud beriringan dengan timbulnya kesedaran keagamaan dalam kalangan manusia primitif itu sendiri, malah menganggap unsur

magis atau ghaib itu berupa analogus dengan agama sendiri. Magis oleh yang demikian diperlukan hadir apabila manusia primitif berhadapan dengan situasi terdesak seperti ancaman, kepayahan, tekanan emosi yang perit, sakit dan sebagainya.

Antara agama dan kepercayaan rakyat itu semacam bukan satu polemik yang baru lagi dalam senario kehidupan masyarakat Brunei. Keterkaitan faktor agama, adat dan budaya memberi satu hubungan yang agak menarik dan meletakkan faktor tradisi sebagai asas dalam hal ini. Faktor warisan walau bagaimanapun nampaknya hanya sekadar mencakupi kesemua aspek baik ia berupa adat, tradisi, budaya malah juga agama dan kesemua komponen ini mempunyai hubungan resiprokal atau imbal-balik sesamanya. Sesetengahnya masih terkesan menyimpan dan mempraktikkan beberapa unsur kepercayaan rakyat yang diwarisi secara turun-temurun dan dari satu generasi kepada satu generasi. Mereka mempercayai sesuatu yang ganjil itu bersifat magis dan membawa tuah sama ada yang berupa objek ataupun bukan. Dengan kesakralan yang ada padanya jugalah dipercayai mampu memberikan kesenangan dan kesusahan kepada manusia.

Dalam konteks pertumbuhan budaya pula, bangsa Melayu Brunei sebenarnya pernah mengalami berbagai macam zaman seperti pengaruh animisme dan Hindu, Hindu-Buddha, pra-Islam, Islam dan Barat. Perjalanan sejarah yang memakan masa begitu panjang berabad-abad lamanya itu jelas sebagai contoh dari proses evolusi budaya yang patut dirungkai, diamati dan digali dengan begitu teliti dan cermat sekali.

Perkembangan agama Islam di Brunei yang berlangsung secara evolusi itu telah berhasil menanamkan akidah Islamiyahnya bagi para penganutnya. Sebelum kedatangan Islam, masyarakat telah menganut agama yang berkembang secara evolusi pula, sehingga berjaya menyerasi ke ruang budaya dan tatacara hidup. Dan, hakikatnya budaya itu tadi sudah sangat utuh dan mengakar dalam kehidupan masyarakat baik yang berbaur di dalamnya budaya-budaya sebelumnya mahupun yang tercipta kerana munculnya nilai-nilai Islam.

Proses asimilasi dan akulturasi budaya pada akhirnya menghasilkan berbagai varian keislaman tanpa disedari yang disebut dengan Islam lokal yang berbeza dengan Islam dalam *great tradition*. Fenomena demikian bagi sebahagian pengamat memandangnya sebagai berlakunya satu proses penyimpangan terhadap kesucian dan kesakralan agama Islam itu sendiri dan lebih

dahsyat sebagai Islam yang hanya diwarisi. Jika diselusuri perjalanan perkembangan Islam di sini, sebenarnya ia merupakan satu proses yang tidak menghapuskan konsep kemertabatan suatu bentuk budaya meski ia diadaptasi secara warisan atau turun-temurun melainkan memperkayai dan mewarnainya dengan nilai-nilai Islam di dalamnya.

## **PENERAPAN DAN PERSEPSI AJARAN ISLAM**

Budaya yang terangkum di dalamnya dua komponen iaitu adat dan tradisi itu merupakan hal yang penting atau vital untuk dibicarakan. Ia menjadi amalan dan diamalkan oleh orang tua-tua kita suatu ketika dahulu dan ditinggalkan menjadi satu bentuk warisan secara turun-temurun. Adat dan budaya tradisi ini diselaraskan dengan nilai-nilai Islam. Namun tidak dinafikan adat dan budaya tradisi ini ada kalanya bertembung dan bercanggah dengan nilai-nilai Islam. Hal ini kerana ia diamalkan mengikut cara yang kurang tepat atau salah bahkan ada segelintirnya terlalu taksud dengan kepercayaan-kepercayaan karut atau pantang-larang tertentu.

Justeru itu paradigma sebegini tidak harus timbul dalam memperkatakan tentang agama Islam kerana Islam sebagai agama bukanlah hasil daripada buatan manusia yang disebut sebagai peradaban dan kebudayaan itu. Adalah penting untuk meneliti sejauhmanakah percanggahan yang berlaku untuk mengelakkan daripada berlakunya pencemaran terhadap amalan-amalan yang berkaitan dengan agama.

## **KONSEP KEPERCAYAAN**

Kesan paling ketara dengan kedatangan Islam ke dalam masyarakat Melayu ialah berlakunya transformasi terhadap kepercayaan masyarakat yang sebelumnya menganut Hindu-Buddha atau kepercayaan animisma kepada Islam yang mentauhidkan dan menyembah Allah Taala di samping meyakini kewujudan malaikat, perutusan para nabi, penurunan kitab-kitab, kewujudan hari akhirat dan ketentuan *qadha* dan *qadar*.

Penilaian masyarakat Melayu terhadap kehidupan juga menjadi benar dan lebih hakiki iaitu untuk beribadah kepada Allah Taala bukan untuk tujuan-tujuan lain selain daripada itu. Amalan berakidah tidak hanya terikat pada amalan ibadah-ibadah yang diwajibkan sahaja tetapi juga

pada setiap tindakan dan perbuatan. Sifat kepercayaan seseorang Muslim terhadap Allah Taala mengutamakan perihal sifat keesaanNya. Dalam istilah Usuluddin, kepercayaan ini adalah tauhid, yang menerima Allah Taala sebagai tidak bersekutu dengan mana-mana makhlukNya. Jelas kefahaman tauhid yang menjadi asas akidah Islam berjaya meresap masuk ke dalam jiwa orang Melayu.

Sungguhpun ternyata kedanggalan pandangan *British Malayanist* yang paling menonjol dan menjolok ialah apabila mereka memperlihatkan unsur-unsur ritual dalam *rites de passage*, pembinaan rumah dan perbomohan Melayu sebagai satu unsur kepercayaan yang dianuti oleh orang-orang yang menggunakan istilah *folk religion*. Antara yang sering diperkatakan ialah yang berkisar tentang pembacaan mantera, pemujaan atau *saruan*<sup>6</sup>, pantang-larang dan sebagai warisan Hindu-Buddha yang menyebabkan kebudayaan Melayu boleh dianggap sebagai yang berasaskan kepada kepercayaan sinkretistik.

Konsep sinkretisme ini telah digunakan untuk pertama kalinya sebagai satu usaha untuk menyatukan agama Kristian yang berbagai-bagai bentuknya. Pada masa ini konsep tersebut telah digunakan kepada penyatuan sistem kepercayaan dan agama tempatan dengan institusi dan agama Kristian di negeri-negeri yang pernah dijajah. Usaha-usaha untuk menyatukan atau mengsinkretisme-kan kepercayaan dan agama setempat dengan agama yang dipaksakan kepada mereka, jelas dapat dilihat di Afrika. Di sana telah wujud gereja-gereja yang diberi nafas lokal. Di sana juga terdapat sistem kepercayaan dan amalan Kristian yang telah disatukan dengan upacara amal penyucian yang telah mereka amalkan lama sebelum datangnya agama Kristian ke situ. Penyatuan agama setempat dengan Kristian juga dapat dilihat di dalam amalan penyembuhan penyakit secara spiritual.

Proses sinkretisme ini tidak terbatas kepada agama Kristian sahaja. Hal tersebut boleh dikaitkan dengan agama-agama lain. Proses sinkretisme boleh juga didapati di dalam agama Islam yang diamalkan di Brunei sendiri. Contohnya penggunaan jampi serapah yang diselitkan dengan nama Nabi, Allah SWT dan ayat-ayat al-Quran. Contohnya:

*Bismillahi'r-rahmani'r-Rahim!*

*Nabi junjunganku.. Salawat ke atas mu,*

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<sup>6</sup> Seruan; pujaan



*Lakap kuku dari isi,  
Baru hilang kasih sayangmu kan kediaku,  
Gila berahi kan kediaku,  
Inda tahan kau diam [...]*

Harus disadari bahawa dalam masyarakat Melayu konsep kepercayaan mempunyai ruang lingkup pengertian yang berbeza daripada agama. Agama adalah perkara yang dianuti manakala kepercayaan adalah gerak rasa tentang perkara yang tidak ada di hadapan yang dirasakan ada dan mempunyai kuasa luar biasa di luar kawalan manusia. Dalam agama Islam memang ada bentuk kepercayaan tetapi tidak semua yang dipercayai itu adalah agama.

Skeat (1965) pernah menjelaskan bahawa masyarakat Melayu sangat sinonim dan taksub dalam soal kepercayaan sehingga memberi kesan dalam kosmos dan pandang alam (*world view*) mereka.

*While by divination and by inferences from omens and dreams, Malay attempt to ascertain the course of fate, so by charms of the nature of amulets and talismans they sometimes endeavour to influence its direction or modify its force. Charms of the nature of invocations have been dealt with already under different headings in connection with a variety of matters, and it will only be necessary to refer here to a few miscellaneous ones or a less elaborate character. It should be observed that some charms are directly effective or protective.*

Unsur kepercayaan yang meliputi petua kerap ditemui dan dilakukan oleh orang-orang Melayu daripada golongan masyarakat kampung biasa yang tidak berpendidikan. Mereka beragama Islam. Umumnya mereka bergantung hidup kepada sumber alam seperti sebagai nelayan atau bertani. Walaupun dilabel jahil dari sudut-sudut tertentu, mereka bagaimanapun menghormati golongan dan institusi agama. Dan, golongan ini mempercayai wujudnya unsur-unsur *psychic* seperti semangat, *beindung*<sup>7</sup>, *berisi*, keramat, roh dan sebagainya. Aktiviti ritual yang mereka lakukan terdiri daripada amalan pantang-larang. Mereka mempercayai konsep dapat menerima kesan baik dan mengelakkan daripada menerima akibat buruk daripada unsur *psychic* itu. Dari kacamata kasar memang yang mereka lakukan dan percayai itu lebih bersifat animistik. Mereka mempercayai amalan-amalan yang dilakukan itu merupakan amalan nenek

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<sup>7</sup> Berpuaka; berpenunggu.

moyang mereka yang asli dan diperturunkan sejak turun temurun. Senario ini memang ada terjadi dalam kehidupan masyarakat Melayu kita.

## KONSEP KEPERCAYAAN MAGIS-AGAMA

Memang banyak amalan dan upacara tentang bentuk kepercayaan orang Melayu terhadap motif sesuatu benda atau lebih tepatnya dipanggil material budaya. Kewujudan unsur kepercayaan rakyat seumpama ini masih nyata lagi sehingga kini. Semua jenis kepercayaan menurut James George Frazer boleh dibahagikan kepada dua, iaitu agama dan magis.<sup>8</sup> Kesan daripada kedua unsur ini jelas seperti membawa satu keterjalinan yang rapat sekali dalam konteks masyarakat Melayu. Ia seakan hanya dapat dipisahkan seandainya diketahui motif pengamalannya semasa melakukan amalan upacara ritual yang demikian itu. Jadi, yang lebih mudah dan selamat bagi memperkatakannya cukup disebutkan sebagai upacara magis-agama sahaja dan inilah jalan yang ditempuh oleh ramai ahli antropologi pada masa sekarang.<sup>9</sup>

Ternyata agama itu merupakan satu unsur dari kebudayaan sejagat (*cultural universal*) yang sama usianya dengan sejarah kehidupan manusia. Agak sulit dan sukar menangani isu tentang penetapan waktu sebenar manusia mulai mengenal dan memeluk agama kerana bentuk kepercayaan dan ritual keagamaan telah mengalami proses evolusi dan berkembang semakin kompleks jadinya.

Namun begitu kepercayaan yang berbentuk magis-agama lebih berupa kepercayaan kepada semangat serta pelbagai penunggu atau roh. Segelintir masyarakat mempercayai akan kewujudan benda-benda ghaib ini dan ia dianggap lebih berkuasa daripada manusia dan kepadanya manusia memohon, menyeru dan meminta agar hajat boleh dicapai. Hal ini terjadi kerana berdasarkan konsep kepercayaan dan pandang alam mereka menanggapi bahawa benda-benda ghaib itu dapat dihubungi, diseru dan dipujuk untuk menunaikan segala permohonan. Menurut Van Gennep (1960) seorang antropologis menanggapi bahawa dalam kehidupan seorang manusia itu ia mengalami berbagai-bagai krisis seperti sakit, kematian, tertimpa bencana dan kehilangan harta benda yang membuatkan manusia rasa tidak berdaya menghadapi masa-masa

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<sup>8</sup> Fraser, James George, 1950. *The Golden Bough: A Study in Magic and Religion*. London: Macmillan Co. Ltd., hlm 97.

<sup>9</sup> Mair, Lucy, 1972. *An Introduction to Social Anthropology*. Britain: Clarendon Press, hlm 82.

sulit seumpama itu dan akhirnya perlu melakukan sesuatu untuk mempengaruhi keyakinannya yang dilakukan dengan upacara-upacara ritual tertentu.

Adapun fungsi kepercayaan adalah untuk menghormati makhluk halus atau roh nenek moyang dan hal ini memang diakui dan diyakini oleh masyarakat setempat konon adanya berbagai makhluk halus yang menempati alam tempat tinggalnya yang merupakan jelmaan dari orang yang sudah tiada. Roh makhluk halus ini jelas memiliki pengaruh penting dalam kehidupan manusia kerana mempunyai jiwa dan kemahuan sendiri; dapat bergembira jika diperhatikan manusia dan dapat marah apabila diabaikan oleh manusia.

Dalam konteks para pengamal Melayu Brunei yang lebih dikenali sebagai ‘orang pemandai’<sup>10</sup> yang mempunyai kepercayaan kepada benda-benda dan kuasa-kuasa ghaib ini pun tidak lepas daripada mempunyai fahaman terhadap konsep pandang alam, hukum-hakam sebab akibat dan logikanya yang tersendiri iaitu sesuai dengan teori kepercayaan mereka. Namun begitu mereka tidak mudah menerima sesuatu kepercayaan itu sekalipun ia sangat baik, dapat memberikan imbalan, faedah atau hasil. Setelah Islam dianuti dalam kehidupan masyarakat setempat ternyata pada pandang alam mereka benda-benda dan alat-alat seumpama ini boleh menjejaskan kepercayaan serta memecahkan jaringan terhadap kepercayaan mereka sendiri atau lebih jelas lagi dikhuatiri bercanggah dengan tuntutan dan akidah Islam.

## **KONFLIK DAN POLEMIK PEGANGAN DALAM ADAT-BUDAYA-TRADISI MASYARAKAT MELAYU BRUNEI**

Brunei kaya dengan adat, budaya dan tradisi leluhurnya yang telah diwarisi dan diamalkan sejak zaman berzaman. Banyak amalan tradisi masyarakat Melayu Brunei yang tidak bertentangan dengan akidah, tetap kekal sehingga kini. Sebahagiannya kekal sebagaimana keadaan asalnya namun ada juga yang mengalami modifikasi dan penyesuaian. Ini dilakukan untuk menyesuaikan dengan keadaan dan keperluan semasa apatah lagi dalam lingkungan kosmos Melayu Brunei yang amat unik dan tersendiri. Konsep amalan tradisi itu tetap dikekalkan dan dipertahankan selagi tidak bertentangan dengan ajaran dan akidah Islam.

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<sup>10</sup> Pawang; dukun; bomoh; jumlahnya kecil dan secara diam-diam.

Daripada hakisan warisan yang merumpun dan tumbuh hidup dalam masyarakat Melayu, didapati masih terdapat beraneka ragam corak hidup yang melingkungi dan mendasari kehidupan. Ketiga komponen adat-budaya-tradisi Melayu di Brunei ternyata masih berjalan terus tetapi dalam bentuk dan sifatnya yang terbatas daripada unsur-unsur yang bertentangan dengan Islam. Dalam banyak hal, berlakunya proses pengadaptasian dan penerimaan masyarakat Melayu Brunei itu sesuai dengan masa dan keadaan. Amalan adat-budaya-tradisi yang masih dipakai dan dihormati ternyata diwarisi dari dahulu lagi sama ada yang bersifat asli ataupun sudah dicampuradukkan dengan kepercayaan (agama) yang dianuti. Peranan agama dan pengaruh keimanan amat jelas mempengaruhi dengan mendalam proses peruntukan dan penyusunan serta pelaksanaan suatu adat itu.

Bagi masyarakat Melayu Brunei, adat dan tradisi adalah suatu yang tidak boleh dipisahkan daripada kehidupan kerana perjalanan hidup sentiasa dipandu oleh agama. Adat itu sendiri adalah salah satu daripada hubungan kandungan budaya. Sebelum adanya adat bererti belum lagi wujud kebudayaan yang memandu, mengawal dan menentukan pola tingkah laku yang dianggap betul dalam masyarakat. Nilai masyarakat terhadap adat itu begitu tinggi sekali dan telah menjiwai diri. Unsur adat dan tradisi ini bersifat suatu yang kudus, suci dan sakral. Adat dan tradisi juga kerap diperhitungkan terlebih dahulu kerana ia membawa suatu pendefinisian yang dapat memberi refleksi terhadap etos masyarakat Melayu itu sendiri.

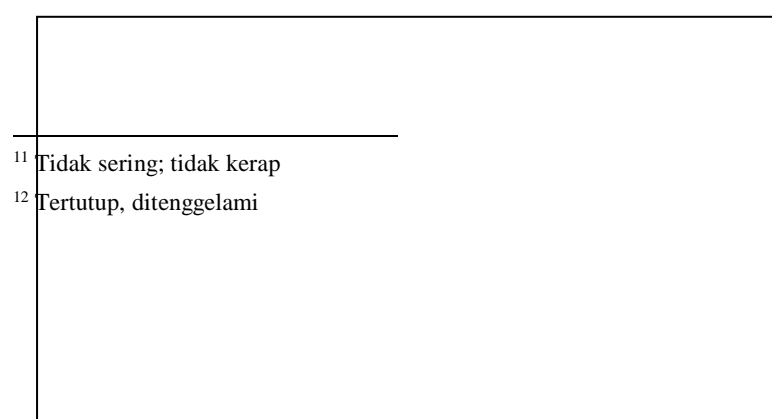
Konsep adat dalam konteks masyarakat Melayu mempunyai kedudukan suci dan tertinggi sehingga bagi sesetengahnya nilai terhadap konsep itu lebih mencapai martabat agama, dipancarkan oleh kelakuan yang betul serta halus, suatu ciri kehidupan yang menyerapi sistem kepercayaan, hukuman dan denda. Setiap yang melanggar, melencong, melebihi atau menafikan adat akan menerima balasan dan hukuman (*sanction*). Paling tidak seseorang itu akan dilarang daripada membuat atau menyebut sesuatu. Jelas betapa adat dan tradisi itu semacam berfungsi sebagai undang-undang atau peraturan sosial sebelum wujudnya dunia tulisan dalam kehidupan masyarakat Melayu Brunei.

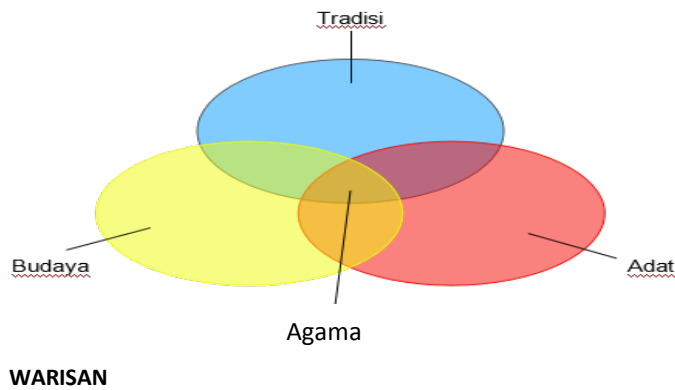
Pada misalnya diperturunkan tentang kes lokal bilamana ramai yang pro kontra terhadap isu 'benda peninggalan'. Pihak yang kurang arif dalam beberapa hal yang bersangkutan dengan suatu konseptual kepercayaan adat dan tradisi yang berkaitan dengan unsur spiritual ini biasanya dilarang untuk banyak mempersoalkannya justeru hanya menyerahkan bulat-bulat

kepada orang tua-tua sahaja. Dalam konteks orang Melayu Brunei tanggapan dan segala hal yang dilakukan oleh orang tua-tua itu kejarangan<sup>11</sup> sekali atau tidak pernah untuk mendapat sebarang pindaan, bantahan atau teguran. Seperti yang disebutkan sebelumnya fenomena seumpama ini berlaku dan seolah dibiarkan kerana konsepsi itu lebih mencapai martabat agama, dipancarkan oleh kelakuan yang betul serta halus. Ia berupa suatu ciri kehidupan yang menyerapi sistem kepercayaan, hukuman dan denda. Bacaan-bacaan, jampi mantera atau segala bentuk pemujaan dan seruan terhadap roh benda peninggalan itu pun masih dipraktikkan dalam kalangan masyarakat Melayu. Keraguan dan kesyakwasangkaan terhadap upacara ritual pemujaan benda peninggalan ini semacam lenyap dan hilang begitu sahaja bilamana orang tua-tua memulakan bacaan atau seruan dengan menggunakan sepotong-dua ayat-ayat al-Quran. Namun bacaan pemujaan seperti jampi dan mantera tetap dikekalkan. Penggunaan ayat-ayat al-Quran yang lazimnya digunakan pada permulaan mana-mana upacara ritual itu sebenarnya diibaratkan sebagai suatu hal yang mengiyakan dan membenarkan kelangsungan upacara ritual yang disifatkan kudus dan sakral agar terus dilaksanakan. Maka di sinilah letaknya konflik dan polemik agama yang nampaknya tertimbus<sup>12</sup> dalam isu kepercayaan setempat.

Warisan yang meletakkan kebudayaan Melayu memang diamalkan sehingga kini dan ternyata ia mendasari kehidupan orang Melayu. Dasar kebudayaan Melayu Brunei khususnya tetap berpaksikan agama Islam walaupun pada awalnya warisan atau kebudayaan Melayu itu banyak berunsur kepada pengaruh Hindu-Buddha. Namun setelah kedatangan Islam maka warisan dan kebudayaan itu menghadapi proses transformasi. Walaupun begitu, masih terdapat unsur-unsur pengaruh Hindu-Buddha yang diamalkan tetapi ‘disifatkan’ sebagai tidak bertentangan dengan hukum syarak. Namun realitinya, bukan saja warisan Melayu itu sendiri menghadapi polemik malah agama Islam sendiri pun turut berhadapan dengan pelbagai tentangan dan cabaran baik secara global mahupun dalaman bilamana agama Islam seolah Cuma diwarisi bagi ‘sesetengah Melayu’ di sini. Sesetengahnya menanggapi bahawa ada beberapa adat kita masih berunsurkan kehinduan dan tidak termasuk dalam hukum syarak.

Gambar rajah di bawah dapat menjelaskan senario ini :





Agama Islam sebenarnya banyak mempengaruhi konseptual pemikiran dan tindakan orang-orang Melayu dari sejak kedatangan agama Islam yang menyebabkan warisan adat-budaya-tradisi kita tetap berpaksikan kepada Islam. Pengajaran agama Islam telah diturunkan dari satu generasi kepada generasi Melayu yang lain. Selagi orang Melayu menganuti dan menghayati Islam maka ia tetap dan terus akan menjadi warisan bangsa Melayu. Namun konsep warisan turun temurun itu telah menyebabkan tahap dan penghayatan agama Islam berbeza tergantung kepada peringkat pendidikan penganutnya. Dalam keadaan ini, masyarakat Melayu, oleh kerana mereka mewarisi agama Islam selalu menganggap mudah (*take for granted*) akan keupayaan mempelajari agama Islam.

Kedudukan agama Islam yang dinamis sifatnya, berkuasa dan definitif dalam masyarakat dan budaya Melayu memastikan bahawa nilai dan hukum Islam menjadi ukuran bagi semua aspek dalam masyarakat. Perbezaan antara Islam dan sistem adat-budaya-tradisi memang ada namun pada tahap hukum Islam – syarak diberi keutamaan mengatasi hukum adat. Adat-budaya-tradisi yang mengatur aspek-aspek kehidupan individu, berbangsa dan bernegara menserasikan dirinya dengan ajaran-ajaran Islam.

Adat-budaya-tradisi yang ditanai<sup>13</sup> sebagai warisan bangsa merupakan satu kesinambungan tamadun Brunei yang berlandaskan ajaran Islam. Adat yang menjadi identiti masyarakat Melayu jika tidak dijaga dan dipelihara maka ia akan kabur, luntur dan hilang kelangsungannya.

## **KEPERCAYAAN RAKYAT DALAM BUDAYA MATERIAL (BENDA)**

<sup>13</sup> Dipelihara; dijaga; diasuh.



Literalnya, budaya itu berupa suatu nilai hidup yang dijemakan oleh faktor-faktor akal dan daya intelek manusia dalam bentuk perbuatan-perbuatan yang diistilahkan sebagai cara dan gaya hidup yang membentuk suatu peradaban serta norma kehidupan. Norma yang terlahir itu berpandukan nilai-nilai moral dan spiritual selain berupa satu manifestasi daripada keimanan dan ketakwaan penganut-penganutnya. Ini sejajar dengan hujah Clifford Geertz (1973);

*...an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and their attitudes toward life.*

Geertz berpendapat bahawa budaya itu berupa pola makna dan konsepsi yang terdapat dalam simbol-simbol, diperolehi secara warisan turun temurun sebagai alat untuk berkomunikasi, melestari dan mengembangkan pengetahuan tentang sikap mereka terhadap soal kehidupan. Beliau juga menekankan tentang kepentingan budaya, dan menyifatkannya sebagai suatu yang amat berharga kerana bukan sahaja berperanan sebagai alat komunikasi, namun budaya juga dapat mencerminkan sikap dan identiti sosial.

Budaya jelas banyak membicarakan tentang manusia dalam konteks cara kehidupan yang dibawa secara kolektif. Edward Burnett Tylor (1958), seorang perintis antropologi sosial Inggeris turut melihat budaya merupakan satu hal yang kompleks dan bersangkutan tentang pengetahuan, keyakinan, seni, moral, hukum dan segala kemampuan serta kebiasaan yang dicapai oleh kelompok masyarakat tertentu. Tylor melihat budaya sebagai istilah yang sangat kompleks dan memiliki arti yang teramat luas.

Secara historikalnya budaya kebendaan itu berasal dalam lingkungan ilmu arkiologi dan etnologi yang sering digunakan dalam kajian berkisar tentang artifak. Lazimnya artifak-artifak ini sama ada dijumpai atau dimiliki tetap kaya dengan unsur estetikanya baik dari sudut pandang seninya mahupun kebudayaan masyarakat yang melahirkannya. Meskipun banyak kearifan para sarjana mengupas maksud budaya kebendaan, namun mereka rata-ratanya bersependapat bahawa budaya kebendaan itu adalah objek yang diperbuat dan digunakan oleh manusia yang mencakupi unsur budaya, kepercayaan dan nilai norma kehidupan yang membentuk identiti dan kelestarian sesebuah kelompok masyarakat dan bangsa itu sendiri (Dant, 2005; Geertz, 1973; Hodder, 2012; Malinowski, 1993; Fleming, 1974).

Dalam membicarakan isu budaya kebendaan ini, Prown (1982) turut menyumbangkan pendapatnya dengan mengatakan bahawa objek berperanan besar dalam mengaitkan hubungan manusia dengan kebendaan dalam memahami pelbagai aspek budaya dan sosial, kepercayaan, nilai serta persekitaran. Selain itu, kepentingan terhadap mana-mana kajian kebendaan ini boleh diperturunkan kepada empat elemen terpenting, iaitu:

Tahap kognitif – kepakaran atau kearifan.

Kegiatan aktiviti.

Aksesibiliti bahan dan teknologi pembuatan.

Nilai, kepercayaan dan kecenderungan pilihan pembuat dan pengguna objek.

Walau bagaimanapun, Ku Zam Zam (1983) turut menulis tentang budaya kebendaan atau budaya material yang terdiri daripada alat-alat atau artifak seperti alat-alat kerja, senjata, pakaian, perhiasan, alat-alat kesenian dan sebagainya yang dihasilkan atau digunakan oleh manusia dalam kehidupan. Alat artifak yang dihasilkan ini biasanya bertahan lama daripada masyarakat atau kebudayaan yang menghasilkannya. Dalam memahami budaya kebendaan sesuatu masyarakat itu, hal yang sebenarnya diteliti ialah objek-objek yang dihasilkan, kepentingannya daripada pelbagai aspek sama ada sosial, ekonomi, politik dan kepercayaan. Aspek yang turut ditekankan dalam hal ini ialah faktor kepercayaan terhadap pembudayaan kebendaan tersebut yang dikaitkan dengan sejarah peredaran zaman sebermula daripada zaman prasejarah yang memperkenalkan konsep Devaraja, kedatangan pengaruh Hindu sehinggalah kedatangan pengaruh Islam.

Menurut Miles Richardson (1974) dalam artikelnya bertajuk *'Images, Objects and The Human Story'* menganalisa budaya kebendaan itu sebagai refleksi cerminan atau gambaran manusia. Artifak-artifak kebudayaan lahir hasil daripada keperluan manusia mengisi kehidupan yang lebih sempurna. Menurutny lagi, budaya kebendaan memungkinan penglihatan terhadap kumpulan manusia lain kerana menerangkan tentang manusia yang telah pernah wujud. Dalam bukunya *'The Human Mirror'* Miles ada menyatakan bagi seorang ahli kaji purba atau ahli arkeologi, budaya kebendaan menerangkan tentang manusia yang telah pernah wujud suatu ketika dahulu. Selain rangka-rangka mayat, artifak yang dijumpai pun turut sama memberi peranan dalam mengkaji corak kehidupan dan kebudayaan manusia pada masa lalu.

Dalam mengupas isu budaya kebendaan ini, Koentjaraningrat (1975) turut menegaskan bahawa budaya kebendaan itu meliputi alat-alat yang digunakan dan menjadi keperluan harian masyarakat. Jelasnya budaya kebendaan itu boleh dikategorikan kepada tujuh bahagian:

Alat-alat kerja  
Senjata  
Bekas mengisi bahan  
Makanan dan minuman  
Pakaian dan perhiasan  
Tempat berlindung dan perumahan  
Alat-alat pengangkutan

Dari sudut etnografinya, budaya kebendaan itu begitu penting dalam menilai dan mengkaji kebudayaan manusia yang sedia ada. Melalui objek atau benda peninggalan boleh sahaja mengembalikan semula nostalgia dan rakaman silam dalam ingatan masyarakat yang ditinggalkan. Budaya kebendaan oleh yang demikian berupa alat yang mencerminkan struktur sosio-budaya dan segala objek-objek yang terdapat dalam masyarakat bahkan menjadi bahan dan data penting untuk digunakan oleh ahli etnografi dalam memahami latar belakang dan tahap kehidupan masyarakat.

Sistem kepercayaan atau keyakinan terhadap suatu budaya material itu sebenarnya mempengaruhi sistem penilaian yang ada dalam satu kelompok komuniti atau masyarakat berkenaan. Sistem keyakinan ini hakikatnya mempengaruhi dalam kebiasaan, pandangan hidup sehinggalah bagaimana mereka berkomunikasi. Benda-benda material ini merupakan cerminan atau refleksi konkrit dari pandangan, etos atau cita-cita hidup suatu bangsa.

Dalam konteks kepercayaan rakyat Melayu Brunei, motif peralatan besi dipercayai memiliki 'pengaruh besi' atau biasanya dipanggil 'tuah besi'. Motif besi dalam masyarakat Melayu memiliki 'semangat' yang harus disaru<sup>14</sup> dengan melakukan ritual tertentu. Bukan sahaja sifat besi itu sebagai logam yang keras dan sesuai untuk dibuatkan senjata tetapi seorang individu itu dimestikan menyimpannya walau dalam segala macam keadaan. Walaupun faedah menyimpan logam ini tidak begitu jelas namun dari sudut kebiasaan dan kepercayaan ia adalah berpengaruh kepada pemiliknya.

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<sup>14</sup> Diseru; dipuja

Kelaziman masyarakat menyimpan logam ini adalah untuk dibuatkan senjata. Kegunaannya dalam bentuk senjata lebih memberi erti lagi terhadap penyimpanan logam itu. Menyimpannya dalam bentuk senjata bukan sahaja untuk kegunaan atau keperluan tertentu tetapi ia dapat mendatangkan tuah. Tuah besi dan pengaruhnya kepada diri seseorang adalah besar dalam kehidupan seharian si pemilik. Ini disebabkan seorang yang mempunyai besi yang baik akan beroleh kesenangan dalam kehidupannya. Menurut sesetengah informan bahawa seorang itu akan berjaya dalam kehidupannya jika salah satu daripada empat faktor tuah ini mendampingi kehidupannya iaitu tuah diri (individu itu sendiri), tuah isteri, tuah anak dan tuah besi.

Daripada empat faktor tersebut dapat disimpulkan yang seorang individu itu akan berjaya dalam kehidupannya jika salah satu daripada empat faktor tuah itu mendampingi dirinya. Jika seorang itu tidak mendapat kejayaan dalam kehidupannya, ia mungkin memperolehnya apabila ia beristeri lantaran tuah yang ada dari isterinya. Jika tuah itu belum juga mendampingi kehidupan mereka, ia mungkin akan datang setelah mereka beroleh anak. Dan jika ini belum juga diperolehi, tuah itu mungkin akan datang daripada besi yang baik, yang kebetulan ada dalam simpanan keluarga itu. Menurut kepercayaan rakyat, seseorang itu dianggap paling bernasib malang atau sial jika keempat-empat faktor tuah ini tidak mendampingi kehidupannya sepanjang hayat. Walaupun seorang itu bekerja keras, jika ia tidak didampingi tuah maka kehidupannya tidak akan senang.

Ada beberapa cara untuk mengukur dan mengetahui tuah besi itu. Ia dapat dikesan dengan cara melihat keadaan besi itu sendiri. Mendengar bunyi besi itu dan yang lazim dilakukan adalah dengan mengukurnya. Cara mengukur ini adalah untuk senjata sahaja dan jarang dilakukan kepada bentuk-bentuk lain daripada logam besi.<sup>15</sup> Dalam kepercayaan rakyat, petanda akan diberikan dan disampaikan kepada pemilik suatu benda itu melalui mimpi.

### ***'BEINDUNG'***<sup>16</sup>

<sup>15</sup> Sabtu Ampuan Safiuddin, 1976. "Ukuran Senjata Besi dan Fa'edahnya Kepada Masyarakat Melayu Tradisional" dlm *Ikhtisar Budaya*. Brunei: Dewan Bahasa dan Pustaka.

<sup>16</sup> Berpuaka; berpenunggu

Dalam kalangan masyarakat Melayu Brunei terutamanya golongan tua menerangkan bahawa konsep '*beindung*' yang kerap dikaitkan dengan motif peralatan besi ialah lebih mirip kepada ciri berpuaka. Dalam masyarakat Melayu Brunei '*beindung*' bermaksud memiliki orang tua seperti '*berindung bapa*'.

Segelintir orang Brunei yang masih mempercayai unsur semangat '*beindung*' terhadap material ini seolah memberikan satu pengertian bahawa benda peninggalan itu mempunyai suatu kuasa yang boleh memberi satu gambaran pelik tapi diyakini oleh masyarakat kita. Majoriti golongan tua turut mempercayai barangan lama yang '*beindung*' dipenghuni dan dijagai oleh makhluk halus seperti jin ataupun iblis. Kepercayaan '*beindung*' ini lebih mirip kepada kepercayaan jahat menurut masyarakat setempat. Hal ini terbukti kerana majoriti golongan tua yang pernah memilikinya menegaskan bahawa mereka enggan menghuraikan lebih panjang lebar tentang '*beindung*' sebaliknya mengatakan keluarganya enggan memilikinya lagi dan nekad membuang semua barangan lama milik mereka ke air (di bawah rumah). Jika permintaan atau barangan lama tidak dijaga atau dipuja akibatnya diri sendiri atau ahli keluarga yang bakal menerima padahnya.

Upacara pemujaan mesti dilangsungkan terhadap barangan lama yang dipercayai '*beindung*' ini bagi mengelak daripada berlakunya sebarang musibah atau kecelakaan. Dalam masyarakat Melayu Brunei upacara ritual pemujaan ini dipanggil '*disaru*'. Kononnya apabila upacara pemujaan ini dilakukan, penunggu puaka yang menyerap ke dalam barangan lama itu akan berpuas hati dan gembira malah dipercayai akan mendatangkan keuntungan kepada si pemiliknya.

Walau bagaimanapun kebanyakan masyarakat Melayu seolah cuba untuk menyembunyikan malah menafikan keberadaan '*beindung*' kini kerana adanya pengaruh agama Islam yang sudah menebal. Menurut mereka hal ini dikhuatiri boleh melanggar akidah pun begitu aspek agama tadi nampaknya cuma sebagai alasan untuk menyembunyikan keberadaannya.

**'BERISI'**

Konsep '*berisi*' dalam kepercayaan masyarakat Melayu Brunei membawa maksud dijaga atau dilindungi oleh suatu makhluk halus atau roh. Makhluk halus atau roh yang melindungi satu benda atau barangan lama itu boleh saja terdiri dari roh baik ataupun jahat. Walau bagaimanapun ramai yang menanggapi konsep '*berisi*' ini lebih sinonim dengan penggungu roh yang jahat. Antara '*beindung*' dan '*berisi*' hampir menyerupai dan membawa satu konseptual yang sama, iaitu memiliki penunggu dari kalangan makhluk halus.



Foto 1 '*Indung Pisau*' yang sudah berusia ratusan tahun dipercayai '*beindung*' dan batu yang terkait di mata kail dipercayai memiliki '*semangat*'.



Foto 2 '*Indung Bujak*' yang diperolehi melalui mimpi dan dipercayai '*berisi*'.

Kepercayaan '*berisi*' biasanya dikaitkan dengan tempat-tempat yang tidak kerap dikunjungi. Namun adakalanya '*berisi*' juga dikaitkan dengan barang peninggalan yang sudah lama usianya. Dalam masyarakat Melayu Brunei, tempat yang baru dikunjungi atau didiami dipercayai memiliki penunggu. Kononnya tempat tersebut didiami sudah oleh keluarga atau sanak keluarga penunggu, yang jelasnya tidak boleh terlihat oleh mata kasar manusia. Menurut kepercayaan rakyat, penunggu itu sering menegur kanak-kanak sehingga dengan mudahnya kanak-kanak jatuh sakit.



Selain itu terdapat juga beberapa kes atau senario dalam masyarakat orang Brunei tentang isu dendam dan perbuatan orang yang cuba untuk mengenakan sebuah keluarga atau seseorang itu ke dalam kancan kesusahan sehingga lebih dahsyat lagi boleh membawa maut dengan menanam sesuatu benda di kawasan persekitaran rumah dan sebagainya. Konsep '*berisi*' agak popular diperkatakan dan sering disebut berbanding kepercayaan rakyat yang lainnya. Ia sebenarnya membawa perlambangan seolah-olah ada yang mengisi tempat itu. Menariknya senario seumpama ini sangat popular di kawasan alam Melayu.

Kebudayaan Melayu menyediakan mekanisme penyembuhan atau pemulihan yang mempunyai keterkaitan dengan kepercayaan terhadap barangan tertentu (budaya material). Biasanya orang yang disampuk ini akan dibawa atau dirujuk kepada bomoh atau lebih biasa dipanggil '*orang pemandai*'. Setiap sistem penyembuhan mempunyai saringan dan peringkat diagnosa, terapi dan rawatan. Dalam konteks masyarakat Melayu Brunei khususnya terapi untuk penyembuhan ini ialah dengan memujuk jin-jin tersebut supaya meninggalkan tubuh atau tempat. Pencegahan ialah dengan mematuhi pantang-larang yang dikenakan oleh '*orang pemandai*' tadi. Jika diamati mana-mana ritual atau kaedah penyembuhan secara tradisional, ia jelas bersifat magis dan unik.



Foto 3 '*Yassin 5*' dipercayai memiliki unsur magis dan seringkali digunakan dalam mana-mana ritual. Juga memiliki '*semangat*' dan melindungi si pemiliknya.

Pada waktu hendak mengadakan upacara, ada beberapa benda pembantu dalam sebarang ritual itu seperti kemenyan, beras, kunyit, '*sira kasar*' (garam kasar), jarum, botol kecil, benang, kain putih atau hitam, paku besi dan sebagainya. Kemenyan diperlukan dalam hampir semua ritual untuk mengasapkan peralatan yang digunakan selain berperanan sebagai penghubung antara '*orang pemandai*' dengan kuasa-kuasa ghaib kerana dipercayai jin-jin suka pada asap. Beberapa benda atau '*pengeras*'<sup>17</sup> disebut di Brunei diminta oleh '*orang pemandai*' seperti pisau lipat dan jarum.

<sup>17</sup> Bayaran '*pengeras*' kepada bomoh, dukun atau pawang yang biasanya berupa benda keras seperti pisau

## ‘SEMANGAT’

Pada dasarnya kepercayaan terhadap ‘semangat’ ini adalah sebahagian daripada kepercayaan-kepercayaan lainnya yang terdapat dalam kosmos Melayu. ‘Semangat’ itu bermaksud satu kepercayaan bahawa setiap benda yang ada di muka bumi ini mempunyai semangat atau rohnya tersendiri sama ada yang bernyawa atau tidak bernyawa.

Kepercayaan pada ‘semangat’ merupakan satu kepercayaan kuno yang diwarisi dari zaman animisme lagi. Jadi ini bermakna ia lebih terkehadapan dan tua berbanding kepercayaan terhadap ‘*beindung*’ dan ‘*berisi*’. Kepercayaan ‘semangat’ menekankan bahawa setiap benda mempunyai ‘semangat’ yang mengawalinya. Bagi sesetengah orang tua-tua di Brunei kepercayaan kepada roh-roh ini bermula sedari awal nenek moyang sehingga diceritakan sekarang bahawa masih kedapatan kebenaran sesetengah benda atau barangan lama itu tetap memiliki semangatnya. Semua unsur benda bernyawa atau tidak bernyawa mesti dihormati agar ‘semangat’ tersebut tidak mengganggu manusia malah membantu mereka dari semangat roh jahat dan juga dalam kehidupan seharian mereka. Selain dari itu roh orang yang telah meninggal dunia atau mati pun juga boleh masuk ke dalam tubuh haiwan atau benda. Bahkan bukan sahaja roh atau semangat kita boleh diambil atau dianiaya oleh bomoh atau ‘*orang pemandai*’ jika ada yang berniat hendak berdendam dan sebagainya.



Foto 4 Batu yang diperolehi dalam asam kelumbi (asam kelubi atau paya) yang dipercayai mempunyai ‘semangat’.

Keris atau mana-mana peralatan senjata yang diperbuat daripada besi seperti perang dan pedang, juga dipercayai memiliki 'semangat' atau biasanya dipanggil 'tuah besi'. Selain daripada kemestian dalam melakukan upacara ritual pemujaan atau '*menyaru*', keris misalnya juga dipercayai boleh memakan tuannya bagi yang tidak mengendahkan keberadaannya dalam lingkungan si pemilik. Masyarakat Melayu Brunei khususnya orang tua-tua dahulu kala pada misalnya dipercayai untuk melihat sama ada sebilah keris itu membawa semangat atau roh yang baik ialah dengan mengukurnya. Hal ini memang terkenal dan diakui oleh kebanyakan orang tua-tua terutamanya di kawasan Kampong Ayer Brunei.



Foto 5 Di antara koleksi keris yang dipercayai memiliki 'semanagt' dan 'tuah besi'.



Foto 6 Pedang yang dikatakan memiliki 'semangat'

Ada banyak cara untuk mengukur sebilah keris atau senjata besi itu walau bagaimanapun yang biasa digunakan iaitu dengan menghalakan hujung keris itu ke hadapan manakala hulu keris ke arah kita. Kata-kata yang digunakan untuk mengukurnya ialah dengan membaca bacaan seruan disertai dengan susunan kata-kata '*hidup-mati-hidup-mati*' dan seterusnya. Cara ini ialah dengan memulakan genggamannya sebelah kanan diikuti oleh genggamannya sebelah kiri dengan menggunakan susunan kata-kata seperti tadi. Ukuran yang jatuh pada hidup sangatlah

baik dan akan membawa keuntungan kepada pemiliknya namun jika ia jatuh kepada mati, pemilik haruslah membuang atau menyerahkan keris tersebut kepada orang lain kerana senjata itu seolah akan memakan orang yang empunya badan.

### **‘KERAMAT’**

‘Keramat’ berasal daripada bahasa Arab iaitu *karama*, *kerama*, *keramat* atau *karamat* yang bererti ‘mulia’. Konsep ‘keramat’ sangat sinonim dengan sifat kekudusan (sanctity) atau kesakralan. Dalam agama Islam ‘keramat’ lebih kepada keberkatan (*God’s blessing*) yang biasanya ada pada seorang wali Allah. Atas sebab kuasa istimewanya telah dimanifestasikan ke dalam diri seorang keramat lalu membolehkannya melakukan sesuatu perkara yang ajaib, pelik dan magis.

Tokoh keramat dengan demikian dipercayai dan diyakini kewujudannya oleh penduduk setempat atau sesebuah masyarakat. Dalam konteks budaya tradisi masyarakat Melayu Brunei dipercayai unsur kekeramatan itu dimiliki oleh Tunku Syarif Kedah yang pernah berada di Brunei suatu ketika dahulu iaitu sezaman dengan ayahanda Sultan Haji Hassanal Bolkiah, Al Marhum Sultan Haji Omar Ali Saifuddien Sa’adul Khairi Waddien atau lebih biasa dipanggil ‘Begawan’ oleh orang tua-tua sedari dahulu sehingga kini. Tokoh keramatnya dihidupkan lewat kisah-kisah keajaiban tentangnya, yang pada kebiasaannya mempengaruhi corak kehidupan penduduk itu.

Dahulunya setiap satu kejadian atau kemunculan suatu hal yang ganjil akan dikaitkan dengan kewujudan keramat. Berlakunya sesuatu musibah dilihat oleh penduduk tempatan sebagai gerak balas daripada keramat. Pada dasarnya, ‘keramat’ itu mencakupi tiga fitur utama yang diwarnai dengan unsur-unsur magis, memiliki unsur sejarah dan dipercayai benar. Namun seorang tokoh keramat itu mempunyai ciri-ciri uniknya tersendiri seperti wataknya yang terdiri daripada seorang tokoh agama atau alim ulama bahkan ada sesetengahnya mengiyakan status seorang tokoh keramat seperti Tunku Syarif Kedah itu merupakan seorang wali Allah.<sup>18</sup>

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<sup>18</sup> Low Kok On, 2009. *Tradisi Lisan Keramat Tunku Syarif Kedah di Pulau Labuan*. Sekolah Pengajian Seni : Universiti Malaysia Sabah, hlm 128.

Sebagai seorang tokoh yang dilabel keramat hidupnya maka masyarakat Melayu Brunei mengakui bahawa beliau dapat melindungi orang yang berhadapan dengan situasi bahaya. Riwayat hidup dan asal-usul tokoh keramat Tunku Syarif Kedah juga berkait dengan Tanah Suci orang Islam. Perkara ini disebabkan seorang tokoh keramat adalah orang suci. Dalam tradisi sufi Islam, tokoh keramat dianggap sebagai kawan rapat Tuhan, atas sebab ini tidak hairanlah seorang tokoh keramat dikurniakan keramat atau unsur keajaiban yang tidak dimiliki orang kebanyakan.

Melalui penjelasan kebanyakan golongan tua terutama di kawasan Kampong Ayer, keberkatan doa dan sembahyang hajat yang dilakukan oleh Tunku Syarif Kedah kerap diperkenankan dan dikabulkan oleh Tuhan. Sembahyang hajat itu tidak hanya terhad kepada permintaan hujan sahaja bahkan hajat yang diminta oleh penduduk pada masa itu adalah lebih daripada itu. Unsur kekeramatan yang kerap disebut-sebut oleh penduduk Kampong Ayer menegaskan bahawa mereka pernah mengikuti kisah tentang Tunku Syarif Kedah yang berjalan di bawah hujan dan tubuhnya tidak basah bahkan orang yang ikut bersamanya juga tidak basah kerana mereka memegang baju Tunku Syarif Kedah. Sesetengahnya mengatakan baju Tunku Syarif Kedah itu diistilahkan sebagai 'payung Tuhan' bagi menerangkan kejadian ajaib yang pernah dialaminya. Selain itu turut dipercayai perahu yang diikuti Tunku Syarif Kedah tidak dibasahi hujan di sepanjang pelayaran sedangkan di kiri dan kanannya sedang mengalami hujan. Tunku Syarif Kedah juga pernah diceritakan mampu untuk berjalan di atas permukaan air sungai atau laut.

Kepercayaan terhadap tenaga atau kuasa pelindung yang ada pada seorang keramat merupakan satu unsur penting yang terkandung dalam kepercayaan anggota masyarakat terhadap tokoh keramat. Sehubungan dengan itu tidak kira sama ada seorang tokoh keramat itu masih hidup ataupun sudah kembali ke rahmatullah, terdapat anggota masyarakat yang percaya bahawa keramat sanjungannya itu memiliki kuasa pelindung. Jika berlaku sesuatu kecelakaan atau bala atas sesuatu tempat atau seseorang, terdapat penduduk kampung yang percaya bahawa keramat berkenaan akan melindunginya daripada ditimpa bahaya. Justeru itu kebanyakan rumah yang terdapat di Kampong Ayer pasti memiliki atau menyimpan gambar potret Tunku Syarif Kedah. Hal sedemikian jelas ditonjolkan dan disebarikan melalui cerita mulut orang kampung. Jelasnya tokoh keramat itu disanjung dan dipuja oleh penduduk setempat dan kisahny diwarnai berbagai-bagai unsur keajaiban dan mistik.



Foto 7 Gambar Tunku Syarif Kedah  
(Tuanku Said Muhammad bin Tuanku Muhammad Shahbudin)

## KESIMPULAN

*WELTANSCHAUUNG MELAYU TRADISIONAL* ditegakkan atas gagasan pemikiran animisme, Hindu dan Islam sehingga mempengaruhi budaya atau cara hidup. Pada zaman mutakhir ini, unsur Islam dianggap sebagai unsur dominan di dalam proses metamorfosis yang membentuk pemikiran mahupun budaya Melayu tradisional itu sendiri. Namun apa yang lebih penting ialah kesemua unsur pemikiran atau tanggapan tersebut bergabung dalam melahirkan satu kompleks kerangka fikir dan pandangan alam Melayu yang jelas menghalakan penekanan kepada kosmologi metafizik.

Bila Islam dijadikan sebagai corak kehidupan masyarakat Melayu Brunei, memang diperakui banyak adat warisan yang telah ditinggalkan apabila diketahui ia bercanggah dengan hukum syarak dan ajaran Islam. Dalam pada itu, masih terdapat segelintir golongan yang masih tetap mempertahankan adat walaupun diketahui sesetengah adat itu merupakan saduran daripada pegangan dan amalan agama lain selain daripada Islam. Tambah mendukacitakan lagi, apabila sesuatu adat yang diamalkan itu boleh membawa kepada khurafat dan syirik kepada Allah SWT. Dalam konteks kosmos Melayu Brunei, masyarakat Melayunya memang berpegang pada akidah Islam. Dan dalam hal ini jelas terlihat dalam pilar utama adat Melayu 'adat bersendikan hukum, hukum bersendikan kitabullah'. Kenyataan ini membuktikan bahawa adat Melayu adalah budaya yang bernuansa dengan nilai dan citra keislaman. Adat, budaya dan tradisi Me-

layu ternyata mempunyai hubungan yang erat dengan nilai dan norma ajaran agama Islam yang berpisah tiada.

Semua bangsa bagaimanapun memang mengalami dilema, konflik dan polemik pada saat berubahnya *status quo* kerana tanpa perubahan maka kemajuan itu tidak akan boleh dikecapi atau dicapai. Namun kemajuan kebendaan, teknologi dan seumpamanya yang menghakis ke tepi dan meremehkan pembangunan adat-tradisi-budaya yang berperanan sebagai warisan kita bahkan ia bukan sahaja tidak dilestari malah mengundang kepada kebobrokan dan konflik sosial yang agak tajam. Pembangunan negara tidak boleh tidak mesti dilandasi dengan pembangunan kebudayaan dan warisan yang mementingkan nilai-nilai agama, moral, kemanusiaan, keadilan dan tanggungjawab kemasyarakatan. Malah pembangunan kebudayaan ini harus berkembang dalam konteks sejarah dan tradisinya tanpa mencondongkannya kepada pola nilai-nilai asing yang ternyata bercanggah dengan tamadun dan peradaban kita.

## KEPUSTAKAAN

Ahmad Johari Moain. (1990). *Kepercayaan Orang Melayu Berhubung Dengan Pertanian*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Abdul Latif bin Haji Ibrahim, Dr. Haji. (2011). *Dinamik Warisan Melayu*. Brunei: Dewan Bahasa dan Pustaka.

Amran Kasimin. (2006). *Unsur-Unsur Menurun Dalam Persembahan Teater Melayu Tradisional*. Kuala Lumpur : Dewan Bahasa dan Pustaka.

Arnold Van Gennep. (1960). *The Rites of Passage*. Great Britain : Routledge and Kegan Paul Ltd.

Bronislaw Malinowski. (1944). *A Scientific Theory of Culture and Other Essays*. The University of North Carolina Press.

Clifford Geertz. (1973). *The Interpretation of Cultures*. New York : Basic Books Inc.

Dant, T. (2005). *Materiality and Society*. New York: Open University Press.

Edward B. Tylor. (1958). *Primitive Culture*. New York: Harper Torchbooks.

Fatimi, S.O. (1963). *Islam Comes To Malaysia*. Singapore.



Fraser, James George. (1950). *The Golden Bough: A Study in Magic and Religion*. London: Macmillan Co. Ltd.

Haji Abdul Latif Haji Ibrahim, Dato Paduka Dr. (2011). *Dinamika Warisan Melayu*. Bandar Seri Begawan: Dewan Bahada dan Pustaka.

Hashim Haji Md Noor. (2004). *Keris: Peranannya Dalam Masyarakat Melayu Brunei*. Brunei: Dewan Bahasa dan Pustaka.

Hashim bin Haji Abd. Hamid, Dr. Haji. (1999). *Cerocok Budaya Brunei*. Akademi Pengajian Brunei: Universiti Brunei Darussalam.

Haron Daud. (peny.) (1994). *Manusia dan Kepercayaan*. Kuala Lumpur : Dewan Bahasa dan Pustaka.

Hodder, I. (2012). *Entangled An Archaeology of The Relationships Between Humans and Things*. Wiley-Blackwell.

Ismail Hamid. (1991). *Masyarakat dan Budaya Melayu*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

K.M. Endicott. (1970). *An Analysis of Malay Magic*. Singapore: Oxford University Press.

Koentjaraningrat, Raden Mas. (1975). *Introduction to the Peoples and Cultures of Indonesia and Malaysia*. Menlo Park, Calif : Cumming Pub. Co.

Low Kok On. (2003). *Membaca Masa Silam Kadazandusun Berasaskan Mitos dan Legenda*. Tesis Ijazah Doktor Falsafah (tidak diterbitkan). Universiti Sains Malaysia.

\_\_\_\_\_. (2009). *Tradisi Lisan Keramat Tunku Syarif Kedah di Pulau Labuan*. Sekolah Pengajian Seni: Universiti Malaysia Sabah.

Mair, Lucy. (1972). *An Introduction to Social Anthropology*. Britain: Clarendon Press.

Miles Richardson. (1974). "Images, Objects and the Human Story" in *The Human Mirror: Material and Spatial Images of Man*, ed. Miles Richardson, Baton Rouge: Louisiana State University Press. p. 3-14.

Mohd Taib Osman. (1989). *Malay Folks Beliefs An Integration of Disparate Elements*. Kuala Lumpur : Dewan Bahasa dan Pustaka.

Norazit Selat. (1989). *Konsep Asas Antropologi*. Kuala Lumpur : Dewan Bahasa dan Pustaka.

Noriah Taslim. (2010). *Lisan dan Tulisan : Teks dan Budaya*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Noria Anak Tugang. (2011). *Ritual Kain Pua Dalam Budaya Iban Di Sarawak*. Tesis Ijazah Doktor Falsafah (tidak diterbitkan). Universiti Malaya, Kuala Lumpur, Malaysia.

Prown, Jules. (1982). "Mind in Matter: An Introduction to Material Culture Theory and Method". *Winterthur Portfolio*, 1-19.

Rauf, M.A. (1964). *A Belief History of Islam With Special Reference To Malaya*. Kuala Lumpur: Oxford University Press.

Sabtu Ampuan Safiuddin. (1976). "Ukuran Senjata Besi dan Fa'edahnya Kepada Masyarakat Melayu Tradisional" dlm *Ikhtisar Budaya*. Brunei: Dewan Bahasa dan Pustaka.

Sapir, E., (1931). Custom. *Encyclopedia of the Social Sciences*. Vol. 4.

Soerjono Soekanto. (1982). *Sosiologi Suatu Pengantar*. Jakarta : PT Raja Grafindo Persada.

Syed Muhammad Naquib Al-Attas. (1990). *Islam Dalam Sejarah dan Kebudayaan Melayu*. Kuala Lumpur : Angkatan Belia Islam Malaysia.

Tylor, E.B. (1871). *Primitive Culture*. London: J. Murray.

Walter William Skeat. (1965). *Malay Magic: An Introduction to the Folklore and Popular Religion of the Malay Peninsula*. Frank Cass & Co. Ltd.

Wan Abdul Kadir. (2002). *Tradisi Dan Perubahan Masyarakat Dan Budaya Melayu*. Kuala Lumpur : Penerbitan Pustaka Ilmu.

Yaakub Harun (editor). (2001). *Kosmologi Melayu*. Kuala Lumpur : Akademi Pengajian Melayu, Universiti Malaya.

**KESAN KIT INOVASI KAKP (KATA ADJEKTIF KATA PENGUAT)  
DALAM PENGUASAAN AYAT ADJEKTIF MENGGUNAKAN KATA  
PENGUAT UNTUK BAHASA MELAYU MURID TAHUN 5**

SALIM BIN ABDULLAH

NURLYANA BINTI EZANI

ANGELINE OOI

AZMAN BIN RAHMAT (P.h.d)

INSTITUT PENDIDIKAN GURU

KAMPUS BAHASA MELAYU

## Bab 1

### Pendahuluan

#### 1.1 Pengenalan

Bahagian ini akan menghuraikan pernyataan masalah yang menjadi dasar kepada pelaksanaan inovasi KAKP ini. Oleh itu, pada bab 1 ini, objektif, persoalan dan hipotesis inovasi akan dinyatakan bagi memfokuskan proses pelaksanaan inovasi KAKP ini dengan lebih teratur. Di samping itu, skop dan batasan kajian juga diterangkan berserta definisi operasional bagi memudahkan pembaca memahami konteks inovasi yang dilaksanakan.

#### 1.2 Pernyataan Masalah

Semasa menjalani praktikum fasa 2 yang lepas, dapat diperhatikan bahawa murid tahun 5 di Sekolah Kebangsaan Seri Bintang Utara tidak menguasai aspek tatabahasa berkaitan kata adjektif dan kata penguat dalam mata pelajaran bahasa Melayu pada tahap yang cemerlang. Walau bagaimanapun, pengetahuan tentang ciri kata adjektif dan kata penguat sememangnya sudah dikuasai murid. Dalam hal ini, murid amat jelas pengetahuannya tentang jenis kata adjektif seperti kata adjektif warna, sifat, waktu, pancaindera dan jenis kata penguat, iaitu kata penguat hadapan, belakang, bebas, hadapan tertinggi dan belakang tertinggi.

Namun, dari aspek kegunaan kata penguat yang hadir bersama kata adjektif dalam binaan ayat terlihat amat lemah pada pemerhatian pengkaji. Fakta ini menjadi lebih jelas apabila soalan berkaitan binaan ayat menggunakan kata adjektif dan kata penguat yang diberikan tidak mampu dijawab oleh murid dengan betul. Berikut ialah jadual 1, yang menunjukkan hasil binaan ayat adjektif yang salah dengan kehadiran kata penguat yang tidak betul kedudukannya dalam ayat.

Jadual 1.

*Hasil Kerja Binaan Ayat Adjektif Murid Tahun 5.*

Ayat Adjektif	
Ayat Tidak Gramatis	<i>Aminah <b>benar</b> cantik pada hari ini.</i>
Contoh 1	

Kesalahan	Kata penguat belakang berada di hadapan kata adjektif.
Ayat Gramatis	<i>Aminah cantik <b>benar</b> pada hari ini.</i>
Ayat Tidak Gramatis	<i>Pokok kelapa itu <b>paling</b> tinggi sekali.</i>
<p style="text-align: right;">penguat hadapan tertinggi tidak boleh bersama kata Kata penguat</p>	
Kesalahan	
Contoh 2	belakang tertinggi dalam satu ayat.
Ayat Gramatis	1 <i>Pokok kelapa itu <b>paling</b> tinggi. (atau)</i>
	2 <i>Pokok kelapa itu tinggi <b>sekali</b>.</i>

Selanjutnya, pengkaji juga telah berjumpa dengan guru asal yang mengajar mata pelajaran bahasa Melayu untuk kelas tahun 5 ini untuk bertanya secara tidak formal bagi mendapatkan maklumat tambahan berkaitan masalah yang dihadapi iaitu tentang kata adjektif dan kata penguat. Hasil temu bual yang pengkaji lakukan terhadap guru, beliau menyedari dan mengakui bahawa memang murid tahun 5 tidak menguasai aspek tata bahasa kata adjektif dan kata penguat dengan dalam aspek binaan ayat adjektif berdasarkan pengalaman mengajarnya yang lepas. Beliau menyatakan murid tahun 5 ini masih keliru dengan kedudukan kata penguat yang hadir dalam binaan frasa adjektif pada ayat.

Sehubungan itu, berdasarkan pernyataan masalah yang pengkaji peroleh sewaktu praktikum fasa kedua tersebut, akhirnya tercetus sebuah idea untuk memperkenalkan inovasi Kit KAKP (Kata Adjektif Kata Penguat). Inovasi Kit KAKP ini umumnya ialah inovasi dalam kaedah atau teknik untuk belajar kata adjektif dan kata penguat bagi murid dengan cara yang lebih efektif bagi membantu meningkatkan tahap penguasaan binaan ayat adjektif yang menggunakan kata penguat dengan betul. Makanya, pengkaji tertarik untuk melihat pengaruh keberkesanan inovasi Kit KAKP dalam penguasaan kata adjektif dan kata penguat bahasa Melayu murid tahun 5.

### 1.3 Tujuan Inovasi

Inovasi ini bertujuan untuk mengenal pasti tahap penguasaan kata adjektif dan kata penguat bagi murid tahun

Di samping itu, kajian ini juga bertujuan untuk mengenal pasti keberkesanan Kit KAKP bagi membina ayat adjektif bahasa Melayu dengan betul.

### **1.3.1 Objektif Inovasi**

Berdasarkan tujuan tersebut, inovasi ini cuba mencapai dua objektif. Kedua – dua objektif adalah seperti yang berikut :

Mengenal pasti tahap penguasaan kata adjektif dan kata penguat bagi murid tahun 5.

Mengenal pasti tahap keberkesanan Kit KAKP dalam penguasaan ayat adjektif menggunakan kata penguat.

### **1.3.2 Persoalan Inovasi**

Berdasarkan objektif inovasi tersebut, inovasi ini cuba menjawab dua persoalan. Kedua – dua soalan adalah seperti yang berikut :

Apakah tahap penguasaan kata adjektif dan kata penguat bagi murid tahun 5?

Adakah Kit KAKP berkesan dalam meningkatkan penguasaan ayat adjektif menggunakan kata penguat?

### **1.3.3 Hipotesis Inovasi**

Berdasarkan persoalan inovasi tersebut, inovasi ini cuba membuktikan tiga hipotesis. Ketiga-tiga hipotesis adalah seperti yang berikut :

Ho.1 Tidak terdapat perbezaan yang signifikan antara min skor ujian pra bagi kumpulan kawalan dengan kumpulan rawatan.

Ho.2 Tidak terdapat perbezaan yang signifikan antara min skor ujian pasca bagi kumpulan kawalan dengan kumpulan rawatan.

Ho.3 Tidak terdapat perbezaan yang signifikan antara min skor ujian ayat adjektif menggunakan kaedah pengajaran tradisional dengan min skor ujian ayat adjektif menggunakan Kit KAKP.

## **1.4 Skop Dan Batasan Inovasi**

Inovasi ini bertujuan untuk mengenal pasti tahap keberkesanan Kit KAKP untuk murid-murid amalkan di sekolah bagi belajar kata adjektif dan kata penguat. Oleh hal demikian, kaedah pengajaran yang diinovasikan ini hanyalah berfokuskan kepada Kit KAKP. Kit KAKP ini pula akan diuji bagi tajuk ayat adjektif menggunakan kata penguat dalam aspek tatabahasa Melayu.

Kit KAKP yang diuji ini merupakan pembelajaran yang berperanan untuk menilai tahap penguasaan ayat adjektif dalam subjek bahasa Melayu untuk murid yang lemah di sekolah. Untuk itu, kajian ini akan menggunakan pendekatan kuantitatif sepenuhnya yang menggunakan reka bentuk kuasi-eksperimen. Reka bentuk kuasi-eksperimen yang digunakan ini ialah jenis reka bentuk ujian pra-pasca bagi kumpulan-kumpulan yang tidak seimbang.

Sehubungan itu, inovasi ini memilih populasi murid sekolah rendah yang terdapat di Wilayah Persekutuan, Kuala Lumpur, iaitu Sekolah Rendah Seri Bintang Utara. Jumlah populasinya ialah seramai 477 murid lelaki dan 588 murid perempuan, menjadikan jumlah keseluruhan murid seramai 1065 orang. Namun, 60 orang murid sahaja yang dipilih secara persampelan rawak mudah untuk diuji menggunakan instrumen kajian yang dihasilkan.

Walau bagaimanapun, kajian yang dilaksanakan ini terbatas pada beberapa aspek. Pertamanya ialah sampel yang dipilih hanya 60 orang sahaja yang diwakili oleh dua buah kelas dari darjah 5 di Sekolah Rendah Seri Bintang Utara. Dari segi tempoh, pengkaji menggunakan waktu selama 2 minggu bagi pelaksanaan inovasi ini dan tempatnya ialah di bilik darjah semasa proses pengajaran dan pembelajaran bahasa Melayu berlangsung.

Akhir sekali, pengkaji menegaskan bahawa analisis data yang dibuat hanya menggunakan ujian-t, peratus dan kekerapan untuk menilai keberkesanan pengajaran yang diuji. Sebabnya, kajian ini menggunakan pendekatan kuantitatif sepenuhnya dan tidak melibatkan pendekatan kualitatif dalam proses mengumpul data.

## **1.5 Definisi Operasional**

Bahagian ini akan menghuraikan definisi operasional mengikut konteks inovasi yang dilaksanakan. Definisi operasional ini penting bagi mentakrifkan istilah utama yang digunakan pengkaji sebagai panduan untuk membentuk instrumen inovasi ini. Oleh itu, pembaca dapat memahami untuk membezakan makna istilah dalam konteks inovasi Kit KAKP secara khusus dan konteks pemahaman umum yang lazim difahami pembaca.

### **1.5.1 Keberkesanan**



Keberkesanan adalah tingkat keberhasilan yang dapat dicapai dari suatu cara atau strategi tertentu yang sesuai dengan tujuan yang ingin dicapai (Sunji Yuniariti, 2013). Jika dilihat dari dimensi pendidikan keberkesanan pedagogi merupakan elemen penting untuk seorang guru perlu ambil peduli bagi mengawal tingkah laku murid dan mencapai objektif pengajarannya di dalam kelas (Harry K. & Rosemary T., 2016).

Dalam inovasi ini, keberkesanan yang dilihat ialah keberkesanan Kit KAKP dalam penguasaan ayat adjektif menggunakan kata penguat bahasa Melayu. Keberkesanan Kit KAKP ini akan diukur melalui ujian pra

– pasca dan ujian t-test untuk melaporkan hasil dapatan inovasi, sama ada terdapat perbezaan yang signifikan bagi skor min ujian pra dan ujian pasca antara kumpulan rawatan dan kumpulan kawalan yang diuji. Sehubungan itu, dapatan inovasi yang diperoleh dapat membuktikan bahawa Kit KAKP yang dilaksanakan berkesan atau tidak.

### **1.5.2 Kit KAKP**

Inovasi Kit KAKP ialah permainan jalin kata penguat bersama kata adjektif untuk dua hingga empat orang. Setiap pemain beradu untuk membentuk perkataan secara cantuman blok kata dengan menggunakan jubin perkataan berwarna dan mengaturnya di atas papan permainan dalam kedudukan yang melintang. Objektif permainan adalah untuk mendapat markah tertinggi. Setiap pembinaan kata penguat yang tepat berdasarkan kata adjektif, maka markah akan dicatat pada ruang pemarkahan setiap individu. Pada bahagian lampiran 1, ada disediakan panduan permainan Kit KAKP ini dirancang untuk dilaksanakan oleh guru.

Kit Inovasi KAKP juga telah dilengkapi kad rumus KAKP, blok permainan KAKP dan pentaksiran secara eksplisit menerusi kaedah penyoalan semasa permainan blok KAKP. Perincian bagi inovasi kad rumus KAKP dalam kit inovasi ini ialah berpandukan rujukan daripada beberapa buku yang ditulis pakar-pakar dalam bidang tatabahasa. Rumus yang dibina dalam jadual inovasi kad rumus KAKP adalah hasil carian maklumat daripada buku-buku berikut:

Tatabahasa Dewan (Nik Safiah Karim et.al)

Petunjuk Tatabahasa Bahasa Melayu (Asraf)

Rumus Tatabahasa BM Golongan Kata ( Abdul Ghalib Yunus & Muhammad Norrudin Abdul Aziz)

Menajamkan Tatabahasa (Zulkifli Mohd Top)

Canggihnya Bahasa Melayu Sistem Pembentukan Kata (Ismail Dahaman)

Canggihnya Bahasa Melayu Sistem Pembentukan Ayat (Ismail Dahaman)

Morfologi Bahasa Melayu (Faridah Nazir)

Hasil garapan idea daripada fakta kukuh yang diperolehi daripada buku-buku dan pendapat pensyarah bahasa Melayu, ternyata rumus inovasi kali ini memudahkan fahaman murid sekolah rendah dan sekolah menengah untuk menguasai asas tatabahasa kata penguat dalam tatabahasa bahasa Melayu. Rumus berjadual ini telah mengimplementasikan konsep warna dalam setiap jenis kata penguat.

Hal ini demikian, kajian oleh Darmaprawira (2002), menjelaskan bahawa fungsi warna dari aspek psikologi ialah memberikan pengaruh tertentu kepada perilaku seseorang dan penghidup jiwa. Malah, penggunaan warna dalam pembelajaran merupakan tarikan murid untuk lebih cakna pada isi fokus. Oleh itu, rumus jadual berwarna dalam Kad Rumus KAKP akan berkesan kepada penerangan konsep tatabahasa kata adjektif- kata penguat dalam bahasa Melayu.

Kata Penguat				
Hadapan	Belakang	Bebas	Hadapan tertinggi	Belakang tertinggi
Cukup	Benar	Amat	Ter-(imbuhan)	sekali
Makin	Betul			
Kurang	Nian			
Lebih				
Begitu				
Demikian		Sungguh	Paling	

Agak				
Terlalu				
8 sahaja	3 sahaja	3 sahaja	2 sahaja	1 sahaja

Rajah 1. Rumus KAKP (Kata Adjektif Kata Penguat)

	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>
-	<b>KATA ADJEKTIF</b>		=	<b>BETUL</b>
	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>

	<b>KAT ADJEKTIF</b>	-	=	<b>BETUL</b>
-	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>
-	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>
	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>
-	<b>KATA ADJEKTIF</b>		=	<b>BETUL</b>
-	<b>KATA ADJEKTIF</b>		=	<b>BETUL</b>
	<b>KATA ADJEKTIF</b>		=	<b>BETUL</b>
	<b>KATA ADJEKTIF</b>		=	<b>BETUL</b>
	<b>KATA ADJEKTIF</b>	-	=	<b>BETUL</b>

*Rajah 2: Panduan Kegunaan Rumus KAKP (Kata Adjektif Kata Penguat)*

### 1.5.3 Bahasa Melayu

Bahasa Melayu umumnya difahami sebagai bahasa yang dituturkan oleh mereka yang berbangsa Melayu. Dalam konteks negara pula bahasa Melayu diangkat sebagai bahasa kebangsaan dan bahasa rasmi negara

menerusi Akta Bahasa Kebangsaan 1963/67 yang digubal dibawah Perkara 152 Perlembagaan Persekutuan Malaysia dan dikuatkuasakan pada 1 julai 1971 (Zaharah Hassan, Abdul Latif Samian dan Nazri Muslim, 2011).

Walau bagaimanapun, bahasa Melayu yang dimaksudkan dalam inovasi ini ialah sebuah mata pelajaran yang wajib dipelajari oleh semua murid di sekolah. Perkara ini selari dengan Akta Pendidikan 1996 yang menjadikan mata pelajaran bahasa Melayu sebagai mata pelajaran wajib dan bahasa pengantar di setiap sekolah kerajaan (Juriah Long, Raja Fauzi Raja Musa, Zarin Ismail, & Hamidah Yamat Ahmad, 2001).

## **1.6 Rumusan**

Oleh itu, dapatlah dirumuskan bahawa dalam bab pertama ini banyak membincangkan pernyataan masalah yang menjadi punca kepada pelaksanaan inovasi Kit KAKP. Oleh itu, pengkaji telah membina dua objektif, dua persoalan dan tiga hipotesis nul yang akan menjadi panduan pengkaji dalam menentukan hasil dapatan inovasi Kit KAKP. Di samping itu, pengkaji juga telah meletakkan skop dan batasan inovasi dan definisi operasional dalam bab pertama untuk maklumat asas kepada pembaca untuk memahami proses pelaksanaan umum keseluruhan inovasi Kit KAKP ini. Oleh itu, dalam bab seterusnya pengkaji akan menghuraikan dengan lebih mendalam berkaitan teori yang menjadi panduan proses pelaksanaan dan pengumpulan data inovasi.

## **Bab 2**

### **Tinjauan Literatur**

#### **2.1 Pengenalan**

Bab ini pengkaji akan mengemukakan sorotan kajian lalu tentang kata adjektif dan kata penguat bagi mata pelajaran bahasa Melayu di peringkat global dan tempatan secara terperinci. Di samping itu, penerangan berkaitan teori yang mendasari inovasi ini juga akan dihuraikan secara mendalam dan terperinci dalam bab ini.

## 2.2 Teori Inovasi

Teori Analisis Kesilapan Berbahasa (Corder, 1967) ini akan digunakan bagi mengukur tahap penguasaan murid dalam ayat aktif transitif bahasa Melayu bagi inovasi Kit KAKP ini. Oleh itu, Teori Analisis Kesilapan Berbahasa (Corder, 1967) akan dihuraikan secara mendalam dan terperinci di dalam bab ini. Huraian yang dibuat adalah berdasarkan aspek konsep, dimensi, struktur dan kepentingan Teori Analisis Kesilapan Berbahasa (Corder, 1967).

### 2.2.1 Konsep Teori

Teori Analisis Kesilapan Berbahasa ini mulanya diperkenalkan oleh Corder (1967) melalui kajiannya yang bertajuk *The Significance of Learners' Errors*. Menurut beliau, kesilapan berbahasa merujuk kepada pertuturan yang menyimpang daripada bentuk asal bahasa itu dituturkan. Dalam erti kata lain kesilapan bahasa juga bermaksud fenomena percanggahan makna asal yang terlihat dari konteks nahu sesuatu bahasa, apabila penutur natif bahasa tersebut menggunakannya (Fang & Jiang, 2007).

Teori Analisis Kesilapan Berbahasa (Corder, 1967) ini mula berkembang secara meluas konsep dan ideanya kerana digunakan oleh ramai ahli bahasa di seluruh dunia untuk menganalisis kesilapan dalam pembelajaran bahasa. Antara pengikutnya ialah C. Dulay & K.Burt (1972), yang mentakrifkan bahawa analisis kesilapan bahasa sebagai masalah penggunaan bahasa yang tidak tepat maknanya dari segi proses binaan struktur ayat yang lazimnya berlaku kepada mereka yang mempelajari bahasa kedua. Erdoğan (2005), pula menyatakan bahawa analisis kesilapan bahasa merupakan strategi pendidik untuk mengenal pasti kesilapan yang dilakukan oleh murid di dalam pembelajaran bahasa dari segi leksikal, fonologi, morfologi dan sintaksis.

Dalam konteks inovasi Kit KAKP ini, Teori Analisis Kesilapan Berbahasa (Corder, 1967) digunakan untuk mengenal pasti tahap penguasaan ayat adjektif menggunakan kata penguat dalam bahasa Melayu terhadap subjek kajian di sekolah rendah. Hal ini disebabkan, sudah banyak pengkaji terdahulu yang menyatakan bahawa Teori Analisis Kesilapan Berbahasa (Corder, 1967) ini sangat sesuai dan berkesan untuk mengukur kemajuan tahap penguasaan gramatikal dengan cara mencatat dan mengklasifikasikan kesilapan yang dilakukan oleh murid dalam pembelajaran bahasa (Ali Akbar Khansir, 2012; Chye & Subramaniam,

2012; Hazlina Abdul Halim, 2013; Mohd, Bin, & Ghazali, 2018; Nian & Zaitul Azma Zainon Hamzah, 2014; Nor Ashikin

Ab Manan, 2016; Nor Hidayah Md Khanapiah, 2016; Roshidah Hassan, 2015; Teo, 2003; Ummi Syarah Ismail, Nazri Atoh, Munirah Azrae, & Nadhilah Abdul Pisal, 2018).

### **2.2.2 Dimensi Teori**

Menurut (Corder, 1974) gabungan aplikasi teori linguistik dan psikologi dalam Teori Analisis Kesilapan Berbahasa (Corder, 1967) telah memberi satu dimensi baharu kepada para pengkaji dan ahli bahasa tentang perbincangan kesilapan dalam pembelajaran bahasa. Dalam hal ini, Mohd et al. (2018) dan Hazlina Abdul Halim & Hoon (2015) menghuraikan bahawa kesilapan yang berlaku dalam pembelajaran bahasa dipercayai boleh diterangkan, iaitu kesilapan hasil gangguan pengaruh bahasa ibunda atau kelemahan strategi pengajaran guru dalam pembelajaran bahasa yang tidak sesuai bagi murid menerima input pengetahuan. Makanya, hasil dapatan inovasi Kit KAKP boleh menjelaskan kegagalan dan kejayaan penguasaan ayat adjektif menggunakan kata penguat dengan betul berpunca sama ada daripada murid atau guru.

### **2.2.3 Struktur Teori**

Corder, (1974) juga telah mengkategorikan punca kesilapan bahasa yang berlaku kepada tiga jenis, iaitu kesilapan pemindahan, kesilapan analogi dan kesilapan dorongan pengajaran. dalam konteks kajian ini pengkaji hanyalah menfokuskan kepada jenis analisis kesilapan bahasa dorongan pengajaran kerana sesuai dan menepati untuk melihat pengaruh keberkesanan inovasi Kit KAKP dalam penguasaan ayat adjektif menggunakan kata penguat untuk bahasa Melayu.

Menurut Fang & Jiang, (2007) jenis analisis kesilapan dorongan pengajaran ini penting untuk disedari oleh seorang pendidik kerana hasil dapatan kajiannya melalui pendekatan kualitatif mendapati kaedah pengajaran guru yang *chalk and talk* menjadi punca utama kesilapan makna dalam ayat berlaku bagi mata pelajaran bahasa Inggeris yang dipelajari oleh pelajar asing di *College of Foreign Languages China*.

### **2.2.4 Kepentingan Teori**



Teori Analisis Kesilapan Berbahasa ini sangat penting kepada seorang murid, guru dan pengkaji untuk menganalisis kesilapan dalam pembelajaran bahasa. Buktinya, kajian Normaizam Hamid (2003) dan Erdoğan (2005) mendapati kesilapan bahasa yang dilakukan oleh seseorang dapat menjadi penanda aras terhadap pemerolehan bahasa dan selanjutnya dapat diketahui tahap latihan yang perlu diberikan oleh guru kepada murid. Perkara ini disebabkan Teori Analisis Kesilapan Berbahasa (Corder, 1967) mengukur kemajuan murid dengan mencatat dan mengklasifikasikan kesilapan yang dilakukan dalam pembelajaran bahasa. Oleh itu, analisis kesilapan menjadi sumber maklumat tentang kemajuan murid dalam mencapai kecekapan dalam pembelajaran bahasa (Teo, 2003).

### 2.3 Sorotan Kajian Lepas

Bahagian ini akan menghuraikan sorotan kajian lepas yang berkaitan dengan kata adjektif dan kata penguat dalam inovasi Kit KAKP ini. Oleh itu, tinjauan literatur akan dilihat pada dua peringkat. Peringkat yang pertama ialah kajian literatur yang telah dilaksanakan oleh pengkaji-pengkaji di luar negara yang berkaitan dengan kata adjektif dan kata penguat. Manakala, peringkat kedua adalah tinjauan literatur yang ada di Malaysia. Kedua-dua peringkat ini akan dihuraikan berdasarkan fokus kaedah pengajaran dan hasil dapatan kajian yang diperoleh pengkaji terdahulu.

Berdasarkan tinjauan yang dilakukan, pengkaji menemukan beberapa kajian di peringkat luar negara yang berkaitan dengan kata adjektif di Singapura. Antaranya ialah Alimah Lob (2010) yang mengkaji faktor-faktor ekstralinguistik dan status sosioekonomi terhadap penguasaan lisan bahasa Melayu kanak-kanak di Singapura dengan melihat pola ayat termasuklah ayat adjektif. Kajian Mohamad Khair, Noraini dan Zubaidah (2011) pula telah melaksanakan proses pembelajaran berdasarkan pengalaman dengan mengadaptasikan teori '*Experiential Learning Theory*' oleh David A Kolb (1984) bagi meningkatkan penguasaan kata adjektif bahasa Melayu. Pendekatan ini memerlukan murid melalui pembelajaran berdasarkan pengalaman yang konkrit, dan membuat pemerhatian serta renungan tentang pengalaman tersebut. Pembelajaran berdasarkan pengalaman ini dijalankan untuk murid-murid dari Darjah 1 hingga Darjah 6 dan hasilnya berkesan.

Selain itu, Hasnah (2019) telah meneliti penggunaan kata adjektif yang betul dalam kalangan pelajar. Justeru, pengkaji menggunakan aplikasi perisian Kahoot untuk meningkatkan pemerolehan kata adjektif

dalam kalangan pelajar. Dapatan kajian amat memberangsangkan kerana pelajar berminat untuk melibatkan diri secara aktif khususnya dalam penggunaan ICT bagi mempelajari kata adjektif dan hasilnya dapat meningkatkan pembelajaran. Kesimpulan kajian ini menunjukkan bahawa aplikasi ini dapat meningkatkan motivasi dan pemerolehan kata adjektif pelajar .

Manakala jika ditinjau di peringkat Malaysia, kajian berkaitan kata adjektif mula dilakukan oleh Jaafar (2001) untuk mengenal pasti bentuk binaan kata sifat dalam bahasa Melayu berdasarkan imbuhan dan fungsi kata. Kemudian kajian Salihah (2004) yang mengkaji kata adjektif pancaindera dalam bahasa Melayu. Sebanyak 35 kata adjektif pancaindera telah dipilih. Kajian ini telah menggunakan analisis komponen makna bagi menganalisis setiap kata adjektif pancaindera. Analisis komponen makna ini bertujuan menganalisis dan menginterpretasikan makna setiap kata berdasarkan bilangan kesamaan fitur yang dikongsi bersama. Kajian ini juga mendapati terdapat kata yang tidak berkongsi sebarang fitur makna umum mahupun fitur diagnostik.

Norliza (2011) pula meneliti penggunaan data korpus berkomputer untuk kata adjektif bagi membantu penyelidik bahasa meneliti perlakuan sebenar sesuatu bahasa. Oleh itu, hasil kajiannya menunjukkan data korpus berkomputer, dapat mengenal pasti kata sifat ini bukan sahaja menjalankan fungsi sebagai penerang nama, tetapi kata sifat juga menjalankan fungsi penerang kepada kata kerja. Kalau diperhatikan tiga kajian utama dan awal yang disenaraikan ini hanya mengkaji kata adjektif mengikut konteks linguistik pesir bahasa Melayu tetapi tidak diluaskan kajian mereka dalam bidang pendidikan.

Sehinggalah pada tahun 2015 kajian berkaitan kata adjektif mula menfokuskan kepada bidang pendidikan. Bemula dengan kajian Mariyati (2015) yang membuat perbandingan bentuk kata adjektif bahasa Sepanyol dengan bahasa Melayu dalam penulisan pelajar IPTA. Seterusnya ialah kajian Siti Saniah (2015) yang melihat bagaimana unsur perbandingan dalam ungkapan darjah penghabisan, tingkat ketiadaan, tingkat kelebihan, dan tingkat kesangatan melalui kata adjektif dan kata penguat yang merupakan salah satu daripada daya cipta bahasa untuk mencapai matlamat retorik dimanipulasikan oleh pengiklan dalam iklan radio.

Walau bagaimanapun kajian Nur Hafizah dan Normaliza (2016) sedikit berbeza apabila memberi fokus kepada makna kata adjektif dalam bahasa Banjar. Kata adjektif yang dipilih dianalisis dari sudut makna

dengan mengaplikasikan teori Analisis Komponen Makna oleh Nida, (1975) dan dibandingkan dengan bahasa Melayu. Begitu juga dengan kajian Siti Mardhiah (2016) yang melakukan kajian analisis perbandingan bentuk kata adjektif bahasa Melayu dalam novel Hujan Pagi dan padanannya dalam terjemahan novel *The Morning Post* berdasarkan analisis kontrastif Lado (1957).

Marry Fatimah dan Muhammad Zaid (2016) pula melaksanakan kajian untuk meninjau ejaan “giler” ataupun “gile” yang kerap digunakan dalam slanga yang dijadikan sebagai kata penguat. Tinjauan dibuat untuk menentukan sama ada perkataan ini mendahului atau mengikuti kata adjektif dan berfungsi menguatkan maksud yang terkandung dalam kata atau frasa adjektif berkenaan. Kajian ini antara yang terawal meneliti kedudukan kata penguat dalam bahasa slanga di Malaysia.

Akhir sekali yang terbaru ialah kajian Mariyati dan Intan Safinas (2019) yang bertujuan untuk mengenal pasti jenis-jenis kesilapan kata adjektif yang dilakukan oleh pelajar Melayu dalam penulisan karangan bahasa Sepanyol oleh pelajar Melayu. Hasilnya didapati punca para pelajar melakukan kesalahan dalam pembelajaran bahasa Sepanyol adalah disebabkan pengaruh sistem bahasa ibunda pelajar iaitu bahasa Melayu.

Berdasarkan senarai kajian yang dinyatakan dapat menyimpulkan tiga perkara utama. Yang pertama, kajian yang berfokus kata adjektif dalam bidang pendidikan khususnya dalam proses pengajaran dan pembelajaran bahasa Melayu masih kurang. Kedua, kajian yang meneliti aspek kehadiran kata penguat dalam ayat adjektif belum ada dilakukan dalam bahasa Melayu kecuali bahasa slanga. Ketiga, kajian yang dilakukan oleh pengkaji lepas belum ada melakukan inovasi dalam strategi kaedah pengajaran melainkan hanya menggunakan perisian yang sudah ada seperti *kahoot* untuk meningkatkan penguasaan kata adjektif sahaja. Oleh itu, inovasi Kit KAKP ini penting dilaksanakan untuk mengatasi kekurangan yang wujud dalam kajian lepas terutamanya mengetegahkan penggunaan kata penguat dalam binaan ayat adjektif bahasa Melayu khasnya.

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## **2.4 Rumusan**

Kesimpulannya, dalam bab dua ini telah dihuraikan kajian – kajian literatur berkaitan teori yang digunakan dalam inovasi Kit KAKP ini. Teori yang digunakan banyak menunjukkan kemampuan untuk mengkaji masalah yang dihadapi oleh murid. Bahagian seterusnya akan menghuraikan berkaitan metodologi inovasi yang akan digunakan dalam Inovasi Kit KAKP.

# **Bab 3**

## **Metodologi Inovasi**

### **3.1 Pengenalan**

Metodologi inovasi Kit KAKP yang digunakan adalah berasaskan pendekatan kuantitatif yang menggunakan reka bentuk kuasi eksperimen. Justeru itu, bab ini, akan menghuraikan secara mendalam reka bentuk kuasi-eksperimen yang menjadi kaedah analisis untuk tahap keberkesanan Kit KAKP dalam penguasaan ayat adjektif menggunakan kata penguat. Pada masa yang sama, bab ini juga akan memperincikan persampelan, instrumen, prosedur pengumpulan data dan prosedur penganalisan data.

### **3.2 Reka Bentuk Inovasi**

Inovasi ini menggunakan pendekatan kuantitatif (kuasi-eksperimen) sepenuhnya, iaitu melibatkan ujian pra dan ujian pasca. Pendekatan kuantitatif digunakan dalam inovasi ini kerana instrumen yang digunakan menyediakan data dalam bentuk nombor (Silalahi, 2000; Sunji Yuniarti, 2013), serta dapat menunjukkan maklumat secara menyeluruh, perbezaan, dan dapatan kesan-akibat (Nor Hidayah Md Khanapiah, 2016).

Seterusnya, dalam kajian ini jenis reka bentuk kuasi-eksperimen yang digunakan ialah reka bentuk ujian pra-pasca bagi kumpulan-kumpulan tidak seimbang *nonequivalent groups pre-post tests design* (Peng, Mahzan Arshad, Zahari Ishak, & Cheong, 2013; Setiawan et al., 2010). Reka bentuk kuasi-eksperimen ini adalah berdasarkan kumpulan yang tidak setara (Chariri, 2009; Mohd Hashim, 2011) dan tidak melibatkan pemilihan responden secara rawak (Hua, 2016; Silalahi, 2000)

Alasan utama, pengkaji menggunakan reka bentuk ini kerana ia sesuai apabila melibatkan kajian tentang keberkesanan atau melihat pengaruh kesan sesuatu kaedah pengajaran, modul atau program dalam pelbagai situasi yang tidak dapat menggunakan reka bentuk eksperimen tulen terutamanya dalam situasi sebenar di sekolah (Bhasah Abu Bakar & Yuslina Mohamed, 2000; Mulyadi, 2018).

### 3.3 Persampelan

Sampel dipilih secara bertujuan. Cara ini diambil berdasarkan pendapat Chua (2006) bahawa persampelan bertujuan *purposive sampling* merujuk kepada prosedur persampelan terdiri daripada sekumpulan subjek yang mempunyai ciri-ciri tertentu dipilih sebagai responden dalam kajian. Oleh itu, inovasi Kit KAKP ini menggunakan persampelan murid tahun 5 kerana calon telah mempelajari standard pembelajaran bahagian binaan ayat adjektif menggunakan kata penguat dalam DSKP bahasa Melayu.

Walau bagaimanapun, persampelan yang diuji dalam inovasi Kit KAKP ini mempunyai perbezaan dalam penguasaan ayat aktif transitif bahasa Melayu. Makanya, tahap penguasaan murid juga akan dikategorikan mengikut tahap cemerlang, sederhana dan lemah mengikut saranan yang dikemukakan oleh Lembaga Peperiksaan Malaysia (2019).

Jadual 2.

*Gred Pentaksiran Ujian Ayat Adjektif Bahasa Melayu.*

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Peratus	Kategori
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80–100%	Cemerlang
40–79%	Sederhana
1-39 %	Lemah

### 3.4 Instrumen Inovasi

Dalam konteks inovasi Kit KAKP ini, instrumen ujian berbentuk soalan objektif disediakan untuk murid tahun 5, mengandungi 20 soalan. Ujian-ujian tersebut merangkumi ujian pra dan ujian pasca yang berkaitan penguasaan ayat aktif transitif bahasa Melayu berdasarkan Dokumen Standard Kurikulum Pelajaran Bahasa Malaysia tahun 5 (KSSR). Soalan kajian sebenar, iaitu soalan ujian yang diwakili soalan objektif ini dibina berdasarkan buku aktiviti pengukuhan murid yang digunakan guru bahasa Melayu Tahun 5 untuk mengajar.

#### 3.4.1 Kesahan

Kesahan bermaksud kebolehan ujian mengukur apa yang sepatutnya diukur (Youngman & Eggleston, 1982; Sax & Newton, 1997). Oleh itu, item soalan objektif yang terdiri daripada 20 soalan ayat adjektif dengan kehadiran kata penguat akan diserahkan kepada pakar untuk disemak item ujian dari aspek kesahan kandungan dan kesahan bahasa. Kesahan ini penting bagi membolehkan instrumen yang dibina dapat digunakan untuk mengumpul data bagi ujian pencapaian.

#### 3.4.2 Kebolehpercayaan

Dalam inovasi Kit KAKP ini pengkaji telah menggunakan analisis item ujian iaitu indeks kesukaran dan indeks diskriminasi sebelum melaksanakan kebolehpercayaan terhadap data kajian rintis yang diperoleh. Analisis indeks kesukaran (*Facility Index, F*) ini penting untuk mengkategorikan soalan yang dibina kepada tiga bahagian item iaitu, mudah, sederhana dan sukar. Manakala, indeks diskriminasi (*Discrimination index, D*) pula bertujuan menunjukkan sama ada setiap soalan atau item itu boleh membezakan pen-

capaian di antara kumpulan murid pada tahap tinggi dengan kumpulan murid pada tahap yang rendah. Oleh itu, saranan Macintosh dan Morrison (1969) dalam Mohamed et al. (2017) telah digunakan bagi menentukan indeks kesukaran bagi menganalisis data item ujian yang diperoleh.

Semakin besar nilai indeks kesukaran, item itu menjadi semakin senang. Bagi aras kesukaran yang baik, nilai F perlu di antara 0.4 hingga 0.6. Nilai F yang rendah pula menunjukkan item mempunyai aras kesukaran yang lebih tinggi iaitu soalan-soalan yang dikemukakan kepada murid adalah sukar. Macintosh dan Morrisson (1969), menyatakan bahawa item dengan nilai F yang rendah boleh dibaiki dan sukar digugurkan. Jadual 3 di bawah ini menjelaskan aras kesukaran (F) sebagaimana yang dikemukakan oleh Macintosh dan Morrisson (1969).

Jadual 3.

*Indeks Kesukaran Item Objektif*

Indeks Kesukaran (F)			
Julat Indeks	Kurang daripada 0.4	0.4 hingga 0.6	Lebih daripada 0.6
Tahap	Sukar	Sederhana	Senang
Keputusan	Dibaiki	Diterima	Digugurkan

Manakala, Indeks Diskriminasi pula digunakan untuk membezakan antara kumpulan murid yang memperoleh skor tinggi dengan kumpulan murid yang memperoleh skor rendah. Indeks Diskriminasi, D, mempunyai nilai antara  $-1.00$  hingga  $+1.00$ . Nilai D negatif menunjukkan item objektif gagal membezakan kumpulan murid yang peroleh skor tinggi dengan skor rendah. Sekiranya, nilai D bersamaan dengan 1.00, ini menunjukkan 27 peratus daripada kumpulan yang peroleh skor tinggi memberi jawapan betul dan 27 peratus daripada kumpulan yang peroleh skor rendah memberi jawapan salah.



Tetapi, jika nilai D bersamaan dengan sifar, menunjukkan kedua-dua kumpulan murid memberi jawapan yang sama bagi item tersebut. Ini bermaksud item tersebut gagal membezakan antara kumpulan murid yang peroleh skor tinggi dengan skor rendah. Menurut, Mohamed et al. (2017), nilai D antara 0.10 hingga 1.00 menggambarkan bahawa item tersebut boleh diguna untuk mengumpulkan data sebenar. Namun, Ebel (1979) pula menyatakan bahawa nilai D yang bersamaan atau lebih besar daripada 0.20 adalah sesuai bagi item ujian. Oleh itu, Dalam konteks kajian ini, pandangan Ebel (1979) telah digunakan untuk menilai Indeks Diskriminasi item ujian yang dibina untuk kajian ini. Berikut ialah jadual 4 yang menjelaskan Indeks Diskriminasi seperti yang dikemukakan oleh Ebel (1979).

Jadual 4

*Indeks Diskriminasi Item Objektif*

## Indeks Diskriminasi (D)

Julat Indeks	Kurang daripada 0.2	0.2 hingga 0.4	Lebih daripada 0.4
Tahap	Kurang Diskriminasi	Sederhana Diskriminasi	Sangat Diskriminasi
Keputusan	Digugurkan	Diterima	Diterima

Sehubungan itu, perisian *Microst Excel 2019* telah digunakan pengkaji untuk menganalisis data ujian rintis bagi Indeks Kesukaran dan Indeks Diskriminasi dalam kajian ini. Dalam hal ini, data item seperti bilangan murid yang menjawab betul, bilangan murid menjawab salah, jumlah murid menjawab dan skor ujian murid telah digunakan bagi mendapatkan nilai Indeks Kesukaran dan Indeks Diskriminasi bagi 20 item soalan objektif yang dibina.

Seterusnya, pengkaji telah menggunakan model Kuder-Richardson 20 (K-R20) untuk mengukur pekali atau indeks kebolehpercayaan item ujian yang dibina. Kebolehpercayaan merujuk kepada ketekalan atau

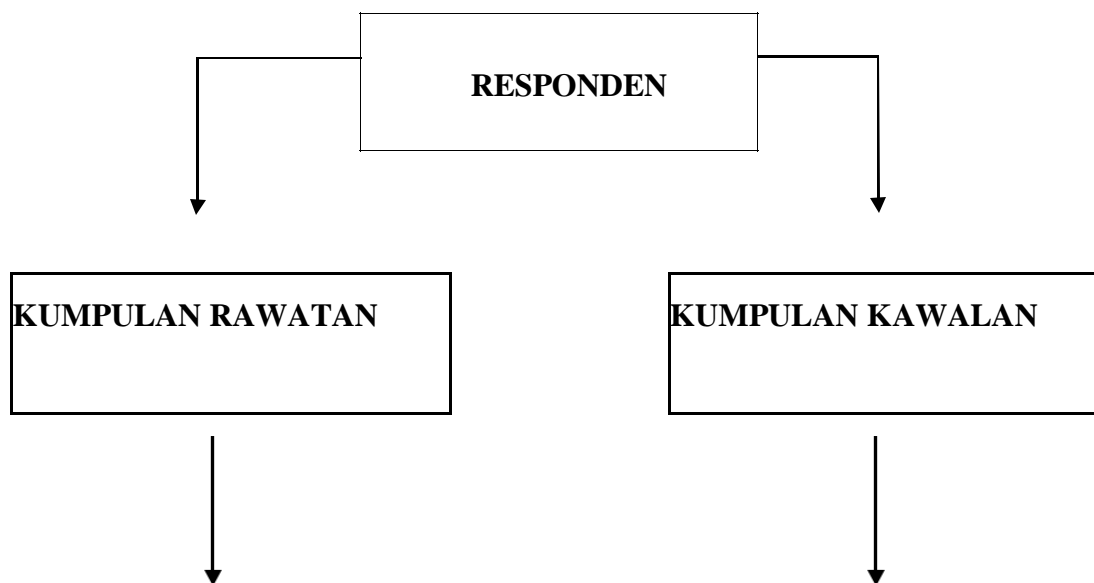
kestabilan keputusan pentaksiran (Hua, 2016). Ini bermakna seseorang murid itu akan mendapat skor yang sama daripada sesuatu instrumen seandainya kebolehan individu itu adalah tekal atau trait yang hendak diukur itu tidak berubah walaupun diukur berkali-kali dengan instrumen yang sama. Nilai rumus K-R20 adalah antara sifar (0) hingga 1.00. Nilai K-R20 yang tinggi menunjukkan ujian mempunyai ketekalan dalaman. Justeru, pengkaji menggunakan program *SPSS version 22* untuk analisis nilai kebolehppercayaan soalan yang dibina.

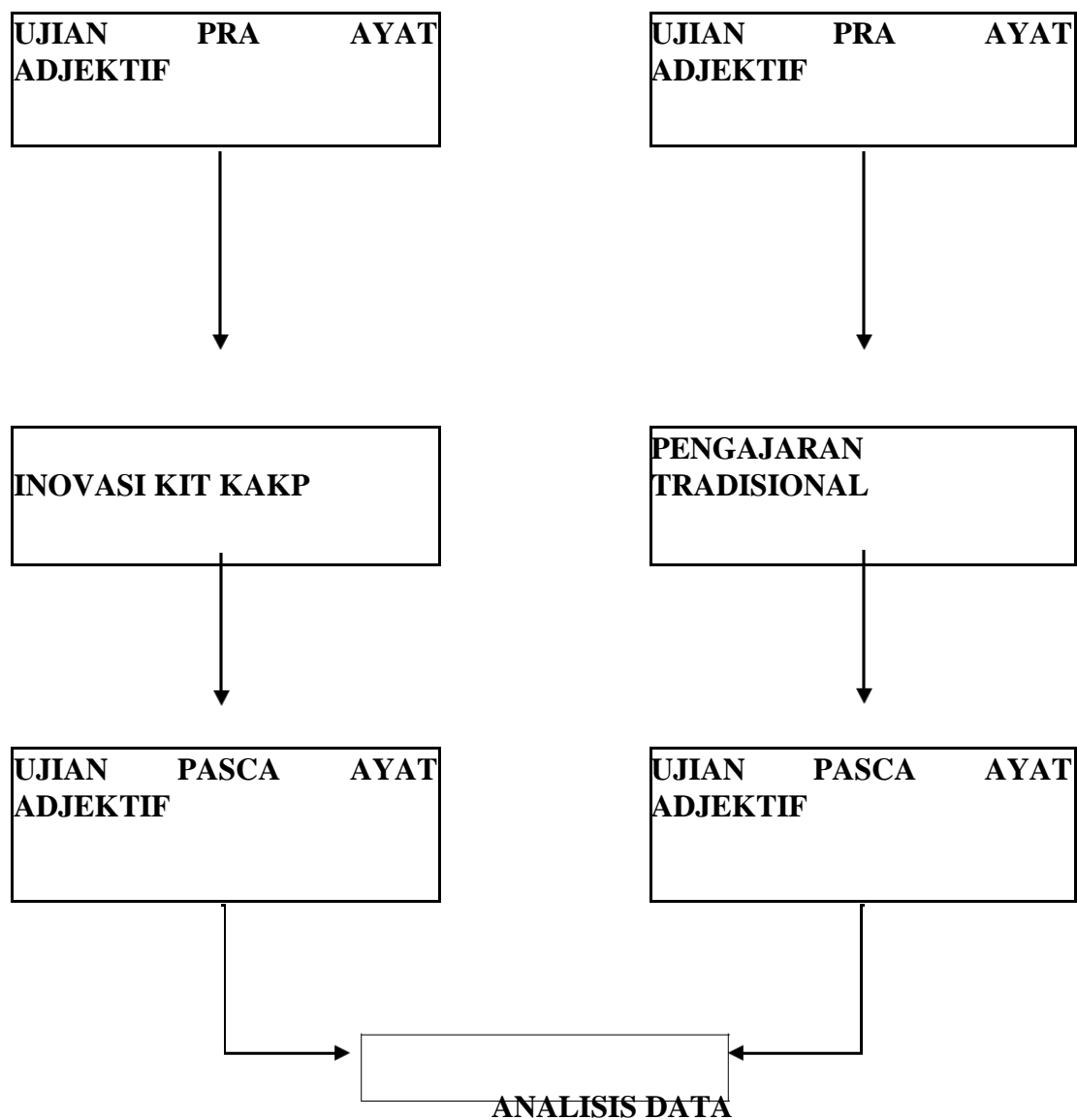
### 3.5 Kajian Rintis

Kajian rintis ini akan dilaksanakan pengkaji pada bulan februari. Seramai 30 orang murid daripada Sekolah Kebangsaan USJ 12 tahun 5 akan terlibat dalam kajian rintis ini. Tujuan kajian rintis ini dilaksanakan adalah untuk menguji instrumen yang telah mendapat kesahan tiga orang pakar. Hal ini perlu dilaksanakan pengkaji bagi membolehkan analisis item ujian dari aspek indeks kesukaran, indeks diskriminasi dan kebolehppercayaan diukur sebelum instrumen ujian digunakan untuk mendapatkan data sebenar inovasi Kit KAKP.

### 3.6 Prosedur Pengumpulan Data Inovasi

Secara keseluruhannya prosedur pengumpulan data inovasi akan melibatkan dua kumpulan yang menerima intervensi atau eksperimen yang berbeza. Berikut ialah rajah 3 yang menerangkan prosedur keseluruhan pengumpulan data inovasi Kit KAKP.

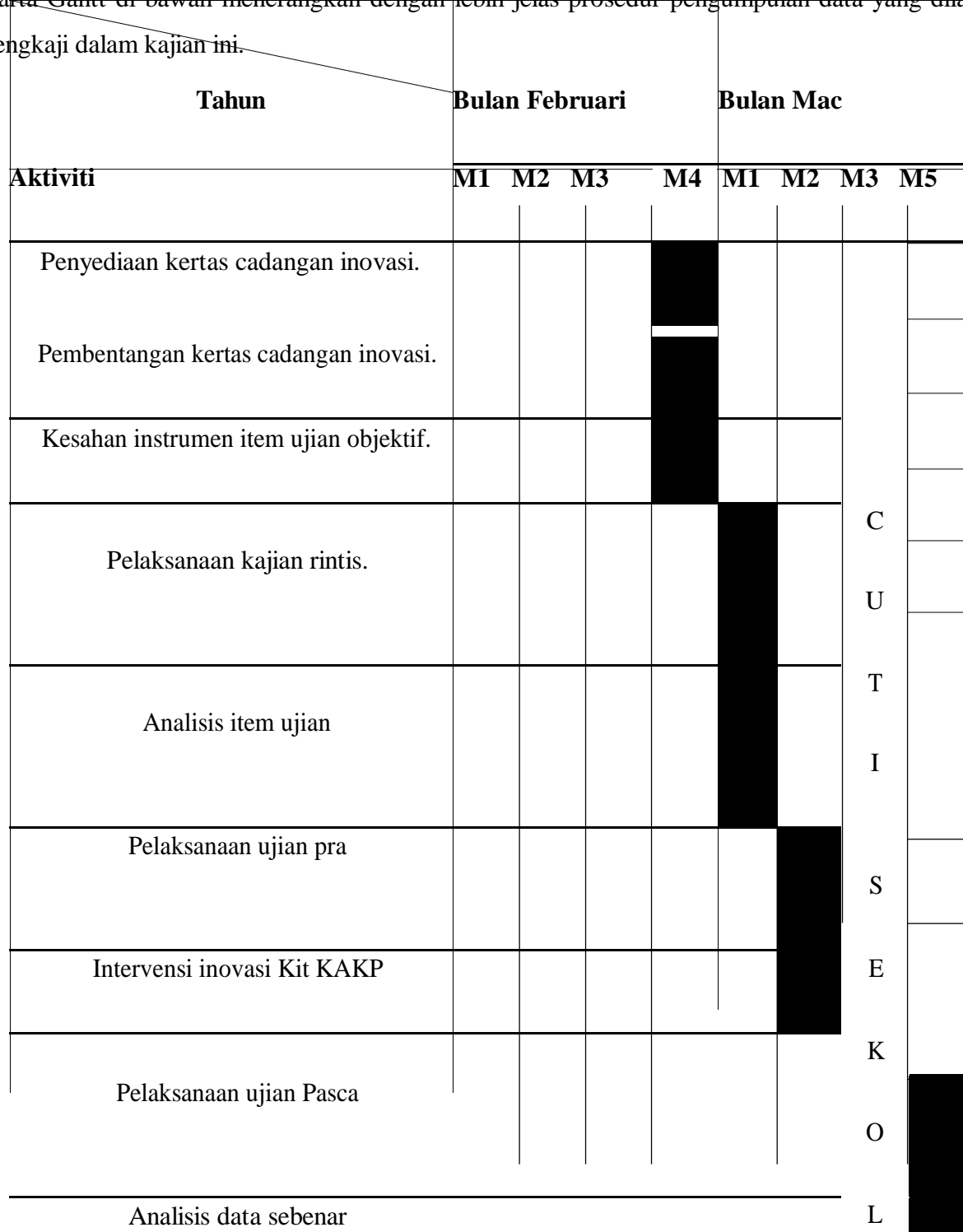




Rajah 3. Prosedur pengumpulan data inovasi Kit KAKP

### 3.6.1 Jadual Pelaksanaan Kajian

Carta Gantt di bawah menerangkan dengan lebih jelas prosedur pengumpulan data yang dilakukan oleh pengkaji dalam kajian ini.



(microsoft excel 2019 dan spss)	A	
Penulisan laporan dapatan inovasi Kit KAKP.	H	
Semakan oleh pensyarah penyelia dan guru pembimbing		
Penyerahan kertas projek inovasi Kit KAKP untuk dinilai		
Pembentangan seminar inovasi penyelidikan di IPG KBM.		April 2020

Rajah 4. Pelaksanaan Inovasi Kit KAKP (Kata Adjektif Kata Penguat)

### 3.6.2 Anggaran Kos Perbelanjaan

Alat inovasi ini menggunakan kos yang sangat berpatutan. Berikut adalah perincian kos perbelanjaan sebuah kit inovasi KAKP.

Barang Keperluan <i>Kit Inovasi KAKP</i>	Unit	Harga
Tapak cantuman blok	1	RM7
Blok Warna Kuning & Kad Kertas glossy	30	RM5
Blok Warna Hijau & Kad Kertas glossy	30	RM5
Blok Warna Biru & Kad Kertas glossy	36	RM8
Kertas Markah & Pen Marker	6	RM3

Kad soalan	20	RM8
Kotak soalan & Kotak Kit Inovasi	1	RM10
Kantung blok	2	RM2
Rak Blok	6	RM6
Kad Rumus	6	RM6
JUMLAH		RM60.00

Jadual 5. Anggaran Kos Perbelanjaan Inovasi Kit KAKP

### 3.7 Prosedur Analisis Data Inovasi

Analisis data dalam inovasi Kit KAKP ini akan menggunakan dua aplikasi yang utama iaitu perisian *Microsoft Excel 2019* dan *Statistical Package for Social Science Version 22 (SPSS)*. Pengkaji memilih untuk menggunakan kaedah kerana lebih mudah, menjimatkan dan sesuai dengan kehendak pendekatan kuantitatif yang pengkaji gunakan dalam inovasi Kit KAKP ini.

Perisian *Microsoft Excel 2019* dalam inovasi Kit KAKP ini digunakan untuk menganalisis data untuk inovasi Kit KAKP rintis. Dalam hal ini, pengkaji telah menggunakan perisian *Microsoft Excel 2019* ini untuk menganalisis indeks kesukaran dan indeks diskriminasi. Cara ini memerlukan pengkaji untuk memasukkan rumus pengiraan indeks kesukaran dan indeks diskriminasi serta data rintis ke dalam perisian *Microsoft Excel 2019* dan seterusnya hasil keputusan analisis item akan dipaparkan secara automatik.

Manakala, perisian SPSS pula digunakan dalam inovasi Kit KAKP untuk menganalisis data statistik dengan lebih mendalam seperti membuat perbandingan, menentukan perhubungan antara pemboleh ubah, mencari nilai pekali kebolehpercayaan dan membuat pengiraan ujian statistik dengan lebih pantas berbanding manual. Analisis data dalam inovasi Kit KAKP ini akan menggunakan ujian-t. Ujian-t dalam penelitian

ini digunakan untuk menguji perbezaan skor purata tes awal guna menyetarakan kedudukan awal atau tidak berbeza secara signifikan antara kumpulan rawatan dan kumpulan kawalan.

Namun, sebelum ujian-t digunakan data perlu melalui ujian kenormalan (*normality test*) untuk mengetahui sama ada data yang diperoleh mempunyai taburan data yang normal atau tidak. Hal ini penting, untuk mengetahui langkah selanjutnya iaitu data yang dianalisis perlu menggunakan statistik parametrik atau non-parametrik. Jika, ujian kenormalan menunjukkan taburan data yang diperoleh normal iaitu aras signifikan ( $P > 0.05$ ) maka pengkaji akan menggunakan ujian *independent sample t-test* untuk menganalisis analisis data.

Tetapi jika taburan data yang diperoleh tidak normal antara kumpulan kawalan dan kumpulan rawatan maka statistik non-parametrik akan digunakan untuk penelitian analisis data inovasi Kit KAKP. Statistik non-parametrik ini lazimnya digunakan untuk menganalisis data nominal dan ordinal iaitu yang tidak mempunyai taburan yang normal seperti jantina. Malah, statistik non-parametrik ini biasanya digunakan untuk menganalisis data yang kurang daripada 30 orang responden.

Maka dalam inovasi Kit KAKP ini, ujian-t yang digunakan akan menguji perbezaan skor min ujian pasca kedua-dua kumpulan, iaitu kumpulan rawatan yang akan mendapat perlakuan dengan strategi pengajaran eksplisit dan kumpulan kawalan yang tanpa mendapat perlakuan. Oleh itu, teknik analisis ujian-t dimaksudkan untuk menguji apakah kedua skor min kumpulan rawatan dan kumpulan kawalan berbeza secara signifikan sekaligus menguji hipotesis yang dibina.

### **3.8 Rumusan**

Rumusannya, bab 3 ini menerangkan reka bentuk inovasi Kit KAKP, persampelan, instrumen, kajian rintis, prosedur pengumpulan data dan prosedur penganalisan data yang akan dilaksanakan pengkaji dalam inovasi Kit KAKP ini. Berdasarkan metodologi inovasi yang dirancang, diharap pengkaji mendapat maklum balas yang tepat serta dapat membuat analisa dan memberikan cadangan yang berfaedah untuk kepentingan bersama-sama terutamanya dalam subjek bahasa Melayu di sekolah rendah.

## **Bab 4**



## Dapatan dan Rumusan Inovasi

### 4.1 Pengenalan

Bab ini, akan menerangkan hasil keputusan kajian yang diperoleh. Hasil keputusan kajian ini melibatkan penelitian data profil peserta kajian yang diproses menggunakan *Statistical Package For Social Science* (SPSS) iaitu suatu perisian yang memproses data secara automatik yang digunakan dalam komputer. Makanya, ujian deskriptif digunakan untuk menghuraikan ciri-ciri asas data mengenai profil peserta kajian dan hasil dapatan selepas menerima rawatan dari segi min, sisihan piawai dan nilai sisihan, skor min data terkumpul.

### 4.2 Profil Peserta

Peserta atau responden dalam kajian ini terdiri daripada murid tahun 5 yang bersekolah di Sekolah Kebangsaan Seri Bintang Utara, Cheras, Kuala Lumpur. Jumlah murid yang terlibat secara keseluruhannya dalam kajian ini ialah seramai 60 orang. Dalam hal ini pembahagian antara kumpulan rawatan dan kumpulan kawalan adalah seramai 30 orang murid. Berdasarkan kajian ini, data yang ada hanyalah data nominal iaitu data pengkategorian seperti jantina.

Jadual 6

*Profil Peserta Kajian Mengikut Jantina*

Kumpulan	Jantina	Bilangan	Peratus (%)
Kumpulan Rawatan	Lelaki	21	70%
	Perempuan	9	30%

	Lelaki	23	76.66%
Kumpulan Kawalan	<hr/>		
	Perempuan	7	23.33%
<hr/>			

Jadual 6 diatas menunjukkan taburan bilangan peserta kajian adalah mengikut jantina. Dalam hal ini, kumpulan rawatan peserta kajian terdiri daripada 21 orang murid lelaki (70%) dan 9 orang murid perempuan (30%). Peserta kajian kumpulan kawalan pula terdiri 23 orang murid lelaki (76.66%) dan 7 orang murid perempuan (23.33%).

### 4.3 Dapatan Kajian Rintis

Seramai 30 orang murid daripada sebuah sekolah kebangsaan di daerah USJ 12 , iaitu murid tahun 5 terlibat dalam kajian rintis ini. Tujuan kajian rintis ini dilaksanakan adalah untuk menguji instrumen kajian yang telah mendapat kesahan tiga orang pakar. Berdasarkan hasil kajian rintis, indeks kesukaran bagi 20 item objektif menunjukkan tahap sederhana, iaitu dalam julat 0.4 hingga 0.6. Indeks diskriminasi pula bagi keseluruhan 20 item objektif menunjukkan tahap diskriminasi yang tinggi, iaitu melebihi jumlah 0.5. Manakala, nilai pekali kebolehpercayaan yang diperoleh secara keseluruhan ialah 0.952 K-R20.

Oleh itu, nilai pekali kebolehpercayaan yang diperoleh dalam data rintis memperlihatkan bahawa item ujian pencapaian ayat aktif yang dibina oleh pengkaji mempunyai kestabilan dan ketekalan dalaman yang sangat baik untuk diuji kepada murid. Mohamed et al. (2017) menyatakan nilai K-R20 yang lebih daripada 0.60 adalah sangat baik untuk digunakan. Makanya, keputusan yang diperoleh pengkaji daripada indeks kesukaran, indeks diskriminasi dan K-R20 merumuskan bahawa item ujian pencapaian ayat adjektif bahasa Melayu yang dihasilkan boleh diguna pakai untuk kajian ini.

### 4.4 Analisis Data Ujian Kenormalan

Analisis ini dilaksanakan untuk menguji keseluruhan data item ujian yang diperolehi adalah bertabur secara taburan normal atau tidak. Bagi mendapatkan keputusan untuk analisa ini, ujian kenormalan ( $p=normality\ test$ ) dilakukan pada keseluruhan data ujian pra dan ujian pasca untuk kumpulan rawatan

dan kawalan dengan menggunakan perisian SPSS 25. Jadual 7, di bawah menunjukkan hasil keputusan ujian kenormalan bagi skor markah ujian yang diperoleh.

Jadual 7.

*Ujian Kenormalan*

Ujian Kenormalan	Kumpulan Rawatan		Kumpulan Kawalan	
	Pra	Pasca	Pra	Pasca
Statistik	.115	.172	.142	.176
Kolmogorov-Smirnov				
df	30	30	30	30
Sig.	.200	.023	.126	.019
Statistik	.960	.936	.949	.944
Shapiro-Wilk				
df	30	30	30	30
Sig.	.311	.073	.155	.120

Dalam Jadual 7, analisis data ujian pra dan ujian pasca dalam bentuk statistik bagi ujian kenormalan dengan menggunakan perisian SPSS. Menurut, Nor Aishah, Abdul Rahman, Che Rohani, dan Teh (2011), ujian kenormalanyang baik apabila aras signifikan lebih besar daripada ( $p > 0.05$ ). Sehubungan itu, data yang diperoleh pengkaji dalam ujian pra dan ujian pasca kumpulan rawatan dan kawalan menunjukkan ( $p = .200$ ), ( $p = .023$ ), ( $p = .126$ ), ( $p = .019$ ) bagi ujian Kolmogorov-Smirnov dan bagi ujian Shapiro-Wilk pula aras signifikannya menunjukkan ( $p = .311$ ), ( $p = .073$ ), ( $p = .155$ ) dan ( $p = .120$ ).

Oleh hal demikian, data yang diperoleh dalam kajian mempunyai taburan yang normal kerana aras signifikan yang diperoleh menunjukkan ( $p > 0.05$ ) dalam ujian Kolmogorov-Smirnov dan ujian Shapiro-Wilk.

Makanya, pengkaji boleh melangkah ke proses seterusnya untuk menggunakan statistik parametrik iaitu ujian *independent sample t-test* bagi menguji hipotesis kajian yang dibina.

#### 4.5 Analisis Data Deskriptif (Ujian Pra Pasca)

Bahagian ini akan menghuraikan analisis deskriptif dengan min, sisihan piawai dan kekerapan terhadap ujian pra dan ujian pasca bagi kumpulan rawatan dan kumpulan kawalan bagi menguji keberkesanan dan menilai tahap penguasaan ayat adjektif menggunakan kata penguat bahasa Melayu murid tahun 5. Jadual 8, di bawah menunjukkan keputusan analisis nilai min ( $\mu$ ), sisihan piawai ( $\sigma$ ), kekerapan (F) dan peratus (%) bagi kumpulan kawalan dan rawatan.

Jadual 8.

##### *Perbezaan Tahap Pencapaian Ujian Pra dan Pasca Kumpulan Rawatan Dan Kawalan*

		Ujian Pra				Ujian Pasca			
Tahap		( $\mu$ )	( $\sigma$ )	(F)	%	( $\mu$ )	( $\sigma$ )	(F)	%
<b>Kumpulan Kawalan</b>									
Cemerlang	(80% - 100%)			0	0%			0	0%
Sederhana	(40% - 79%)	<b>48.17</b>	<b>13.550</b>	22	73.3%	<b>51.33</b>	<b>11.442</b>	26	86.7%
Lemah	(0% - 39%)			8	26.7%			4	13.3%
<b>Kumpulan Rawatan</b>									
Cemerlang	(80% - 100%)			4	13.3%			13	43.3%

Sederhana	(40% - 79%)	51.50	17.673	19	63.3%	73.67	13.578	17	56.7%
Lemah	(0% - 39%)			17	23.3%			0	0%
Jumlah		N=60				N=60			

### Persoalan 1 : Tahap Penguasaan Kata Adjektif Dan Kata Penguat Bagi Murid Tahun 5.

Berdasarkan Jadual 8, menunjukkan nilai min skor ujian bagi kumpulan rawatan untuk pra ( $\mu=51.50$ ) lebih rendah daripada pasca ( $\mu=73.67$ ), iaitu pada **tahap sederhana**. Nilai sisihan piawai bagi kumpulan rawatan pula menunjukkan ujian pra ( $\sigma=17.673$ ) lebih tinggi daripada pasca ( $\sigma=13.578$ ). Perkara ini bermaksud serakan data bagi skor ujian pasca terkelompok menghampiri nilai min, tetapi serakan data bagi ujian pra pula terkelompok menjauhi nilai min untuk kumpulan rawatan. Keadaan ini menggambarkan pencapaian ujian pasca ialah homogen kerana tidak ada perbezaan ketara antara markah calon, berbanding pencapaian ujian pra yang heterogen iaitu terdapat perbezaan ketara antara markah calon.

Seterusnya, keputusan analisis bagi kumpulan kawalan pula menunjukkan nilai min skor ujian pra rendah ( $\mu=48.17$ ) dan ujian pasca tinggi ( $\mu=51.33$ ), iaitu pada **tahap sederhana**. Manakala, nilai sisihan piawai bagi ujian pra ( $\sigma=13.550$ ) lebih tinggi daripada ujian pasca ( $\sigma=11.442$ ) dalam kumpulan kawalan. Situasi ini bermaksud, serakan data bagi ujian pasca terkelompok menghampiri nilai min, tetapi serakan data bagi ujian pra pula terkelompok menjauhi nilai min bagi kumpulan kawalan. Oleh itu, dapatlah difahami bahawa pencapaian ujian pasca ialah homogen kerana tidak ada perbezaan ketara antara markah calon, berbanding pencapaian ujian pra iaitu heterogen kerana terdapat perbezaan yang ketara antara markah calon.

Meskipun kedua-duanya menunjukkan **tahap sederhana** bagi penguasaan kata adjektif dengan kata penguat, namun jika dibandingkan antara kedua-dua kumpulan, didapati bahawa kumpulan rawatan lebih baik. Hal ini demikian, berdasarkan jadual 8, nilai min skor ujian kumpulan rawatan lebih tinggi iaitu pra ( $\mu=51.50$ ) dan pasca ( $\mu=73.67$ ), berbanding nilai min skor ujian kumpulan kawalan iaitu pra ( $\mu=48.17$ ) dan pasca ( $\mu=51.33$ ). Keadaan ini menggambarkan bahawa **peningkatan purata markah kumpulan**

**rawatan ( $\mu=22.17$ ) lebih tinggi bagi setiap calon murid berbanding kumpulan kawalan yang meningkat hanya sebanyak ( $\mu=3.16$ ) bagi setiap calon murid.**

**Persoalan 2 : Kesan Kit KAKP Terhadap Penguasaan Ayat Adjektif Menggunakan Kata Penguat.**

Berdasarkan jadual 8, bilangan yang mencapai tahap cemerlang dalam kumpulan rawatan ialah seramai 4 orang (13.3%), sederhana seramai 19 orang (63.3%) dan lemah seramai 7 orang (23.3%). Bagi kumpulan kawalan bilangan murid yang mencapai tahap sederhana ialah seramai 22 orang (73.3%) dan lemah seramai 8 orang (26.7%). Namun, tiada seorang pun mendapat tahap cemerlang bagi kumpulan kawalan. Hal ini menunjukkan pencapaian awal atau pra bagi kumpulan rawatan dan kumpulan kawalan cenderung kepada tahap sederhana bagi setiap kumpulan ujian pencapaian ayat adjektif menggunakan kata penguat.

Manakala, tahap prestasi lemah pula lebih tinggi dalam kumpulan kawalan dengan jumlah kekerapan 17 orang berbanding kumpulan rawatan yang hanya 8 orang sahaja. Nilai kekerapan ini secara keseluruhannya menjelaskan bahawa pencapaian murid dalam tahap penguasaan ayat adjektif bahasa Melayu berada pada tahap yang sederhana bagi kumpulan kawalan dan kumpulan rawatan. Dapatan skor ujian pra ini juga menunjukkan bahawa kumpulan murid yang dipilih antara kumpulan rawatan dan kumpulan kawalan sesuai sebagai peserta kajian. Dapatan ini penting kepada pengkaji sendiri untuk menilai keseimbangan tahap penguasaan ayat adjektif bagi kumpulan murid yang terlibat dalam inovasi ini. Tujuannya adalah untuk mengurangkan pengaruh faktor-faktor luaran seperti motivasi, jantina, kecerdasan pelbagai dan umur terhadap kesan pengajaran eksplisit pada ujian pasca yang boleh menyebabkan data kajian diragui.

Selanjutnya, bagi ujian pasca kumpulan rawatan bilangan murid yang mencapai tahap sederhana 17 orang (56.7%) dan tahap cemerlang seramai 13 orang (43.3%). Tetapi tidak terdapat seorang pun murid yang mempunyai tahap prestasi lemah. Manakala, bagi kumpulan kawalan pula bilangan murid yang mencapai prestasi tahap sederhana ialah seramai 26 orang (86.7%) dan tahap lemah seramai 4 orang (13.3%). Namun, tiada seorang pun juga dalam kumpulan kawalan yang mencapai prestasi tahap cemerlang dalam ujian pasca sama seperti ujian pra.

Oleh itu, berdasarkan Jadual 8 secara keseluruhannya ujian pasca kumpulan rawatan menunjukkan peningkatan tahap cemerlang yang tinggi dengan jumlah 9 orang berbanding sifar dalam kumpulan kawalan. Manakala, tahap prestasi lemah bagi kumpulan rawatan jauh lebih baik dengan jumlah sifar berbanding kumpulan kawalan dengan bilangan murid 4 orang dalam ujian pasca. Tetapi, bagi prestasi tahap sederhana ujian, kumpulan kawalan lebih tinggi dengan jumlah 26 orang berbanding 17 orang dalam kumpulan rawatan untuk ujian pasca. Maka, melalui analisis data ujian pra dan pasca penguasaan ayat adjektif menggunakan kata penguat menggunakan **KIT KAKP lebih berkesan** dalam meningkatkan tahap penguasaan murid tahun 5 berbanding kaedah pengajaran tradisional.

#### 4.6 Pengujian Hipotesis

Analisis ujian-t sampel tidak bersandar telah digunakan untuk menguji hipotesis yang dibina oleh pengkaji. Oleh itu, untuk mengetahui hipotesis nul itu diterima atau ditolak, maka nilai signifikan (2-tailed) menjadi sandaran kepada pengkaji untuk menentukannya. Sekiranya, nilai signifikan (2-tailed) lebih besar daripada 0.05, maka hipotesis nul diterima. Namun, seandainya nilai signifikan (2-tailed) lebih kecil daripada 0.05, maka hipotesis nul ditolak.

Jadual 9.

Analisis data ujian-t tidak bersandar

Hipotesis	Keterangan	Nilai (2-Tailed)	Status
Pertama	Tidak terdapat perbezaan yang signifikan antara min skor ujian pra bagi kumpulan kawalan dengan kumpulan rawatan.	0.41	Diterima
Kedua	Tidak terdapat perbezaan yang signifikan antara min skor ujian pasca bagi kumpulan kawalan dengan kumpulan rawatan.	0.00	Ditolak



pulan

kawalan dengan kumpulan rawatan.

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	Tidak terdapat perbezaan yang signifikan antara min skor ujian ayat adjektif			
Ketiga	menggunakan kaedah pengajaran tradisional dengan min skor ujian ayat adjektif menggunakan Kit KAKP.	0.00		Ditolak

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Berdasarkan jadual 9, hipotesis nul pertama diterima. Oleh itu, hal ini menunjukkan calon yang bagi kumpulan kawalan dan rawatan mempunyai tahap penguasaan yang sama dalam penguasaan ayat adjektif menggunakan kata penguat pada peringkat pra. Manakala, hipotesis nul kedua dan ketiga pula ditolak. Oleh itu, hal ini menggambarkan bahawa purata min skor bagi kumpulan kawalan dan rawatan mempunyai perbezaan ketara di mana purata min bagi rawatan lebih tinggi berbanding kawalan. Makanya, nilainya signifikan dan membuktikan KIT KAKP benar berkesan dalam meningkatkan tahap penguasaan ayat adjektif menggunakan kata penguat Bahasa Melayu bagi murid tahun 5.

#### 4.7 Rumusan

Konklusinya, bahagian ini melaporkan dapatan kajian yang membandingkan keberkesanan pengajaran KIT KAKP dengan tindakan konvensional. Secara umumnya didapati KIT KAKP memberi kesan yang lebih baik terhadap pencapaian ayat adjektif menggunakan kata penguat Bahasa Melayu bagi murid tahun 5. Ini dibuktikan dengan pencapaian prestasi yang semakin baik dalam ujian pasca berbanding ujian pra bagi kumpulan rawatan. Selanjutnya, semua dapatan dalam kajian ini akan dibahasakan dengan lebih mendalam dalam bab 5.

#### Lampiran



## Sesi PdP untuk kumpulan rawatan yang menggunakan inovasi Kit KAKP

### Rujukan

- Ali Akbar Khansir. (2012). *Error Analysis and Second Language Acquisition. Theory and Practice in Language Studies*, 2(5), 1027-1032. <https://doi.org/10.4304/tpls.2.5.1027-1032>
- Alimah Lob. (2010). *Penguasaan Lisan Bahasa Melayu dalam Kalangan Kanak-kanak Prasekolah di Singapura*. Universiti Putra Malaysia.
- Bhasah Abu Bakar, & Yuslina Mohamed. (2000). *EAP3072 Metodologi Penyelidikan*. Majlis Penerbitan Ilmiah Malaysia. Negeri Sembilan: Universiti Sains Islam Malaysia.
- Chariri, A. (2009). *Landasan Filsafat dan Metode Penelitian Kuantitatif. Workshop Metodologi Penelitian Kuantitatif Dan Kualitatif*, 1-27.
- Chye, Y. C., & Subramaniam, V. (2012). Analisis kesilapan dalam pembelajaran bahasa Melayu oleh pelajar asing. *GEMA Online Journal of Language Studies*, 12(2), 667–692.

#### CARA BERMAIN BLOK INOVASI KAKP

1. Permulaannya, setiap pemain akan mencabut 4 blok kuning dan 4 blok hijau untuk mencukupkan 8 blok di raknya.
2. Pemain pertama memilih sepetah perkataan blok kata adjektif daripada 9 jenis kata adjektif yang dilonggokkan, blok dicantumkan secara melintang atau menegak, di atas papan dan permulaan perkataannya harus berada di petak empat segi di tengah papan permainan. Blok ini dikenal sebagai Blok atas papan blok.
3. Pemain kedua dan pemain seterusnya akan mengikut giliran masing-masing sambil mencantumkan satu blok kata penguat yang sesuai bersebelahan blok kata adjektif yang dipilih pemain sebelumnya. Sekiranya pemain kedua berjaya mendapatkan markah maka, dia berhak memilih blok kata adjektif dan mencantumkan pada papan untuk diteruskan permainan oleh pemain ketiga.
4. Masa untuk membina dan mencantumkan blok kata penguat yang sesuai bersebelahan blok kata adjektif adalah seperti yang berikut:
  - a) Sekolah menengah : 15 saat
  - b) Sekolah rendah : 20 saat
5. Pemain akan mencatatkan markahnya dalam Kertas Markah. Pengumuman markah pemain terbanyak akan dibuat selepas tamat masa permainan. Markah akan diumumkan sebagai berikut: A) Giliran dari yang pertama sehingga yang keempat markah terendah. Murid perlu menjawab soalan pada kad soalan berbilang yang akan disediakan. B) Giliran yang kelima sehingga yang kesembilan, 10-20 saat dengan marker white board. Setelah semakan jawapan dibuat, markah akan diberi dan dijumlahkan bersama permainan blok untuk menentukan juara permainan.

#### CARA MEMULAKAN PERMAINAN BLOK INOVASI KAKP

1. Tulis nama setiap pemain dalam Kertas Markah.
  2. Masukkan kesemua blok di dalam beg yang disediakan (blok ini dikenal sebagai blok dalam kantung) dan campurkan mengikut kategori penguat hadapan dan penguat belakang.
  3. Setiap pemain mencabut blok masing-masing. Penentuan pemain mengikut giliran adalah berdasarkan jumlah pada setiap balingan dadu.
  4. Pemain pertama mencabut setiap giliran 4 blok kata penguat hadapan, 4 blok kata penguat belakang dan termasuk 1 blok kata adjektif. Blok diletakkan di atas rak masing-masing.
  5. Giliran menurut putaran jarum jam.
- Setelah selesai, setiap pemain akan dibenarkan untuk membina kata penguat yang lengkap. Pemain yang maksimum sehingga 10 jubin pada rak sehingga mampu membina kata penguat yang lengkap. Pemain yang selesai pada gilirannya perlu dipotong markah.

- Corder, S. P. (1967). The significance of Learners' errors. *IRAL*, 161-70. *International Review of Applied Linguistics in Language Teaching*. *IRAL*, 4(Novemb), 161-170. Retrieved from <http://files.eric.ed.gov/fulltext/ED019903.pdf>
- Corder, S. P. (1974). Error Analysis and Remedial Teaching. *IATEFL Conference (Budapest)*, 1-15.
- Dulay, Heidi C. Dan Burt, M. K. (1972). An Analysis of Children's Second Language Errors. *Eric*, (Jun), 1-46.
- Ebel, R. . (1979). *Essentials of Educational Measurement* (Ed. Ke-3). New Jersey: Prentice-Hall Inc.
- Erdoğan, V. (2005). Contribution of error analysis to foreign language teaching. *Mersin University Journal of the Faculty of Education*, 1(2), 261-270. Retrieved from [http://research.iaun.ac.ir/pd/shafiee-nahrkhalaji/pdfs/homework\\_5173.pdf](http://research.iaun.ac.ir/pd/shafiee-nahrkhalaji/pdfs/homework_5173.pdf)
- Fang, X., & Jiang, X.-M. (2007). Error analysis and the EFL classroom teaching. *China Education Review*, 4(934), 1548-6613.
- Hasnah. (2019). Penggunaan Aplikasi Kahoot Dalam Meningkatkan Penguasaan Kata Adjektif. *Seminar Bahasa Melayu*, 433-440.
- Hazlina Abdul Halim. (2013). Analisis Kesilapan Dan Strategi Pembelajaran Gender Gramatikal Bahasa Perancis French Grammatical Gender Error Analysis and Learning Strategies. *Journal of Language Studies*, 13(February), 169-184.
- Hazlina Abdul Halim, & Hoon, A. L. (2015). Kesalahan pemilihan dan pembentukan kata dalam terjemahan bahasa perancis. *GEMA Online Journal of Language Studies*, 15(2), 151-164.
- Hua, A. K. (2016). Pengenalan Rangkakerja Metodologi dalam Kajian Penyelidikan : Satu Kajian Kes Abstrak
- Introduction to Metodology Framework in Research Study: A Case Study Abstract Pengenalan. *Malaysian Journal of Social Sciences and Humanities*, 1(1), 17-23. <https://doi.org/10.1016/j.ejcts.2008.03.009>
- Jaafar. (2001). *Hubungan Kata Sifat Dengan Unsur Lain Dalam Ayat*. Universiti Sains Malaysia. <https://doi.org/10.1017/CBO9781107415324.004>

- Juriah Long, Raja Fauzi Raja Musa, Zarin Ismail, & Hamidah Yamat Ahmad. (2001). Keperluan Pendidikan Bahasa Melayu di Institusi Pendidikan Tinggi Swasta. *Jurnal Pendidikan (UKM)*.
- Mariyati. (2015). *Perbandingan Bentuk Kata adjektif Bahasa Sepanyol dengan Bahasa Melayu Dalam Penulisan Pelajar IPTA*. Universiti Putra Malaysia. <https://doi.org/10.1145/3132847.3132886>
- Mariyati dan Intan Safinas. (2019). Kesilapan penggunaan kata adjektif bahasa Sepanyol dalam penulisan karangan pelajar Melayu di Universiti. *Jurnal Perspektif*, 9(October), 9–24.
- Marry Fatimah dan Muhammad Zaid. (2016). Slanga Kata Penguat. *Jurnal Bahasa*, 16(December 2016), 293– 306.
- Mohamad Khair, Nor Aini dan Zubaidah. (2011). Meningkatkan Penguasaan Penggunaan Kata Adjektif Melalui Pembelajaran Berdasarkan Pengalaman. *Jurnal Pendidikan Singapura*, 130–136.
- Mohamed (2017). Pembinaan dan Penilaian Instrumen Ujian Aptitud Kemasukan ke Institut Pengajian Tinggi Malaysia Development and Evaluation of an Aptitude Test for Bachelor Degree Entrance in Malaysian Institution of Higher Learning. *J. Sci. Math. Lett. UPSI*, 5, 16–27.
- Mohd Hashim, (2011). Potensi penyelidikan kualitatif dalam pendidikan teknikal dan vokasional. *Perbandingan Kebangsaan Penyelidikan Dan Inovasi Dalam Pendidikan Dan Latihan Teknik Dan Vokasional*, 2–4.
- Mulyadi, M. (2018). Penelitian Kuantitatif Dan Kualitatif Serta Pemikiran Dasar Menggabungkannya. *Jurnal Studi Komunikasi Dan Media*, 15(1), 128. <https://doi.org/10.31445/jskm.2011.150106>
- Nian, O. S., & Zaitul Azma Zainon Hamzah. (2014). Memahami Penguasaan Kata Sendi Nama Bahasa Jepun Dalam Kalangan Pelajar Melayu: Satu Pendekatan Analisis Kesilapan\* (Understanding the Mastery of Japanese Particles By Malay Learners: an Error Analysis Approach). In *The 11th International Conference On Japanese Language Education In Malaysia* (pp. 41–62). Kuala Lumpur: Universiti.
- Nor Ashikin Ab Manan. (2016). First Language (L1) Interference In The Writing Of English As A Second Language (Esl) Learners. UITM.

- Nor Hidayah Md Khanapiah. (2016). *Analisis Penggunaan Imbuhan Kata Kerja Dalam Penulisan Murid Pekak. Ijazah Sarjana Tesis*. Universiti Malaya.
- Norliza. (2011). Kata Adverba Atau Kata Sifat. *Jurnal Bahasa*, 204–219.
- Normaizam Hamid. (2003). *Analisis Kesilapan Sintaksis dalam Karangan di Kalangan Pelajar Prauniversiti : Satu Kajian Kes. Ijazah Sarjana Tesis*. Universiti Malaya.
- Nur Hafizah dan Nor Maliza. (2016). Kata adjektif dalam ujaran masyarakat Banjar. *Jurnal Ilmi*, 6, 1–10.
- Peng, C. F., Mahzan Arshad, Zahari Ishak, & Cheong, L. S. (2013). Pendidikan Kesusasteraan Awal Kanak Kanak : Isu Dan Masalah Early Childhood Literature Education : Issues And Challenges. *Jurnal Pendidikan*, 77–89.
- Roshidah Hassan. (2015). Analisis Penguasaan Bunyi Vokal Bahasa Perancis oleh Pelajar Melayu An Analysis of the Mastery of French Vowel Sounds by the Malay Students. *Journal of Language Studies*, 15(September), 99–120.
- Salihah. (2004). *Analisis Komponen Makna Kata Adjektif Deria Bahasa Melayu*. Universiti Pendidikan Sultan Idris.
- Setiawan, W., Fitrajaya, E., & Mardiyanti, T. (2010). Penerapan Model Pengajaran Langsung ( Direct Instruction ) Untuk Meningkatkan Pemahaman Belajar Siswa Dalam Pembelajaran Rekayasa Perangkat Lunak ( Rpl ). *Jurnal Pendidikan Teknologi Informasi Dan Komunikasi (PTIK)*, 3(1), 7–10.
- Silalahi, U. (2000). Metode Penelitian Sosial Kuantitatif. *Journal of Visual Languages & Computing*, 11(3), 287– 301.
- Siti Mardhiah. (2016). *Universiti Teknologi Mara Analisis Kontrastif: Bentuk Kata Adjektif Bahasa Melayu Dalam Novel Hujan Pagi Ijazah Sarjana Muda Pengajian Bahasa Gunaan* . Universiti Teknologi Mara.
- Siti Saniah. (2015). Perbandingan sebagai Strategi Retorik dalam Iklan Radio. *Jurnal Pendeta*, 5 (Februari), 175–192.

Sunji Yuniarti. (2013). *Keefektifan Strategi Pengajaran Eksplisit Dalam Pembelajaran Membaca Pemahaman Siswa Kelas Vii Smp Negeri 3 Gombong*. Universitas Negeri Yogyakarta.

Teo, A. Mi. (2003). *Penjodoh bilangan bahasa Melayu dan bahasa Cina : satu analisis kontrastif dan analisis kesilapan*. Universiti Malaya.

Umami Syarah Ismail, Nazriatoh, Munirah Azrae, & Nadhilah Abdul Pital. (2018). Urutan pemerolehan al-ḍamīr al -munfaṣ il dalam ayat nominatif bahasa arab dalam kalangan pelajar uitm perlis 1, *I*(1), 66–81.

Wan Mohd Fairaz Mohd Ghazali. (2018). Kesilapan Binaan Ayat Bahasa Jepun Terjemahan Dalam Kalangan Pelajar Kuis. In *e-Prosiding Persidangan Antarabangsa Sains Sosial dan Kemanusiaan 2018 PASAK3* (pp. 654–660). Selangor: Kolej Universiti Islam Antarabangsa.

Zaharah Hassan, Abdul Latif Samian dan Nazri Muslim. (2011). Bahasa Melayu dalam perlembagaan persekutuan: Kedudukan dan peranannya dalam konteks komunikasi perpaduan. *SARI : Jurnal Alam Dan Tamadun Melayu*, 29(1), 103–120.



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### ABS TRAK

*Penawaran program baharu di Kolej Komuniti perlu diberi sinergi dengan kehendak perubahan sosial ekonomi dan keperluan industri serta keperluan setempat setelah ianya beroperasi semenjak tahun 2001. Ianya selaras dengan usaha kerajaan untuk merealisasikan Revolusi Industri 4.0 (IR 4.0) yang memerlukan modal insan berkemahiran tinggi serta membuktikan kesungguhan kerajaan melahirkan lebih ramai tenaga kerja muda berkemahiran pada masa hadapan mengikut keperluan lokaliti. Sejak kebelakangan ini, beberapa program kolej komuniti di Daerah Seberang Perai Utara (SPU) telah mengalami kemerosotan enrolmen dalam bidang teknikal walaupun bilangan yang mengambil Sijil Pelajaran Malaysia melebihi 4000 pelajar setiap tahun di Daerah ini. Justeru itu, kajian kualitatif ini dijalankan bagi menentukan keperluan penawaran kursus baharu di Daerah Seberang Perai Utara dengan memastikan bidang pengajian yang ditawarkan oleh Kolej Komuniti adalah relevan dan responsif seiring dengan peredaran semasa setempat. Kajian ini dilakukan secara kualitatif dengan kaedah temubual dan semakan dokumen yang melibatkan pegawai kanan di Pejabat Pendidikan Daerah Seberang Perai Utara, Pejabat Daerah dan Tanah Seberang Perai Utara dan Unit Perancang Bandar, Majlis Bandaraya Seberang Perai yang mempunyai autoriti di dalam bidang masing-masing. Hasil analisa Dapatan kajian ini menunjukkan bahawa dua kursus baharu yang dicadangkan iaitu Teknologi Pemprosesan Makanan Dan E-commerce. Bidang ini harus difokuskan kerana ia merupakan bidang penting yang bakal menyumbang kepada produktiviti Industri Kecil & Sederhana (IKS) di Daerah Seberang Perai Utara.*

**Kata kunci:** Sinergi Program Baharu, Kolej Komuniti

### PENGENALAN

Merujuk kit kemasukan Politeknik & Kolej Komuniti edisi 1/2020, 104 buah kolej komuniti telah beroperasi dengan 134 program pengajian di peringkat sijil, diploma (*Work-Based Learning*) dan sijil kemahiran khas bagi pelajar berkeperluan khas telah berjaya melahirkan pelbagai graduan yang telah menyumbang kemajuan kepesatan negara. Walaubagaimanapun, sejak kebelakangan ini terdapat beberapa program yang tidak dapat memenuhi norma kemasukan terutama dalam bidang teknikal dan beberapa program pula mempunyai lambakan permohonan dan telah melebihi norma tawaran. Paling ketara ialah



penurunan drastik terhadap program-program bidang teknikal dan perkara ini telah terjadi di Kolej Komuniti yang berada di Daerah Seberang Perai Utara.

### **Pernyataan Masalah**

Enrolmen pengambilan pelajar bagi Kolej Komuniti di Daerah Seberang Perai Utara, di bawah Bandaraya Seberang Perai, Pulau Pinang telah mengalami kesan kekurangan pelajar sejak kebelakangan ini walaupun bilangan pelajar mengambil Sijil Pelajaran SPM setiap tahun yang mempunyai lebih 4000 orang calon. Terdapat dua Kolej Komuniti di daerah ini iaitu Kolej Komuniti Kepala Batas dan Kolej Komuniti Tasek Gelugor. Kolej Komuniti Kepala Batas menawarkan program Sijil Kenderaan Ringan, Sijil Animasi 2D, Sijil Teknologi Pembuatan dan Sijil Senibina manakala Kolej Komuniti Tasek Gelugor menawarkan Kuliner dan Penghawa Dingin. Semua program yang ditawarkan telah mengalami kemerosotan enrolmen kecuali kursus kuliner di Kolej Komuniti Tasek Gelugor.

### **1.2. Objektif Kajian**

i) Menentukan jenis program pengajian di Kolej Komuniti Baharu di Daerah Seberang Perai Utara.

### **1.3. Persoalan Kajian**

i) Apakah keperluan bagi penawaran kursus baharu di Kolej Komuniti sedia ada di Daerah Seberang Perai Utara?

ii) Apakah bidang kursus pengajian yang sesuai ditawarkan di Kolej Komuniti sedia ada di Daerah Seberang Perai Utara?

### **1.4 KAJIAN LITERATUR**

Seberang Perai Utara, ialah salah satu daripada lima daerah pentadbiran di Pulau Pinang, Malaysia. Ia merupakan daerah terbesar sekali dengan keluasan 269 km persegi dan merupakan daerah separa bandar. Pejabat pentadbiran di daerah ini terletak di Kepala Batas dan ianya terletak di bawah Bandaraya Seberang Perai. Berdasarkan unjuran pada tahun 2017, Jumlah penduduk di Bandaraya Seberang Perai mempunyai seramai 1,746,700 orang yang mana Seberang Perai Utara ialah 35 % daripada penduduk seberang Perai iaitu seramai 331,900 orang. Jumlah penduduk yang ramai ini adalah merupakan 'feeder' pada tahun mendatang untuk mengikuti sijil kemahiran di Kolej Komuniti berdasarkan industri yang tersedia ada selaras dengan cadangan penawaran bidang pengajian yang diperlukan oleh masyarakat dan keperluan industri. Mengikut RMKe-11 dalam menuju negara maju, kerajaan menyarankan lebih ramai pekerja yang berkemahiran tinggi dalam pelaksanaan dasar Negara, 2016-2020. Oleh sebab itu, cadangan penawaran program baharu bagi Kolej Komuniti sedia ada di Daerah Seberang Perai Utara adalah tepat bagi memenuhi saranan kerajaan yang mahu menggalakkan lebih ramai penduduk mendapat pendidikan berbentuk kemahiran dan vokasional dalam usaha untuk meningkatkan peratus rakyat berpendapatan tinggi yang berasaskan permintaan terkini.

Dalam merangsang pertumbuhan ekonomi kontemporari, mempunyai modal insan berpendidikan tinggi merupakan asas kepada peningkatan pesat permintaan terhadap pendidikan (Becker, G.,1994). Modal manusia atau modal insan merupakan faktor pengeluaran yang penting dalam semua aktiviti ekonomi melalui pelaburan dalam pendidikan. Norain dan Noriah (2012) menegaskan kepentingan penjana modal insan berpendidikan tinggi perlu diberikan penekanan dalam meningkatkan produktiviti ekonomi negara.

Kolej Komuniti yang terdapat di Daerah Seberang Perai Utara ialah Kolej Komuniti Kepala Batas dan Kolej Komuniti Tasek Gelugor. Kolej Komuniti Kepala Batas menawarkan program Sijil Kenderaan Ringan, Sijil Animasi 2D, Sijil Teknologi Pembuatan dan Sijil Senibina manakala Kolej Komuniti Tasek Ge-

lugor menawarkan Kulinari dan Penghawa Dingin. Giat Mara pula terdapat Giat Mara Bagan, Giat mara Kepala Batas dan Giat Mara Tasek Gelugor (Prima) yang memfokuskan kemahiran dari aspek kejuruteraan dan kemahiran seperti automotif, elektrik dan fesyen serta menyediakan sijil kemahiran tahap satu hingga tiga. Matrikulasi pula ialah Kolej Matrikulasi Pulau Pinang yang mensasarkan pelajar yang mendapat keputusan baik dari seluruh negara dan sudah pastilah akan meminggirkan pelajar yang kurang baik akademiknya dan menuntut persaingan yang tinggi diantara pelajar yang pandai. Dua pusat IPT yang terdapat di Daerah SPU ialah Institut Perubatan dan Pergigian Termaju (IPPT) Universiti Sains Malaysia dan Universiti Teknologi Mara Kampus Bertam (UiTM). Kesenambungan tahap pendidikan di daerah Kepala Batas dilihat amat memerlukan dan perlu diberi perhatian yang serius untuk penjana modal insan masyarakat setempat dan kepeluan industri. Keperluan pendidikan bukan sahaja hanya perlu dititikberatkan di peringkat universiti, malahan fokus pendidikan juga perlu diberikan kepada bidang vokasional dan teknikal sebagai usaha untuk menampung keperluan guna tenaga yang semakin meningkat dalam bidang tersebut apabila berlakunya perubahan kepada perindustrian berat pada tahun 1960 (Rahman & Mahani, 2007).

Jumlah keseluruhan pelajar bagi sekolah rendah adalah seramai 33,045 orang pelajar dan jumlah pelajar sekolah menengah adalah sebanyak 25,654 orang pelajar. Maklumat bilangan pelajar adalah seperti jadual 1;

**Jadual 1: Bilangan pelajar di Daerah Seberang Perai Utara,2019**

BILANGAN PELAJAR SEKOLAH DI DAERAH SEBERANG PERAI UTARA TAHUN 2019			
SEKOLAH RENDAH		SEKOLAH MENENGAH	
PRA SEKOLAH	2177	PERALIHAN	208
KELAS KHAS RENDAH	434	KELAS KHAS MENEGAH	300
TAHUN 1	5,385	TINGKATAN 1	4,786
TAHUN 2	5,226	TINGKATAN 2	4,713
TAHUN 3	4,929	TINGKATAN 3	4,878
TAHUN 4	5,519	TINGKATAN 4	4,527
TAHUN 5	5,263	TINGKATAN 5	4,454
TAHUN 6	5,112	TINGKATAN 6 BAWAH	1,063
		STAM	119
		TAHUN 1 KOLEJ VOKASIONAL	126
		TAHUN 1 KOLEJ	140

		VOKASIONAL	
		TAHUN 1 KOLEJ VOKASIONAL	169
		TAHUN 1 KOLEJ VOKASIONAL	171
JUMLAH	30,434	JUMLAH	25,654

Hala tuju Wilayah Pembangunan Utara atau NCER (2007-2020) telah memfokuskan lima teras utama iaitu 1). pertanian, 2). pelancongan, 3). minyak, gas dan petrokimia, 4). pembuatan dan 5). pendidikan. Antara teras utama pembangunan NCER adalah memperbanyakkan kemudahan pendidikan terutamanya institusi pendidikan tinggi, membuka lebih banyak peluang latihan dan merapatkan jurang celik teknologi maklumat (Remali et. al., 2009). Penubuhan Institut Pengajian Tinggi (IPT) dan kolej komuniti di Utara Semenanjung iaitu di Daerah Seberang Perai Utara adalah dilihat bertepatan dengan saranan NCER ini yang pastinya dapat memperkasakan industri yang terdapat di daerah ini dan dalam Bandaraya Seberang Perai.

## 2.0. METODOLOGI KAJIAN

Kajian ini adalah berbentuk kajian kualitatif supaya dapat lebih memahami secara mendalam pembangunan infrastruktur sedia ada dan perancangan pendidikan berasaskan TVET di daerah SPU. Dalam kajian ini, terdapat dua kaedah digunakan bagi mendapatkan maklumat berkaitan dengan cadangan penawaran program baharu bagi Kolej Komuniti sedia ada di Daerah Seberang Perai Utara. Penyelidik memulakan kajian dengan analisis data sekunder dan kemudiannya disokong oleh data primer.

### Data Primer

Kaedah temubual akan dilakukan untuk mendapatkan maklumat primer dalam menjalankan kajian. Temu bual secara formal akan dilaksana kerana kaedah ini melibatkan pertemuan di antara Majlis Daerah Seberang Perai Utara, Pejabat Pendidikan Daerah Seberang Perai Utara dan Pejabat Bandaraya Seberang Perai

### Data Sekunder

Kaedah ini melibatkan pengambilan data secara semakan dokumen dari jabatan/agensi Daerah Seberang Perai Utara, Pejabat Pendidikan Daerah Seberang Perai Utara dan Bahagian Perancangan di Bandaraya Seberang Perai bagi mengukuhkan data dan maklumat yang diperlukan dalam menjalankan kajian. Data-data seperti dokumen RMKe-11, Wawasan Kemakmuran Bersama 2030 dan NCER adalah merupakan sebahagian dokumen yang dianalisis bagi mengukuhkan keperluan penawaran bidang pengajian yang dicadangkan.

## 3.0. ANALISIS DAN KEPUTUSAN

Analisis data dalam kajian makro ini merangkumi analisis terhadap demografi Bandaraya Seberang Perai Utara yang merangkumi sektor ekonomi penduduk setempat, analisis primer dan analisis sekunder.

### 3.1. Demografi Daerah SPU dan Sektor Ekonomi

Pada masa kini, Daerah Seberang Perai Utara sedang menumpukan perhatian kepada sektor perkhidmatan, sektor pertanian, sektor pendidikan dan sektor perkilangan. Secara amnya, sektor ekonomi Daerah SPU dirangsang oleh:

Sektor Pertanian – Aktiviti-aktiviti sektor pertanian merangkumi sub-sektor tanaman padi, perikanan (40% sumber pendapatan penduduk)

Sektor Perkilangan – Aktiviti-aktiviti sektor perkilangan pula merangkumi industri kuari, industri kecil dan sederhana (IKS) dan industri informal (25% sumber pendapatan penduduk)

Sektor Perkhidmatan – aktiviti-aktiviti sektor perkhidmatan pula diteraskan dengan aktiviti-aktiviti kerajaan, pelancongan dan perdagangan. (30% sumber pendapatan penduduk)

sektor pendidikan – merupakan pusat pendidikan iaitu mempunyai 8 institusi pendidikan tinggi (5% sumber pendapatan penduduk)

#### Analisis Data Primer

Kesemua sesi temubual ini melibatkan pegawai kanan di Pejabat Pendidikan Daerah, Pejabat Daerah dan Bahagian Perancangan Bandar di Bandaraya Seberang Perai.

**Jadual 2: Sesi temubual responden**

Jabatan / Agensi	Jawatan	Tarikh Temubual
Pejabat Tanah dan Daerah Kepala Batas	Penolong Pegawai Daerah Kanan (Pembangunan)	15 November, 2019
Majlis Bandaraya Seberang Prai (Bahagian Perancangan Bandar)	Datuk Bandar, Timb. Pengarah Perancang Bandar	10 November 2019 & 27 November 2019
Pejabat Pendidikan Daerah	Pegawai PPD	22 Oktober 2019

**Jadual 3: Ringkasan Transkrip Pejabat Daerah dan Tanah Seberang Perai Utara**

Pejabat Daerah dan Tanah Seberang Perai Utara
Ringkasan Transkrip
<p>1.Terdapat 3 unit utama iaitu Bahagian Pengurusan Daerah, Bahagian Pentadbiran Tanah dan Bahagian Pembangunan Daerah.</p> <p>Bahagian Pembangunan Daerah terbahagi kepada dua iaitu pembangunan masyarakat dan pembangunan fizikal. Antara aktiviti pembangunan masyarakat yang dijalankan adalah modal insan dan aktiviti berbentuk komuniti yang diselaraskan oleh MPKK. Pembangunan berbentuk fizikal pula ialah program pembangunan seperti pelebaran jalan dan pembersihan longkang dan juga kerja-kerja berbentuk adhoc yang diselaraskan oleh pejabat daerah (&lt;200k).</p> <p>2.Perancangan pembangunan di daerah SPU ini khususnya Kepala Batas lebih menumpukan kepada sektor <i>pertanian</i> kerana pembangunan berbentuk fizikal memang telah dijalankan melalui pembinaan kompleks pentadbiran kerajaan dan kompleks perumahan berbagai kategori yang dijalankan oleh syarikat perumahan swasta. Pengeluaran pertanian yang utama adalah padi diikuti dengan tanaman lain seperti sayur-sayuran. Kerajaan negeri melalui kerjasama Jabatan Pertanian juga melancarkan <i>Taman Kekal Pengeluaran Makanan</i> yang tertumpu di daerah SPU sahaja di Pulau Pinang.</p> <p>3.Pertanian dan perusahaan pembuatan yang berskala kecil adalah sector ekonomi utama di daerah SPU terutama di daerah Kepala Batas. Potensi lain adalah <i>sektor perikanan</i> di daerah Penaga dan sector hiliran yang lain.</p> <p>4.Kursus <i>Pemprosesan makanan</i> adalah besesuaian berdasarkan sector ekonomi utama di daerah SPU Kepala Batas. Kursus berkaitan makanan seperti <i>pemprosesan hasil laut seperti fish ball, keropok lekor</i> dan lain-lain.Kursus-kursus lain yang bersesuaian adalah peruncitan dan kursus dandanan rambut yang tertumpu kepada muslimah.</p> <p>5.Sangat bersesuaian berdasarkan sector ekonomi di daerah SPU yang menumpukan kepada <i>pertanian dan pengeluaran hasil laut</i></p>

Pejabat Daerah dan Tanah Seberang Perai Utara
Ringkasan Transkrip

**Jadual 4 : Ringkasan Transkrip Pejabat Pendidikan Daerah Seberang Perai Utara**

Pejabat Pendidikan Daerah Seberang Perai Utara
Ringkasan Transkrip

1. Bilangan sekolah harian di daerah SPU ini ialah sejumlah 28 buah sekolah. Dari sejumlah 28 buah sekolah terdapat 1 sekolah Berasrama penuh (SBP) dan 1 sekolah agama bantuan kerajaan (SABK). Baki (26 buah) adalah sekolah menengah harian biasa (SMK).
2. Enrolmen pelajar SPM bagi tahun 2019 adalah dianggarkan seramai 4600 orang daripada 28 buah sekolah yang terletak di daerah SPU. Daripada jumlah tersebut seramai 2116 pelajar adalah lelaki dan seramai 2338 orang pelajar adalah perempuan. Pecahan peratus jantina setiap tahun dianggarkan sebanyak 47.55% (Lelaki) dan 52.45% (Perempuan). Pelajar berketurunan Melayu mendominasi peratus pelajar tertinggi diikuti etnik Cina dan India.
3. Keputusan SPM secara keseluruhan adalah meningkat sedikit dari tahun ketahun tetapi tidak secara ketara. Sebagai contoh tahun 2018 ialah sebanyak 86.07% lulus manakala tahun 2017 peratus lulus adalah sebanyak 85.11%. Grade Purata Daerah (GPD) ialah 4.72 pada tahun 2017 manakala pada 2018 GPD ialah 4.67. Dari segi rangking, SPU terletak di rangking ke dua dalam mencapai keputusan SPM terbaik secara keseluruhan untuk tahun 2017 dan 2018.
4. Berdasarkan kepada keputusan SPM setiap tahun, kebanyakan pelajar lepasan spm memasuki Tingkatan 6, Kolej2 komuniti dan juga matrikulasi. Bagi pelajar yang hanya lulus sejarah dan bahasa malaysia mereka cenderung ke pusat kemahiran dan ada yang terus bekerja di industri atau kerja sendiri. Mereka ini adalah dianggarkan berjumlah seramai 1000 orang lepasan spm. Walaubagaimanapun kecenderungan pelajar memilih halatuju adalah berdasarkan latarbelakang keluarga masing-masing.
5. Bidang yang sesuai adalah *perniagaan dalam talian, pemprosesan makanan, landskap dan peruncitan*. Terdapat juga kecenderungan pelajar yang meminati kepada seni persembahan (pengurusan acara)

#### Jadual 5 : Ringkasan Transkrip Majlis Bandaraya Seberang Perai

Majlis Bandaraya Seberang Prai  
(Temubual Bersama Dato Bandar)



## Ringkasan Transkrip

1. Bertam Kepala Batas adalah merupakan 'growth area' yang baharu selepas Batu Kawan dan Daerah Bukit Mertajam dan Bukit Minyak yang sudah 'tepu' dengan pembangunan. Sasaran 2022 hingga 2030 **peningkatan liputan 5G** yang akan meningkatkan infrastruktur capaian internet di daerah Bertam Kepala Batas
2. Walaubagaimanapun, sektor2 berdaya maju seperti **pertanian, perikanan dan ecotourism dikekalkan**. Industrial 4.0 akan berkembang seiring dengan peningkatan infrastruktur 5G.
3. Peningkatan infrastruktur 5G di daerah Kepala Batas akan memacu ekonomi setempat melalui **perniagaan dalam talian**, e wallet, dan IoT. Kursus yang bersesuaian adalah 'data scientist' yang berkaitan data analysis yang menyokong urusan secara *cashless, internet banking, ewallet* dan sebagainya.
4. Sesuai dengan kapasiti pelajar kolej komuniti, pembelajaran yang berasaskan kepada *hands on* adalah sesuai untuk menganalisis data bilamana keupayaan liputan internet ditingkatkan kepada 5G. Kursus berkaitan **Data scientist** boleh ditawarkan diperingkat asas bagaimana untuk membangunkan perisian aplikasi sebagaimana dinegara maju yang telah menggunakan internet berkelajuan tinggi dalam pembedahan secara *online, online business, ewallet*, dan sebagainya.

Berdasarkan maklum balas dari jabatan ini, dapat dinyatakan kesemua bersetuju dengan keperluan untuk menawarkan kursus baharu di Kolej Komuniti di Daerah DPU selain mengekalkan kursus sedia ada. Ini telah menjawab persoalan kajian yang pertama. Bagi persoalan kajian yang kedua, semua responden juga mempunyai pandangan yang hampir sama bagi penawaran bidang berdasarkan sosio-ekonomi Daerah SPU. Jadual 3 di bawah menunjukkan rumusan bagi cadangan penawaran kursus baharu yang sesuai terhadap kolej komuniti sedia ada di Daerah SPU.

**Jadual 6 : Rumusan Cadangan Kursus Baharu Oleh Agensi/Jabatan Setempat**

Jabatan / Agensi	Cadangan Kursus Baharu
Pejabat Tanah dan Daerah Kepala Batas	<b>Pemprosesan makanan</b> , kursus peruncitan dan kursus dandan rambut (muslimah)
Majlis Bandaraya Seberang Prai (Pejabat Dato Bandar)	<b>eCommerce</b> , Data Scientist, pembangunan aplikasi.
Pejabat Pendidikan Seberang Perai Utara	perniagaan dalam talian ( <b>eCommerce</b> ), <b>pemprosesan makanan</b> , landskap dan peruncitan, seni persembahan.

### Analisis Data Sekunder

Analisis data sekunder dilakukan terhadap dokumen terbitan kerajaan yang berkaitan dalam menyokong cadangan kursus baharu di Kolej Komuniti di Daerah SPU serta bidang pengajian yang bersesuaian dengan ekonomi setempat, infrastruktur sedia ada dan bakal pelajar bagi enrolmen kemasukan ke kolej komuniti daerah ini. Jadual 4 menunjukkan analisis data berkaitan keperluan program baharu di Kolej Komuniti daerah SPU.

**Jadual 7: Analisis data berkaitan keperluan kursus baharu di Kolej Komuniti Seberan Perai Utara**

ANALISIS/DAPATAN	PERBINCANGAN
<p><b>(RMK11)</b></p> <p><b>Pembangunan modal insan</b></p> <p>RMK11 meneruskan agenda menghasilkan modal insan yang berpengetahuan, berkemahiran dan memiliki sikap positif untuk terus maju dalam ekonomi global.</p>	<p>Kursus baharu yang ditawarkan akan merealisasikan hasrat RMK 11 dalam membangunkan modal insan yang berpengetahuan, berilmu, beretika dan berakhlak untuk memacu pertumbuhan ekonomi yang mampan dan inklusif. Oleh itu, suatu tenaga pekerja yang kompeten, berdaya saing dan tersusun adalah diperlukan. Dalam konteks ini pendidikan di kolej komuniti adalah salah satu institusi yang utama bagi mencapai hasrat tersebut. Untuk membina dan mengekalkan guna tenaga yang berpengetahuan dalam suasana yang efisien dan berorientasikan sasaran merupakan yang paling penting.</p>
<p><b>(RMK11)</b></p> <p><b>TVET</b></p> <p>Sebanyak 60% daripada pekerjaan yang akan diwujudkan dijangka memerlukan kemahiran berkaitan TVET. TVET dikenalpasti sebagai pemacu perubahan bagi Malaysia menghasilkan modal insan berkemahiran. Secara keseluruhannya bidang ini akan menghasilkan modal insan bertaraf dunia yang diperlukan Malaysia dalam fasa terakhir untuk menjadi negara maju.</p>	<p>Kursus baharu selaras dengan hala tuju agenda RMKe-11 iaitu menyumbangkan lebih ramai pekerja-pekerja berkemahiran TVET pada 2020. Justeru itu, bersesuaian dengan kawasan di daerah seberang Prai Utara khususnya Daerah Kepala Batas.</p>
<p><b>(NCER)</b></p> <p><b>Wilayah Ekonomi Utara</b></p> <p>Dari segi lokasi, kedudukan S.P.U. sangat strategik bersempadankan kawasan pembangunan Sungai Petani, Tikam Batu, dan Kulim di Kedah. Dalam pada itu, Butterworth bandar utama daerah ini merupakan Pusat Pertumbuhan Antarabangsa</p>	<p>Selain merupakan pintu masuk utama dari utara Semenanjung, Butterworth merupakan laluan utama dari utara ke selatan Semenanjung. Dua kemudahan infrastruktur jalan di daerah ini iaitu Lebuhraya Utara - Selatan dan Butterworth - Kulim Expressway (BKE) menjadi nadi utama sistem perhubungan jalan darat. Pada dasarnya pertanian merupakan punca guna tanah utama bagi daerah S.P.U. Ini terbukti dengan 69.88% (18,580 hektar persegi) kawasan diusahakan untuk pertanian.</p> <p>Untuk memenuhi keperluan sumber tenaga</p>

Segitiga (IMTGT) yang melibatkan Indonesia, Malaysia dan Thailand.	manusia yang berkemahiran, adalah wajar satu kursus baharu yang bersesuaian ditawarkan di Kolej Komuniti Kepala batas.
( NCER)	
<b>Keperluan Tenaga Kerja</b>	
Penekanan juga diberikan ke atas ekologi dan kemampuan. Aktiviti-aktiviti ekonomi turut berkembang pesat di daerah Kepala Batas. Sektor perkhidmatan dan Industri perkilangan telah dijadikan pemangkin kepada pewujudan peluang-peluang pekerjaan dan perniagaan di daerah ini. Dengan mengambil kira kekuatan ini, daerah ini menawarkan banyak peluang dalam perkhidmatan, industri agro, Hasil Laut, pelancongan Agro Tourism dan aktiviti pemprosesan berasaskan makanan.	

Analisis data sekunder juga dilakukan terhadap objektif kajian yang kedua iaitu mengenal pasti penawaran bidang kursus yang sesuai di Kolej Komuniti Kepala Batas. Berdasarkan dasar dan hala tuju dalam RMKe-11, NCER dan PPPM(PT), terdapat 2 cadangan kursus baharu yang sesuai hasil daripada dapatan kajian primer dan sekunder. Cadangan bidang tersebut ialah Teknologi Pemprosesan Makanan dan eCommerce.

#### 4.0. PERBINCANGAN

Hasil daripada dapatan analisis primer dan sekunder, terdapat persamaan terhadap kedua-dua dapatan. Namun, cadangan bidang dalam dapatan primer lebih banyak berbanding dapatan sekunder. Jadual 5 di bawah menunjukkan dapatan bidang-bidang tersebut:

**Jadual 8: Perbezaan analisis primer dan sekunder terhadap bidang pengajian**

Analisis Primer	Analisis Sekunder
Pemprosesan Makanan	1. Pemprosesan makanan
2. eCommerce	2. eCommerce

Berdasarkan maklumat dalam Jadual 8, 2 senarai yang teratas merupakan cadangan paling banyak diterima semasa sesi temubual dijalankan terhadap agensi setempat. Bidang pertanian dan kejuruteraan kurang mendapat cadangan kerana telah pun banyak ditawarkan melalui institusi-institusi lain yang terdapat di Daerah Kepala Batas. Dapatan ini bertepatan

dengan kajian sekunder yang hanya mendapati dua bidang teratas merupakan bidang yang sesuai berdasarkan dokumen dan surat-surat yang dilakukan.

Sasaran kemasukan ke kolej komuniti ini adalah pelajar lepasan SPM, dan golongan pekerja yang memerlukan upskill dan re-skilling. Berdasarkan kajian yang dijalankan menunjukkan bahawa DUA kursus baharu yang sesuai dicadangkan iaitu Teknologi Pemprosesan Makanan Dan eCommerce. Bidang ini harus difokuskan kerana ia merupakan bidang penting yang bakal menyumbang kepada produktiviti Industri Kecil & Sederhana (IKS) di Daerah SPU. Manakala bidang pertanian dan perikanan merupakan hasil utama pendapatan penduduk di daerah ini. Justeru itu, dengan penawaran bidang Teknologi Pemprosesan Makanan Dan eCommerce, kombinasi 2 kursus ini mampu meningkatkan pengeluaran dan penjualan secara atas talian sama ada melalui hasil tanaman dan juga pembuatan makanan dalam kelompok IKS. Selain daripada itu, penyelidik mengambil kira faktor ekonomi penduduk setempat dan kemudahan infrastruktur sedia ada untuk mencadangkan bidang-bidang pengajian yang boleh menjana pendapatan penduduk di Daerah SPU. Penawaran bidang pengajian berkaitan pertanian tidak dicadangkan oleh penyelidik memandangkan pengajian ini sudah ditawarkan oleh Pusat Penyelidikan Pertanian (MARDI) Paya Keladi dan agensi-agensi pertanian yang berkaitan.

Penawaran kursus baharu di Kolej Komuniti sedia ada di Daerah SPU akan dapat membantu meningkatkan enrolmen sedia ada selain dapat meningkatkan sosio ekonomi masyarakat setempat. Secara umumnya, kewujudan Kolej Komuniti akan dapat memberi impak positif terhadap pembangunan modal insan negara selagi kursus yang ditawarkan adalah sesuai dan relevan kepada komuniti setempat. Kursus baharu yang ditawarkan akan memberi keupayaan tambahan kepada sistem pendidikan dan latihan kolej komuniti Malaysia untuk terus menjalankan program pengajian berkualiti bagi memenuhi keperluan industri negara. Rakyat, terutamanya, golongan masyarakat di Daerah SPU dan mukim sekitarnya akan mendapat manfaat melalui peluang pengajian dalam bidang tertentu yang bersesuaian dengan persekitaran mereka. Ini akan menyemarakkan lagi aktiviti sosio-ekonomi yang akhirnya membawa kepada peningkatan pendapatan dalam kalangan masyarakat.

## 5.0. Kesimpulan

Penawaran program baharu akan merencanakan lagi penghasilan graduan yang berkemahiran tinggi dan menyumbang kepada revolusi industri 4.0 dan programnya berasaskan permintaan setempat. Perubahan ini seiring dengan transformasi digital, supaya kolej komuniti dapat terus kekal berdaya saing dan merencanakan kemajuan landskap dunia moden, memandangkan ia bakal memberi kesan langsung kepada masa depan dunia pekerjaan.

## RUJUKAN

- Abdul Murad Abd Hamid. Falsafah, dasar dan akta negara serta implikasinya terhadap teknologi maklumat dan komunikasi dalam pendidikan. Retrieved from <http://www.slideshare.net>
- Babbie, E. (2010). The practice of social research. Belmont, CA. Wadsworth.
- Becker, G. (1994). Human capital: A theoretical and empirical analysis with special reference to education. Chicago: The East University of Chicago Press.
- Muslihah Hasbullah. Dasar Pertanian Negara. Retrieved from <http://www.vodppl.upm.edu.my>
- Investment opportunities in the North Coast Economic Region Malaysia (NCER). iAdvisory Seminar. 9<sup>th</sup> April 2014. Retrieved from [www.iesingapore.gov.sg](http://www.iesingapore.gov.sg)

Jusang Bolong, Siti Zobaidah Omar, Jeffrey Lawrence D'Silva, Hayrol Azril Mohamed Shaffrill and Musa Abu Hassan. (2013). ICT utilization and its impact on the income of young fishermen in Malaysia. *Per-tanika J. So. Sci. 7 Hum.* 21(S): 49-58. ISSN 0128-7702

Kertas Strategi 09 RMKe-11. Mentransformasi pendidikan dan latihan teknikal dan vokasional untuk memenuhi permintaan industri. Retrieved from <http://rmk11.epu.gov.my>

Kertas Strategi 15 RMKe-11. Memacu teknologi dan komunikasi berasakan pengetahuan. Retrieved from <http://rmk11.epu.gov.my>

Kementerian Pendidikan Malaysia. Retrieved from <http://www.moe.gov.my>

National Economic Advisory Council (NEAC), New Economic Model for Malaysia (NEM). Retrieved from <http://www.epu.gov.my>

Norain Mat Lazim & Nooriah Yusof. (2012). Universiti, pembangunan modal insan dan penumpuan ruang komuniti berpendidikan tinggi di Malaysia: Suatu ulasan kritis. *e-Bangi Journal Universiti Kebangsaan Malaysia*. Vol 7(2).

Ringkasan eksekutif PPPM2015-2025. Retrieved from <http://hea.uitm.edu.my>

Wawasan Kemakmuran Bersama. Retrieved from <https://www.makmurbersama.my>

Mentransformasi Landskap Sosioekonomi Di NCER <http://www.koridorutara.com.my>

# TAHAP MINAT DAN KESESUAIAN PROGRAM SIJIL TEKNOLOGI PEMROSESAN MAKANAN (CERTIFICATE IN FOOD PROCESSING TECHNOLOGY) DAN SIJIL EDAGANG (CERTIFICATE IN ECOMMERCE) BAGI KOLEJ KOMUNITI DI DAERAH SEBERANG PERAI UTARA (SPU)

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## ABSTRAK

*Kajian keperluan program baharu merupakan satu syarat penting dalam membina sesuatu program baharu. Kajian ini telah menggunakan pendekatan kuantitatif yang melibatkan dua ratus lima puluh lima (255) orang responden yang terdiri dari pelajar, pensyarah, guru-guru, industri dan penduduk setempat di Daerah Seberang Perai Utara. Pengumpulan data kajian dibuat melalui soal selidik dan dianalisa menggunakan IBM SPSS Statistics versi 22. Hasil kajian menunjukkan skor min bagi tahap kesesuaian minat dan memenuhi kehendak industri mengikut program adalah tinggi iaitu Sijil Teknologi Pemprosesan Makanan 3.44 dan Sijil eDagang 3.45. Kajian ini juga telah membuktikan bahawa pelajar-pelajar, guru-guru, pensyarah, industri dan juga komuniti di Daerah Seberang Perai Utara bersetuju agar Kolej Komuniti sedia ada mewujudkan program baharu iaitu Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang. Dapatan kajian juga mendapati tenaga kerja dari Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang sangat diperlukan oleh industri dan komuniti setempat di daerah ini. Kesimpulannya, Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang perlu diwujudkan sebagai program baharu di kolej komuniti sedia ada demi memenuhi permintaan dari pelbagai lapisan masyarakat di Daerah Seberang Perai Utara khususnya dan Pulau Pinang amnya.*

## **Kata kunci**

*Sijil Teknologi Pemprosesan Makanan, Sijil eDagang, Program Baharu*

## **1.0. PENGENALAN**

Belia Malaysia perlu dipersiapkan menerusi sistem TVET yang ditransformasi untuk menghadapi masa depan yang mencabar dan sentiasa berubah. Peranan Kolej Komuniti yang mana merupakan kesinambungan pendidikan di sekolah hendaklah dipertingkatkan dengan memastikan lepasan sekolah dibentuk dengan pengetahuan yang seimbang, kemahiran industri dan insaniah yang mencukupi dan sikap positif agar dapat melahirkan modal insan yang dapat memberi sumbangan bermakna kepada negara (Ahmad Anuar, A. dan Esa, A. 2010). Sehubungan itu, halatuju Konsep Transformasi Kolej Komuniti merangkumi perubahan *systemic* yang menjurus kepada pewujudan institusi pilihan, penghasilan graduan yang boleh diambil bekerja dan pembinaan persepsi positif dalam kalangan masyarakat terhadap pendidikan kolej komuniti sekaligus meningkatkan kepercayaan membekal tenaga kerja mahir dan professional berdasarkan permintaan perlu dititikberatkan (Liew Chei Siang, Lam Eileen. 2008). Apabila tercetusnya Revolusi Industri 4.0 (IR 4.0) pada pertengahan 2016 dengan membabitkan teknologi auto-

masi, cabaran baharu meresap ke dalam semua sektor perkhidmatan dan perindustrian negara. Kolej komuniti harus mendepani Revolusi Industri 4.0 yang sedang melanda dan bergerak seiring dengan perkembangan revolusi. Program akademik perlu diganti dengan program baharu yang harus selari dengan keperluan industri dan masyarakat setempat.

### **1.1. Tujuan Kajian**

Menjalankan kajian keperluan program baharu iaitu Sijil Teknologi Pemprosesan Makanan dan eDagang bagi memastikan program yang dijalankan memenuhi kehendak pasaran. Kajian ini meliputi maklumbalas dari pihak guru-guru, industri, pensyarah, pelajar sekolah menengah dan masyarakat di Daerah Kepala Batas.

### **1.2. Skop Kajian**

Kajian Keperluan bagi Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang ini merangkumi pihak industri, pelajar sekolah menengah, guru-guru, pensyarah-pensyarah dan komuniti setempat dimana ianya melibatkan kawasan di Daerah Seberang Perai Utara, di bawah Bandaraya Seberang Perai.

### **1.3. Persoalan Kajian**

1.3.1 Apakah tahap persepsi pelajar terhadap dimensi Kesesuaian minat Serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di Kolej Komuniti Kepala Batas?.

1.3.2 Adakah terdapat perbezaan persepsi pelajar yang signifikan terhadap dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program eDagang dan Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan jantina?.

1.3.3 Apakah tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat berdasarkan Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di Kolej Komuniti Kepala Batas?.

1.3.4 Adakah terdapat perbezaan persepsi guru-guru, pensyarah, industri dan penduduk setempat yang signifikan terhadap dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di Kolej Komuniti Kepala Batas berdasarkan sektor organisasi?

### **1.4. Objektif Kajian**

1.4.1 Mengenal pasti tahap persepsi pelajar terhadap dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Kepala Batas?.

1.4.2 Mengenalpasti perbezaan persepsi pelajar yang signifikan terhadap dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program eDagang dan Program Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan jantina?.

1.4.3 Mengenal pasti tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan dan Sijil eDagang di Kolej Komuniti Kepala Batas?.



1.4.4 Mengenalpasti perbezaan yang signifikan persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan sektor organisasi?

### 1.5. Hipotesis Nol

H<sub>01</sub>: Tidak terdapat perbezaan yang signifikan persepsi pelajar terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program Sijil eDagang di Kolej Komuniti Kepala Batas berdasarkan jantina

H<sub>02</sub>: Tidak terdapat perbezaan yang signifikan persepsi pelajar terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan jantina

H<sub>03</sub>: Tidak terdapat perbezaan yang signifikan persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan sektor organisasi.

H<sub>04</sub>: Tidak terdapat perbezaan yang signifikan persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri Program Sijil eDagang di Kolej Komuniti Kepala Batas berdasarkan sektor organisasi.

## 2.0. METODOLOGI KAJIAN

Kajian keperluan ke atas program ini dilakukan melalui satu sumber penyelidikan iaitu data primer. Data primer ini diperolehi melalui kaedah proses pengumpulan data melalui soalan kaji selidik dari pihak pelajar, guru-guru, pensyarah, industri dan penduduk setempat. Dapatan hasil sumber primer dilakukan dalam bentuk kajian kuantitatif bagi mendapatkan input secara telus dan komprehensif mengenai gambaran sebenar sejauh mana keperluan program ini boleh diadakan di Kolej Komuniti sedia ada di daerah SPU (Creswell, J. W. 2003).

### 2.1. Persampelan Kajian

**Jadual 2.1 : Persampelan Mengikut Kategori Responden**

<b>Bi l</b>	<b>Kategori Responden</b>	<b>Bil maklumbalas</b>
<b>1</b>	Industri	79
<b>2</b>	Pelajar	70
<b>3</b>	Pensyarah	21
<b>4</b>	Guru-guru	39
<b>5</b>	Komuniti setempat	46
<b>Jumlah Keseluruhan</b>		<b>255</b>

Analisis data telah dijalankan dengan menggunakan perisian *Statistical Package for the Social Sciences* versi 22.0 (SPSS 22.0). Setiap data yang dimasukkan ke dalam komputer telah dikodkan secara ringkas dengan menggunakan singkatan-singkatan yang mudah difahami oleh pengkaji. Ujian Normaliti juga telah dijalankan ke atas pemboleh ubah-pemboleh ubah bersandar. Kedua-dua pemboleh ubah iaitu dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang, telah diuji kenormalannya dan hasil taburan datanya adalah normal. Begitu juga dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri dan ia adalah berskala interval dan ia pemboleh ubah bersandar dan juga berskala interval. Ini membolehkan statistik inferensi parametrik dilaksanakan Chua Yan Piaw(2008).

### 3.0 ANALISA DAN KEPUTUSAN

Kajian Keperluan Program ini melibatkan data primer yang diperolehi melalui maklumbalas soal selidik dan melibatkan responden dari pihak industri, pelajar sekolah menengah, pensyarah, guru-guru dan penduduk setempat. Dapatan primer terbahagi kepada 2 kategori iaitu kategori pelajar dan kategori selain dari pelajar iaitu guru-guru, pensyarah, industri dan penduduk setempat dalam satu kumpulan. Bagi melihat keberkesanan dapatan pelajar dan bukan pelajar, item dianalisis menggunakan peratusan dan empat skor Skala *Likert* telah ditetapkan seperti Jadual 3.1. Skor ini dipecahkan kepada 2 penunjuk iaitu jawapan yang positif dan juga jawapan yang negatif. Semasa analisis min setiap dimensi diambil dan dibahagikan kepada tiga aras seperti yang ditunjukkan dalam Jadual 3.2

**Jadual 3.1: Skor Skala Likert**

Min	Aras
1 hingga 1.33	Rendah
1.34 hingga 2.66	Sederhana
2.67 hingga 4.00	Tinggi

**Jadual 3.2: Pembahagian Skor mengikut aras**

Skor	Skala
1	Sangat tidak setuju
2	Tidak setuju
3	Setuju
4	Sangat setuju

#### 3.1. Responden soal selidik

**Jadual 3.3: Responden Kaji Selidik bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang**

Pembolehubah	Keseluruhan (n=255)	
	Frekuensi	Peratus (%)
Pelajar	70	27.5
Pensyarah	21	8.2
Guru-guru	39	15.3
Industri	79	31.0
Komuniti Setempat	46	18.0
<b>Jumlah</b>	<b>255</b>	<b>100.0</b>

### 3.2. Responden pelajar

**Jadual 3.4: Profil Pelajar**

Item	Profil	Bilangan Pelajar	Pera-tusan (%)
<b>Janti-na</b>	Lelaki	30	42.9
	Perempu-an	40	57.1
<b>Aliran kelas</b>	Sains	30	20.0
	Sastera	36	51.4
	Perdagan & Ekonomi	20	28.6
	<b>JUMLAH</b>	<b>70</b>	<b>100.0</b>

#### 3.2.1 Tahap pengetahuan pelajar terhadap program

Jadual 3.4 menunjukkan tahap pengetahuan pelajar dalam eDagang. Berdasarkan rajah tersebut didapati tahap pengetahuan pelajar-pelajar dalam bidang eDagang adalah seimbang antara tahap tinggi 45.7% (32) dan tahap sederhana iaitu 45.7% (32) manakala hanya 8.6% (6) pelajar agak kurang pengetahuan tentang eDagang. Jadual 3.5 menunjukkan dapatan kajian bagi program Teknologi Pemprosesan Makanan di mana tahap pengetahuan pelajar adalah 54.3% (38) ditahap sederhana dan tahap tinggi adalah 37.1% (26) manakala hanya 8.6% (6) ditahap rendah dari segi pengetahuan di bidang Teknologi

Pemprosesan Makanan. Keseluruhannya, pelajar mempunyai aras pengetahuan yang tinggi berkaitan kedua-dua program ini berdasarkan nilai skor min yang tinggi diperolehi dalam kajian ini.

**Jadual 3.5: Pengetahuan eDagang**

	Frekuensi	Peratus (%)	Skor Min	Aras
Valid	6	8.6	3.37	Tinggi
TT	32	45.7		
T	32	45.7		
Total	70	100.0		

Nota: ST: Sangat Tahu; T:Tahu; TT: Tak Tahu

**Jadual 3.6: Pengetahuan Teknologi Pemprosesan Makanan**

	Frekuensi	Peratus (%)	Skor Min	Aras
Valid	6	8.6	3.29	Tinggi
TT	38	54.3		
T	26	37.1		
Total	70	100.0		

Nota: ST: Sangat Tahu; T:Tahu; TT: Tak Tahu

### 3.2.2. Tahap minat pelajar terhadap program

Dapatan kajian menunjukkan tahap minat pelajar terhadap program Teknologi Pemprosesan Makanan adalah , 61.4% (43) ditahap sederhana dan tahap tinggi adalah 32.9% (23). Manakala tahap minat pelajar bagi program eDagang adalah 61.4% (43) ditahap sederhana dan tahap tinggi adalah 32.9% (23). Keseluruhannya, minat pelajar untuk kedua-dua program ini adalah pada aras tinggi yang menunjukkan pelajar sangat berminat dengan program eDagang dan Teknologi Pemprosesan Makanan.

**Jadual 3.7: Minat Tek.Pemprosesan Makanan**

	Frekuensi	Peratus (%)	Skor Min	Aras
TM	4	5.7	3.27	TINGGI
M	43	61.4		
SM	23	32.9		
Total	70	100.0		

Nota: SM:Sangat Minat; M: Minat; TM: Tak Minat

**Jadual 3.8: Minat Edagang**

	Frekuensi	Persatus (%)	Skor Min	Aras
TM	7	10.0	3.33	TINGGI
M	33	47.1		
SM	30	42.9		
Total	70	100.0		

Nota: SM:Sangat Minat; M: Minat; TM: Tak Minat

### 3.2.3. Analisis Statistik Diskriptif dan Inferensi

Untuk menjawab kesemua persoalan kajian ini, penyelidik telah menggunakan analisa faktor untuk membahagikan 9 soalan dari soal selidik untuk dijawab oleh pelajar-pelajar. Hasilnya penyelidik berjaya mengasingkan soalan S3, S5, S7, S9 dan S1 ke dalam satu kumpulan (rujuk soal selidik di lampiran1). Kelima-lima soalan ini boleh diletakkan di bawah dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program eDagang dan soalan S6, S8, S2 dan S4 di dalam satu kumpulan. Ia diletakkan di bawah dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program Teknologi Pemprosesan Makanan. Penyelidik juga telah menggunakan analisa faktor untuk membahagikan 9 soalan dari soal selidik untuk dijawab oleh guru-guru, pensyarah, industri dan penduduk setempat. Hasilnya penyelidik berjaya mengasingkan soalan Q9, Q7, Q4, Q5 dan Q2 ke dalam satu dimensi iaitu dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program eDagang. Bagi soalan Q1, Q6, Q8 dan Q3 di bawah dimensi iaitu dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Teknologi Pemprosesan Makanan (Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E ,2010).

### 3.2.4. Menjawab Soalan Kajian

Soalan 1: Apakah tahap persepsi pelajar terhadap dimensi Kesesuaian Minat Serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Kepala Batas?.

Penentuan tahap persepsi pelajar terhadap dimensi Kesesuaian Minat Serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di Kolej Komuniti Kepala Batas adalah berdasarkan kepada interpretasi skor min.

**Jadual 3.9: Tahap persepsi pelajar terhadap dimensi Kesesuaian Minat Serta Memenuhi Kehendak Industri**

Pemboleh Ubah	Min	Sisihan Piawai	Tahap
Kesesuaian Minat dan Memenuhi Kehendak Industri bagi Prg Sijil Teknologi Pemprosesan Makanan	3.44	.62	Tinggi
Kesesuaian Minat dan Memenuhi Kehendak Industri bagi Prg Sijil eDagang	3.45	.60	Tinggi

Berdasarkan Jadual 3.9, dapatan kajian menunjukkan responden yang terdiri dari pelajar-pelajar sekolah menengah berpersepsi bahawa Program Sijil eDagang di Kolej Komuniti Kepala Batas adalah bersesuaian dengan minat mereka dan boleh memenuhi kehendak industri dan ia berada pada tahap tinggi (min =3.45, S.P=.60). Manakala bagi Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas juga adalah bersesuaian dengan minat pelajar-pelajar dan boleh memenuhi kehendak industri dan ia juga berada pada tahap tinggi (min =3.44, S.P=.62). Kesimpulannya kedua-dua dimensi bagi Program Sijil eDagang dan Teknologi Pemprosesan Makanan ini berada di tahap tinggi dalam kalangan pelajar-pelajar yang dikaji.

Soalan 2: Adakah terdapat perbezaan persepsi pelajar yang signifikan terhadap dimensi Kesesuaian minat serta Memenuhi Kehendak Industri bagi Program eDagang dan Teknologi Pemprosesan Makanan di Kolej Komuniti Kepala Batas berdasarkan jantina?.

### Pengujian Hipotesis

- H<sub>01</sub> Tidak terdapat perbezaan persepsi pelajar yang signifikan terhadap dimensi Kesesuaian minat serta memenuhi kehendak industri bagi program eDagang di Kolej Komuniti
- H<sub>02</sub> Tidak terdapat perbezaan yang signifikan persepsi pelajar terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan

Bagi menguji hipotesis null yang pertama dan ke dua di dalam kajian ini, kaedah Ujian t (t-test) digunakan kerana ianya melibatkan satu pemboleh ubah bebas iaitu jantina dengan dua kategori (lelaki dan perempuan) dan satu pemboleh ubah bersandar (interval) iaitu dimensi kesesuaian minat serta memenuhi

kehendak industri bagi ke dua-dua program yang dikaji di Kolej Komuniti Daerah SPU (Kerlinger, F.N. 1986).

**Jadual 3.10: Ujian t (t-test) Perbezaan yang signifikan terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi program eDagang**

Jantina	N	Min	SP	dk	t	p
Lelaki	30	3.44	.498	69	.72	.26
Perempuan	40	3.46	.582			

Jadual 3.10 menunjukkan keputusan ujian-t sampel bebas antara dimensi kesesuaian minat pelajar-pelajar serta memenuhi kehendak industri bagi program eDagang mengikut jantina. Setelah analisis statistik t-sampel dilakukan, ujian Levene didapati tidak signifikan ( $p > .05$ ). Keputusan ini menunjukkan varians di antara pelajar lelaki dan pelajar perempuan adalah sama dan telah memenuhi andaian kehormogenan varians antara kedua-duanya terhadap dimensi Kesesuaian Minat Pelajar-pelajar serta Memenuhi Kehendak Industri bagi Program eDagang. Setelah ujian-t sampel bebas dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $t(70) = .72$ ,  $p > .05$ . Oleh itu hipotesis null pertama dalam kajian ini tidak boleh ditolak. Justeru, tidak terdapat perbezaan yang signifikan terhadap dimensi kesesuaian minat pelajar-pelajar serta memenuhi kehendak industri bagi program eDagang di Kolej Komuniti Daerah SPU berdasarkan jantina dalam kalangan pelajar-pelajar yang dikaji.

**Jadual 3.11: Ujian t (t-test) Perbezaan yang signifikan terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi program Teknologi Pemprosesan Makanan**

Jantina	N	Min	SP	dk	t	p
Lelaki	30	3.36	.530	69	.64	.32
Perempuan	40	3.54	.703			

Keputusan dalam Jadual 3.11 menunjukkan setelah ujian-t sampel bebas dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $t(70) = .64$ ,  $p > .05$ . Oleh itu hipotesis null ke dua dalam kajian ini diterima. Justeru, tidak terdapat perbezaan yang signifikan terhadap dimensi Kesesuaian Minat Pelajar-pelajar serta Memenuhi Kehendak Industri bagi Program Teknologi Pemprosesan Makanan di Kolej Komuniti Dearah SPU berdasarkan jantina dalam kalangan pelajar-pelajar yang dikaji.

### 3.4. Responden guru-guru, pensyarah, industri dan penduduk setempat

Soalan 3: Mengenal pasti tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Kepala Batas?.



Penentuan tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU adalah berdasarkan kepada interpretasi skor min. Rujuk Jadual 3.12 di bawah.

**Jadual 3.12: Dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri**

Pemboleh Ubah	Min	Sisihan Piawai	Tahap
Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Prg Sijil Teknologi Pemprosesan Makanan	3.41	.69	Tinggi
Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Prg Sijil eDagang	3.39	.75	Tinggi

Berdasarkan Jadual 3.12, dapatan kajian menunjukkan responden yang terdiri dari guru-guru, pensyarah, industri dan penduduk setempat berpersepsi bahawa Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Daerah SPU adalah membuka peluang pekerjaan yang mudah serta memenuhi kehendak industri dan ia berada pada tahap tinggi (min =3.41, S.P=.69). Manakala bagi Program Sijil eDagang di Kolej Komuniti Daerah SPU juga adalah membuka peluang pekerjaan yang mudah serta memenuhi kehendak industri dan ia juga berada pada tahap tinggi (min =3.39, S.P=.75). Nilai minnya lebih rendah berbanding dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan. Kesimpulannya kedua-dua dimensi bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang ini berada di tahap tinggi dalam kalangan guru-guru, pensyarah, industri dan penduduk setempat yang dikaji.

Soalan 4: Adakah terdapat perbezaan persepsi guru-guru, pensyarah, industri dan penduduk setempat yang signifikan terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di Kolej Komuniti Daerah SPU berdasarkan sektor organisasi?.

### Pengujian Hipotesis

$H_0$  : Tidak terdapat perbezaan yang signifikan persepsi guru-guru, pensyarah, industri dan penduduk setempat yang signifikan terhadap peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Dearah SPU berdasarkan sektor organisasi

Statistik inferensi yang digunakan untuk menguji hipotesis null ketiga iaitu perbezaan persepsi guru-guru, pensyarah, industri dan penduduk setempat yang signifikan terhadap Peluang Pekerjaan Yang Mudah

serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan di Kolej Komuniti Daerah SPU berdasarkan sektor organisasi adalah ujian ANOVA Sehal. Ia digunakan kerana data pemboleh ubah bebas iaitu sektor organisasi yang terdiri 4 kategori dan pemboleh ubah bersandar (interval) iaitu peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan. Selain daripada itu, data juga diambil daripada responden yang sama.

**Jadual 3.13 Keputusan Ujian ANOVA Sehal bagi Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan Berdasarkan Sektor Organisasi**

	SS	dk	MS	F	Sig.
Antara kumpulan	4.984	3	1.661	3.828	.011
Dalam kumpulan	78.552	181	.434		
Jumlah	83.535	184			

Jadual 3.13 menunjukkan dapatan Ujian ANOVA Sehal antara Sektor Organisasi dan . Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan. Setelah analisis dilakukan, keputusan ujian *Levene* adalah tidak signifikan ( $p > .05$ ) (Patton, M. Q. (2002). Keputusan ini menunjukkan varians di antara Sektor Organisasi sama ada sektor swasta, kerajaan, industri tempatan, industri kecil/serdana dan lain-lain sektor adalah sama dan telah memenuhi andaian kehormogenan varians antara kategori. Setelah Ujian ANOVA Sehal dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $F(3,181) = 3.828$ ,  $p > .05$ . Oleh itu hipotesis null ketiga dalam kajian ini gagal ditolak. Maka, tidak terdapat perbezaan yang signifikan terhadap Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan berdasarkan Sektor Organisasi dalam kalangan guru-guru, pensyarah, industri dan penduduk setempat yang dikaji.

#### Pengujian Hipotesis

$H_04$  : Tidak terdapat perbezaan yang signifikan persepsi guru-guru, pensyarah, industri dan penduduk setempat terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri Program Sijil eDagang di Kolej Komuniti Kepala Batas berdasarkan sektor organisasi.

**Jadual 3.14 Keputusan Ujian ANOVA Sehal bagi dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil eDagang Berdasarkan Sektor Organisasi**

	SS	df	MS	F	Sig.
Antara kumpulan	3.553	3	1.184	2.437	.066
Dalam kumpulan	87.960	181	.486		
Jumlah	91.514	184			

Jadual 3.14 menunjukkan dapatan Ujian ANOVA Sehal antara Sektor Organisasi dan . Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil eDagang. Setelah analisis dilakukan, keputusan ujian *Levene* adalah tidak signifikan ( $p > .05$ ). Keputusan ini

menunjukkan varians di antara Sektor Organisasi responden sama ada sektor swasta, kerajaan, industri tempatan, industri kecil/serdahana dan lain-lain sektor adalah sama dan telah memenuhi andaian kehormogenan varians antara kategori. Setelah Ujian ANOVA Sehal dilakukan, didapati keputusan yang diperolehi adalah tidak signifikan,  $F(3,181) = 2.437$ ,  $p > .05$ . Oleh itu hipotesis null ke empat dalam kajian ini juga gagal ditolak. Maka, ianya dapatlah disimpulkan bahawa tidak terdapat perbezaan yang signifikan terhadap Dimensi Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Sijil eDagang berdasarkan responden dari Sektor Organisasi dalam kalangan guru-guru, pensyarah Kolej Komuniti, industri dan penduduk setempat yang dikaji (Paadi, K. 2014).

## **PERBINCANGAN DAN KEPUTUSAN**

Hasil dapatan berdasarkan analisis data yang telah dilakukan.

### **Tahap persepsi pelajar terhadap dimensi Kesesuaian minat Serta Memenuhi Kehendak Industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU.**

Tahap persepsi pelajar terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU berada pada tahap yang tinggi. Dimensi ini merujuk kepada minat pelajar terhadap kedua-dua program ini iaitu Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang. Mereka bersedia untuk melanjutkan pelajaran selepas SPM dalam bidang ini. Mereka yakin tenaga mereka sangat diperlukan oleh industri sekiranya mereka memilih salah satu dari program ini. Mereka juga sangat mengharapkan kedua-dua program ini ditawarkan di Kolej Komuniti Daerah SPU berdasarkan minat mereka yang terhadap kedua-dua kursus ini. Kesimpulannya Program Sijil Teknologi Pemprosesan Makanan dan eDagang sememangnya boleh ditawarkan di Kolej Komuniti Daerah SPU berdasarkan persepsi minat yang tinggi pelajar-pelajar di daerah ini.

### **4.2. Adakah terdapat perbezaan persepsi pelajar yang signifikan terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program eDagang di Kolej Komuniti Daerah SPU berdasarkan jantina?.**

Hasil ujian t (t-test) didapati tidak terdapat perbezaan yang signifikan terhadap dimensi kesesuaian minat serta memenuhi kehendak industri bagi Program eDagang di Kolej Komuniti Daerah SPU berdasarkan jantina. Ini bermakna tiada perbezaan pendapat atau persepsi antara pelajar lelaki atau perempuan, terhadap kesesuaian minat serta memenuhi kehendak industri bagi Program eDagang di Kolej Komuniti Daerah SPU. Ini sekali dapat menjelaskan kepada kita bahawa semua pelajar-pelajar ini senada dalam menyatakan manfaat dan kebaikan program Sijil eDagang ini.

### **4.3. Apakah tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat berdasarkan dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU?.**

Tahap persepsi guru-guru, pensyarah, industri dan penduduk setempat berdasarkan dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU juga berada pada tahap yang tinggi. Dimensi ini merujuk kepada peluang kerja yang banyak, daerah yang sesuai, memenuhi kehendak industri terhadap kedua-dua program ini iaitu Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang. Mereka yakin graduan kolej ini sangat diperlukan oleh industri di luar. Mereka juga sangat mengharapkan kedua-dua program ini ditawarkan di Kolej Komuniti Daerah SPU. Kesimpulannya Program Sijil Teknologi Pemprosesan Makanan dan eDagang sememangnya perlu ditawarkan di Kolej Komuniti Daerah SPU berdasarkan persepsi keperluan yang tinggi masyarakat serta penduduk di daerah ini.

#### **4.4. Adakah terdapat perbezaan persepsi guru-guru, pensyarah, industri dan penduduk setempat yang signifikan terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU berdasarkan sektor organisasi?.**

Hasil ujian Anova Sehalu (Anova One Way) didapati tidak terdapat perbezaan yang signifikan terhadap dimensi peluang pekerjaan yang mudah serta memenuhi kehendak industri bagi Program Sijil Teknologi Pemprosesan Makanan dan eDagang di Kolej Komuniti Daerah SPU berdasarkan sektor organisasi. Ini bermakna tiada perbezaan pendapat atau persepsi antara guru-guru, pensyarah, industri dan penduduk setempat, terhadap Peluang Pekerjaan Yang Mudah serta Memenuhi Kehendak Industri bagi Program Teknologi Pemprosesan Makanan di Kolej Komuniti Daerah SPU. Ini menjelaskan kepada kita bahawa semua responden yang terlibat ini senada dalam menyatakan manfaat dan kebaikan program Sijil Teknologi Pemprosesan Makanan ini.

### **KESIMPULAN**

Berdasarkan dapatan kajian yang dijalankan, menunjukkan program baharu iaitu Sijil Teknologi Pemprosesan Makanan dan Sijil eDagang di daerah SPU mempunyai merit yang kukuh untuk diwujudkan. Ini telah dibuktikan dengan persepsi minat dan pengetahuan yang tinggi terhadap program sama ada pelajar-pelajar atau bukan pelajar yang dikaji, di daerah SPU. Malah ujian hipotesis juga telah menunjukkan bahawa guru-guru, pensyarah, industri dan penduduk setempat telah sebulat suara bersetuju kedua-dua program ini patut diperkenalkan di Kolej Komuniti di daerah SPU. Semua responden berkeyakinan program ini mampu membawa sinar ekonomi yang lebih kukuh kepada penduduk di daerah ini dan Bandaraya Seberang Perai, Pulau Pinang. Mereka juga bersetuju dengan memperkenalkan kedua-dua program ini akan dapat memenuhi kehendak dan kemahuan industri samada tenaga kerja separa mahir atau pun mahir. Ianya sekaligus menyahut seruan kerajaan dalam memacu Malaysia sebagai tumpuan industri teknologi tinggi menjelang 2025 selaras dengan dasar nasional industri IR4.0.

### **RUJUKAN**

- Ahmad Anuar, A. dan Esa, A. (2010). Penerapan Kemahiran Insaniah di Pusat Giat Mara (PGM): Satu Analisis Perbandingan. dalam. Esa, A. & Mustafa, M.Z. (Ed). Kemahiran Insaniah: Kajian di Institusi- Institusi Pengajian. Batu Pahat: Penerbit UTHM. Ms 1-19.
- Chua Yan Piaw(2008). Asas Statistik Penyelidikan : Analisis Data Skala Ordinal dan Skala Nominal . Mc Graw-Hill (Malaysia) Sdn Bhd
- Creswell, J. W. (2003). Research design: Qualitative, Quantitative, And Mixed Method Approaches. Thousand Oaks, CA.: SAGE.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E (2010). Multivariate Data Analysis. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.
- Kerlinger, F.N. (1986). Foundations of behavioural research (3rd ed.). New York: Holt, Rinehart & Winston.
- Liew Chei Siang, Lam Eileen. 2008. Analisis Pengaruh Pemilihan Jenis Institusi Pengajian Tinggi Di Kalangan Pelajar IPTA Dan IPTS. Prosiding Persidangan Kebangsaan Ekonomi

Malaysia Ke III 2008. Daya Tahan Ekonomi Negara: Dasar dan Strategi Pengukuhan

Norusis, M.O. 1997. SPSS advanced statistic (5th ed.). Chicago, IL: SPSS Inc. Parker, B.

Paadi, K. 2014. Perceptions on employability skills necessary to enhance human resource management graduates prospects of securing a relevant place in the labour market. European Scientific Journal, 129-143

Patton, M. Q. (2002). Qualitative research & evaluation methods (3rd ed.). Thousand Oaks, CA: Sage.

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Rancangan Malaysia Ke Sebelas 2016-2020 (2016). Unit Perancang Ekonomi Jabatan Perdana Menteri. Putrajaya.

Noraini Omar (2008). Faktor-faktor yang Mempengaruhi Pencapaian Pelajar Dalam Mata Pelajaran Pendidikan Islam Tingkatan Lima. Jurnal Pendidikan, Institut Perguruan Tun Abdul Razak, Sarawak

Makki, B. I., Salleh, S., Memon, M. A. & Harun, H. (2015). The relationship between work readiness skills, career self-efficacy and career exploration among engineering graduates: a proposed framework Research Journal of Applied Sciences, Engineering and Technology, 10(9): 1007-1011.

## E-COMMERCE IN PANDEMIC ERA: ANALYSIS TOKOPEDIA USE AS MEDIA TRADING FOR COMMUNITIES FACEBOOK GROUP

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### Abstract

This study aims to find out how to use internet communication technology in trade transactions, using *Tokopedia* as an online trading medium. This research uses mix-method, the data collection is done through survey, in-depth interviews, observation and documentation. The subject of the research is the internet user community and *Tokopedia* customers who are in the Facebook group *I love Parepare* which has a thousand members, the members are chosen purposively for those who have traded or always traded (buying) through *Tokopedia.com* in the current pandemic. The results of this study reveal, that the types of the internet communication technology users who make it *Tokopedia* as an online shopping medium, consist of young people and housewives. The majority of them use *Tokopedia* as an online trading medium during this pandemic, because *Tokopedia* is one of the safest, most convenient e-commerce transactions online. This study can be useful in the field of communication, economic and health. Analysis of e-commerce with communication, System and health approach.

**Keyword:** Communication Technology, Communities Facebook Group, E-Commerce, Online Media Trading, Pandemic, Tokopedia.

### Introduction

The use of Internet-based on information technology, it makes the changes into the pattern of human communication, which is used to be manual and face-to-face or directly meeting to move to online form. This has led to the growth of the trading of businesses in cyberspace, where all of transactions used an online model. This certainly has a positive impact on some people who live in urban areas, which is have limited time due to the busyness or urban congestion, so that, it will takes a long time, to make purchases by visiting directly or face to face with sellers, or conditions of long distances in various regions on place in Indonesia. (Mowlana, 2018)

This factor initiates people on the world of economy by looking carefully at opportunities to provide online sales services and messages between goods and services, thus making the growth of e-commerce trading models in the world, including in Indonesia, and making the internet a breath in this online trading business (*e-commerce*).

The internet has made all the human users close to all parts of the world, the internet is a global network that unites through the computer networks around the world. This computer network makes it easy to communicate and interact with the people all over the world or what is called internet communication technology. With this internet communication technology changes many vendors and retail merchants of goods and even services had make the trading applications based on network communication technology (Meyer, 2003).

By connecting the company's network with this internet-based on communication technology, the companies can promote their goods and service trading, so that, a dynamic and inherent business network is had



been formed between sellers and customers (buyers), even with the applications that they make can be easily installed via their mobile, the buyers will become regular customers, because the data will be recorded on the company's server obtained from the application or it is commonly called (*e-commerce*) (Pauline Ratnasingam & Dien D. Phan, 2003). Including its electronic mailing address, with this company can always provide the information to sales the goods or promotes the new items to be discounted (sellout), at any time, by not having to interfere to the business and privacy of the customers or prospective buyers. This is one of the trading model, that is looks far but close and sticks through the more efficient business relationships with the business partners or consumers (Boateng, 2016).

**Tabel 1.** Internet Users in The World

	2017	2018	2019
Population in the world	6.5 billion	6.9 billion	7.4 billion
Social media user in the world	16%	30%	48%
Social media user in developing country	8%	21%	41.3%
Social media user in developed country	51%	67%	81%

Source: International Telecommunication Union

This table showed that the world population, past three years. Currently in Indonesia the number of internet-based communication technology users is reaches 82 million people or around 30% of the total population in Indonesia (Surata, 2017), the e-commerce market is becoming a very tempting gold mine for some people who can see the potential going forward. This growth is supported by data from the internet user data (minister of communication and information), which states that the value of e-commerce transactions in 2013 reached Rp130 trillion. Because of this, the internet is a good infrastructure and suitable for running e-commerce, so that the term e-commerce has become synonymous with doing business on the Internet.

In year 2020, the use of the internet communication technology interaction as an electronic commerce media is expected to continue and to grow with the increasing the Internet supporting of the infrastructure in Indonesia. Especially with the current outbreak of covid-19, it is causing the social and economic interaction to move to online models. The data from the ICD (*Internet Computer Data*) research institute which has its head office in London UK, predicts that the *e-commerce* market in Indonesia will grows up 42% from 2017-2019. This figure is higher compared to other countries such as Malaysia (14%), Thailand (22%), and the Philippines (28%) (Mitra, 2014). Of course, a value of this size is very tempting for some investors, both of the domestic and foreign in developing marketing activities through online media.

The product promotion and the strategy of marketing must be owned by every company, so that it can continue to grow, using a variety of ways to keep business going and goods sold. Marketing must continue to be carried out, considering marketing is a social and managerial process that in it the individuals and groups can get what they need and want by creating, offering, and exchanging products of value with others (Zhang, 2014)

The communication in the marketing becomes the core of how the companies utilize a network and, planning, implementing and evaluating in maintaining or developing a company in the business world (Kishore & Raghav, 2004). The marketing at this time is not enough just only by developing the products, improving the quality, setting affordable prices or delivering the right products, but also by using a media in marketing, that is, online media.



## Literature Review

### Health Belief Model

HBM (*Health Belief Model*) is a model in the field of health psychology, this theory is used to explain and predict behavior related to the health or called health behavior. HBM (Health Belief Model) is the oldest and most widely used as a social cognition model in the health of psychology. This health model was developed in the early 1950s by a group of social psychologists at the United States Public Health Service, in an effort to understand the widespread failures into the public and to accept disease prevention or screening tests in the early detection of asymptomatic diseases (Janz & Becker, 1984; Rosenstock, Strecher & Becker, 1988), or in other words, this theory is widely used to explain behavior related to the health in terms of behavior change and maintenance. But as it develops of HBM is used to predict individuals in taking precautions, filtering, or controlling the disease conditions (Sakinah, 2017). According to Glanz, et al. (2008), the Health Belief Model is a cognitive model that can be influenced by information from the surrounding environment. This theory explains that the possibility of an individual taking precautions depends on the individual's self-confidence.

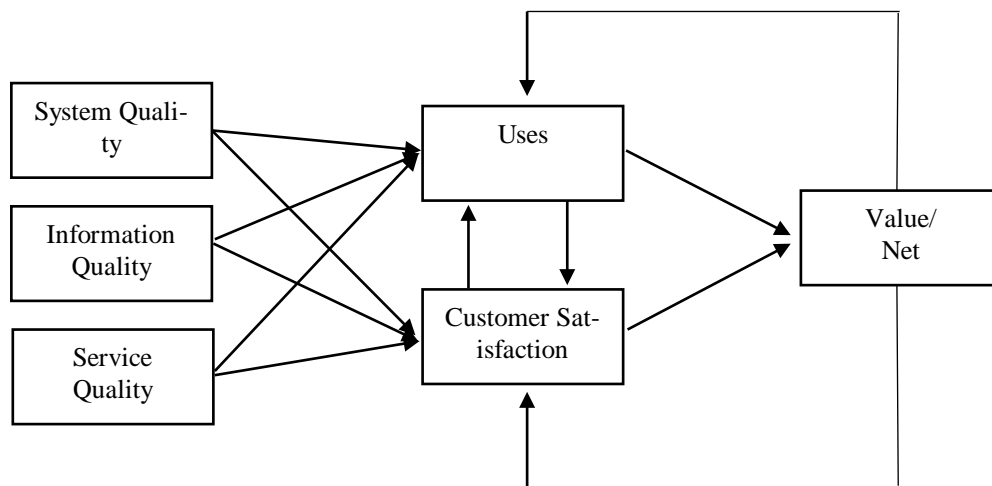
HBM (Health Belief Model) uses two aspects as a representation of an individual's health behavior in responding to a disease threat, that are the perception of a disease threat and behavioral evaluation to ward off that threat. Threat perception is divided into two beliefs, the first is perceived susceptibility to disease and perceived severity of the consequences of the disease. Behavioral evaluation includes consideration of potential benefits (Perceived benefits) as well as consideration of obstacles (Perceived barriers) (Conner & Norman, 2005; Steptoe, 2010). Specifically, the HBM (Health Belief Model) consists of the following dimensions:

1. Perceived susceptibility. (Perceived vulnerability). Individual perceptions about a condition that vary greatly in their personal feelings of vulnerability (this dimension includes questions such as estimation of *resuscibility*, confidence in diagnosis, and susceptibility to disease in general). So, this dimension refers to one's subjective perception of the risk of contracting a condition.
2. *Perceived severity*, (Severity Perception) which is the feeling that arises about the seriousness of contracting to the disease also it varies from one individual to another. These dimensions include the evaluations including the medical consequences such as, death, disability, and pain as well as social consequences such as, effects of conditions on work, family life, and social relations.
3. Perceived benefits. Acceptance of personal vulnerability to a condition believed seriously, held to produce the strengths that lead to individual behavior, this dimension is hypothesized depending on beliefs about the effectiveness of various measures available to reduce the threat of disease or in other words the individual will receive the health actions that are considered appropriate to overcome a condition
4. Perceived barriers, that is, the potential negative aspects of certain health actions it could act as obstacles to perform recommended behavior. Such as cost benefit analysis where individuals weigh the cost of effectiveness whether or not these costs, and their danger of side effects, cause unpleasant, uncomfortable, time consuming.

### System Success Model (ISSM)

Measurement of the success or effectiveness of the information systems is very important for understanding the value and efficacy of information systems management (DeLone and McLean, 2002). The ISSM model was created in 1992, based on information systems theory and empirical research conducted by a number of researchers in the 1970s and 1980s. According to DeLone and McLean, the dependent variable of MIS research is divided into six variables, including system quality, information quality, system usage, personal and organizational influence, and user satisfaction. Among these variables, the quality of information can affect the use of the system which further affects user satisfaction, personal performance and organizational performance (Chiu et al., 2006). DeLone and McLean devel-

oped ISSM with the quality of service introduced, incorporating personal and organizational influences into net income, related to the user satisfaction as an important index to measure ISSM success and concluded that system and service quality can jointly influence the user satisfaction and willing to use (DeLone and McLean, 2003).



**Figure 1.** New ISSM

So far, ISSM has been used in checking usage in various information system users, especially online marketplaces. Angelina et al has used ISSM to verify consumers' willingness to shop online (Angelina et al, 2019). Dirgantari et al uses the ISSM model to explain the level of e-commerce consumer usage and satisfaction during the pandemic (Dirgantari, 2020).

### Diffusion of Innovations

This theory was popularized by Everett M. Rogers from a book called Diffusion of Innovation in 1961, so, from that book Roger considered a central figure in the theory of diffusion of innovation (Burhan, 2008). Initially this theory was used as a study in the field of sociology, because the diffusion of innovation is part of social change in which discuss the structure and function of social systems. As the development of science, the diffusion of innovation is also an important study in the field of communication, because one important element of the diffusion of innovation is the communication channel. Diffusion theory describes the spread of an innovation through a population. Diffusion is the process which an innovation is spread or communicated through certain channels from time to time among members of the social system. The definition contains four main elements of diffusion, namely innovation, communication channels, time, and social systems. Innovation is an idea, practice, or an object that is considered the new one by the humans. This theory believes that an innovation is diffused into society in a predictable pattern (Rogers, 1983; Rizal, 2012).

Diffusion can also be referred to as social change, which is defined as the process of change that occurs in the structure and function of social systems, it means that when the new ideas are discovered and disseminated, then, these ideas can be adopted or rejected are leading to certain consequences from which social change occurs. In other words, this theory illustrates how an innovation spreads from time to time from an individual through an adoption decision process, which consists of five stages: 1) Individuals are aware of an innovation, 2) Individuals obtain enough knowledge to make decisions to the next stage, 3) Individuals have the decision to adopt or reject an innovation, 4) Individuals act on their decisions, 5) Individuals reflect their decisions usually in behavior (Rogers, 1983; Straub, 2009; Alzaidi, 2020).

The strength of this theory lies on the broad foundation of factors that influence the choices of a person makes about an innovation. This is the basis for understanding adoption which consists of five

characteristics, as well as: relative advantage, compatibility, complexity, trialability and observability (Rogers, 1983; Straub, 2009; Rizal, 2012).

### 1. Relative Advantage

The individual will adopt the innovations or new ideas, if he considers them to be a better choice than the ideas they replaced. The more profitable to the innovation offered, So it can spread faster in a social system. The relative level of profit is often expressed in terms of economic profitability or the granting of social status.

### 2. Compatibility

Compatibility is the degree of an innovation that is perceived, it has consistency with existing values, past experience, and the potential needs of adopters. An innovation can be compatible or not seen from (1) sociocultural values and beliefs, (2) ideas previously introduced, or (3) client needs for innovation. So, the more an innovation is not in accordance with the values and norms are prevailing in the social system, then the innovation cannot be adopted easily by the community.

### 3. Complexity

Complexity is a characteristic of an innovation that had been perceived difficult relatively or easy to understand and use by members of the social system. This level assumes that an innovation can be quickly adopted when the innovation is easy to understand and would be understood by adopters.

### 4. Trial ability

Trialability is the level of an innovation can be tested before individuals actually adopt it. This stage determines an innovation will be adopted or rejected by adopters. The more an innovation is able to show or demonstrate its superiority, the faster the innovation would be adopted.

### 5. Observability or observability

The ability of observation or observable is the level of an innovation that can be seen by others or in other words an innovation is easily observed and communicated to others. The easier individuals see the results and benefits of an innovation, the more they likely to adopt it.

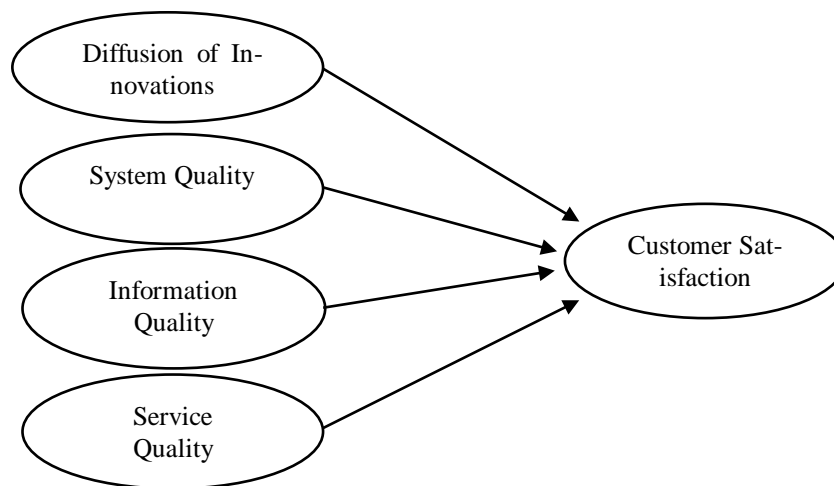
## Customer satisfaction

Customer satisfaction is the most important position in every sale and buy transaction. Customer satisfaction can be defined as an overall assessment of the product or service based on purchasing experience (Khadka, 2017). Customer satisfaction is the philosophy in business that shows the ability and responsibility to meet customer needs, managing and estimating what their expectations (Lager, 2008). Individual perceptions, both dissatisfaction or pleasure can be compared to the perceived performance of the product that is related to the one's expectations (Mendoza, Marius, Pérez, & Grimán, 2007). When customers are satisfied with a product or service, they are more likely to recommend it to others, and more likely to repeatedly buy or use those products and services, rather than switching to alternative other products (Bennett and Thiele, 2004).

Mustafa (2011) said that the loyalty of B2C e-commerce customers in Saudi Arabia is strongly influenced by customer satisfaction, but also influenced by customer trust. In Serbia, customer satisfaction in online shopping depends on determinants factors directly, such as security, delivery, availability of information, price, quality and time (Vasic, Kilibarda and Kaurin, 2019). User satisfaction systems is the response and feedback was raised by user after using the information system. The user's attitude to information systems is a subjective criterion of how much the user likes the system used. Adopting from DeLone and McLean (2003) this article uses two items namely:

Information Satisfaction (Repeat Purchase). The difference between information needed and information received. "In general, is the information satisfaction as a result of comparing the expectations or needs to the information systems with the performance of the system received".

Repeat Visit. One form of the global satisfaction with all systems that have been presented and conducted it is about the interactions regarding the level of satisfaction on information services and systems. As well as the benefits in the input and output process are received.



**Figure 2.** Research Model

## Research Methods

This type of research is a case study using a qualitative and quantitative approach. The case study method is used by researchers because it is appropriate to explain how communication happens through online media conducted by members of the Facebook group "*I Love Parepare*" against *Tokopedia*. The purpose of case study research is to make image or systematically, actual and accurate facts, as well relationship between the phenomenon under investigation.

Researchers discuss in depth communication which occurred in the online media trade *Tokopedia*, during the pandemic covid-19 outbreak. A Case studies attempt to explore an object to be examined. The object in the form of the events that have occurred, serve as a case if the object is seen as a restricted system that is bound to the time and place of the object's event. This case study method is widely used in social sciences research (Edward W. (Jed) Frees Editor & Stuart Klugman, 2001).

Generally, case studies are a more appropriate strategy if the main focus of the research is to find out and explore aspects of the question as, why, or more explanatory, which leads to research on the use of strategy, history, or experimentation. Therefore, in case study research there are several things that need attention. Regarding of the research data, the case study research must gather evidence from various sources through the documentation, observation, interviews and surveys (Chivanga, 2016).

**Tabel 2.** Description of Diffusion of Innovation, ISSM and Customer Satisfaction (Quantitative)

Variabel	Number of Item
<b>Diffusion of Innovation</b>	12
Relative Advantage, Compatibility, Complecity, Triability, Observability	

<b>Information Quality</b>	Completeness, Precision, Currency, Format of Output	4
<b>System Quality</b>	System Flexibility, System Intergration, Time to Respond, Error Recovery, Convinience of Access, Language.	6
<b>Service Quality</b>	Assurance, Emphaty, Responsiveness	3
<b>User Satisfaction</b>	Repeat Purcases, Repeat Visits	4

## Result and Disscussion

### Tokopedia History

*Tokopedia* shop is an online company of 3 e-commerce sites in Indonesia, the other two are *Lazada* and *Buka lapak*. Therefore *Tokopedia* is a company that cannot be considered small. William Tanuwijaya and Leontinus Alpha Edison, are the founders of this company, and people who have played a major role in the development of this *Tokopedia* company. "Facing similar life experiences and challenges. They think, to stop this problem, they must do something to shorten the gap between big cities and small towns. " That is a piece of sentence uttered by William at the inaugural launch of the *Tokopedia* application in Jakarta, on August 17, 2009. One of the intentions of the establishment this company according to William is for digital economic equality. Therefore, in the last 10 years, *Tokopedia* is one of the e-commerce sites that has promoted digital economic equality by motivating the Indonesian people to start selling online. This initiative is carried out by building a platform that allows anyone to start and find anything, wherever he is.

*Tokopedia* prepares several steps to be better known by the public and as an online trading media is trusted and sought after by the public. At presently *Tokopedia* is developing a program called, *Super Ecosystem* (SE) that allows everyone to contribute and add value to each other and grow together. We have built bridges with many partners, including logistics and payment partners, and we are still working to build stronger networks (William). *Tokopedia*, experiencing the rapid development as an online trading medium, has been established until now, in just 10 years time it was able to dominate the retail market, relying on the internet technology as a medium of transaction and trading communication in Indonesia. *Tokopedia* is the biggest company that can target the market in Indonesia by making online media a way to target the market in conducting sales promotions. *Tokopedia* was making shopping centers (markets) move from offline to online, making some online shopping applications into trading media or function as a market. "The only way for us to measure the success, is when our sellers have a better life by selling products and reaching more customers with the technology we provide" (William).

There are at least four steps of *Tokopedia* had succed marketing and trading business, namely: 1) **Free**, no costs to start a business in the *Tokopedia* marketplace, 2) **Reach All of Indonesia**, our sellers and customers come from all over Indonesia, reaching 98% of the districts in throughout Indonesia, 3) **Complete the Logistics**, there are 13 logistics partners as an option for sellers to choose the logistics they like, 4) **Many Supporting Features**, there are many financial technology products and other supporting features that are ready to help develop reseller stores.

### Tokopedia marketing strategy

Conduct the marketing activities, is a fundamental problem in a company, so that various ways and efforts are carried out in order to get the market or consumers, including technology as a communication device. The use of internet technology as a communication tool in dealing with potential customers is one of the efforts to control the market. The internet, especially websites and social media, are the main tools in selling products, in addition to being used in providing information on discounted offers and promos, that are

going on to consumers. This shows how strong marketing is done through the Internet today (Guilherme Pires, John Stanton & Ioannis-Dionysios Salavrakos, 2010) .

The researcher found that the current use of sales promotions via the Internet is often encountered and increased the creativity in communicating it to the consumers. *Tokopedia's* sales promotion tools done to the consumers include vouchers, flash sales, special offers from partners, discounts, trade shows like (Monday mastercard, I love Wednesday, mobile weekend, Friday frenzy, midnight sale, anniversary sale), and discount or cash back. The researcher deliberately raised the internet technology communication to *Tokopedia* as his case, so that this study was to complement or strengthen the previous case. Although it is realized that many previous studies have examined this e-commerce or trading transaction activities on the internet (online). Assumption researchers still want to know that not everyone can be the same and appropriate in using internet communication technology. The researchers see so many consumer differences in Indonesia ranging from how to shop, how to appreciate a product, how to see sales promotions, economic conditions, cultural differences and technological developments become a challenge for companies as big as Tokopedia. This is what attracts the attention of researchers to discuss it further in this scientific study.

In this section, I will describe a member of the Facebook group from I love Parepare who uses the internet communication Technology for who shop at *Tokopedia* which is focusing of this research. Facebook group members who are as the object of this study are members who have a shopping duration in a month, the details can be seen in the following table:

<b>N0</b>	<b>Shopping Duration (in a month)</b>	<b>Category</b>	<b>Presentation</b>
1	4 times	Often	80-90%
2	3 times	Always	70-80%
3	2 times	sometimes	60-70%
4	1 times	Seldom	50-60%
5	0	Never	40-50%

While because of the Facebook group *I love Parepare* has nearly one thousand members, the researchers took 50 people from the total members to be sampled in this study, namely by paying attention to their education level, as follows:

<b>No</b>	<b>education Level</b>	<b>frequency (people)</b>	<b>presentation</b>
1	Not Elementary graduated	-	0 %
2	Elementary graduated	4	8, %
3	Junior School Graduated	12	24%



4	Senior School Graduated	21	42, %
5	University & Graduated	13	26%
		30	100%

The table and graph above can be explained that the frequency of the education level of members of the Facebook group *I love Parepare* based on the results of 50 people, the highest graduated from high school by 21 people or 42.% then graduated, junior high as many as 12 people or 24.% and elementary school as many as 4 people or 8%, 13 person universities or around 26%.

This research was conducted on 50 members *I love Parepare*, by measuring the level of use of the internet communication technology in accessing *Tokopedia* as a medium of online commerce, by looking at 3 elements of the assessment variable and user pleasure, namely:

#### Product

N0	Criteria of products	frequency (people)	presentation (%)
1	There are genuine products	3	6
2	Has an official store	1	2
3	Variety of payment methods	7	14
4	Unique and interesting items	7	14
5	Goods vary	5	10
6	Forwarding and insurance services	8	16
7	Can buy credit and pay installments	5	10
8	Shop cash system	7	14
9	Cashback	4	8
10	Refund	3	6
	<b>Total</b>	50	100%

#### Access and Transactions

N0	Criteria of products	frequency (people)	presentation (%)
1	Trusted (rating)	12	24%
2	Practical	11	22%



3	All in all	7	14%
4	Many discount promos	12	24%
5	Professional	8	16%
	<b>Total</b>	50	100%

### 3) Trust

N0	Criteria of products	frequency (people)	presentation (%)
1	Slow Interaction and communication	12	24%
2	Disconnected with Customer	11	22%
3	Looks not communicative	10	20%
4	Inaccurate Number of Goods Availability	3	6%
5	Goods are often exchanged	14	28%
	<b>Total</b>	50	100%

Based on the results of research conducted on 50 respondents in the facebook community *I love Parepare*, the frequency of internet communication technology brings positive benefits for members, where 70-80% state that the internet brings the benefits of communication and interaction of shopping goods on *Tokopedia*. While for members as users give the reason that the internet can help respondents in accessing media.

In the category often there are 15 people, while always 16 people, sometimes 8 people, rarely 4 people and 7 never access or buy at media outlets. However, each member states that the benefits are not always positive benefits, but there are harmful effects too, so respondents choose sometimes. And which states No 0% of respondents.

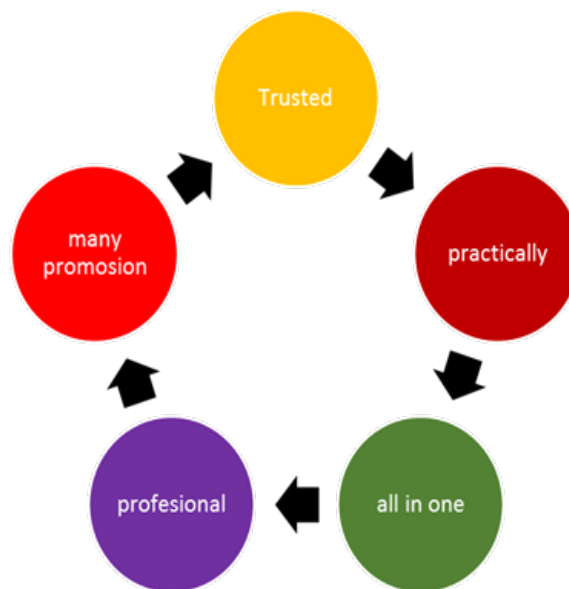
N0	Shopping Duration (in a month)	Category	Quantity (person)
1	4 times	Often	15
2	3 times	always	16
3	2 times	Sometimes	8

4	1 times	rarely	4
5	0	never	7
<b>Total</b>			50

In this study, it shows that there are 15 persons are stating that they often access the internet on *Tokopedia*, and around 16 respondents said they always access, while 8 people sometimes, 4 people rarely, and 7 people have never accessed *Tokopedia*, as a communication medium internet technology.

While the reason for respondents are accessing *Tokopedia* as an internet communication technology medium, is because of its easy access and interaction. Respondents can find information about the goods that they need, and can be trusted, and the payment transactions can be done at any time.

There are five important aspects of internet technology communication users in using and accessing *tokopedia* shops, namely, the existence of practical and professional convenience, he explained, which can be seen in the following chart:



## CONCLUSION

This study results gives explanationthat the level of public communication through internet technology is quite high, the average is ranged between 83% -85% of the total respondents who answered the questionnaire as many as 116 respondents. For demographic data about the participation of respondents who have followed the Facebook group "*I Love Parepare*" around 17.7% or about 16 people who have followed more than 2 years, and 16.7% or about 15 people who participated in under 1 year.

As for the profession of about 63.5% as others, that is apart from civil servants 23.1%, and non-permanent employees 8.7%, the rest are traders, around 1.6%. It can be said that the follower of the Facebook group "*I Love Parepare*" came from the middle to lower economic class, about 71.3% have an uncertain income or about 61 people. And the data also shows that the middle class is those with the higher education output around 81.1% or around 67 people. This shows that those who actively use *Tokopedia* as an online trading media communication technology those are educated people, they comprise 69.8% as bachelors.

For this reason, I declare in this conclusion that the people are very happy to use internet communication technology in shopping at *Tokopedia*, in the period before the co-19 epidemic spread and increased during this pandemic. This data also shows that people use internet communication technology positively according to what their needs and for safety, comfort and health considerations

### **LIMITATION AND STUDY FORWARD**

in this study the respondents were limited to only about 100 respondents who filled out questionnaires on google which were distributed to several respondents via the Facebook group I Love Pare, as we know *facebook* group *Aku Cinta Parepare* has around 500-up members. And also through *whatsapp* groups were randomly selected. The respondent answers the questionnaire easily, by simply clicking on the link was sent, after the link is clicked, then the answer will open. The answers only meet the criteria; disagree, strongly disagree, agree and strongly agree. And in the last section there are questions requiring brief and short comments. For further research you can access "I Love Parepare" as a facebook group, regarding the use of e-commerce applications such as *Toopedia* as a medium of trading and communication between customers and providers of goods (sellers).

### **ACKNOWLEDGEMENT**

Thanks to the research team, Ali Halidin for helping to collect the data on facebook group "Aku Cinta Parepare", and analysis them through *googleform* diagrams, and Nur Setiawati has specified the data and the final discussion

### **AUTHORS CONTRIBUTION**

Ali Halidin had spread the questionnaire online through links to several respondents, then he collected the data from respondents who gave his answers, then analyzed it with Nur Setiawati had specified the data and finally discussed it.

### **REFERENCES**

- Ack Linchuan Qiu (2010) Mobile communication research in Asia: changing technological and intellectual geopolitics?, *Asian Journal of Communication*, 20:2, 213-229, DOI: 10.1080/01292981003693393
- Alzaidi, Maram Saeed. 2020. The Diffusion of M-learning Innovation: The Case of Saudi Arabia. *The 6th IEEE International Conference on Information Management*. 978-1-7281-5770-2/20, pp. 329 – 334
- Amoshaun Toft (2011) CONTEXTUALIZING TECHNOLOGY USE, *Information, Communication & Society*, 14:5, 704-725, DOI: 10.1080/1369118X.2010.530674
- Angelina, Ruth Johanna.; Aji hermawan; Arif Imam Suroso. 2019. Analyzing E-Commerce Success using DeLone and McLean Model. Surabaya: Jurnal Unair. <http://dx.doi.org/10.20473/jisebi.5.2.156-162>
- Anjana Maitra PhD (2008) Ensuring Safe Motherhood by Using Information and Communication Technology Tools in Behavioral Change Communication, *Marriage & Family Review*, 44:2-3, 350-356, DOI: 10.1080/01494920802255968

- Barbara Collier, Donna Mcghie-Richmond & Hazel Self (2010) Exploring Communication Assistants as an Option for Increasing Communication Access to Communities for People who use Augmentative Communication, Augmentative and Alternative Communication, 26:1, 48-59, DOI: 10.3109/07434610903561498
- Bennett, R.; Rundle-Thiele, S. Customer satisfaction should not be the only goal. J. Serv. Mark. 2004, 18, 514–523. <https://doi.org/10.1108/08876040410561848>.
- Bethany Johnson, Margaret M. Quinlan & Jade Myers (2017) Commerce, Industry, and Security: Biomedicalization Theory and the Use of Metaphor to Describe Practitioner–Patient Communication Within Fertility, Inc., Women's Reproductive Health, 4:2, 89-105, DOI: 10.1080/23293691.2017.1326250
- Bethany Johnson, Margaret M. Quinlan & Jade Myers (2017) Commerce, Industry, and Security: Biomedicalization Theory and the Use of Metaphor to Describe Practitioner–Patient Communication Within Fertility, Inc., Women's Reproductive Health, 4:2, 89-105, DOI: 10.1080/23293691.2017.1326250
- Boateng, R. (2016). Resources, Electronic-Commerce Capabilities and Electronic-Commerce Benefits: Conceptualizing the Links. Information Technology for Development, 2-4.
- Brian Shoesmith (1993) Technology Transfer or Technology Dialogue: Rethinking Western Communication Values, Media Asia, 20:3, 152-172, DOI: 10.1080/01296612.1993.11726417
- Bronwyn Hemsley, Stuart Palmer, Stephen Dann & Susan Balandin (2018) Using Twitter to access the human right of communication for people who use Augmentative and Alternative Communication (AAC), International Journal of Speech-Language Pathology, 20:1, 50-58, DOI: 10.1080/17549507.2017.1413137
- Burhan, Bungin. 2008. *Sosiologi Komunikasi*. Jakarta: Kencana Prenada
- Carrie Sturts Dossick & Gina Neff (2011) Messy talk and clean technology: communication, problem-solving and collaboration using Building Information Modelling, Engineering Project Organization Journal, 1:2, 83-93, DOI: 10.1080/21573727.2011.569929
- Carrie Sturts Dossick & Gina Neff (2011) Messy talk and clean technology: communication, problem-solving and collaboration using Building Information Modelling, Engineering Project Organization Journal, 1:2, 83-93, DOI: 10.1080/21573727.2011.569929
- Chiu, C.M.; Hsu, M.H.; Wang, E.T. Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. Decis. Support Syst. 2006, 42, 1872–1888. <https://doi.org/10.1016/j.dss.2006.04.001>
- Chivanga, S. Y. (2016). Qualitative Research Methodology and Numbers. Journal of Social Sciences, 4-6.
- Christopher J. Schroll (1995) Technology and communication ethics: An evaluative framework, Technical Communication Quarterly, 4:2, 147-164, DOI: 10.1080/10572259509364594
- Chrystal B. Zhang & Yi Hsin Lin (2015) Exploring interactive communication using social media, The Service Industries Journal, 35:11-12, 670-693, DOI: 10.1080/02642069.2015.1064396
- Claartje L. Ter Hoeven, Ward van Zoonen & Kathryn L. Fonner (2016) The practical paradox of technology: The influence of communication technology use on employee burnout and engagement, Communication Monographs, 83:2, 239-263, DOI: 10.1080/03637751.2015.1133920
- Conner, Mark & Paul Norman. 2005. *Predicting Health Behaviour: Research And Practice With Social Cognition Models*. Second edition. New York: Open University Press
- Craig R. Scott, Laura Quinn, C. Erik Timmerman & Diana M. Garrett (1998) Ironic uses of group communication technology: Evidence from meeting transcripts and interviews with group decision support system users, Communication Quarterly, 46:3, 353-374, DOI: 10.1080/01463379809370107
- DeLone, W.H.; McLean, E.R. The DeLone and McLean model of information systems success: A ten-Year update. J. Manag. Inf. Syst. 2003, 19, 9–30.

- Delone, William & McLean, Ephraim. (2002). Information Systems Success Revisited (PDF). Hawaii International Conference on System Sciences. 8. 238. 10.1109/HICSS.2002.994345.
- Dirgantari et all. 2020. Level of use and satisfaction of e-commerce customers in Covid-19 Pandemic Period: an Information system success Model Approach. Bandung: Universitas Pendidikan Indonesia. <https://doi.org/10.17509/ijost.v5i2.24617>.
- Edward W. (Jed) Frees Editor & Stuart Klugman . (2001). Case Studies Add Unique Perspective. North American Actuarial Journal, 9.
- Eid, Mustafa. (2011). Determinants of E-Commerce Customer Satisfaction, Trust, and Loyalty in Saudi Arabia. Journal of Electronic Commerce Research.
- Glanz, Karen; Barbara K. Rimer; K. Viswanath. 2008. *Health Behavior And Health Education Theory, Research, and Practice*. 4th Edition. United State: Jossey-Bass
- Gregg C. Vanderheiden Ph.D. (1998) Universal Design and Assistive Technology in Communication and Information Technologies: Alternatives or Complements?, Assistive Technology, 10:1, 29-36, DOI: 10.1080/10400435.1998.10131958
- Guilherme Pires, John Stanton & Ioannis-Dionysios Salavrakos. (2010). The Interaction of Foreign Direct Investment with Electronic Commerce in Less Developed Countries. Forum for Social Economics, 7-8.
- Günter Müller (1996) Secure communication Trust in technology or trust with technology?, Interdisciplinary Science Reviews, 21:4, 336-347, DOI: 10.1179/isr.1996.21.4.336
- Howard C. Shane PhD, Sarah Blackstone PhD, Gregg Vanderheiden PhD, Michael Williams MA & Frank DeRuyter PhD (2012) Using AAC Technology to Access the World, Assistive Technology, 24:1, 3-13, DOI: 10.1080/10400435.2011.648716
- Hyuk Jun Cheong & Sufyan Mohammed-Baksh | Len Tiu Wright (Reviewing editor) (2019) U.S. consumer m-commerce involvement: Using in-depth interviews to propose an acceptance model of shopping apps-based m-commerce, Cogent Business & Management, 6:1, DOI: 10.1080/23311975.2019.1674077
- Janz, Nancy K & Marshall H. Becker. 1984. The Health Belief Model: A Decade Later. *Health Education Quarterly*, SOPHE (Society for Public Health Education) Vol. 11 (1): 1 – 47
- Jean Carletta, Anne H. Anderson & Rachel McEwan (2000) The effects of multimedia communication technology on non-located teams: a case study, Ergonomics, 43:8, 1237-1251, DOI: 10.1080/00140130050084969
- Jennifer Ihm & Yuli Patrick Hsieh (2015) The implications of information and communication technology use for the social well-being of older adults, Information, Communication & Society, 18:10, 1123-1138, DOI: 10.1080/1369118X.2015.1019912
- Jeremy St. John, Lucian L. Visinescu, Carl S. Guynes & Victor R. Prybutok (2016) Information and Communication Technology Offshoring Logistics Success: A Social Exchange Perspective, Information Systems Management, 33:3, 212-230, DOI: 10.1080/10580530.2016.1188542
- Jozée Lapierre & Roxane G. Medeiros (2006) Information and communication technology usage patterns: a case study, Journal of Strategic Marketing, 14:3, 229-244, DOI: 10.1080/09652540600825472
- Karen Kear, Judith Williams, Richard Seaton & Geoff Einon (2004) Using information and communication technology in a modular distance learning course, European Journal of Engineering Education, 29:1, 17-25, DOI: 10.1080/0304379032000129331
- Khadka, K.; Maharjan, S. Customer satisfaction and customer loyalty. Master's Thesis, Centria University of Applied Sciences, Business Management, Lahti, Finland, 2017.
- Lager, M. (2008). CRM: In the public interest (p. 18). CRM Mag. 6.

- Mahesh S. Raisinghani (2001) Wap: Transitional Technology for M-Commerce, *Information Systems Management*, 18:3, 8-16, DOI: 10.1201/1078/43196.18.3.20010601/31285.2
- Mailin Lemke, Edgar Rodríguez Ramírez, Brian Robinson & Nada Signal (2020) Motivators and barriers to using information and communication technology in everyday life following stroke: a qualitative and video observation study, *Disability and Rehabilitation*, 42:14, 1954-1962, DOI: 10.1080/09638288.2018.1543460
- Mendoza, L. E., Marius, A., Pérez, M., & Grimán, A. C. (2007). Critical success factors for a customer relationship management strategy. *Information and Software Technology*, 49(8), 913-945. <https://doi.org/10.1016/j.infsof.2006.10.003>
- Maria Bakardjieva & Robert W. Gehl (2017) Critical approaches to communication technology – the past five years, *Annals of the International Communication Association*, 41:3-4, 213-219, DOI: 10.1080/23808985.2017.1374201
- Meyer, D. R. (2003). The Challenges of Research on the Global Network of Cities. *Urban Geography*, 4.
- Michael J. Harnisch (2014) Impacts of the Developments in Digital Media and Communication Technology on Personalization Research, *COLLNET Journal of Scientometrics and Information Management*, 8:2, 353-370, DOI: 10.1080/09737766.2014.916873
- Michael Ruddat, Alexander Sautter, Ortwin Renn, Uwe Pfenning & Frank Ulmer (2010) Communication about a communication technology, *Journal of Risk Research*, 13:3, 261-278, DOI: 10.1080/13669870902899062
- Mowlana, H. (2018). On Human Communication. *Javnost - The Public*, 1-2.
- Nalinee Joy Taveesin PhD & William J. Brown (2006) The Use of Communication Technology in Thailand's Political Process, *Asian Journal of Communication*, 16:1, 59-78, DOI: 10.1080/01292980500467590
- Paaige K. Turner (2019) The voice of communication in comprehensive internationalization, *Communication Research and Practice*, 5:1, 23-38, DOI: 10.1080/22041451.2019.1561395
- Pauline Ratnasingam & Dien D. Phan. (2003). rating Partner Trust in B2B E-Commerce: A Case Study. *Information Systems Management*, 3.
- RAJIV KISHORE, M. A. (2004). Determinants of Sourcing During Technology Growth and Maturity: An Empirical Study of e-Commerce Sourcing. *Journal of Management Information Systems*, 5-6.
- Richard Boateng (2016) Resources, Electronic-Commerce Capabilities and Electronic-Commerce Benefits: Conceptualizing the Links, *Information Technology for Development*, 22:2, 242-264, DOI: 10.1080/02681102.2014.939606
- Rizal, Fahrul. 2012. Penerapan Teori Difusi Inovasi dalam Perubahan Sosial Budaya. *Hikmah*. Vol. VI, No. 01 Januari 2012, 129 – 14
- Rogers, Everett M. 1983. *Diffusion Of Innovations: Third Edition*. New York: The Free Press
- Rosenstock, Irwin M.; Victor J. Strecher; Marshall H. Becker. 1988. Social Learning Theory and the Health Belief Model. *Health Education Quarterly*, *SOPHE (Society for Public Health Education)* Vol. 15 (2): 175 – 183
- Ronnie J. Yeh, Jerrold K. Leong, Lee Blecher & Wei-Tang (Tim) Hu (2005) Analysis of E-commerce and information technology applications in hotels: Business travelers' perceptions, *Asia Pacific Journal of Tourism Research*, 10:1, 59-83, DOI: 10.1080/1094166042000330227
- Sakinah, Zernike Victoria. 2017. Aplikasi Health Belief Model Dalam Menganalisis Perilaku Penggunaan Kacamata Pelindung. *Jurnal Promkes*, Vol. 5, No. 1 Juli 2017: 105–116.
- Straub, Evan T. 2009. Understanding Technology Adoption: Theory and Future Directions for Informal Learning. *Review of Educational Research*. Vol 79, p.625-649
- Steptoe, A. (ed.). 2010. Cognitive Determinants of Health Behavior. *Handbook of Behavioral Medicine*. Springer Science+Business Media, LLC



- Surendra Pal (2002) Advanced Satellite Communication Technology—A Perspective, IETE Technical Review, 19:6, 387-398, DOI: 10.1080/02564602.2002.11417056
- Syed Shah Alam, Md. Yunus Ali & Mohd. Fauzi Mohd. Jani (2011) An Empirical Study of Factors Affecting Electronic Commerce Adoption among SMEs in Malaysia, Journal of Business Economics and Management, 12:2, 375-399, DOI: 10.3846/16111699.2011.576749
- T. Andrew Finn (1999) THE ROLE OF TEMPORALITY IN MEDIATED COMMUNICATION AND TECHNOLOGY CONVERGENCE, Information, Communication & Society, 2:2, 174-200, DOI: 10.1080/136911899359691
- Vasic, Nebojsa, Milorad Kilibarda, Tanja Kaurin. 2019. The influence of Online Shopping Determinants on Customer Satisfaction in the Serbia Market. **Universidad de Talca**. <http://dx.doi.org/10.4067/S0718-18762019000200107>.
- V J Hanumesh & K S Sunder (2000) A Study of Security Issues in E-Commerce Applications, IETE Technical Review, 17:4, 209-214, DOI: 10.1080/02564602.2000.11416905
- William L. Lomerson, Christopher G. Jones & Paul H. Schwager (2005) Core Web Technologies for New E-Commerce Employees, Journal of Computer Information Systems, 45:2, 44-55, DOI: 10.1080/08874417.2005.11645830
- Xuefei (Nancy) Deng & Jian Zhang (2014) Differentiating the Effects of Internet Usage and Wireless Usage on Business-to-Business and Business-to-Consumer E-commerce, Journal of Internet Commerce, 13:2, 138-157, DOI: 10.1080/15332861.2014.934648
- Zhang, X. (. (2014). Differentiating the Effects of Internet Usage and Wireless Usage on Business-to-Business and Business-to-Consumer E-commerce. Journal of Internet Commer



## **COVID-19: TAHAP KESEDIAAN PENSYARAH MELAKSANAKAN PENGAJARAN DAN PEMBELAJARAN DALAM TALIAN (PDPDT) DI PNS**

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### **ABSTRAK**

*COVID-19 merupakan satu pandemik penyakit koronavirus 2019 yang telah melanda satu dunia yang mengakibatkan jutaan pesakit dan ratusan ribu kematian. Malaysia juga tidak terlepas daripada berdepan dengan pandemik tersebut. Pada awalnya, wabak ini dikesan pada pertengahan Disember 2019 di bandaraya Wuhan, Hubei, China, dan telah diiktiraf sebagai pandemik oleh Pertubuhan Kesihatan Sedunia (WHO) pada 11 Mac 2020. Bagi mengekang penularan jangkitan wabak ini, Malaysia telah mengistiharkan Perintah Kawalan Pergerakan (PKP) yang bermula pada 18 Mac 2020. Sehubungan dengan itu semua institusi pendidikan termasuk Institusi Pendidikan Tinggi Awam (IPTA) terpaksa ditutup. Seiring dengan penguatkuasaan PKP, Jabatan Pengajian Politeknik dan Kolej Komuniti (JPPKK) juga telah mengubah landskap pembelajaran daripada besemuka kepada tidak bersemuka iaitu Pengajaran dan Pembelajaran Dalam Talian (PdPDT). Pihak JPPKK telah mengeluarkan Garis Panduan dan Perancangan Pengajian yang perlu diikuti untuk mengekang pandemik tersebut. Kajian ini dilakukan untuk melihat tahap kesediaan pensyarah Politeknik Nilai dalam melaksanakan proses PdPDT dari tiga dimensi iaitu dimensi pensyarah, dimensi teknologi dan dimensi kursus. Instrumen kajian yang digunakan adalah set borang soal selidik yang mengandungi 24 item berskala Likert. Responden terdiri daripada 44 pensyarah*

*Jabatan Perdagangan PNS. Data yang diperolehi dianalisis menggunakan perisian Statistical Package for Social Sciences (SPSS) Versi 25 untuk melihat min, peratusan dan kekerapan. Dapatan kajian menunjukkan tahap kesediaan pensyarah adalah diperingkat sederhana. Penyelidik mencadangkan agar pihak pengurusan PNS memperbanyakkan bilangan kursus dan seminar yang berkaitan dengan PdPDT serta memperkenalkan pelbagai teknik PdPDT untuk digunakan oleh pensyarah semasa melaksanakan PdPDT.*

**Kata Kunci :** pengajaran dan pembelajaran dalam talian, teknologi, kursus, pensyarah

## Pengenalan

Pandemik COVID-19, atau nama lainnya juga adalah dikenali sebagai pandemik koronavirus. Pandemik penyakit koronavirus 2019 merupakan penyakit yang berterusan secara global yang mana ia adalah berpunca daripada koronavirus sindrom pernafasan akut teruk 2 (SARS-CoV-2). Pada permulaan menularnya wabak ini, bermula pada pertengahan Disember 2019 di bandaraya Wuhan, Hubei, China. Setelah berlakunya penularan wabak ini secara global, Pertubuhan Kesihatan Sedunia (WHO) pada 11 Mac 2020 telah mengiktiraf wabak ini sebagai pandemik. Menurut laporan yang dikeluarkan oleh WHO bermula pada 11 Mac sehingga 18 Julai 2020, lebih daripada 14.1 juta kes COVID 19 telah dilaporkan di lebih daripada 188 negara dan wilayah, mengakibatkan lebih dari 602.000 kematian, lebih daripada 7.89 juta orang telah pulih. Selaras dengan pengisytiharan tersebut, maka pada 16 Mac 2020, Malaysia telah mengistiharkan Perintah Kawalan Pergerakan (PKP) 2020 yang dilaksanakan di seluruh negara berkuatkuasa pada 18 Mac 2020. Bagi mengekang penularan wabak COVID-19 salah satu usaha yang dilakukan ada menutup semua institusi pendidikan termasuk penutupan kesemua institusi pendidikan tinggi awam dan swasta serta institut latihan kemahiran di seluruh negara. Sehubungan dengan pengisytiharan PKP proses pengajaran dan pembelajaran secara bersemuka terpaksa dihentikan. Seiring dengan PKP proses pengajaran dan pembelajaran terpaksa diubah kepada PdPDT.

## Pernyataan Masalah

Pandemik Covid -19 yang melanda dunia telah mengubah corak kehidupan manusia serta merencatkan pertumbuhan ekonomi di Malaysia dengan begitu drastik. Di Malaysia, kesan pandemik sahaja kepada syarikat swasta, turut terkesan adalah dalam bidang pendidikan. Oleh itu, IPT perlu merangka proses pengajaran dan pembelajaran bagi memastikan pelajar IPT masih dapat menimba ilmu pengetahuan walaupun negara dilanda wabak. Dengan itu, kaedah pengajaran dan pembelajaran secara maya perlu dilaksanakan bagi memastikan silibus pengajaran dapat disampaikan dengan sebaik mungkin serta sesi pembelajaran dapat berjalan dengan lancar walaupun negara dilanda wabak pandemik. JPPKK juga telah mengubah lanskap pembelajaran dari pada bersemuka kepada tidak bersemuka iaitu pembelajaran atas talian. Dengan itu pihak JPPKK telah mengeluarkan perancangan pendidikan (Study Plan) bagi semua program yang ditawarkan di Politeknik Malaysia. Pada 30 Jun 2020, satu Garis Panduan Pengurusan Operasi Politeknik dan Kolej Komuniti telah dikeluarkan semasa dan pasca Perintah Kawalan Pergerakan Akibat Pandemik Covid-19. Seajar dengan garis panduan tersebut, Politeknik Nilai, telah menetapkan hanya pelajar semester satu sahaja yang akan melaksanakan pembelajaran secara bersemuka dengan mengikuti peraturan yang seragam atau Standard of Prosedur (SOP) yang dikeluarkan oleh pihak Kementerian Pengajian Tinggi Malaysia (KPTM). Manakala bagi pelajar semester dua, tiga, empat dan lima akan melaksanakan pembelajaran secara dalam talian. Sehubungan dengan itu, kajian ini dijalankan untuk mengkaji tahap kesediaan pensyarah Politeknik Nilai dalam melaksanakan PdPDT.

### **Objektif Kajian**

Objektif kajian ini dilaksanakan untuk:

1. Mengenalpasti tahap kesediaan pensyarah terhadap PdPDT.
2. Mengenalpasti tahap teknologi yang dikuasai oleh pensyarah dalam melaksanakan PdPDT.
3. Mengenalpasti tahap kesesuaian kursus untuk dilaksanakan PdPDT.

### **Persoalan Kajian**

Kajian ini dilaksanakan untuk mengetahui:

1. Sejauhmanakah tahap kesediaan pensyarah terhadap PdPDT?
2. Bagaimanakah tahap teknologi yang dikuasai oleh Pensyarah dalam melaksanakan PdPDT?
3. Apakah tahap kesesuaian kursus untuk dilaksanakan PdPDT?

### **Soroton kajian**

Garis Panduan Pengurusan Operasi Politeknik Dan Kolej Komuniti Semasa Dan Pasca Perintah Kawalan Pergerakan Akibat Pandemik panduan untuk PdPDT untuk mencapai hasil pembelajaran yang ditetapkan. PdPDT juga dikenali sebagai e-pembelajaran yang merupakan proses kaedah pengajaran dan pembelajaran secara maya yang menggunakan teknologi komputer. E-pembelajaran ialah arahan pembelajaran berdasarkan web (Abbey,2000). E-pembelajaran ialah pembelajaran secara rangkaian (Haughey dan Anderson 1998). E-pembelajaran juga didefinikan sebagai pembelajaran secara atas talian. pembelajaran online, pembelajaran berasaskan Internet, pembelajaran berasaskan teknologi, pembelajaran berasaskan komputer, pembelajaran berasaskan web dan pembelajaran maya (Mishra, 2009)

Bagi memastikan PdPDT dapat berjalan dengan lancar memerlukan akses capaian teknologi yang maksimum. teknologi adalah alat yang menyokong proses pembelajaran. PdPDT yang berkesan, terdapat beberapa faktor yang perlu diambil kira seperti pembinaan kawalan persekitaran, kepentingan interaksi secara interaktif, latihan yang efektif dan berkesan, akses capaian teknologi yang maksimum.

Dimensi pensyarah, Pensyarah merupakan faktor yang penting bagi menjayakan PdPDT. Pensyarah perlu mendekati PdPDT secara secara mesra dan bertenaga untuk mencipta persekitaran PdPDT yang positif. Gaya pengajaran pensyarah juga meningkatkan pelajar motivasi untuk melaksanakan PdPDT. Pengaruh rakan sebaya dikalangan pensyaah juga memainkan peranan penting dalam menjayakan PdPDT (Su-Kheng Haw et. al, 2015). Pensyarah perlu mengalakan aktif seperti menyertai aktiviti berkumpul dan gred mereka bergantung kepada penyertaan dan memberi maklum balas segera dan sesuai dengan prestasi (Yusup Hshim, 2012).

Fokus e-pembelajaran telah beralih dari teknologi penyampaian kepada teknologi reka bentuk pembelajaran atau learning design technology. Strategi, kaedah, interaksi guru dengan pelajar dalam kelas atau luar kelas. Sama juga dengan e-pembelajaran atau lebih khusus pembelajaran dalam talian, di mana penekanan diberi pada mod interaksi dan aplikasi teori pembelajaran yang sesuai. Menurut(Rubiah Omar , Jamilah Hj. Ahmad, 2008) PdPDT penyampaian pendidikan atau latihan melalui Internet dengan menggunakan computer. Peranan teknologi dalam

PdP adalah memperkenalkan kaedah-kaedah baharu yang inovatif dalam pembelajaran dan penilaian (Munohsamy, 2014).

Dalam dimensi kursus, fleksibiliti menjadi perhatian utama. Fleksibiliti merangkumi faktor seperti masa, lokasi, kaedah, penyertaan dan kepuasan. Pensyarah perlu mempunyai kawalan yang lebih baik dari segi memilih bahan yang sesuai, membentangkan bahan tersebut secara dalam talian dan memilih untuk penilaian dalam talian. (Su-Kheng Haw et. al, 2015). Melhusih dan Falloon (2010) berpendapat teknologi mobile seperti tablet iPad tidak lagi memprsoalkan masa, bila dan tempat belajar tetapi lebih kepada jalinan hubungan rangkaian yang mantap antara pengguna.

Menurut <https://elearningindustry.com/> terdapat tujuh(7) tips untuk bersedia PdPDT iaitu

Merancang kelas yang akan dilakukan

Pengajar perlu memastikan silibus dan bahan anda disusun dengan jelas sebelum kelas bermula.

Bersedia dan menguasai Teknologi

Mengajar dalam talian memerlukan kemahiran teknikal terutama perkakasan dan perisian yang sesuai. Pengajar juga memerlukan kebolehcapaian internet yang kuat, dan platform terbaik untuk memenuhi PdPDT.

Persekitaran mengajar yang sesuai

Pesekitaran kerja yang sesuai akan mendorong pengajaran yang lebih produktif. Pencahayaan mencukupi dan kerusi ergonomik dapat membantu mewujudkan persekitaran kerja yang ideal.

Menginovasikan dan Merangsang Perbincangan

Pengajar perlu mengalakkan penyertaan, seperti yang anda lakukan di kelas. Terdapat pelbagai cara untuk mendorong penyertaan dari perbincangan hingga membuat kuliah, untuk menetapkan bahan bacaan, hingga memantau kemajuan.

Sentiasa berkomunikasi

Pengajar perlu memastikan kehadiran pelajar dalam talian yang adalah konsisten. Komunikasi sangat penting dalam persekitaran bilik darjah dalam talian. Perkenalkan diri anda dan beri peluang kepada pelajar anda untuk memperkenalkan diri - membantu membawa kemanusiaan dan kehangatan ke dalam kelas anda yang tidak dapat dimiliki oleh kelas dalam talian. Pastikan pelajar anda mengetahui kaedah dan masa terbaik untuk menghubungi anda.

Memotivasikan pelajar anda

Setiap orang belajar secara berbeza dan motivasi memainkan peranan besar dalam proses pembelajaran. Pengajar perlu memotivasi pelajar untuk belajar sesuatu yang baru.

Maklum Balas dalam kelas

Pelajar anda dapat memberi anda maklum balas berharga yang dapat membantu memajukan kelas anda. Maklumbalas ini akan memberitahu anda mengenai positif dan negatif keseluruhan kelas dalam talian anda.

## Metodologi Kajian

Kajian yang dijalankan ini adalah kajian deskriptif yang berbentuk tinjauan dengan menggunakan borang soal selidik sebagai alat untuk mendapatkan maklumat dan menggunakan kaedah kuantitatif dalam menganalisis data kajian. Perisian Statistical Package Social Science (SPSS) versi 25. Data yang dikumpul adalah data berjenis kuantitatif. Menurut Mohd Majid Konting (2000), kajian tinjauan ini sering dijalankan dalam penyelidikan pendidikan. Selain itu juga kajian berbentuk tinjauan ini melibatkan kedua-dua pengumpulan data kuantitatif. Memandangkan ianya merupakan kaedah pengambilan data dalam satu masa tertentu sahaja iaitu menerusi tinjauan situasi suatu masa, ianya dapat menerangkan kaitan lanjutan pola pada satu-satu peringkat masa (Mohamad Najib, 1999).

Dalam kajian ini, populasi kajian terdiri daripada pensyarah Jabatan Perdagangan, Politeknik Nilai seramai 50 orang. Manakala, sampel kajian yang dipilih berdasarkan jadual saiz sample oleh Kerjcie & Morgan (1970) adalah seramai 44 orang iaitu sebanyak 88% daripada jumlah populasi.

### Soal Selidik Kajian

Instrumen kajian yang akan digunakan untuk mengumpul data adalah dengan menggunakan borang soal selidik dengan menggunakan skala Likert lima mata (1=sangat tidak setuju, 2=tidak setuju, 3=kurang setuju, 4=setuju, 5=sangat setuju) Borang soal selidik ini dibahagikan kepada dua bahagian iaitu Bahagian A dan B. Bahagian A mengandungi soalan-soalan yang lebih menjurus kepada demografi. Bahagian B terdiri soal selidik yang mengukur 3 dimensi iaitu pensyarah, teknologi dan kursus. Bahagian B mempunyai 24 item yang dibahagikan kepada 3 dimensi iaitu dimensi pensyarah, dimensi teknologi dan dimensi kursus seperti Jadual 1. 3 dimensi tersebut diadaptasi dari kajian Ann Su-Kheng Haw, Su-Cheng Haw, Chee-Onn Wong dan Yan-Peng Lim (2015) dalam kajian *LearnCube: A Conceptual Framework for E-Learning Implementation in Secondary School*.

Jadual 1.3 : Jumlah Item soalan mengikut dimensi

Dimesi	Jumlah Item
Pensyarah	6
Teknologi	12
Kursus	6

### Sampel Kajian

Populasi bagi kajian ini adalah pensyarah Jabatan Perdagangan 44 orang yang akan melaksanakan PdPDT.

### Kajian Rintis

Menurut Konting (2000), kajian rintis perlu dijalankan untuk menilai kebolehpercayaan soal selidik yang digunakan dalam kajian sebenar kerana memberi darjah ketekalan dan ketepatan instrumen pengukuran. Kebolehpercayaan soal selidik dianalisis dengan menggunakan perisian Statistical Package for Social Sciences (SPSS) Versi 17. Kajian rintis telah dilakukan terhadap 15 pensyarah daripada pelbagai jabatan lain untuk tujuan kebolehpercayaan dan nilai kebolehpercayaan keseluruhan item Cronbach Alpha adalah  $\alpha=0.915$  berdasarkan Jadual 1. Ghaffar (1999) menyatakan kebolehpercayaan soal selidik yang tinggi adalah sekiranya nilai Cronbach Alpha melebihi 0.80. Oleh yang demikian, soal selidik berkenaan didapati sesuai digunakan dalam kajian.

Jadual 1 : Kebolehpercayaan

<i>Cronbach's Alpha</i>	<i>N of Items</i>
.915	24

### Analisis Data

Kajian ini berbentuk kajian deskriptif dan melibatkan seramai 44 pensyarah Politeknik Nilai, Negeri sembilan. Soal selidik terbahagi kepada 2 bahagian. Bahagian A mengumpul maklumat responden dan Bahagian B mengumpul maklumat tentang dimensi pensyarah, teknologi dan kesesuaian kursus bagi melaksanakan PdPDT semasa pandemik COVID 19. Dimensi pensyarah, teknologi dan kesesuaian kursus diinterpretasikan berdasarkan skor yang dikodkan semula kepada 3 tahap penilaian iaitu tahap rendah, sederhana dan tinggi. Interpretasi min berkenaan ditunjukkan pada jadual 2 yang diadaptasi daripada Mohd Ridhuan, (2007).

Jadual 2: Penafsiran Skor Min

Julat Skor Min	Aras Persetujuan	Penafsiran Min
1.00 – 2.40	Tidak Bersetuju	Rendah
2.41 – 3.80	Sederhana Setuju	Sederhana
3.81 – 5.00	Setuju	Tinggi

*Diadaptasi daripada Mohd Ridhuan (2007)*

### Dapatan kajian

Responden kajian adalah terdiri daripada seramai 44 pensyarah daripada Jabatan Perdagangan .

#### Persoalan 1: Sejauhmanakah Tahap Kesiediaan Pensyarah terhadap Pengajaran dan Pembelajaran Dalam Talian?

Analisis deskriptif bahagian ini menghuraikan dapatan kajian tahap Kesiediaan Pensyarah terhadap Pengajaran dan Pembelajaran Dalam Talian. Dapatan kajian adalah seperti jadual 3.

Jadual 3 : Taburan min mengenai Dimensi Pensyarah dalam melaksanakan Pengajaran dan Pembelajaran Dalam Talian

Bil	Item	Bilangan Peratusan (%)						Min
			STS	TS	KS	S	SS	
1	Saya bersedia untuk melaksanakan Pengajaran dan Pembelajaran dalam talian (PdPDT)	<b>F</b>	0	2	13	17	12	3.88
		<b>%</b>	0	4.5	29.5	38.6	27.3	
2	Saya mampu mewujudkan suasana pembelajaran PdPDT yang lebih seronok.	<b>F</b>	0	5	17	15	7	3.54
		<b>%</b>	0	11.4	38.6	34.1	15.9	
3	Saya bersedia untuk menggunakan	<b>F</b>	0	3	13	18	10	3.79

	pelbagai jenis aplikasi e pembelajaran dalam PdPDT.	%	0	6.8	29.5	40.9	22.7	
4	Saya dapat meningkatkan motivasi pelajar untuk melibatkan diri semasa PdPDT.	F	0	4	19	13	8	3.56
		%	0	9.1	43.2	29.5	18.2	
5	Saya dapat mempengaruhi rakan sekerja untuk turut serta dalam melaksanakan PdPDT	F	0	5	14	16	9	3.65
		%	0	11.4	31.8	36.4	20.5	
6	Saya mengikuti kursus dan latihan bagi meningkatkan kemahiran dalam mengendalikan PdPDT.	F	0	0	6	20	18	4.27
		%	0	0	13.6	45.5	10.9	
Purata Min								3.78

Dapatan kajian bagi dimesi pensyarah menunjukkan min keseluruhan yang dicatatkan dalam item ini adalah 3.7879. Ini menunjukkan tahap pengetahuan adalah ditahap tinggi. Ini menunjukkan bahawa pensyarah PNS adalah ditahap tinggi bagi persediaan PdPDT. Berdasarkan Jadual 3, analisis menunjukkan min tertinggi diperoleh daripada item soalan keenam iaitu sebanyak 4.2727. Seramai 6 pensyarah atau 13.6% kurang setuju, 20 pensyarah atau 45.5% setuju dan 18 pensyarah atau 10.9% sangat setuju dengan item yang dikemukakan. Manakala item yang mencatatkan min yang terendah adalah item soalan kedua iaitu sebanyak 3.5455. Seramai 5 pensyarah atau 11.4% tidak setuju, 17 pensyarah atau 38.6% kurang setuju, 15 pensyarah atau 34.1% setuju dan 7 pensyarah atau 15.9% sangat setuju.

## Persoalan 2: Bagaimanakah Tahap Teknologi yang dikuasai oleh Pensyarah dalam melaksanakan pengajaran dan pembelajaran?

Analisis deskriptif bahagian ini menghuraikan dapatan kajian Tahap Teknologi yang dikuasai oleh Pensyarah dalam melaksanakan pengajaran dan pembelajaran. Dapatan kajian adalah seperti jadual 4.

**Jadual 4 : Taburan min mengenai Tahap Teknologi yang dikuasai oleh Pensyarah dalam melaksanakan PdPDT**

Bil	Item	Bilangan Peratusan (%)						Min
			STS	TS	KS	S	SS	
1	Saya mempunyai kemudahan alat bantu mengajar dalam melaksanakan PdPDT.	F	0	1	10	25	8	3.90
		%	0	2.3	22.7	56.8	18.2	
2	Saya mempunyai capaian internet yang baik dalam melaksanakan PdPDT.	F	1	4	14	13	12	3.70
		%	2.3	9.1	31.8	29.5	27.3	
3	Saya mahir menggunakan CIDOS untuk mengendalikan PdPDT.	F	3	6	16	15	4	3.25
		%	6.8	13.6	36.4	34.1	9.1	
4	Saya mahir menggunakan GOOGLE	F	0	9	14	13	8	3.45



	CLASSROOM untuk mengendalikan PdPDT.	%	0	20.5	31.8	29.5	18.2	
5	Saya mahir menggunakan aplikasi GOOGLE MEET dalam melaksanakan PdPDT	F	3	6	17	15	3	3.20
		%	6.8	13.6	38.6	34.1	6.8	
6	Saya mahir menggunakan aplikasi MICROOSFT TEAM dalam melaksanakan PdPDT	F	3	8	23	9	1	2.93
		%	6.8	18.2	52.3	20.5	2.3	
7	Saya mahir menggunakan aplikasi WEBEX melaksanakan dalam melaksanakan PdPDT.	F	3	3	14	21	3	3.40
		%	6.8	6.8	31.8	47.7	6.8	
8	Saya mahir menggunakan CIDOS untuk menyediakan penilaian berterusan seperti test dan kuiz.	F	2	7	15	13	7	3.36
		%	4.5	15.9	34.1	29.5	15.9	
9	Saya mahir menggunakan GOOGLE FORM untuk menyediakan penilaian berterusan seperti test dan kuiz.	F	1	2	8	20	13	3.95
		%	2.3	4.5	18.2	45.5	29.5	
10	Saya mahir menggunakan QUIZEZ untuk menyediakan penilaian berterusan seperti test dan kuiz.	F	5	14	13	8	4	2.81
		%	11.4	31.8	29.5	18.2	9.1	
11	Saya mahir menggunakan aplikasi telefon mudah alih WHATSAPP dalam melaksanakan PdPDT.	F	0	1	5	18	20	4.29
		%	0	2.3	11.4	40.9	45.5	
12	Saya mahir menggunakan aplikasi telefon mudah alih TELEGRAM dalam melaksanakan PdPDT.	F	3	6	11	11	13	3.56
		%	6.8	13.6	25.0	25.0	29.5	
Purata Min								3.49

Dapatan kajian mengenai Tahap Teknologi yang dikuasai oleh Pensyarah dalam melaksanakan PdPDT menunjukkan min keseluruhan yang dicatatkan dalam item ini adalah 3.4886. Ini menunjukkan tahap teknologi adalah ditahap sederhana. Ini menunjukkan bahawa pensyarah PNS masih ditahap sederhana menguasai tahap teknologi bagi melaksanakan PdPDT. Berdasarkan Jadual 4, analisis menunjukkan min tertinggi diperoleh daripada item soalan kesebelas iaitu sebanyak 4.29. Seorang pensyarah atau 2.3% tidak setuju, 5 pensyarah atau 11.4% kurang setuju, 18 pensyarah atau 40.9% setuju dan 20 pensyarah atau 45.5% sangat setuju dengan item yang dikemukakan. Pensyarah mahir menggunakan aplikasi telefon mudah alih WHATSAPP dalam melaksanakan PdPDT.

Manakala item yang mencatatkan min yang terendah adalah item soalan kesepuluh iaitu sebanyak 2.81. Seramai 5 pensyarah atau 11.4% sangat tidak setuju, 14 pensyarah atau 31.8% tidak setuju, 13 pensyarah atau 29.5% kurang setuju, 8 pensyarah atau 18.2 % setuju dan 4 pensyarah atau 9.1%

sangat setuju. Pensyarah tidak mahir menggunakan QUIZZ untuk menyediakan penilaian berterusan seperti test dan kuiz.

### Persoalan 3: Apakah Tahap Kesesuaian kursus untuk dilaksanakan PdPDT?

Analisis deskriptif bahagian ini menghuraikan tahap Tahap Kesesuaian kursus untuk dilaksanakan pengajaran dan pembelajaran dalam talian. Dapatan kajian adalah seperti jadual 5.

**Jadual 5 : Taburan min mengenai Tahap Kesesuaian kursus untuk dilaksanakan PdPDT**

Bil	Item	Bilangan Peratusan (%)						Min
			STS	TS	KS	S	SS	
1	Kursus yang diajar sesuai untuk dilaksanakan secara dalam talian.	F	1	8	13	13	9	3.48
		%	2.3	18.2	29.5	29.5	20.5	
2	Penilaian berterusan yang terdapat di dalam kurikulum sesuai dilaksanakan dalam talian.	F	2	8	11	15	8	3.43
		%	4.5	18.2	25.0	34.1	18.2	
3	Pemilihan penggunaan Bahan Bantu Mengajar (BBM) yang bersesuaian bagi kursus	F	1	4	17	15	7	3.52
		%	2.3	9.1	38.6	34.1	15.9	
4	Penerangan topik dalam kurikulum kursus dapat diterangkan dengan jelas secara dalam talian.	F	1	2	22	15	4	3.43
		%	2.3	4.5	50	34.1	9.1	
5	Peruntukan masa yang ditetapkan mencukupi untuk mengajar sesuatu kursus secara dalam talian.	F	2	7	16	13	6	3.31
		%	4.5	15.9	36.4	29.5	13.6	
6	Kursus yang di ajar lebih fleksibel semasa dilaksanakan proses PdPDT.	F	2	5	7	21	9	3.68
		%	4.5	11.4	15.9	47.7	20.5	
Purata Min								3.48

Dapatan kajian bagi kesesuaian kursus untuk dilaksanakan PdPDT dengan lebih fleksibel menunjukkan min keseluruhan yang dicatatkan dalam item ini adalah 3.47. Ini menunjukkan tahap kesesuaian kursus yang diajar adalah ditahap sederhana. Ini menunjukkan bahawa tahap kesesuaian kursus yang diajar oleh pensyarah PNS masih di tahap sederhana dalam melaksanakan Pengajaran dan Pembelajaran Dalam Talian sempena Pandemik Covid19. Berdasarkan Jadual 5, analisis menunjukkan min tertinggi diperoleh daripada item soalan keenam iaitu sebanyak 3.68. Seramai 2 pensyarah atau 4.5% sangat tidak setuju, 5 pensyarah atau 11.4% tidak setuju, 7 pensyarah atau 15.9% kurang setuju, 21 pensyarah atau 47.7% setuju dan 9 pensyarah atau 20.5% sangat setuju dengan item yang dikemukakan. Manakala item yang mencatatkan min yang terendah adalah item soalan kelima iaitu sebanyak 3.31. Seramai 2 pensyarah atau 4.5% sangat tidak setuju, 7 pensyarah atau 15.9% tidak setuju, 16 pensyarah atau 36.4% kurang setuju, 13 pensyarah atau 29.5 % setuju dan 6 pensyarah atau 13.6 % sangat setuju.

## 5.0 Perbincangan

Dapatan kajian yang diperolehi secara keseluruhan adalah menunjukkan nilai purata min adalah sederhana iaitu 3.58 seperti yang ditunjukkan dalam Jadual 6.. Persoalan kajian tentang Tahap Kesediaan Pensyarah dalam melaksanakan PdPDT adalah sederhana iaitu 3.78. Manakala, nilai purata min dalam persoalan kajian tahap kesediaan dimensi teknologi yang dikuasai oleh Pensyarah dalam melaksanakan PdPDT adalah sederhana iaitu 3.48, diikuti nilai purata min bagi persoalan tentang tahap kesesuaian kursus untuk dilaksanakan PdPDT adalah 3.47 iaitu pada juga pada tahap sederhana.

Jadual 6 : Min Keseluruhan

Aspek	Min	Interpretasi min
Dimesi Pensyarah	3.78	Sederhana
Dimensi Teknologi	3.48	Sederhana
Dimensi Kursus	3.47	Sederhana
<b>Min Keseluruhan</b>	<b>3.58</b>	<b>Sederhana</b>

Hasil dapatan persoalan kajian pertama, didapati kebanyakan pensyarah mempunyai tahap kesediaan yang sederhana dalam melaksanakan PdPDT sempena pandemik Covid19. Berdasarkan dimensi pensyarah, pensyarah masih lagi mempersiapkan diri untuk melaksanakan PdPDT. Ini adalah kerana pensyarah masih belum pernah melaksanakan PdPDT secara 100%. Pensyarah perlu menggunakan sepenuhnya persekitaran dalam talian untuk mengembangkan maklumat dalam talian, komunikasi dan kemahiran interpersonal yang berkesan, serta kemahiran kerjasama dan membina pasukan. Di samping itu, kursus harus menghendaki pelajar menggunakan kemahiran berfikir inventif –kreativiti, penyelesaian masalah, dan pemikiran kritis. Guru harus berperanan sebagai fasilitator dan jurulatih pendidikan, merancang aktiviti yang mencabar dan memberikan bimbingan yang berkesan dan maklum balas yang berkualiti. (National Education Association, 2002). Sejajar dengan kajian yang telah dijalankan oleh Ahmad et al. (2010) di mana penggunaan pembelajaran secara elektronik di kalangan pensyarah dalam pengajaran masih rendah dan pelajar juga menunjukkan tahap yang sederhana.

Bagi persoalan kajian kedua, Tahap Teknologi yang dikuasai oleh Pensyarah dalam melaksanakan PdPDR adalah tahap sederhana. Oleh itu para pensyarah perlu diberi pendedahan yang mengenai teknologi PdPDT dengan lebih mantap. Rohaida dan Zamri (2015) juga menyatakan ada guru susah untuk menerima perubahan dan mempelajari kemahiran penyampaian pengetahuan dalam bentuk baharu kerana mereka sudah biasa dengan kaedah pengajaran yang sedia ada. Guru yang mengajar e-pembelajaran perlu dilatih dalam teknologi maklumat dan Internet untuk berkumpul bersama pelajar mereka di bilik darjah maya supaya guru berupaya untuk mentadbir semua aplikasi PdPDT (Dhavidan Sivalingam, 2018). Penggunaan teknologi baru sebagai alat dalam pelaksanaan e-pembelajaran adalah untuk menyediakan keupayaan kepada ahli akademik menjadi fasilitator pembelajaran yang efektif (Rubiah Omar, Jamilah Hj. Ahmad, 2008). Latihan perlu diberikan kepada guru untuk meningkatkan kemahiran dalam mengendalikan pembelajaran berbantuan komputer. (Ahmad et.al, (2007)

Walaupun pensyarah mempunyai tahap kesediaan yang tinggi, tahap teknologi masih diperingkat sederhana. Teknologi sains adalah instrumen tetapi manusia adalah pencipta dan penentu kepada keberkesanan instrumen ini. Maka dalam mendepani cabaran yang telah dan bakal muncul kelak amat memerlukan kebijaksanaan serta hikmah merentasi aspek minda dan jiwa (Mohamad Abdullah, 2018).

PdPDT boleh dilakukan antara dan antara pelajar dan guru yang boleh tidak bergerak atau bergerak (National Education Association, 2002).

Bagi persoalan kajian ketiga, tahap kesesuaian kursus untuk dilaksanakan PdPDT adalah sederhana. Pensyarah berpendapat kursus yang diajar mungkin kurang bersesuaian untuk dilaksanakan dalam talian. Pembelajaran maya akan menyebabkan pelajar lebih cenderung melakukan pembelajaran sendiri dan menggalakkan pelajar untuk melakukan penilaian sendiri dari semasa ke semasa terdapat pemahaman kandungan kursus. Penilaian ini akan membantu pelajar dan pensyarah untuk memastikan hasil pembelajaran (learning outcomes) dapat dicapai di akhir sesi pembelajaran. (Mazlina Abdul Majid, 2020). Keberkesanan sesuatu kursus jika dilaksanakan dalam talian bergantung pada kandungan kursus yang dirancang dengan baik, interaksi bermotivasi antara pengajar dan pelajar. (Anna Sun, Xiufang Chen, 2016)

## Kesimpulan

Hasil dapatan daripada kajian ini dapat merumuskan tahap kesediaan pensyarah melaksanakan Pengajaran dan Pembelajaran dalam talian (PdPDT) di Politeknik Nilai adalah sederhana. Pensyarah serta pendidik perlu mengikuti perkembangan dalam dunia pendidikan. Jika dahulu pendidikan hanya tertumpu kepada secara di dalam kelas, tetapi dengan pandemik COVID-19 telah mengubah corak pengajaran kepada dalam talian. Pensyarah perlu mampu untuk memotivasikan dan menggalakkan penglibatan pelajar dalam PdPDT. Disamping itu juga, pengaruh rakan sebaya dapat memberi galakan kepada pensyarah dalam melaksanakan PdPDT.

Teknologi akan menyokong pensyarah perlu mempunyai alat bantu mengajar yang menyokong PdPDT serta ilmu pengetahuan dalam aplikasi pengajaran online seperti Google Meet, Microsoft Team, Kahoot dan Quizez. Selain daripada itu pensyarah perlu menyampaikan kursus yang diberikan secara online dan merancang kandungan kursus mengikut kurikulum yang telah dibangunkan. Penyampaian kursus boleh dilakukan dengan lebih fleksibel mengikut masa, lokasi dan bahan pengajaran. Kesimpulannya, pensyarah PNS perlu melengkapi diri dengan ilmu pengetahuan dalam teknologi dan pedagogi untuk melaksanakan PdPDT.

## Rujukan

Abbey, B. (Ed.). (2000). *Instructional and cognitive Impacts of web-based education*. London: Idea Group Publishing.

Ahmad Fkrudin Mohamed Yusoff, Mohd Isa Hamzah, Wan Norina Wan Hamat. *Pembangunan Perisian Pengajaran Dan Pembelajaran Multimedia Interaktif Pengurusan Jenazah Politeknik Malaysia*. Journal of Islamic and Arabic Education 5(2), 2014 25-42 ISSN: 1985-6326

Ahmad Esa, Baharom. M, Mukhtar dan Siti Nasrah (2007) Peranan multimedia di dalam pembelajaran kanak-kanak. In: Seminar Kebangsaan Jawatankuasa Penyelarasan Pendidikan Guru (JPPG 2007), 18-20 November 2007, Hotel Royal Adelphi, Seremban. Diambil dari <http://eprints.uthm.edu.my/2705/>

Anna Sun & Xiufang Chen (2016). Online Education and Its Effective Practice: A Research Review, Journal of Information Technology Education: Research, 15, 157-190. Retrieved from <http://www.informingscience.org/Publications/3502>

Ann Fruhling dan Sang Lee (2005) .*Assessing the Reliability, Validity and Adaptability of PSSUQ*. In Proceedings of the Eleventh Americas Conference on Information Systems, Omaha, NE, USA August 11th-14th 2005

Clark, Donald. (2006) *Motivation in e-learning*. Disponível em: Março, 2012.

*Five characteristics of high quality information*. Retrieved 14 September 2019. from <http://www.computerbusinessresearch.com/Home/database/five-characteristics-of-high-quality-information>

Guru perlu bersedia tempuh cabaran revolusi industry. Retrieved 14 Sept 2019 . from <https://www2.bharian.com.my/berita/pendidikan/2019/05/563340/guru-perlu-bersedia-tempuh-cabaran-revolusi-industri>

Haughey, M. dan Anderson, T. (1998). *Networking Learning: The Pedagogy of the Internet*. Montreal: Cheneliere, McGraw-Hill

Jill Phillips (2016), 7 Tips On How To Prepare For Teaching Online, <https://elearningindustry.com/7-tips-prepare-for-teaching-online>

Katuk, N. (2013). *Progressive assessment of student engagement with web-based guided learning*. *Interactive Technology and Smart Education*, 10(2), 116. doi:10.1108/ITSE-11-2012-0023

National Education Association, Guide to Teaching Online Courses, <http://www.nea.org/assets/docs/onlineteachguide.pdf>

**Mazlina Abdul Majid**. Adaptasi Pembelajaran Secara Maya Dalam Kebiasaan Baharu Bidang Pendidikan <http://news.ump.edu.my/experts/adaptasi-pembelajaran-secara-maya-dalam-kebiasaan-baharu-bidang-pendidikan>

Mishra, P., & Koehler, M. (2007). Technological pedagogical content knowledge (TPCK): Confronting the wicked problems of teaching with technology. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2007* (pp. 2214-2226). Chesapeake, VA: Association for the Advancement of Computing in Education.

Munohsamy .T (2014), *Integrasi Teknologi Maklumat dan Komunikasi Dalam Pendidikan*, Journal IPA Bil.23, 2014

Mohd Ridhuan Mohd Jamil (2007). *Rekabentuk Kerangka Piawaian Transnasional Bagi program Tenaga Pengajar TVET*. Batu Pahat: Universiti Tun Hussein Onn Malaysia.

Mok Soon Sang (1996). Pendidikan Di Malaysia, Kuala Lumpur. Kumpulan Budiman.

Su-Kheng Haw et. al (2015), *LearnCube: A Conceptual Framework for E-Learning Implementation in Secondary School* . Indian Journal of Science and Technology Vol 8(32), November 2015

Rohaida Yusop & Zamri Mahamod. (2015). Keberkesanan Peta Pemikiran (I-Think) Dalam Meningkatkan Pencapaian Penulisan Bahasa Melayu Pelajar Tahun 6. Jurnal Pendidikan Bahasa Melayu. 5(2). Nov 2015: 31-37.

Piovesan S.D, Passerine L.M & Pereira A.S (2012). Virtual reality as tool in the education, IADIS International conference on Cognition and Exploratory Learning in Digital Age (CELDA).

Reyna, J. (2009). *Developing quality e-learning sites: A designer approach*. In *ASciliate 2009* (pp. 837–838). Retrieved from <http://www.ascilite.org/conferences/auckland09/procs/reyna-1-poster.pdf>

Sithole, K., B. D., I., & Onyari, E. K. (2012). *Influence of Generations' Traits on teaching and Learning in an Open Distant Learning (ODL) Environment*, 1–9.

Mohamad Najib Abdul Ghafar (1999). *Penyelidikan Pendidikan*. Skudai: Penerbitan Universiti Teknologi Malaysia

Yusup Hshim(2012), *Penggunaan e-Pembelajaran dalam pengajaran dan pembelajaran yang berkesan*, Konvensyen Kebangsaan Pendidikan Guru (KKPG) 2012

## **THE NEW THEORY OF LOCAL COMMERCIAL BANK AND BANK LENDING BEHAVIOUR IN MALAYSIA**

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### **ABSTRACT**

*This research study identifies the determinants of bank lending behavior for the local commercial banks in Malaysia relatively focus on non-performing loan, gross domestic product, bank size, loan*



*provision, capital adequacy ratios and inflation. Motivated by the fact that most of the selected commercial banks have a volatile movement in their loan growth every year, this research will analyze the determinants using a sample of local commercial banks in Malaysia. The analytical method of Pooled ordinary least square (POLS) method through STATA 10.1 software had been used in assisting the result development and generation. Employing a number of econometric estimation approaches for getting a good result, it is found that bank lending behavior is significantly depending on non-performing loan, bank's capital adequacy ratio, size of the bank and macroeconomic factors which is gross domestic product. Upon that, the recommendations and suggestions for the future researcher to conduct further study will be more intriguing.*

**Keywords:** Bank Lending Behavior, Loan Growth, Commercial Banks, Non-Performing Loan, Gross Domestic Product.

## Introduction

In developing countries, institutional constraints hamper financial intermediation and public policy effectiveness (Beck, Levine and Loayza, 2000). Monetary policy transmission, for instance, is hindered by weakness in the legal environment, underdeveloped financial markets and concentrated banking system (Mishra, Montiel and Spilimbergo, 2012). The banking system plays an important role in financing economic growth. However, recession might be appeared because of the banking crisis could arise in the whole economy. The consequence of the global financial crisis in 2008 is a clear proof, highlighting the importance of maintaining a safe and sound banking system (Ho, Huang, Lin and Yen, 2016). The major concern of this context is the over lending that happened in the economy. This causes overextended credit supply exceeding the borrower's ability to repay and greatly affects performance of banks. In order to expand their activities, bank absolutely have they're on way to achieve their aimed at profitability. There is an opinion that stated the bank institution should have a good customer relation. It is shown that the bank is in a corner solution with respect to its good customers, and other customers often have an incentive to get to the corner (Pekka Ahtiala, 2005).

Therefore, there is no exception in the bank's customer relation, and they need to become fair and square to all of their customers. A rationed customer with high and enough probability function can receive a larger amount of loan by asking for less. For this reason, the banking system especially in the core of borrowing and lending needs to be framed that bank loans can help businesses maintain and expand operations, generate profits and thereby promote the economy to grow. As a result, banks will have conditions to continue their activities stably, effectively, and minimize risks. More importantly, it is crucial for bank management in maintaining the soundness of a banking system by understanding the bank lending behaviour. Hence, the bank lending behaviour policy should be vigorously followed for all the bank management in every country able to maximize profit and minimized risks and thus serve the people in the country's well. Bank lending behaviour or can be thought as the decision that the banks had on their activities are based on three observed phenomena which are banks consider in their lending decisions when banks earn substantial profits from off-balance sheet activities and services. Secondly, the critical point in the customer relation is the loan decision where the probability of the customer staying with the bank is a function of the loan extended each time one is applied for. Besides that, what is at stake in the loan decision is the expected value of the entire customer relation, which is the probability times the present value of expected future profits. The maximiser of the expected present value is the bank itself, while making decisions on individual loan applications. It is shown that the bank is in a corner solution with respect to its good customers, and other customers often have an incentive to get to a corner.



## Literature Review

### *Bank Lending Growth*

Bank lending growth is an important measure of the behaviour of bank while giving lending because bank lending behaviour is monitored by the country's financial and banking supervisory authority. Some of the researcher study on bank lending behaviour and use bank lending growth as the dependent variable. Those researchers are Vo (2018), Kim and Sohn (2017) and Dang (2019). The study is not only in Malaysia but also in other country such as Vietnam, United State, Nigeria, Middle East country and also in Asian Countries. In addition, the study of bank lending behaviour is limited. There is various factor that can influence the bank lending growth in the banking institution such as growth of bank loan, non-performing loan, gross domestic product growth, bank size, capital asset ratio, loan provision and inflation. Each of the researcher is different between them. It is stated that bank lending behaviour is monitored by the country's financial and banking supervisory authority, because of that, according to Vo (2018), found that indicator also reflects the financial strength and soundness of the bank since local authority determines the lending growth rate relying on the evaluation of commercial bank soundness. Interestingly, in the study of Kosak, Li, Loncarski and Marinc (2015), the relationship on high tier 1 ratios of competing bank had during the global financial crisis lead the banks to cut their lending activities more. This indicates that by having a high quality of capital encourages the competitive position of a bank in a financial crisis. This author confirms in the findings of journal Berger and Bouwman (2013) from U.S banking sector and extends them to the global setting. Berger and Bouwman (2013) show that probability and market share of banks can survive with higher capital that the bank had. The effect always occurs for small banks and during banking crises for medium and large banks. The author stated their findings that shows that small banks will lend more if they had high levels of bank capital, whereas large banks lent more in the global financial crisis (but less during the normal times) if their competing banks had low levels of bank capital.

Hence, in a crisis, small banks getting helps with the bank capital while large banks gain a competitive advantage against weakly capitalized competitors. Moreover, in the paper of Behr, Norden and Noth (2013) that investigates whether and how financial constraints of private firms depend on bank lending behaviour. The author focuses on private firms, especially small and medium-sized enterprises (SMEs) because they are subject to stronger informational asymmetries, more likely to be affected by financial and legal constraints to investments, and more bank-dependent than public firms. At the same time, SMEs are of key importance by many countries for their economic activity, employment and innovation. Apart from that, banks are the main providers of credit to SMEs. Bank lending has a positive impact on aggregate output and economic activity, it contributes to financial deepening of an economy (King and Levine, 1993). Kim and Sohn (2017) reveals the result of their study that loan growth will be positive only when it use as the dependent variable for medium banks. In addition, the result would be positive and statistically significant for small banks as they are easy to be conducted by the financial and banking supervisory authority.

### *Non-Performing Loan (NPL)*

Non-performing loan (NPL) is a loan measured to its default or at the end of the time to be default. Based on Chaiporn (2016), the researcher has found that credit growth and non-performing loan have a positive relationship to each other by using the panel ordinary least square (OLS) regressions and dynamic GMM regressions. It indicates that even though the fact that non-performing loan has a

negative relationship with its dependent variable, which is credit growth, the result of the data turns out to be positive affecting by another factors. From the impact of the global financial crisis of 2007, it has showed that credit growth gives the negative correlate with non-performing loans for commercial banks in Japan. Another similar finding that has been found from the journal of banking and finance which studied by Shehzad et.al. (2010), the dependent variable which is impaired loans is showing a positive relationship and significant result to its independent loan growth. This is because that the researcher implies that as the growth of bank loan is getting increase, the non-performing loan will also be rises and parallel to the condition of the Japan country that have a high level of people consume loan and not paying the loan. Apart from that, from the journal of Amin, Iman and Malik (2019) under the title of Regulations, Governance and Resolution of Non-Performing Loan: Evidence from an emerging economy has found that in the country of Bangladeshi, bad loans have shown a negative relationship towards the loan growth. Based on the author's findings state that annual loan growth rate is volatile as for statistic shows that the loan growth is ranging from 34.4% (in 2001) to 12.71% (in 2012). So, the loan growth are the high standards of any developed banking market, that making it not exceptionally high for emerging market.

### *Bank Size (S)*

Bank size is calculated as logarithm of the total assets at the end of the year. It is important to each bank or other institutions to calculate their size and knowing their level of performance to enable them making transaction with other firm or bank institutions. It is also enable other institution or parties to make a connection with any bank that have good level of performance. Vo (2018) analyse the determinants of bank lending rate using a sample of Vietnamese banks used bank size as the independent variable in their study. The study done by using 37 Vietnamese commercial banks for the period between years 2006 to 2015. The result shows a positive relationship and significant with bank lending growth. This means that when the size of bank is increases, the behaviour of bank giving loan also will increase. Like Nguyen, Linh and Sila (2019) found the positive relationship between bank size and bank lending growth. The researcher examines whether bank culture influences a specific risk-taking process which is bank lending decisions. The researcher found that compete dominant banks exhibit higher loan growth in normal times and incur greater loan losses in times of distress. Meanwhile, in the study of Cubillas et.al. (2018) found that by applying the random effects panel data approach, the coefficient of bank size is positive and give significant result, discovering that the larger the bank is, the greater market power it has. However, the different result obtains by Ismail, Azlan, Husin, Ishak and Hashim (2017), they found the negative significant relationship between bank size and non-performing loan. The researcher examines the impacts of bank efficiencies towards Non-Performing Loan (NPL) of commercial banks in Malaysia. According to the "too big to fail" theory is study by Kim et.al (2017), large banks have incentives to take more risk amid high expectations of government bailout to prevent systemic risk, thereby enabling the supplying of more credit. However, large banks can diversify their portfolio by investing in various types of securities and involving themselves in various activities, whereas small banks tend to pursue traditional lending activities. The researcher examines the effect of bank capital on lending differs depending upon the level of bank liquidity.

### *Capital Adequacy Ratio (CAR)*

Capital adequacy ratio is referring to capital adequacy variable, measured by the common capital asset ratio at the end of year. From the study of Vo (2018), the researcher has found that banks with lower capital asset ratio (CAR ratio) are associated with higher lending growth. However, at the end of the Fixed effect method shows that the capital asset ratio is less significant to the bank lending growth. In the journal of Shehzad et.al. (2010) through the random effects model, banks that has high loan

growth potential will have a higher capital adequacy ratio. Based on the journal it has the 1% significant level where it shows that the variable is positively significantly to the growth of bank loan. Furthermore, according to Kosak et.al. (2015) found the result that capital asset ratio significantly affects the bank lending behaviour. The findings are confirmed by referring to Brei, Gambacorta and Peter (2013) who show that bank capital support lending at the critical crisis of the bank. Therefore, the researcher indicates that capital asset ratio was important for bank lending behaviour during the global financial crisis.

### *Loan Provision*

Loan provision or bank risk is a proxy for bank risk, which is measured by the provision for credit risk at the end of year. According to Cubillas et.al (2018) indicates that the level of bank risk with it dependent variable which is the power of bank market that also include the power of bank giving a lending resulting to positive and significant. It points out that the lower the level of bank risk, the higher the bank market power or the bank activities. This result, while compared to the theory of risk or return trade off it is contra. As can be seen, the theory of risk or return trade off indicates that the higher the risk, the higher return of the bank and it can be seen that even though the level of bank risk is lower, it is not indicate that the bank cannot get the higher return based on their lending activities. Besides, a strong link between capital requirement and credit risk and aggregate bank lending was found in the previous studies (Diamond and Rajan, 2000; Thakor, 1996; Zelenyuk, Faff and Phatan, 2017) in the study of Vo (2018). It is also stated by Vo (2018) assert that banks with higher capital ratios sustain bank lending better than other banks during financial crisis while Ivashina and Scharfstein (2010) state that banks with better access to liquid funding cut their lending less. The agreement by the researcher, Kopecky and Vanhooose (2006) found that lending activities declines, when capital requirements suddenly constraint the banking system. From the journal of Hess, Grimes and Holmes (2009) and Foos, Norden and Weber (2010) in the study of Soedarmono, Sitorus and Tarazi (2017) did the examination of loan losses found that higher abnormal loan growth is associated with higher loan loss provision. Thus, loan growth and loan provision have a positive relationship to each other.

### *Gross Domestic Product*

Gross domestic product (GDP) is a measure of macroeconomic environment and it is being use as the economic growth indicator in every country. Based on Jemenez, Ongena, Peydro and Saurina (2012), found that the effect of GDP seems noticeably with respect to the method that use by the researcher which is GMM. Besides, it also implies that an enhancement of the economic conditions would positively affect credit growth. The researcher did the study on the quality of bank capital affects bank lending and financing in Islamic versus conventional banks by using the data from 123 banks in Middle Eastern and Asian countries. According to (Kim and Sohn, 2017), as the coefficients of GDP growth are normally positive, but for large bank, the magnitudes and statistical significance are greater. In contrast to the small bank, when the lending growth become their dependent variables, the coefficients are small and even slightly negative. However, in the result of GDP studied by the researcher named, Cubillas and Suarez (2018) found that there is a negative signs between the GDP and the loan lending. It suggests that the countries that have a high economic growth should give a higher reduction on the bank credit loan. Hence, that can be a way to stop the recession that happen in the country.

### *Inflation*

Inflation is a measurement of macroeconomic environment that give the definition of the country that having a decline in the value of money in term of economic growth. Because of that, government in

many countries will take an initiative to limit the movement of money in the country. By looking at *ceteris paribus* from the study of Akinwale (2018), inflation rate shows a negative sign with economic growth in the model, although it is not statistically significant. That result can be proved that an increase in inflation by a unit brings decrease in economic growth. In contrast, Vo (2018) found the positive and significant link between economic growth and bank lending. The result was come out consistent with the researcher expectation because based on the logical theory, the increase the economic growth, the increase in the economic activities which is the lending activities can be one of them. However, it is reported that in Vietnamese, the inflation and bank lending activities have a negative link. It is because the researcher found that Vietnamese banks are likely to support the government approach in recover the inflation with limiting their lending activities in high inflationary environment.

### Data and Methodology

The data collected from Thomson Reuters Eikon Database, World Bank data and Bank Negara Malaysia. Data of the bank institutions are also taken from Thomson Reuters Eikon Database. Meanwhile, the gross domestic product and inflation are from Bank Negara Malaysia and World Bank. In this study, there are 8 number of local commercial bank institution are collected as samples. The panel data sets 10 years periods with yearly basis with the observation of 80 samples and the period of study is from 2009 to 2018.

### Model Estimation

$$L = f(\text{NPL, GDP, S, CAR, PROV, INF})$$

$$L_{i,t} = \alpha_{i,t} + \beta_1 \text{NPL}_{i,t} - \beta_2 \text{GDP}_{i,t} + \beta_3 \text{S}_{i,t} - \beta_4 \text{CAR}_{i,t} + \beta_5 \text{PROV}_{i,t} - \beta_6 \text{INF}_{i,t} + \varepsilon_{i,t}$$

Figure 3.1 Estimation model

Where:

L = Loan Growth

NPL = Non-Performing Loan

GDP = Gross domestic product

S = Bank Size

CAR = Capital Adequacy Ratio

PROV = Loan Provision

INF = Inflation

$\alpha$  is constant variable,  $\beta$  is coefficient for the variables and  $\varepsilon$  is error term of the regression model.

### Expected Sign

Table 3.4.1 Expected sign for the variables

Variable	Expected Sign	Supported by:
Bank Lending Growth (L)	+	Vo (2018), Kim and Sohn (2017) Dang (2019) Kosak, Li, Loncarski and Marinc (2015)
Non-performing loan (NPL)	+	Chaiporn (2016) Shehzad, Haan and Scholtens (2010) Amin, Iman and Malik (2019)
Bank size (S)	+	Vo (2018), Nguyen, Linh and Sila (2019), Ismail, Azlan, Husin, Ishak and Hashim (2017) Cubillas and Suarez (2018)
Capital adequacy ratio (CAR)	-	Vo (2018) Kosak, Li, Loncarski and Marinc (2015) Shehzad, Haan and Scholtens (2010)
Loan Provision (PROV)	+	Cubillas and Suarez (2018), Vo (2018), Ivashina and Scharfstein (2010) Kopecky and Vanhooose (2006) Vo (2018) Soedarmono, Sitorus and Tarazi (2017)
Gross domestic product (GDP)	-	Jemenez, Ongena, Peydro and Saurina (2012), Kim and Sohn (2017) Cubillas and Suarez (2018)
Inflation (INF)	-	Akinwale (2018) Vo (2018)

## Empirical Results

### DESCRIPTIVE STATISTICS

Table 4.1: Descriptive Statistics

Mean	Maximum	Minimum	Standard deviation
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<b>LOAN</b>	0.102275	1.16	-0.09	0.1327027
<b>NPL</b>	0.02135	0.0666	0	0.0137595
<b>LgGDP</b>	13.10967	13.43315	12.64164	0.228862
<b>LgSIZE</b>	18.9306	20.50882	17.27068	0.872938
<b>PROV</b>	0.0026487	0.0097	-0.0021	0.0028291
<b>CAR</b>	0.1192575	0.1646	0	0.0322061
<b>INF</b>	0.021336	0.0351	0.00165	0.0103058

The descriptive statistics is a brief descriptive coefficient that summarize a given data set use in the research. As can be seen in table 4.1, it includes the simple basis analysis such as mean, maximum, minimum and the standard deviation. The mean has the meaning of the average value of the sample where it is calculated by adding all the data sample and dividing the number of data points. The maximum is referring to the highest data value while minimum is the lowest data value. Next, the standard deviation measures the distribution of a dataset relatives to its mean where the larger the standard deviation it means that the value are spread out more. Loan growth has been calculated by dividing the difference value of net loan current year and net loan previous year with net loan previous year. The table above shows clearly the loan growth of the banks that is treated as the dependent variable of the study has a mean of 0.1023. The data from RHB bank has the maximum and minimum value of its variable which are the highest data value reached to the percentage of 116% while the minimum value of the variable is -9% and that shows the highly differentiated result for that dependent variable. The deviations in the data hence lead to the standard deviation of 0.1327. The late payment for at least 90 days from the borrower regarding their loan is considered as a non-performing loan or NPL. The average of NPL is 0.02135 among the period. It recorded that the range of maximum is 6.66 percent from RHB bank and the minimum is 0 percent which come from the bank of Ambank, Affin and Alliance. As can be seen in the table, it has the standard deviation of 0.01375. The next variable enclosed in the descriptive statistic is gross domestic product (GDP).

The data of gross domestic product (GDP) that is recorded in Ringgit Malaysia has become one of the highest figures in the table 4.1 above thus has made the data to be enormous size. As can be seen in the table, the mean for GDP is 13.1097 followed by the maximum value for GDP has the amount of RM 13.43 while it has the minimum value of RM 12.64. Thus, it has reveals that the standard deviation has the value of 0.2289. Besides gross domestic product (GDP), the size of bank also recorded in Ringgit Malaysia that at the end will cause sizeable data. The mean of bank size is 18.9306. The range of maximum and minimum value for this variable is 20.5088 and 17.2707 respectively from the period of study. For the standard deviation, the size of bank has the value of 0.8729. Based on the data of loan provision from the period study, it can see that the maximum value of the variable is 0.97 percent of Maybank Berhad while its minimum value has the value of -0.21 percent of Ambank. From the table, it has the average value of 0.00265. The deviations in the data hence lead to the standard deviation of 0.00283. Moreover, the next factors that can be affect the bank lending behaviour is capital adequacy ratio (CAR). It is calculated by dividing a bank's capital by its risk-weighted assets. It is recorded in the table that the variable has the average of 0.1193. The value of maximum and minimum value of the variable is 16.46 percent of Maybank Berhad and 0 percent of Ambank, Affin and Alliance from the period of study thus lead to have a standard deviation of 0.0322. The last variable to be justified from the descriptive statistics is the inflation. The data of inflation that is been taken from the consumer price index has the mean of 0.021336. The data has the maximum value of 0.0351 while its minimum has the value of 0.00165. Thus, it led the variable to have a standard deviation of 0.0103058.

## PEARSON'S CORRELATION

Table 4.2 : Pearson's Correlation



	<b>LOAN</b>	<b>NPL</b>	<b>CAR</b>	<b>PROV</b>	<b>LgSIZE</b>	<b>LgGDP</b>	<b>INF</b>
<b>LOAN</b>	1.0000						
<b>NPL</b>	0.4620	1.0000					
<b>CAR</b>	-0.0816	0.1310	1.0000				
<b>PROV</b>	0.2465	0.5010	-0.0077	1.0000			
<b>LgSIZE</b>	-0.0728	-0.0688	0.3614	0.2251	1.0000		
<b>LgGDP</b>	-0.4265	-0.5625	0.1486	-0.4380	0.2631	1.0000	
<b>INF</b>	-0.1315	-0.1169	-0.2337	-0.1807	0.0309	0.0804	1.0000

From the table 4.2 above, it shows that non-performing loan and loan provision have positive relationship with dependent variable. This shows that the other those variables have parallel relationship where one variable increase or decrease, the other variables will increase or decrease in parallel. Meanwhile, capital adequacy ratio, size of the bank, gross domestic product and inflation have negative relationship with the dependent variable. That negative relationship correlation indicates the extent to which are variables increase as the others are decreases. Addition, it shows CAR, size of bank, GDP and inflation have negative relationship with loan growth with the value -0.0816, -0.0728, -0.4265 and -0.1315 respectively. When the loan growth increase, CAR, size of bank, GDP and inflation will decrease and vice versa as they are inversed relationship with each other. Meanwhile, NPL and loan provision are positive relationship with loan growth with the value of 0.4620 and 0.2465. If the loan growth increase or decrease, the non-performing loan and loan provision also increase or decrease as it has the parallel direction of relationship to each other. Besides, non-performing loan is 50.10% correlated with loan provision. The data of NPL also negatively correlated with gross domestic product, size and inflation. Gross domestic product positively correlated with size, CAR and inflation and -43.80% correlated with loan provision.

Meanwhile for size, it has positive correlated with 22.51% to loan provision and 36.14% to capital adequacy ratio. It has also had a negative correlated with 6.88% to non-performing loan. It can be seen loan provision is -0.77% negatively correlated to capital adequacy ratio while 22.51% positively correlated to size of bank. The last correlation revealed by the correlation is the capital adequacy ratio and inflation that 23.37% negatively correlated.

Apart from that, multicollinearity problems can be detected from this correlation test where based on the table 4.2, it reveals that there is no multicollinearity problem as all the values for variables are less than 0.8. Besides that, by using VIF, multicollinearity also can be tested. It is found that no multicollinearity problem exists through VIF because it is less than 5.

Table 4.2.1: VIF

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
<b>LOAN</b>		
<b>PROVISION</b>	1.78	0.560701
<b>LgGDP</b>	2.24	0.445781
<b>NPL</b>	1.81	0.551998
<b>LgSIZE</b>	1.32	0.760310
<b>CAR</b>	1.48	0.677614
<b>Inflation</b>	1.06	0.940599
<b>Mean VIF</b>	1.61	



From the above table, it shows that multicollinearity problem does not exist in this study as the mean VIF is less than 5 which is 1.61.

### POOLED OLS REGRESSION

Table 4.4: Pooled OLS Regression

LOAN	Coef.	Std. Err.	t	P> t	F-stat	R-squared
<b>NPL</b>	18.26219	8.626149	2.12	0.039		
<b>CAR</b>	-2.37734	.7536852	-3.15	0.003		
<b>PROV</b>	-.2213663	.1269287	-1.74	0.087	6.39	
<b>LgSIZE</b>	.2912852	.1279498	2.28	0.027	Prob> F 0.3464	
<b>LgGDP</b>	-1.302998	.5579668	-2.34	0.023	0.0000	
<b>INF</b>	-6.176622	9.026567	-0.68	0.497		
<b>-cons</b>	2.386148	7.971115	0.30	0.766		

Based on result in table 4.4, it shows that four independent variable is significant as P-value of t-stat is below 5% significant level for the variables of non-performing loan, gross domestic product and size while capital adequacy ratio is showing the most significant level at 1% level of significant whereas inflation and loan provision has insignificant result toward loan growth. F-stat and P-value for the whole model is below of 5% significant level. Therefore, all independent variable which are non-performing loan, gross domestic product, size, loan provision, capital adequacy ratio and inflation are statistically significant in influencing the dependent variable which is loan growth.

Besides that, the R-squared shows 0.3464 which means 34.64% of changes in loan growth can be explained by all independent variables. Whereas, the remaining 65.36% cannot be explained. From the table above, it is found CAR, loan provision, GDP and inflation has inverse relationship while non-performing loan and size have positive relationship with dependent variable. If non-performing loan increase by 1%, the loan growth will be increase by 18.26%. Meanwhile, for the next variable which is if gross domestic product is increases by RM 1 Million, the loan growth will be reduce by 1.3%. Next, a RM 1 Million increase in size, the loan growth will increase by 0.29%. If loan provision increases by 1%, the loan growth will be decrease by 0.22%. Furthermore, for CAR, if it is increase in 1%, it will also reduce the loan growth by 2.38%. Lastly, as can be seen from the table, 1% increase for inflation will be decrease by 6.18% of loan growth.

### RANDOM EFFECT REGRESSION MODEL

Table 4.5: Random Effect Regression Model

LOAN	Coef.	Std. Err.	t	P> t	F-stat	R-squared
<b>NPL</b>	18.26219	8.626149	2.12	0.034		
<b>CAR</b>	-2.37734	.7536852	-3.15	0.002	38.32	
<b>PROV</b>	-.2213663	.1269287	-1.74	0.081	Prob> F 0.4106	
<b>LgSIZE</b>	.2912852	.1279498	2.28	0.023	0.0000	
<b>LgGDP</b>	-1.302998	.5579668	-2.34	0.020		

<b>INF</b>	-6.176622	9.026567	-0.68	0.494
<b>-cons</b>	2.386148	7.971115	0.30	0.765

Based on result in table 4.4, it shows that four independent variable is significant as P-value of t-stat is below 5% significant level for the variables of non-performing loan, gross domestic product and size while capital adequacy ratio is showing the most significant level at 1% level of significant whereas inflation and loan provision has insignificant result toward loan growth. F-stat and P-value below of 5% significant level. Therefore, all independent variable which are non-performing loan, gross domestic product, size, loan provision, capital adequacy ratio and inflation are statistically significant in influencing the dependent variable which is loan growth. Besides that, the R-squared shows 0.4106 which means 41.06% of changes in loan growth can be explained by all independent variables. Whereas, the remaining 58.94% cannot be explained. According to table above, gross domestic product, loan provision and capital adequacy ratio still has inverse relationship while NPL and size was also maintained by having a positive relationship with dependent variable. The coefficient of the variables is still maintained the same as result tested in Pooled OLS. If non-performing loan increase by 1%, the loan growth will be increase by 18.26%. Meanwhile, for the next variable which is if gross domestic product is increases by RM 1 Million, the loan growth will be reduce by 1.3%. Next, a RM 1 Million increase in size, the loan growth will increase by 0.29%. If loan provision increases by 1%, the loan growth will be decrease by 0.22%. Furthermore, for CAR, if it is increase in 1%, it will also reduce the loan growth by 2.38%. Lastly, as can be seen from the table, 1% increase for inflation will be decrease by 6.18% of loan growth.

#### BREUSCH PAGAN (BP) AND LANGRAGIAN MULTIPLIER (M) TEST

**Ho = Choose Pooled OLS**

**H1 = Choose Random Effect Model (REM)**

chi2(1) = 0.41
Prob> chi2 = 0.5243

Figure 4.6: Breusch Pagan (BP) And Langragian Multiplier (M) Test

Breush Pagan and Langragian Multiplier (LM) test is carry on in this study in order to choose between Pooled OLS and Random Effect Model (REM). Based on the figure 4.6 above, it shows that P-value is more than 0.05, therefore null hypothesis (Ho) will be accepted and alternate hypothesis (H1) will be rejected. Thus, Pooled OLS is preferable compared to REM.

#### FINAL ESTIMATION MODEL

Table 4.7 Final estimation model

Variable	Least Squares	
	Coeff	p-value
C	2.3861	0.766
NPL	18.2621**	0.039
CAR	-2.3773***	0.003
PROV	-0.2213	0.087
LgSIZE	0.2912**	0.027
LgGDP	-1.3029**	0.023
INF	-0.61766	0.497

R-squared	0.4106
Adjusted R-squared	0.3464
F-statistic	6.39
Prob(F-statistic)	0.0000

### The final formulated model

$$L = 18.2621 - 2.3773 \text{ NPL}^{**} - 2.3773 \text{ CAR}^{***} - 0.2213 \text{ PROV} + 0.2912 \text{ S}^{**} - 1.3029 \text{ GDP}^{**} - 0.6176 \text{ INF}$$

Figure 4.7 Final estimation model

Where:

L = Loan Growth

NPL = Non-Performing Loan

GDP = Gross domestic product

S = Bank Size

CAR = Capital Adequacy Ratio

PROV = Loan Provision

INF = Inflation

Based on the result and findings analysis above, R-squared shows the overall explanation of the model. It shows the variation or changes in dependent variable caused by all independent variables or can be said to test the goodness of fits of data. In this study, the R-squared is 0.3464. Thus, the changes 34.64% of dependent variable (loan growth) can be explained by all independent variables (non-performing loan, gross domestic product, size, loan provision, capital adequacy ratio and inflation), the remaining 65.36% is cannot be explained. Moreover, F-stat reveals that it is significant because F-stat value shows greater than 4 (Rule of Thumb) which is 6.39 and its P-value is less than 5% significant level. In this study P-value for F-stat is 0.0000 which is the value lower than 0.05. Hence, this proves that all independent variables (non-performing loan, gross domestic product, size, loan provision, capital adequacy ratio and inflation) are statistically significant in influencing the dependent variable (loan growth). Despite that, it is found that out of independent variables, there is only four of them which are non-performing loan, gross domestic product, and size have significant relationship with loan growth at 5% significant level while capital adequacy has a significant level of 1%. This is because the P-value of non-performing loan, gross domestic product, and size are less than 5% significant level with the value of 0.039, 0.023 and 0.027 respectively. Not just that, capital adequacy that has the highest percentage of 1% level of significant has the value of 0.003. In addition, the results also showed that four variables that has a t-stat value that is greater than 2 based on the Rule of Thumb has proven that all that independent variable which is non-performing loan, gross domestic product, size, and capital adequacy ratio are significant towards the dependent variable which is loan growth.

As per result obtain above, it shows that non-performing loan is significant with the loan growth at 5% significant level. Parallel with the significance between non-performing loan and loan growth, non-performing loan has a positive relationship with the loan growth where 1 time increase in non-performing loan will increase by 18.26% of the loan growth. There is parallel by research done by Chaiporn (2016) and Shehzad et. Al (2010) which can support the result of positive relationship between non-performing loan and the loan growth. The positive sign indicates that the greater the

amount of loan growth, its non-performing loan will also increase. Furthermore, the gross domestic product is also significant towards the loan growth and have a negative relationship with loan growth. When the GDP is increases 1% the loan growth will drop by 1.3%. The result was like the Kim and Sohn (2017) and Cubillas and Suarez (2018) which found the gross domestic product is negative relationship with loan growth. The expectation and the actual result turn out to be the same as Cubillas and Suarez (2018) also concluded that the loan growth of the bank will drop if the GDP was increases. By having that result, it is one way to stop the recession to be happen in the country that will give impact to the performance of bank.

Contra from the GDP, the next variable which is bank size also reveals by the study that it has the significant result with loan growth. For RM 1 Million increases in size will increase 0.29% of loan growth. By looking at the result it can be supported by the previous researcher's which are Vo (2018) and Nguyen et. Al (2019) also displayed that they found the positive relationship between bank size and loan growth. As the basic of finance that all people know, bank size will represent the performance of one entity or institution, it is the same as the bank. The result regression from the Pooled OLS that show the bank size to be positive relationship with loan growth. This can be supported by looking at the bank cultures that show the bigger the size of the bank, the increase the amount of loan given to the customer to be borrowed. The result is matched with the expected sign.

Then, move to the variable named capital adequacy ratio (CAR) shows the outcome of the regression where the capital adequacy ratio has the most significant result compare to other variables. However, there is a negative sign for capital adequacy ratio that has the meaning that it does not achieve the expectation sign. From the table 4.4, an increase in 1% for capital adequacy ratio, will decrease the loan growth to -2.38%. According to Shehzad et.al (2010) and Kosak et.al (2015) stated that it is significant with positive relationship. That is because banks that have high loan growth potential to have a higher capital adequacy ratio. In addition, bank capital will support the problem or any critical crisis that happen in the bank and so it has the big role in the bank. Next variable after CAR, there is loan provision that shows the result to be insignificant but have the relationship with the dependent variable which is loan growth. The loan provision has a level of significant of 10% which is 0.087. The result generated was not achieve the expectation sign as it turns out to be negative instead of positive sign. The reason it does not come out as the expected is because of the journal or references of the supporting details is collected using the secondary data. Different country will come out with different sign or result because there is another factor that will be affect the loan growth. From the logical side and supported by the journal of Cubillas et.al (2018), Hess et.al (2009), Foos et.al (2010) and Soedarmono et.al (2017), the reseachers turn out to be found that loan growth and loan provision is positive relationship with each other. However, the last variable which is inflation turn out to be insignificant result to the loan growth as it has surpassed the level of significant to be a significant variable to the dependent variable. Inflation that has the meaning of decline in the value of money in term of economic growth turn out to insignificant with the loan growth. Alternatively, supposed that the inflation should have a negative relationship with loan growth because of the higher the inflation, it will decrease the loan growth. Thus, it can be supported by the journal of Akinwale (2018) and Vo (2018) that found the negative relationship with loan growth because there is a country that are likely to support the government approach as it turn out to be negative relationship.

Finally, the most significant variable in influencing the loan growth is the capital adequacy ratio. This is because the capital adequacy ratio has the highest t-stat value of 3.15 as compared to other variables. Therefore, the result has revealed that capital adequacy ratio is the most significant factor in influencing the bank lending behaviour of the local.

## Conclusions

Firstly, this research was conducted to examine the determinants of the bank lending behaviour of local commercial banks in Malaysia and to identify the significant relationship between growth of bank loan, non-performing loan, gross domestic product, bank size, capital adequacy ratio, loan provision and inflation. Thus, the data for the study was collected by using the secondary data. The data collected by using panel data method in order to achieve the objective. The number of years of observation are started from 2009 until 2018 with the local commercial banks in Malaysian which are Maybank Berhad, CIMB Berhad, Public Bank, RHB Bank, Hong Leong Bank, Ambank, Affin Bank and Alliance Bank Berhad with total of 80 observations. The data has been collected from the data of Bank Negara Malaysia, World Bank and Thomson Reuters. Besides that, from the result obtain in the study, Pooled (OLS) Model is selected as the result estimation. It can be concluded that two independent variables that is loan provision and inflation show insignificant result with the dependent variable that is loan growth. However, for loan provision has a relationship even though it has no significant with loan growth. Meanwhile, the other four independent variables which are non-performing loan, gross domestic product, and bank size have a significant towards loan growth at 5% significant level and capital adequacy ratio have a significant towards loan growth at 1% significant level. Furthermore, there are only three variable which are non-performing loan, size and gross domestic product are matching with expected result. In addition, this study also had done to determine the relationship between loan growth with all independent variables which are non-performing loan, gross domestic product, bank size, loan provision, capital adequacy ratios and inflation. It has been approved that non-performing loan, gross domestic product, bank size, loan provision and capital adequacy ratios have relationship with loan growth which is three variables is negative relationship with loan growth and the other two have a positive relationship with loan growth. So, it has shown the result that the most significant factor influencing bank lending behaviour is capital adequacy ratio.

## References

- Ahtiala, P. (2005). The new theory of commercial bank and bank lending behaviour. *Scottish journal of Political Economy*, 52, 769-792.
- Akinwale, S. O. (2018). Bank Lending Rate and Economic Growth: Evidence from Nigeria. *International Journal of Academic Research in economics and management sciences*, 7(3), 111-122.
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Financial Economic*, 58, 261-300.
- Behr, P., Norden, L., & Noth, F. (2013). Financial constraints of private firms and bank lending behaviour. *Journal of Banking and Finance*, 37, 3472-3485.
- Berger, A., & Bouwman, C. (2013). How does capital affect bank performance during financial crises? *Journal of Financial Economics*, 109, 146-176.

- Brei, M., Gamabcorta, L., & Peter, v. G. (2013). Rescue packages and bank lending. *Banking and Finance*, 37(2), 490-505.
- Chaiporn, V. (2016). Deflation, bank credit growth, and non-performing loans: Evidence from Japan. *Internation of Finance Analysis*, 45, 295 - 305.
- CIMB, B. (2017). *CIMB Annual Report*. Malaysia: CIMB Group Holding Berhad.
- Cornett, M. M., McNutt, J. J., Strahan, P. E., & Tehranian, H. (2011). Liquidity risk management and credit supply in the financial crisis. *Financial Economic*, 101(2), 297-312.
- Cubillas, E., & Suarez, N. (2018). Bank market power and lending during the global financial crisis. *Finance International Money*, 89, 1-22.
- Dang, D. V. (2019). The effects of loan growth on bank performance: evidence from Vietnam. *Management Science Letters*, 9, 899-910.
- Hong Leong, B. B. (2017). *Annual Report*. Malaysia: Hong Leong Bank Group Holding.
- Ismail, N., Azlan, N. D., Husin, M. M., Ishak, I., & Hashim, S. L. (2017). Bank efficiencies and non performing loan of commercial banks in Malaysia. *Humanities, Language, Culture and Business*, 1(5), 34-40.
- Ivashina, V., & Schrarfstein, D. (2010). Bank lending during financial crisi of 2008. *Financial Economic*, 97(3), 319-338.
- Jemenez, G., Ongena, S., Peydro, J. L., & Saurina, S. J. (2012). Credit supply: identfyng balance sheet channels with loan application and granted loans. *Management Economy*, 102(5), 2301-2326.
- Kim, D., & Sohn, W. (2017). The effect of bank capital on lending : does liquidity matter? *Banking and Finance*, 77, 95-107.
- Kopecky, K., & Vanhooose, D. (2006). Capital regulation, heterogeneous monitoring costs and aggregate loan quality. *Banking Financial*, 30, 2235-2255.
- Kosak, M., Li, S., Loncarski, I., & Marinc, M. (2015). Quality of bank capital and bank lending behaviour during the global financial crisis. *Review of Financial Analysis*, 37, 168-183.
- Maybank, B. (2017). *Maybank Annual Report*. Malaysia: Maybank Berhad.
- Mishra, P., Montiel, P., & Spilimbergo, A. (2012). Monetary transmission in low income countries : effectiveness and policy implications. *International Monetary Fund Economic*, 60, 270-302.
- Nguyen, D. D., Linh, N., & Sila, V. (2019). Does corporate culture affect bank risk taking? Evidence from Loan Level Data. *Management*, 30, 106-133.
- Niu, J. (2016). Loan growth and bank valuations. *The Quarterly Review of Economic and Finance*, 61, 185-191.
- Public, B. B. (2017). *Forging a sustainable future (Annual Report)*. Malaysia: Public Bank Berhad.



- RHB, B. B. (2017). *Our Way Forward (Annual Report)*. Malaysia: RHB Bank Berhad.
- Shehzad, C., Haan, J., & Scholtens, B. (2010). The impact of bank ownership concentration on impaired loans and capital adequacy. *Journal of Banking and Finance*, 34, 399-408.
- Soedarmono, W., Sitorus, D., & Tarazi, A. (2017). Abnormal loan growth, credit information sharing and systematic risk in Asian banks. *International Business and Finance*, 42, 1208-1218.
- Vo, X. V. (2018). Bank lending behaviour in emerging market. *Finance Research Letter*, 27, 129-134.

**Internet Resource:**

Essays, UK. (November 2018). Functions of Commercial Banks in Malaysia. Retrieved from <https://www.ukessays.com/dissertation/literature-review/banking/study-on-the-functions-of-commercial-banks.php?vref=1>

## **KEFAHAMAN DAN PRAKTIKAL SOLAT DALAM KALANGAN PELAJAR POLITEKNIK NILAI**

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## ABSTRAK

*Solat merupakan salah satu daripada syariat Islam. Menunaikan solat merupakan kewajipan utama dalam kehidupan sebagai seorang muslim. Solat merupakan antara aspek kerohanian yang penting dan perlu dilatih sedari awal dalam kehidupan seorang pelajar. Ia akan menentukan tahap Islam seseorang. Dalam kesibukan belajar, solat kadang-kadang diambil mudah oleh kalangan pelajar kerana kepadatan masa mereka. Kadangkala kefahaman mereka terhadap solat juga pada tahap rendah kerana kesibukan mempelajari ilmu solat. Kajian ini diperlukan untuk melihat sejauh mana tahap kefahaman, tahap praktikal solat dalam kalangan pelajar Politeknik Nilai. Dalam masa yang sama menilai pandangan mereka terhadap kepekaan pihak politeknik terhadap pengamalan dan pengajaran solat terhadap pelajar. Dapatan menunjukkan kefahaman mereka terhadap solat pada tahap yang tinggi manakala praktikal pada tahap yang rendah. Para pelajar didapati bersetuju bahawa pihak politeknik memainkan peranan penting dalam latihan pengamalan solat mereka dan program keagamaan yang dianjurkan oleh pihak pengurusan politeknik berkesan kepada pelajar dan mereka berminat untuk menghadiri kem solat jika dianjurkan oleh pihak pengurusan politeknik.*

## PENGENALAN

Solat merupakan tiang agama. Ia merupakan sebahagian amalan sebagai seorang muslim yang diwajibkan. Solat terdiri dari dua jenis iaitu solat fardhu dan solat sunat. Solat merupakan sebahagian daripada rukun Islam sebaris dengan mengucap dua kalimah syahadah, menunaikan zakat dan mengerjakan haji bagi yang mampu. Solat juga adalah tiang agama.

Di Malaysia, solat merupakan perkara yang sangat dititikberatkan oleh para ibu bapa. Menunaikan solat menunjukkan seseorang adalah beragama Islam dan seorang penganut yang patuh. Solat juga menjadi antara perkara yang selalu ditekankan oleh para guru di sekolah untuk dijaga. Ia kerana apabila terjaga solat seseorang maka terpeliharalah kehidupannya. Walaubagaimanapun, solat kurang dititikberatkan apabila berada dalam dunia pengajian tinggi. Ia kerana persoalan tanggungjawab soalan banyak dijaga oleh individu sendiri. Sekiranya mereka berasa bertanggungjawab terhadap agama maka mereka akan menunaikannya. Manakala apabila seseorang tidak dididik dengan penjagaan solat atau sudah mula tidak bertanggungjawab terhadap agama maka mereka mulai meninggalkan solat.

## PERNYATAAN MASALAH

Kajian telah mendapati bahawa pengamalan solat dalam kalangan mahasiswa Politeknik Kuching Sarawak (PKS) adalah pada tahap tinggi. Dapatan ini mewakili pelajar kepulauan Borneo dari segi pemahaman terhadap kepentingan dan pengamalan solat mereka. Begitu juga dengan kajian yang dilakukan di Kolej TATi juga menunjukkan kefahaman dan praktikal dalam kalangan pelajar juga adalah pada tahap tinggi yang berada di wilayah Pantai Timur. Pengamalan solat dan kefahamannya di

Politeknik Ungku Omar (PUO), Ipoh dan Politeknik Sultan Abdul Halim Muadzam Shah (POLIMAS) yang berada di bahagian Barat Malaysia juga menunjukkan dapatan yang positif bagi pengamalan solat. Menjadi pertanyaan adakah penghayatan terhadap solat dalam kalangan pelajar di Politeknik Nilai Negeri Sembilan (PNS) juga adalah sama. Ia kerana kedudukannya yang berada di kawasan Lembah Klang dan berdekatan dengan bandar memungkinkan dapatan yang berbeza dengan dapatan kawasan lain.

## **OBJEKTIF KAJIAN**

1. Mengkaji kefahaman dan praktikal solat dalam kalangan pelajar politeknik Nilai Negeri Sembilan (PNS)
2. Untuk mengkaji sejauh mana usaha pihak pengurusan Politeknik Nilai Negeri Sembilan (PNS) dalam mengambil berat tentang persoalan amalan solat di kalangan pelajar

## **PERSOALAN KAJIAN**

1. Adakah pelajar Politeknik Nilai Negeri Sembilan (PNS) memahami dan mempraktikkan solat yang betul dalam hidup mereka
2. Adakah Politeknik Nilai Negeri Sembilan (PNS) mengambil berat permasalahan solat dalam kalangan pelajar.
3. Adakah latarbelakang dan tempat tinggal pelajar mempengaruhi amalan solat mereka

## **HIPOTESIS KAJIAN**

1. Kefahaman dan praktikal solat dalam kalangan pelajar Politeknik Nilai Negeri Sembilan (PNS) adalah pada tahap rendah
- 2.. Latarbelakang pendidikan dan tempat tinggal pelajar mempengaruhi amalan solat mereka

## **BATASAN KAJIAN**

Batasan kajian ini adalah terhad kepada pelajar Politeknik Nilai Negeri Sembilan (PNS) sahaja dan hanya berkaitan pengamalan solat dan perkara berkaitan solat

## **METODOLOGI KAJIAN**

Metodologi kajian ini secara ringkasnya menggunakan kaedah kuantitatif yang menggunakan kaedah penganalisan data.

### **1. Kaedah Dapatan Data**

Suatu kumpulan soalan telah dibina untuk diedarkan dalam kalangan pelajar. Ia terbahagi kepada 4 bahagian. Soalan ini akan diedarkan melalui *google form* kerana ia mudah dan capaiannya lebih meluas dan efisien kepada para pelajar.

## 2. Kaedah Penganalisan Data

Kaedah penganalisan data akan dilakukan menggunakan *Statistic Package For Social Science* (SPSS) Versi 18.0 iaitu melalui kaedah deskriptif.

## PERSAMPELAN

Jumlah anggaran pelajar di Politeknik Nilai Negeri Sembilan (PNS) adalah seramai 2400 orang. Kajian ini menggunakan saiz persampelan yang dikemukakan oleh **Krejcie dan Morgan 1970** di mana seramai 331 sampel diperlukan.

## TEMPAT PENYELIDIKAN

Tempat penyelidikan adalah di Politeknik Nilai Negeri Sembilan (PNS). Politeknik Nilai, Negeri Sembilan (PNS) adalah politeknik yang ke-23 ditubuhkan di bawah Kementerian Pengajian Tinggi Malaysia pada 1 April 2007 di bawah Rancangan Malaysia Ke-9. PNS mula beroperasi di kampus sementara iaitu di Kompleks Perniagaan Kuarters KLIA pada Disember 2007. Pengambilan pelajar yang pertama pada Sesi Jun 2008.

PNS berpindah ke kampus tetap di Kompleks Pendidikan Bandar Enstek, Negeri Sembilan pada September 2011 di atas tapak seluas 101.5 ekar yang memuatkan 37 blok bangunan pentadbiran, akademik, kamsis dan kediaman staf. Kampus ini mampu menampung pelajar seramai 2,400 orang pelajar dengan kapasiti penginapan di kamsis seramai 1,200 orang pelajar. Pendaftaran pertama di kampus tetap pada Disember 2011 dan majlis perasmian kampus baru PNS oleh Yang Berhormat Menteri Pengajian Tinggi telah diadakan pada 13 September 2012.

PNS mempunyai jumlah kakitangan seramai 67 orang yang terdiri daripada 48 orang pensyarah dan 19 orang staf sokongan. Jumlah pelajar adalah seramai 446 orang pelajar yang sedang mengikuti program Diploma in Business Studies (e-Commerce), Diploma in Islamic Banking and Finance dan Diploma in Logistics and Supply Chain Management.

Dua Jabatan baru iaitu Jabatan Kejuruteraan Mekanikal (JKM) dan Jabatan Agroteknologi dan Bio-Industri (JAB) akan mula menawarkan program baru masing-masing Diploma in Mechanical Engineering dan Diploma in Landscape and Horticulture pada Sesi Julai 2012.

## INSTRUMEN KAJIAN

Bagi melakukan kajian, instrumen kajian terdiri dari soal selidik yang dibangunkan untuk mencapai objektif kajian.

*Jadual 1: Dimensi objektif untuk mendapatkan data*

	OBJEKTIF	Cara Mendapatkan Data
RQ 1	Mengkaji kefahaman dan praktikal solat dalam kalangan pelajar Politeknik Nilai	Soal Selidik
RQ 2	Untuk mengkaji sejauh mana usaha pihak pengurusan Politeknik Nilai dalam mengambil berat tentang persoalan amalan solat di kalangan pelajar	Soal Selidik
RQ 3	Untuk menganalisa adakah faktor latarbelakang pendidikan awal dan tempat tinggal pelajar turut mempengaruhi amalan solat mereka	Soal Selidik

Jadual 1 menjelaskan dimensi objektif kajian ini sebagaimana yang dinyatakan dalam bab awal kajian ini dan cara mendapatkan data-data berdasarkan objektif yang telah digariskan. Hal ini menunjukkan hasil setiap tiga objektif yang telah digariskan diperolehi menerusi set kaji selidik.

### 1. Soal Selidik

Soal selidik yang digubal adalah berdasarkan objektif kajian iaitu mengkaji kefahaman dan praktikal solat dalam kalangan pelajar, mengkaji sejauh mana usaha pihak pengurusan dalam mengambil berat tentang persoalan amalan solat di kalangan pelajar dan menganalisa adakah faktor latarbelakang pendidikan awal dan tempat tinggal pelajar turut mempengaruhi amalan solat mereka

Set soal selidik telah dibahagikan kepada tiga bahagian iaitu:

- A) Demografi Pelajar
- B) Analisis Kefahaman Solat
- C) Analisis Praktikal Solat
- D) Analisis Penekanan Oleh Institusi

Soalan Bahagian A kesemuanya disediakan dalam bentuk tertutup kecuali bagi soalan. Bahagian B terdiri daripada jawapan 1 (Kurang Tahu), 2 (Tahu) dan 3 (Sangat Tahu). Bahagian C dan D pula diwakili oleh 1 (Tidak Pernah/Kurang Setuju), 2 (Kadang kala/Setuju) dan 3 (Sentiasa/Sangat Setuju).

Oleh itu, kajian ini bersifat kajian kuantitatif iaitu data yang diuji seperti pandangan **Bryman (2008)** yang memerlukan kepada penganalisan data. Manakala kuantiti merujuk kepada bilangan deskriptif yang dinyatakan dengan tepat. Berdasarkan istilah kuantiti, penyelidikan kuantitatif politeknik dikaitkan dengan data numerikal dan ketepatan. Pengukuran data dalam penyelidikan kuantitatif politeknik mengutamakan kesahan dan kebolehpercayaan. Ia dilakukan untuk menguji teori, membina fakta dan menyatakan perhubungan antara pemboleh ubah - pemboleh ubah dalam kajian di bawah kajian penyelidikan seperti pandangan **Chua (2006)** untuk menyempurnakan kajian. **Bryman (2008)** mengatakan perkara berkaitan kajian kuantitatif bersekitar keinginan penyelidikan terhadap kajian

yang dijalankan. **Rosinah (2011)** pula berpandangan kajian jenis ini juga tidak terlepas daripada kelemahannya iaitu ianya tidak dapat menjelaskan sepenuhnya kebanyakan masalah yang dikaji.

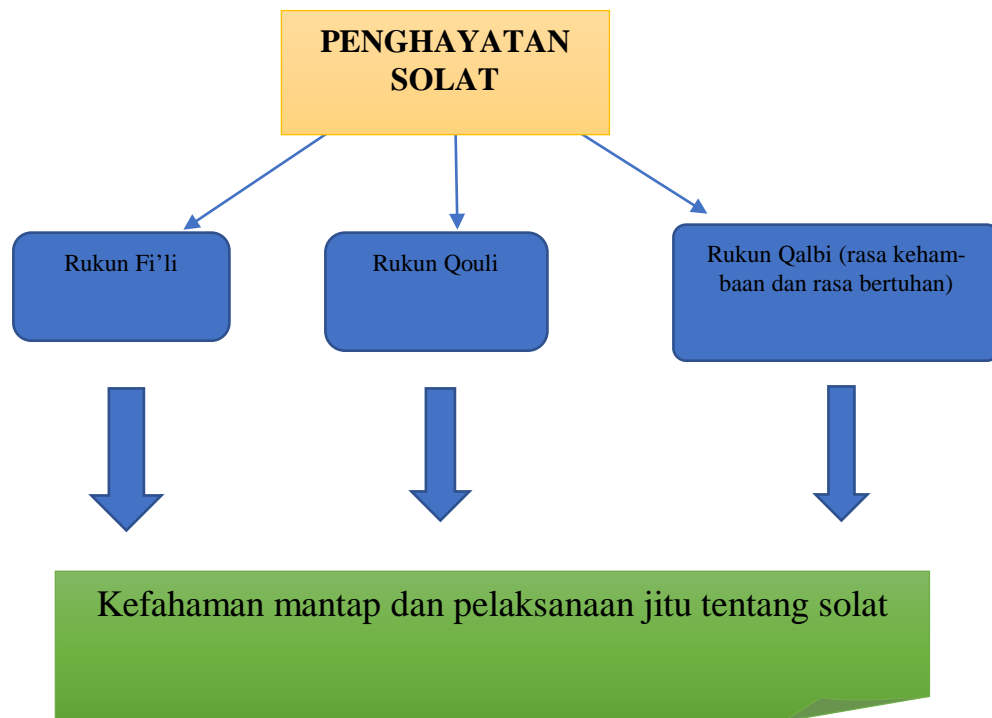
## DAPATAN KAJIAN

### Bahagian A: Demografi Responden

Bil	Perkara	Demografi	Peratusan (%)
1	Jantina	Lelaki	51
		Perempuan	49
2	Semester	1	14.4
		2	34.3
		3	8.5
		4	14.1
		5	28.8
3	Jabatan	Jabatan Kejuruteraan Mekanikal (JKM)	18
		Jabatan Perdagangan (JP)	16
		Jabatan Agroteknologi & Bio-Industri (JAB)	66
4	Program	Diploma Sistem Maklumat Perniagaan (DBS)	15.7
		Diploma Perbankan Islam (DIB)	22.2
		Diploma Pengurusan Peruncitan (DRM)	5.6
		Diploma Bioteknologi (DBT)	7.8
		Diploma Hortikultur Landskap (DLH)	9.5
		Diploma Kejuruteraan Mekanikal (DKM)	11.4
		Diploma Kejuruteraan Mekatronik (DEM)	6.2
		Diploma Perdagangan (DEC)	0
		Diploma Pengurusan Logistik & Rangkaian Bekalan (DLS)	21.6
5	Kawasan Tempat Tinggal	Bandar	32
		Kampung	28.4
		Separa Bandar	39.5
6	Keluarga Anda Menekankan Amalan Solat	Tidak Setuju	0
		Kurang Setuju	2.9
		Setuju	96.7

**Bahagian B: Analisis Kefahaman Solat****1 (Kurang Tahu), 2 (Tahu) dan 3 (Sangat Tahu)**

<b>Bil</b>	<b>Persoalan</b>	<b>1</b>	<b>2</b>	<b>3</b>
1	Adakah Anda Mengetahui Tentang Kewajiban Solat 5 Waktu Sehari Semalam	0.3	14.1	85.6
2	Adakah Anda Mengetahui Setiap Solat Yang Ditinggalkan Wajib Diqada'	1.0	20.6	74.8
3	Adakah Anda Tahu Tentang Azab Keseksaan Orang Yang Meninggalkan Solat	2.9	23.9	73.2
4	Adakah Anda Mengetahui Hukum Meninggalkan Solat Fardhu	1	19.6	79.4
5	Adakah Anda Mengetahui Bahawa Ibadat Solat Boleh Mencegah Dari Perbuatan Keji Dan Mungkar	1	19	80.1
6	Adakah Anda Mengetahui Bahawa Tidak Sempurna Keimanan Seseorang Jika Tidak Melakukan Ibadat Khusus Yang Diperintahkan Oleh Allah SWT	1.3	22.5	76.1
7	Adakah Anda Mengetahui Bahawa Orang Yang Meninggalkan Solat Fardhu Telah Melakukan Dosa Besar	1.3	18.3	80.4
8	Adakah Anda Mengetahui Cara Mandi Wajib Bagi Mengharuskan Amalan Solat Fardhu	1	36.6	62.4
9	Adakah Anda Mengetahui Tentang Rukun-Rukun Solat Dan Syarat-Syarat Sah Solat	2	40.2	57.8
10	Adakah Anda Mengetahui Cara Bertayamum Ketika Ketiadaan Air Untuk Mengharuskan Solat	12.7	58.2	29.1
11	Adakah Anda Mengetahui Bahawa Kanak-Kanak Wajar Dipukul Jika Sekiranya Meninggalkan Solat Fardhu Setelah Mencapai Usia 10 Tahun	2.6	31	66.3
12	Anda Mengetahui Fadilat Solat Berjemaah	3.6	30.1	66.3
13	Anda Mengetahui 13 Rukun Solat	3.3	42.5	54.2
14	Anda Mengetahui Perbezaan Sunat Hay'at dan Ab'ad Dalam Solat	36.6	51	12.4
15	Anda Mengetahui Perkara Yang Membatalkan Solat	1	37.3	61.8
16	Anda Mengetahu Pembahagian Rukun Solat kepada Ucapan (Qouli) dan Perbuatan (Fi'li)	13.1	56.2	30.7



*Jadual 2: Kefahaman mantap dan pelaksanaan jitu solat melahirkan peribadi agung*

### Bahagian C: Analisis Praktikal Solat

1 (Tidak Pernah/Kurang Setuju), 2 (Kadang kala/Setuju) dan 3 (Sentiasa/Sangat Setuju).

Bil	Persoalan	1	2	3
1	Adakah Anda Mengerjakan Solat 5 Waktu Sehari Semalam	1	34.3	64.7
2	Adakah Anda Terus Mengerjakan Solat Fardhu Sebaik Sahaja Masuk Waktu	2.3	82.7	15
3	Adakah Anda Selalu Mengerjakan Solat-Solat Sunat Di Samping Solat Fardhu	8.5	80.7	10.8
4	Adakah Anda Sentiasa Khusyuk Dalam Mengerjakan Solat Fardhu	4.9	21.6	73.5
5	Adakah Anda Pernah Bertayamum Untuk Menunaikan Solat Ketika Ketiadaan Air	60.1	34.3	5.6
6	Adakah Anda Tetap Menunaikan Solat Walau Dalam Keadaan Sakit Yang Berat	14.4	59.2	26.5
7	Anda Merasakan Ketenangan Ketika Bersolat	1.3	20.6	78.1
8	Adakah Anda Cuba Memperbaiki Bacaan Dalam Solat	1.3	28.8	69.9
9	Pernahkan Anda Cuba Menghafal Surah-Surah Al-Quran Dengan Hasrat Untuk Membacanya Di Dalam Solat	2	40.5	57.5



10	Pernahkah Anda Menjadi Imam Dalam Solat Berjemaah	30.4	48.4	21.2
11	Adakah Anda Mengqada'kan Solat Yang Ditinggalkan	6.2	53.6	40.2
12	Adakah Anda Pernah Bersolat Di Surau Politeknik	1.3	42.8	55.9
13	Pernahkah Anda Cuba Memahami Maksud Bacaan Bacaan Dalam Solat	3.9	57.5	38.6
14	Adakah Anda Membaca Doa Setiap Kali Selesai Solat Fardhu	1	33.7	65.4
15	Adakah Anda Mempunyai Pakaian Khusus Untuk Bersolat Fardhu	15.7	50.7	33.7
16	Adakah Anda Memastikan Pakaian Bersih Daripada Najis Sebelum Bersolat	1	21.2	77.8
17	Adakah Anda Merasa Seronok Ke Masjid Untuk Menunaikan Solat Berjemaah Atau Solat Jumaat	1.6	25.5	72.9
18	Adakah Anda Sering Mengajak Rakan-Rakan Untuk Sama-Sama Bersolat Jemaah	8.2	64.1	27.8
19	Adakah Anda Pernah Menegur Rakan Yang Cuai Dalam Solat	18.3	64.4	17.3
20	Adakah Anda Bangun Pada Waktu Malam Untuk Menunaikan Solat Tahajjud	18	77.5	4.6
21	Adakah Anda Membaca Wirid Selepas Bersolat Fardhu	11.4	12.1	76.5
22	Adakah Anda Sentiasa Tertunggu-Tunggu Untuk Menunaikan Solat Setelah Masuk Waktunya	3.6	75.8	20.6
23	Setelah Aqil Baligh Barulah Saya Mula Konsisten Bersolat Fardhu	3.9	37.3	58.8
24	Adakah Anda Pernah Meninggalkan Solat Fardhu	3.3	59.8	36.9
25	Adakah Anda Sering Menunaikan Solat Fardhu Di Akhir Waktu	5.9	86.3	7.8
26	Adakah Anda Sering Merasa Malas Untuk Menunaikan Solat Fardhu	16.7	73.5	9.8
27	Adakah Anda Malas Bersolat Terutamanya Pada Waktu Subuh	14.1	23.2	62.7
28	Adakah Anda Bersegera Mengqada'Solat Fardhu Yang Ditinggalkan Kerana Terlupa Atau Tertidur	8.2	61.8	30.1
29	Setelah Meninggalkan Solat Pernahkah Anda Terfikir Dan Berazam Untuk Tidak Akan Mengulangi Lagi Perbuatan Tersebut	2.6	27.5	69.9
30	Adakah Wujud Perbezaan Perasaan Anda Sewaktu Menunaikan Solat Fardhu Dan Ketika Meninggalkannya	1.3	23.9	74.8
31	Adakah Anda Solat Fardhu Berjemaah	2	80.7	17.3
32	Bacaan Solat Anda Pernah ditegur oleh orang lain	19.9	66.7	13.4

#### Bahagian D: Analisis Penekanan Solat Oleh Institusi

1 (Tidak Pernah/Kurang Setuju), 2 (Kadang kala/Setuju) dan 3 (Sentiasa/Sangat Setuju).

<b>Bil</b>	<b>Persoalan</b>	<b>1</b>	<b>2</b>	<b>3</b>
1	Adakah Anda Pernah Mengikuti Kursus Keagamaan Sepanjang Berada Di Kampus	7.8	54.2	37.9
2	Adakah Waktu Rehat Antara Jam 1 Hingga 2 Petang Yang Diberikan Itu Mencukupi Untuk Anda Menunaikan Solat Zohor, Makan Dan Rehat.	27.5	44.4	28.1
3	Adakah Anda Bersetuju Jika Hukuman Denda Dikenakan Terhadap Terhadap Pelajar Yang Meninggalkan Solat	6.2	34.4	59.5
4	Adakah Pengurusan Politeknik Serius Dalam Menguatkuasa Amalan Solat Di Kalangan Pelajar	10.1	55.6	34.3
5	Adakah Kekangan Waktu Kuliah Atau Bengkel Menjadikan Anda Mengabaikan Perintah Kewajiban Bersolat Fardhu	47.7	37.6	14.7
6	Adakah Pihak Pengurusan Politeknik Pernah Mengambil Tindakan Terhadap Pelajar Lelaki Yang Tidak Hadir Solat Jumaat	29.7	47.4	22.9
7	Adakah Anda Bersetuju Dengan Kenyataan Bahawa Tiada Apa-Apa Tindakan Oleh Pihak Pengurusan Politeknik Terhadap Pelajar Yang Mengabaikan Solat	48.4	30.7	20.9
8	Adakah Anda Bersetuju Jika Sekiranya Pihak Pengurusan Politeknik Mewajibkan Para Pelajar Menunaikan Solat Maghrib Dan Isyak Di Musolla Politeknik	6.9	35.3	57.8
9	Bersetujukah Anda Jika Tindakan Tatatertib Diambil Oleh Pihak Pengurusan Politeknik Terhadap Pelajar Yang Mengabaikan Solat	3.6	32.4	64.1
10	Adakah Pelajar Yang Meninggalkan Solat Fardhu Wajar Dikaunseling Oleh Pihak Pengurusan Politeknik	4.2	31	64.7
11	Adakah Pihak Pengurusan Telah Menyediakan Tempat Solat Yang Sesuai Kepada Pelajar	1.6	21.6	76.8
12	Pihak Pengurusan Politeknik Telah Menyediakan Kemudahan Yang Mencukupi Di Musolla Politeknik	2.6	26.5	70.9
13	Adakah Pengangkutan Yang Disediakan Oleh Pengurusan Untuk Bersolat Jumaat Mencukupi	6.9	36.6	56.5
14	Adakah Pengurusan Politeknik Pernah Anjurkan Aktiviti Untuk Mengalakkan Pelajar Bersolat Sepanjang Anda Menjadi Pelajar Politeknik	5.6	41.2	53.3
15	Program Kumpulan Bina Insan Yang Dijalankan Sedikit Sebanyak Memberi Kesedaran Dan Pengetahuan Kepada Pelajar Tentang Amalan Solat Fardhu	3.3	44.1	52.6

16	Pada Pandangan Anda Program Keagamaan Yang Dianjurkan Oleh Pihak Pengurusan Politeknik Tidak Berkesan Kepada Pelajar	39.5	46.4	14.1
17	Adakah Anda Berminat Untuk Menghadiri Kem Solat Jika Dianjurkan Oleh Pihak Pengurusan Politeknik	2.6	42.5	54.9

## KESIMPULAN

Objektif kajian mengkaji kefahaman dan praktikal solat dalam kalangan pelajar Politeknik Nilai Negeri Sembilan (PNS), untuk mengkaji sejauh mana usaha pihak pengurusan Politeknik Nilai dalam mengambil berat tentang persoalan amalan solat di kalangan pelajar dan untuk menganalisa adakah faktor latarbelakang pendidikan awal dan tempat tinggal pelajar turut mempengaruhi amalan solat mereka telah mencapai tujuannya.

Dapatan kajian menunjukkan bahawa kecaknaan pelajar terhadap pengamalan solat sangat tinggi. Pemahaman mereka juga amat baik walaupun terdapat beberapa kelemahan dalam pemahaman mereka. Mereka juga mengakui bahawa tempat mereka belajar juga memainkan peranan penting dalam penjagaan solat mereka. Program-program keagamaan seumpama bengkel Tahsin Solat wajar diadakan bagi memperelok dan memperbaiki solat mereka yang mana mereka mengakui mereka suka dan akan menyertainya sekiranya program seumpama itu diadakan.

## RUJUKAN

- Aziz Yahya, PeterVoo, Ismail Maskip & Mohd Dahlan A. Malek. 2018. *Kaedah Penyelidikan Dalam Pendidikan*. Sabah: Penerbit UMS.
- Fauzi Hussin, Jamali Ali & Mohd Saifoul Zamzuri Noor. 2016. *Kaedah Penyelidikan & Analisis Data SPSS*. Kedah: UUM PRESS.
- Ghazali Darusalam & Sufean Hussin. 2018. *Metodologi Penyelidikan Dalam Pendidikan*. Petaling Jaya: Penerbit UM.
- Hasna Bidin. 2016. *Pelaksanaan solat dalam kalangan pelajar muslim di kolej komuniti Negeri Johor*. Tesis Sarjana Fakulti Tamadun Islam, Universiti Teknologi Malaysia.
- Hilmi Bin Ismail. 2010. *Pengamalan solat fardhu di kalangan mahasiswa di TATi University College (TATiUC)*, Kemaman, Terengganu. Tesis Sarjana Jabatan Fiqh Dan Usul Akademi Pengajian Islam Universiti Malaya Kuala Lumpur.

Nazrul Bin Hassan.2011. *Konsep al-ta'wil dan al-ta'khir dan kefahaman tentang amalannya dalam ibadah solat di George Town Pulau Pinang*. Ijazah Sarjana Sastera (Pengajian Islam), Universiti Sains Malaysia.

Suhaila Nadzri, Suhaily Md Shamsudin, Siti Syuhada Abd Rahman, Ahmad A'toa' Mokhtar, Azri Rizal Md Razali. 2018. *Isu-Isu Pengabaian Solat Dalam Kalangan Remaja Di Negeri Selangor*. E-Book Of Masjid, Zakat And Waqf Management 2018 . Bangi: KUIS

Abdul Baqi Shabran. (2008). *77 Petua Meningkatkan Kualiti Solat Anda*. Kuala Lumpur, Jasmin Enterprise.

Zaharuddin Abd Rahman (2012). *Panduan Lengkap Formula Solat Sempurna*. Kuala Lumpur: Terbitan Telaga Biru Sdn. Bhd.



## **IMPAK KRISIS KEWANGAN GLOBAL TERHADAP KESTABILAN PERBANKAN ISLAM DI MALAYSIA**

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### **ABSTRAK**

*Perbankan dan kewangan Islam adalah salah satu segmen yang berkembang pesat dalam industri perbankan global dengan ciri tersendiri. Pelaksanaan sistem dwi perbankan di Malaysia bermula dengan penubuhan Bank Islam Malaysia Berhad pada tahun 1983. Pada tahun 2013 sektor perbankan Islam di Malaysia mencatat pencapaian yang signifikan dari segi aset, yang mewakili 13% daripada jumlah aset perbankan Islam global, di belakang Iran dan Arab Saudi. Kekuatan sistem perbankan dapat dianalisis berdasarkan risiko kecairan. Risiko kecairan bukan hanya menjadi topik utama dalam perbankan Islam, tetapi merupakan masalah bagi semua bank, termasuk bank Islam dan badan pengawas yang terlibat bagi menilai kestabilan sesebuah institusi perbankan. Kajian ini adalah untuk menganalisis kesan krisis kewangan global terhadap kecairan dalam sistem perbankan Islam di Malaysia. Untuk menganalisis kesan krisis kewangan dengan kecairan perbankan Islam, data siri masa 2007 hingga 2017 digunakan. Untuk analisis, nisbah kecairan telah ditentukan dan Analisis Variasi Sehalu (ANOVA) digunakan untuk menguji hipotesis menggunakan SPSS. Penemuan ini dapat memberi kesan positif kepada sistem perbankan Islam untuk terus berdaya saing dalam keadaan ekonomi semasa yang tidak menentu.*

### **Katakunci**

Perbankan Islam, kecairan bank dan kestabilan perbankan

## PENGENALAN

Sistem perbankan Islam berkembang dengan sangat pesat dalam industri perbankan global dengan prinsipnya yang berasaskan perkongsian keuntungan. Sistem kewangan Islam di Malaysia juga menunjukkan kemajuan yang ketara dalam persekitaran yang semakin liberal dan berdaya saing, sejajar dengan peningkatan integrasi sistem kewangan Islam Malaysia ke dalam landskap kewangan Islam global. Mengikut statistik yang dikeluarkan oleh Bank Negara Malaysia, sebanyak 17 buah bank Islam yang telah wujud di Malaysia yang beroperasi di bawah sistem perbankan Islam. Ini menunjukkan suatu peningkatan yang mantap jika dibandingkan dengan penubuhan perbankan Islam pada tahun 1983. Perkembangan Sistem Perbankan Islam di Malaysia terus rancak berkembang seiring dengan perbankan konvensional yang sedia kukuh, yang mana sehingga akhir 2013 aset sistem perbankan Islam meningkat kepada RM556,508.5 juta yang merupakan 25.0 peratus daripada jumlah aset sistem perbankan negara. Manakala deposit Sistem Perbankan Islam berkembang 26.6 peratus kepada RM436, 327.6 juta yang merangkumi 26.6 peratus daripada jumlah deposit sistem perbankan dan pembiayaan meningkat sebanyak 27.5 peratus daripada jumlah pinjaman sistem perbankan [1]. Dalam situasi perkembangan ini, menurut Malaysia International Islamic Financial Centre melaporkan, sektor perbankan Islam di Malaysia menguasai 13% dari jumlah aset perbankan Islam global, kedudukan ini dibelakang Iran dan Arab Saudi [2]. Krisis kewangan global pada tahun 2008 menyebabkan kesukaran kepada perbankan konvensional di kebanyakan negara. Sebaliknya perbankan Islam, sebahagian besarnya terlindung daripada krisis kewangan global ini kerana operasi persekitaran perbankan Islam berpandukan prinsip-prinsip Syariah yang melarang pelaburan dalam instrumen yang mengandungi unsur riba.

Kadar pertumbuhan yang memberangsangkan dalam perbankan Islam dan kestabilannya semasa krisis kewangan ini menarik perhatian ramai pembuat dasar dan pakar kewangan di seluruh dunia untuk mengkaji kekukuhan sistem perbankan Islam. Dalam tempoh krisis kewangan ini telah mendedahkan kelemahan perbankan konvensional berbanding dengan sistem perbankan Islam, sebagai alternatif yang lebih baik dengan menggunakan terma-terma asas risiko perkongsian keuntungan [3], [4]. Beberapa pakar dan pegawai

Sebagai sebuah institusi kewangan, bank sepatutnya mampu untuk menguruskan permintaan dan penawaran untuk meletakkan bank dalam keadaan yang selamat dan mengelakkan masalah dalam kecairan. Masalah dalam kecairan biasanya berpunca dari kegagalan dalam menguruskan dana atau tidak bertindak balas terhadap keadaan ekonomi yang sentiasa berubah-ubah yang mana membawa kepada pengeluaran tunai oleh pendeposit. Tambahan pula, bagi menstabilkan pengurusan kecairan dalam sistem ekonomi yang terbuka ini adalah mencabar disebabkan sensitiviti pemain pasaran yang tidak dijangka. Pengurusan bank biasanya akan cuba memaksimumkan pulangan bank atas jumlah aset dengan melaburkan seberapa banyak tunai yang ada. Walaubagaimanapun, pengurusan bank yang cekap perlu supaya bank mempunyai kecairan yang mencukupi untuk memenuhi mana-mana ketidakseimbangan dalam tempoh matang aset dan liabiliti. Risiko kecairan di perbankan Islam biasanya berpunca daripada ketidakseimbangan diantara aset dan liability, walaubagaimanapun, kekurangan adalah disebabkan dari pelaburan jangka panjang [5].



Kebanyakan kajian lepas telah mengambil kira kesan terhadap krisis kewangan 1997 dan 2007 seperti kajian oleh [6], [7], [8], [9]. Tahun 2015 adalah pasca kepada kemelesetan ekonomi kerana persekitaran ekonomi dan kewangan global dipengaruhi oleh tiga situasi utama. Pertama, kejatuhan mendadak harga komoditi global hingga mencecah paras yang rendah pada pascakrisis. Negara-negara pengeksport komoditi dan pengimport komoditi sangat terkesan dengan keadaan ini dari segi prospek pertumbuhan, di samping kesan inflasi terhadap kedua-dua ekonomi tersebut. Kedua, pasaran kewangan antarabangsa juga mengalami perubahan turun naik yang lebih ketara, ini disebabkan oleh perubahan dasar dalam ekonomi utama, penghindaran risiko yang tinggi, aktiviti spekulatif, dan kejatuhan mendadak harga minyak dan komoditi utama yang lain. Ketiga, pertumbuhan ekonomi global yang menjadi sederhana [10]. Pada Tahun 2016 juga pertumbuhan KDNK dunia adalah paling rendah sejak Krisis Kewangan Global.

Objektif kajian ini adalah untuk membuktikan secara empirikal kesan terhadap krisis kewangan global yang berlaku pada tahun 2007 hingga 2009 dan krisis ekonomi pada tahun 2015 terhadap prestasi bank Islam yang memfokuskan kepada pengalaman Malaysia. Maka kertas kerja ini telah mengambil kira dua tahap krisis yang berlaku iaitu pada tahun 2007 hingga 2009 dan tahun 2016 serta mengambil kira tahun-tahun selepas krisis iaitu 2010 hingga 2014 dan 2017. Secara khususnya, analisis kajian ini ingin melihat kesan krisis kewangan semasa terhadap kekukuhan kecairan sistem perbankan Islam.

## LITERASI KAJIAN

Pinjaman adalah tidak cair sekiranya pemberi pinjaman mewujudkan pengurusan yang khusus untuk memilikinya semula. Akibatnya, jika pemberi pinjaman memerlukan dana sebelum tempoh matang, dia boleh meminta untuk mencairkan awal atau meminta pulangan premium yang nyata dalam tempoh pemberian pinjaman secara langsung. Peminjam juga berisiko kehilangan pembiayaan. Ketidakaian tidak dapat dielakkan jika hubungan peminjam merupakan sebuah bank dengan struktur modal yang rapuh dan terarah kepada sebuah bank. Kegagalan bank untuk mewujudkan kecairan membolehkan pendeposit untuk menarik diri apabila mereka memerlukan tunai dan bank seharusnya mempunyai penampungan pinjaman dari pendeposit [11].

Kajian lepas ada membincangkan mengenai pengurusan risiko kecairan institusi perbankan dengan objektif untuk menyediakan perspektif global berkaitan pengurusan kecairan dari sudut ahli-ahli perbankan [12]. Kajiannya yang mengambil sampel perbankan di Romania turut menggariskan kepentingan dalam mewujudkan sistem perbankan yang fleksible, yang mana mampu untuk mengukur dan meramal aliran tunai bagi asset, liabiliti dan derivative dalam pelbagai keadaan normal dan juga senario tekanan yang pelbagai. Hasil kajian menunjukkan pengukuran kecairan termasuk dalam penilaian terhadap aliran masuk tunai bank terhadap aliran keluar dan penilaian kecairan atas asset untuk mengenalpasti potensi terhadap kekurangan dana. Bank perlu mengenalpasti hubungan antara risiko kecairan dan jenis-jenis risiko yang terdedah.

Manakala [13] menganalisis kewujudan pengurusan kecairan industri perbankan Islam di Indonesia. Pengkaji mendapati dari sudut pengurusan risiko yang menyentuh seluruh aspek dan isu yang membawa institusi kearah menangani risiko kecairan berlandaskan syariah.

Kecairan merupakan salah satu faktor yang penting bagi memastikan kestabilan dalam sesebuah institusi perbankan. Ia memainkan peranan penting dalam risiko kecairan sewaktu menghadapi krisis kewangan semasa. Kajian oleh [14] yang melakukan analisis perbandingan antara perbankan Islam dan konvensional dalam waktu krisis kewangan global tahun 2007 – 2008 di Malaysia mengambil kira tiga indikator iaitu profitabiliti, kecairan dan risiko kredit dari institusi perbankan. Sampel kajian adalah dari tahun 2006 hingga 2010 dan dibahagikan kepada sebelum, semasa dan selepas krisis kewangan. Hasil dapatan mendapati perbankan Islam kurang terdedah kepada risiko kecairan berbanding perbankan konvensional sewaktu krisis kewangan.

Kajian juga telah dilakukan di Turkey untuk menilai kestabilan sektor perbankan Islam dan konvensional dalam krisis kewangan global tahun 2006 hingga 2011 [15]. Kajian menggunakan kaedah trans analisis tahunan terhadap profitabiliti, kecairan, risiko dan kuantiti nisbah aset perbankan Islam dan konvensional. Hasil dapatan menunjukkan perbankan Islam lebih stabil dari perbankan konvensional dari segi profitabiliti, kecukupan modal dan kecairan untuk tempoh kajian termasuk sewaktu krisis kewangan global tahun 2008.

Rafiuddin, A and Alam, Z [3] dalam kajiannya membuat analisis perbandingan kestabilan antara perbankan Islam dan konvensional dari segi purata profitabiliti, kecairan dan nisbah risiko untuk tempoh lima tahun iaitu dari 2005-2009. Hasil kajian mendapati perbankan konvensional lebih keberuntungan berbanding perbankan Islam dan perbankan Islam mempunyai tingkat kecairan yang tinggi serta rendah kadar risiko berbanding bank konvensional.

Perbandingan pencapaian antara perbankan Islam and konvensional telah dilakukan semasa krisis ekonomi global bagi negara Bahrain, Kuwait, Oman, Qatar, Arab Saudi dan United Arab Emirates [4]. Kajian ini menggunakan enam analisis nisbah dan mendapati perbankan Islam lebih menderita dalam waktu krisis kewangan global dari segi nisbah modal, leverage dan pulangan purata ekuiti manakala perbankan konvensional menderita lebih kepada pulangan purata aset dan kecairan.

Kajian oleh [16] mengkaji kesan krisis kewangan global tahun 2008 dan 2009 terhadap perbankan Islam dan Konvensional di beberapa buah Negara seperti Bahrain, Jorgan, Kuwait, Qatar, Malaysia, Arab Saudi, UAE dan Turkey. Dapatan kajian mendapati perbankan Islam menerima kesan yang berbeza dengan perbankan konvensional semasa krisis kewangan global. Faktor profitabiliti yang membantu perbankan Islam dapat mengurangkan kesan buruk dari krisis kewangan global.

Manakala kajian [17] telah mengkaji kesan kejutan kewangan iaitu pada 1997 dan 2007/2008 terhadap bank Islam dan bank konvensional di Malaysia. Kajian ini menguji hipotesis bahawa perbankan Islam lebih berdaya tahan berbanding perbankan konvensional sewaktu krisis kewangan. Kajian ini memfokus kepada tiga jangka masa iaitu 1997 Krisis Kewangan Asia (July 1997-September 1999), waktu tiada krisis (October 1999-June 2007) dan 2007 waktu Krisis Kewangan (July 2007-September 2009). Hasil kajian mendapati kedua-dua sistem kewangan iaitu perbankan Islam dan konvensional terdedah kepada krisis kewangan. Kajian ini kontra dengan kepercayaan yang menyatakan perbankan Islam tidak terdedah dengan kejutan kewangan disebabkan ia mengamalkan prinsip tanpa faedah.

Perbandingan antara kesan kejutan krisis kewangan global antara perbankan Islam dan perbankan konvensional bagi Malaysia untuk tahun 1999 hingga 2010 mendapati fungsi tindak balas yang berbeza dalam kejutan dasar kewangan terhadap pinjaman di antara sistem perbankan Islam dan konvensional [18].

## METODOLOGI KAJIAN

Data dikumpul daripada penyata ekuiti dan liabiliti bank dan penyata asset perbankan Islam yang diterbitkan oleh Bank Negara Malaysia. Bagi tujuan kajian ini, beberapa nisbah kewangan yang bersesuaian dikira berdasarkan purata bagi tempoh 2007-2017. Analisis Nisbah digunakan secara meluas oleh banyak kajian untuk menilai prestasi bank. Kelebihan kaedah ini adalah bahawa ia menghapuskan jurang perbezaan dalam saiz antara firma perbankan dan membawanya setara [19]. Penggunaan langkah-langkah nisbah bukan satu kaedah baru [20] dan [21] telah menggunakan kaedah ini pada awal tahun 1970. Sejak itu, ia telah digunakan dalam banyak kajian seperti [22], [23], [24], [25]. Penilaian prestasi bank Islam menggunakan nisbah kewangan termasuk kajian oleh [26], [27] and [19]. Data selama sepuluh tahun telah dihabagikan kepada tiga bahagian iaitu semasa krisis kewangan global 2007-2008, selepas krisis 2009-2014 dan krisis ekonomi 2015-2016 dan selepas krisis 2017. Pada permulaannya Microsoft Excel telah digunakan untuk mengira nisbah kewangan. Kemudian, SPSS telah digunakan untuk memfokus kepada menguji hipotesis. Sampel data telah diuji dengan *One Way Analysis of Variance* (ANOVA).

Analisis nisbah yang diambil kira dalam kajian ini adalah analisis nisbah kecairan perbankan Islam. Kecairan bermakna berapa cepat bank boleh menukar aset kepada wang tunai untuk memenuhi permintaan tunai pendeposit dan peminjam. Dua Nisbah penting yang digunakan seperti di bawah:

Nisbah Aset Pelaburan (IAR):  $\text{Jumlah Pelaburan} / \text{Jumlah Aset} \times 100$ . Nisbah kecairan ini menunjukkan berapa peratus aset bank yang diikat dalam pinjaman. Semakin tinggi nisbah ini, semakin mudah kecairan bank.

Nisbah Aset Cair (LAR):  $((\text{Tunai dan Setarafnya} + \text{Pelaburan dalam Bon, Bil dan Sekuriti}) / \text{Jumlah Aset}) \times 100$ . Ini adalah nisbah deposit dan melihat berapa peratusan dana pelanggan dan jangka pendek yang dapat dipenuhi jika mereka menarik dana secara tiba-tiba, semakin tinggi peratusan ini, semakin cair bank dan kurang terdedah kepada perjalanan sistem bank.

## DAPATAN DAN KEPUTUSAN KAJIAN

Analisi ANOVA sehalu digunakan untuk menguji hipotesis berikut:

H0: Tidak ada perbezaan yang signifikan semasa dan selepas krisis kewangan global dalam Nisbah Aset Pelaburan (IAR) bank Islam di Malaysia. H1: Terdapat perbezaan yang ketara semasa dan selepas krisis kewangan global dalam Nisbah Aset Pelaburan (IAR) bank Islam di Malaysia.

Jadual 1 menunjukkan keputusan bagi ujian ANOVA sehalu. Nilai p adalah 0.898 untuk data Malaysia. Nilai ini melebihi daripada  $\alpha$  (0.05) nilai signifikan dimana hipotesis null diterima bermaksud tidak ada perbezaan yang signifikan semasa dan selepas krisis kewangan global dalam Nisbah Aset Pelaburan

(IAR) bank Islam di Malaysia. Keputusan ini menunjukkan perbankan Islam di Malaysia tidak terkesan dari segi aset pelaburan akibat krisis kewangan global.

**Jadual 1. Analisis ANOVA sehala bagi Nisbah Aset Pelaburan (IAR)**

Pembolehubah	Ujian ANOVA	
	<i>F</i>	<i>Sig.</i>
IAR	0.017	0.898

Analisis ANOVA sehala digunakan untuk menguji hipotesis berikut:

H0: Tidak ada perbezaan yang signifikan semasa dan selepas krisis kewangan global dalam Nisbah Kecairan Aset (LAR) bank Islam di Malaysia.

H1: Terdapat perbezaan yang ketara semasa dan selepas krisis kewangan global dalam Nisbah Kecairan Aset (LAR) bank Islam di Malaysia

**Jadual 2. Analisis ANOVA sehala bagi Nisbah Kecairan Aset (LAR)**

Pembolehubah	Ujian ANOVA	
	<i>F</i>	<i>Sig.</i>
LAR	19.948	0.002

Jadual 2 menunjukkan keputusan ujian ANOVA sehala bagi menguji Nisbah Kecairan Aset. Nilai  $p$  0.002 dan nilai ini kurang daripada  $\alpha$  (0.05) nilai signifikan dimana hipotesis null tidak diterima bermaksud terdapat perbezaan yang ketara semasa dan selepas krisis kewangan global dalam Nisbah Kecairan Aset (LAR) bank Islam di Malaysia. Keputusan ini menunjukkan perbankan Islam tidak terkesan dari segi aset pelaburan akibat krisis kewangan global tetapi ianya terkesan dari segi pegangan nisbah kecairan aset,

## KESIMPULAN

Objektif kajian ini adalah untuk membuktikan secara imperikal kesan terhadap krisis kewangan global yang berlaku pada tahun 2007 hingga 2009 dan krisis ekonomi pada tahun 2015 hingga 2016 terhadap prestasi bank Islam yang memfokus kepada pengalaman Malaysia. Maka kertas kerja ini telah mengambil kira dua tahap krisis yang berlaku iaitu pada tahun 2007 hingga 2009 dan tahun 2015 hingga 2016 serta mengambil kira tahun-tahun selepas krisis iaitu 2010 hingga 2014 dan 2017. Secara khususnya, analisis kajian ini ingin melihat kesan krisis kewangan semasa terhadap kekukuhan kecairan

sistem perbankan Islam. Hasil kajian mendapati perbankan Islam perlu memegang aset cair yang mencukupi yang menjadikannya kurang terdedah kepada risiko kecairan semasa berhadapan dengan krisis kewangan global. Bagi nisbah aset pelaburan ianya signifikan dimana hipotesis null diterima bermaksud tidak ada perbezaan yang signifikan semasa dan selepas krisis kewangan global.

Terdapat beberapa implikasi dasar yang boleh dirumuskan berdasarkan dapatan kajian ini. Pertamanya perlunya perbankan Islam untuk menguruskan aset dan meningkatkan modal mereka bagi mengelakkan risiko kecairan yang boleh terjadi. Simpanan yang mencukupi juga amat penting bagi menghadapi situasi kecemasan yang tidak menentu. Perbankan Islam juga perlu memilih waktu yang sesuai dalam meningkatkan jumlah pembiayaan. Pembiayaan yang bersifat pro kitaran iaitu pertumbuhan ekonomi yang menggalakkan akan mampu memberikan prospek perniagaan dan keuntungan yang tinggi kepada bank. Bank seharusnya mengelakkan dari menyediakan pembiayaan yang terlalu tinggi ketika ekonomi tidak stabil disebabkan faktor risiko kemungkiran yang tinggi bakal berlaku. Selain itu, walaupun perbankan Islam semakin mengejar keuntungan berdasarkan pembiayaan dan pelaburan, kecairan bekalan deposit bank juga perlu mencukupi, stabil serta menjanjikan kadar pulangan yang kompetatif berbanding perbankan konvensional. Kekurangan dalam membekalkan deposit permintaan akan menyebabkan kekurangan keyakinan masyarakat terhadap sesebuah institusi perbankan. Deposit merupakan sumber utama bagi pembiayaan dan pendahuluan kepada para pelanggan. Ketidakstabilan deposit akan menjejaskan aktiviti pembiayaan perbankan Islam. Jurang tempoh masa deposit berjangka pendek dan pembiayaan bersifat jangka panjang juga perlu dikurangkan melalui pendekatan bersesuaian.

Sehubungan dengan itu juga kekukuhan institusi perbankan Islam tampatan akan memberi ruang kepada Malaysia untuk menjadi peneraju kepada hub perbankan Islam global.

Daripada kajian yang telah dijalankan ini, terdapat beberapa cadangan penambahbaikan yang boleh dilakukan untuk memantapkan lagi kajian yang boleh dilakukan dimasa akan datang antaranya adalah menjalankan kajian menggunakan data bulanan. Menggunakan kaedah kajian yang berlainan supaya dapat mengesahkan bahawa dengan menggunakan metodologi yang berlainan masih memperoleh hasil dapatan yang sama.

## RUJUKAN

- [1] "Laporan Kestabilan Kewangan dan Sistem Pembayaran, 2013," Bank Negara Malaysia, Kuala Lumpur, 2014.
- [2] M. I. I. F. Centre, "Islaimc Finance Industry Outperforms in 2013," [www.mifc.com](http://www.mifc.com), Kuala Lumpur, 2014.
- [3] A. Rafiuddin and Z. Alam, "Islamic Banks and Conventional bank in the Qatar Before and After the recession.," *International Journal of Financial Management (IJFM)*, vol. 1, no. 1, pp. 50-59, 2012.
- [4] S. P. Parashar and J. Venkatesh, "How did Islamic Banks do During Global Financial Crisis.," *Banks and Bank System*, vol. 5, no. 5, pp. 52-55.
- [5] M. L. Samsudin, M. R. Abdul Halim, M. T. Mohamad and A. A. Sulaiman, "Pengurusan Kecairan Berasaskan Aset dan Liabiliti perbankan Islam di Malaysia," *Persidangan Kebangsaan Ekonomi*

*malaysia ke VII*, 2012.

- [6] E. E. Hakan and A. B. Gulumser, "Impact of interest rate on Islamic and conventional banks: The case of Turkey," *Munich Personal rePEc Archive (MPRA)*, pp. 1-18, 2011.
- [7] H. K. Salina and A. M. M. Sabri, "The role of bank loans and deposit in the monetary transmission mechanism in Malaysia," *International Journal of Banking and Finance*, vol. 6, pp. 37-59, 2009.
- [8] S. K. Salina and Raditya, "Role of the Islamic banks in the monetary transmission proses in Malaysia," *International Journal of Islamic and Middle Eastern Financial and Managment*, pp. 7-19, 2010.
- [9] H. K. Salina and M. S. Abdul Majid, "Impact of Financial Shocks on Islamic Bank: Malaysia Evidence during 1997 and 2007 Financial Crises," *Internatioanl Journal of Islamic and Middle Eastern and Managment*, vol. 3, no. 4, pp. 291-305, 2010.
- [10] "Perkembangan Ekonomi Pada Tahun 2015," Bank Negara Malaysia, Kuala Lumpur, 2015.
- [11] W. D. Douglas and G. R. Raghuram, "Liquidity Risk, Liquidity Creation and Financial Fragility: A Theory of Banking," *Journal of Political Economy*, vol. 100, pp. 663-684, 2001.
- [12] I. Driga, "Liquidity Risk Management in Banking," *The Youngh Economists Journal*, 2009.
- [13] R. Ismail, "Strengthening and Improving The Liquidity in Islamic Banking," *Journal of Humanomics*, pp. 18-35, 2010.
- [14] M. Abdull and S. Kassim, "Impact of Global Financial Crisis on the Performance of Islamic and Conventional Banks: Emperical Evidence from Malaysia," *Journal of Islamic Economics, Banking and Finance*, vol. 8, no. 5, 2012.
- [15] M. Aktas, "Stability of the Participation Banking Sector Against the Economic Crisis in Turkey," *International Journal of Economics and Financial Issues*, vol. 3, no. 1, pp. 180-190, 2013.
- [16] M. Hasan and J. Dridi, "The Effect of Global Financial Crisis on Islamic and Conventional Banks: A comparative Study," *IMF Working Paper*, p. WP/10/201, 2010.
- [17] S. H. Kassim and M. S. Abdul Majid, "Impact of Financial Shocks on Islamic Bnak: Malaysia Evidence during 1997 and 2007 Financial Crises," *Internatioanl Journal of Islamic and Middle Eastern Financial and Management*, vol. 3, no. 4, pp. 291-305, 2010.
- [18] M. R. Rosamiza and Z. Abdul Karim, "Dasar Kewangan dalam Dwi Sistem Perbankan: Suatu Kajian VAR Berstruktur di Malaysia," *Prosiding KERKEM VII*, pp. 111-125, 2012.
- [19] Abdus Samad, "Performance of Interest-free Islamic Banks vis-a-vis Interestbased Conventional Bank pf Bahrain," *IIUM Journal of Economics And Managment*, vol. 12, no. 2, 2004.
- [20] M. C. O'Connor, "On the Usefulness of Financial Ratios to Investors in Common Stock," *The Accounting Review*, vol. April, 1973.
- [21] R. Libby, "Accounting Ratios and the Prediction of Failure: Some Behavioral Evidence," *Journal of Accounting Research*, vol. Spring, pp. 150-161, 1975.
- [22] K. Chen and S. Thomas, "An Empirical Analysis of Useful Financial Ratios," *Financial Management*, vol. 10, no. 1, 1981.
- [23] P. S. Ross, "Commercial Bank Management," vol. Boston: Irwin, 1991.
- [24] P. S. Sabi, "Comparative Analysis of Foreign and Domestic Bank Operation in Hungary," *Journal*



*of Comparative Economics*, vol. 22, no. 2.

- [25] G. H. Hempel and G. S. Donal, *Bank Management*, New York: John Wiley and Sons, Inc, 1998.
- [26] A. Samad, ""Comperative Efficiency of the Islamic Bank Malausia vis-a-vis Conventional Banks", "*IJUM Journal of Economics and Management*, vol. 7, no. 1, pp. 1-25, 1999.
- [27] M. Iqbal, "Islamic and Conventional Banking in the Nineties: A Comparative Study," *Islamic Economic Studies*, vol. 8, no. 2, p. (Jeddah: Islamic Development Bank), 2001.
- [28] S. E. Hidayat and M. Abdullah, "Does financial crisis give impacts on Bahrain Islamic banking performance? A panel regression analysis," *International Journal of Economics and Finance*, vol. 4, no. 7, 2012.

## **KAJIAN TAHAP PENGETAHUAN DAN AMALAN HIBAH DI KALANGAN KETUA KELUARGA PELAJAR DIPLOMA KEWANGAN DAN PERBANKAN ISLAM DI POLITEKNIK NILAI NEGERI SEMBILAN**

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### **ABSTRAK**

Hibah merupakan instrumen penting dalam perancangan harta menurut undang-undang Islam. Hibah ialah pemberian harta yang berlaku semasa hidup pemberi hibah dan instrumen ini digalakkan dalam Islam, di mana sekiranya ia dilakukan dengan betul dan selaras dengan kehendak syarak, maka ia boleh mengelakkan berlaku pertikaian dan perebutan harta. Salah faham masyarakat mengenai instrumen ini sering kali timbul terutamanya apabila berlaku kematian pihak yang memberi hibah. Oleh itu, kajian ini mempunyai dua tujuan (i) untuk mengenal pasti pengetahuan responden berkaitan hukum-hukum asas hibah dan (ii) mengenal pasti pengetahuan responden tentang perundangan hibah di Malaysia. Satu soal selidik telah dijalankan ke atas 136 orang responden dengan menggunakan kaedah persampelan bertujuan. Data yang diperoleh dianalisis secara deskriptif menggunakan kekerapan, peratusan dan skor min. Dapatan kajian menunjukkan bahawa responden mempunyai tahap pengetahuan yang tinggi berkaitan hukum-hukum asas hibah. Seterusnya, kajian ini menunjukkan pengetahuan responden tentang perundangan hibah di Malaysia turut mencatatkan skor min yang tinggi. Hasil kajian ini penting untuk agensi-agensi awam dan swasta, Majlis Agama Islam Negeri (MAIN) serta industri di mana mereka boleh menggunakan kajian ini bagi memahami



gelagat pelanggan dan mengukuhkan industri perancangan harta pusaka di Malaysia.

***Katakunci: Hibah, perundangan hibah, perancangan harta, pengurusan harta***

## ABSTRACT

*Hibah is an important instrument in property planning according Islamic law. Hibah is the giving of property that occurs during the life of the giver of hibah and this instrument is encouraged in Islam, where if it is done properly and in accordance with the requirements of sharia, then it can avoid disputes and disputes over property. Public misunderstandings about this instrument often arise especially when there is the death of the grantor. Therefore, this study has two purposes (i) to identify respondents knowledge related to basic laws of hibah and (ii) to identify respondents knowledge of hibah legislation in Malaysia. A questionnaire was conducted on 136 respondents by using a purposive sampling. The data obtained were analyzed descriptively using frequency, percentage and mean score. The findings of the study show that the respondents have a high level of knowledge related to the basic laws of hibah. Furthermore, this study shows that the respondents' knowledge of hibah law in Malaysia also recorded a high mean score. The results of this study are important for public and private agencies, the State Islamic Council (MAIN) and industry where they can use this study to understand customer behavior of the community regarding the understanding and practice of hibah as an estate planning instrument and strengthen the estate management industry in Malaysia.*

**Keywords:** *Hibah, hibah law, estate planning, wealth management*

### 1. Pengenalan

Islam sebagai agama yang sempurna telah menentukan cara-cara pemilikan harta yang sah menurut hukum syarak seperti pemilikan melalui hibah, wasiat, wakaf serta Faraid. Pemilikan harta oleh seseorang individu melalui salah satu cara tersebut telah diiktiraf oleh Islam sebagai hak milik sempurna (Mohd Zamro Muda & Mohd. Ridzuan Awang, 2006).

Menurut kajian oleh Rusnadewi Abdul Rashid & Nor Hisyam Ahmad (2013), hak milik ini tidak boleh dilucutkan oleh sesiapaupun tanpa persetujuan daripada pemiliknya melainkan dengan cara yang dibenarkan. Mana-mana individu yang memiliki harta di bawah kategori hak milik sempurna adalah bebas menggunakan serta menikmati harta mereka dalam batas-batas yang ditetapkan. Justeru sebagai satu pengiktirafan kepada hak milik yang diberikan, mereka layak melaksanakan apa-apa transaksi berkaitan harta tersebut termasuk melakukan pindah milik, wakaf, wasiat dan hibah. Selain daripada itu, mereka juga berhak mewariskan harta tersebut selepas kematian dalam bentuk pusaka.

Konsep pengurusan harta merupakan perkara yang amat penting bagi menjamin harta agar mampu beredar dan bergerak cergas di dalam pelbagai aspek kehidupan bagi penggunaan yang luas serta menyeluruh. Konsep pengurusan harta sedemikian memberikan hak pemilikan kepada seseorang atau segolongan yang lain. Selain itu, pengurusan harta yang baik boleh memberi galakan kepada transaksi harta agar dapat memperluaskan skop peredaran harta dan kekayaan sehingga dapat dinikmati oleh masyarakat. Oleh yang demikian, pengurusan harta secara sistematik dan teratur ini

adalah bertujuan untuk mengelakkan berlakunya kesukaran- kesukaran yang boleh melemahkan kegiatan ekonomi masyarakat dalam sesebuah negara (Rusnadewi Abdul Rashid & Nor Hisyam Ahmad, 2013).

Menurut Nurul Hazira Rahmat (2009), hibah merupakan satu instrumen penting dalam perancangan pengurusan harta menurut undang-undang Islam. Hibah ialah pemberian harta yang berlaku semasa hidup pemberi hibah, sedangkan wasiat ialah pemberian harta yang berlaku selepas kematian pewasiat. Instrumen ini digalakkan dalam Islam. Sekiranya ia dilakukan dengan betul dan selaras dengan kehendak syarak maka ia boleh mengelakkan berlaku pertikaian dan perebutan harta di samping dapat membantu kaum kerabat yang memerlukan bantuan. Terdapat tanggapan bahawa dengan melakukan hibah maka seseorang itu telah menyalahi ketetapan hukum Faraid. Tanggapan ini tidak tepat kerana instrumen ini juga sebenarnya diberi fokus dan tempat yang tersendiri dalam Islam.

Setiap satu kaedah pengurusan harta ini adalah berbeza antara satu sama lain. Kaedah melalui Faraid telah ditetapkan bahagian-bahagian yang perlu dibahagikan kepada waris-waris yang telah ditetapkan mengikut syarak. Wakaf, wasiat dan hibah digunakan ketika pemilih harta tersebut masih hidup (Nurul Hazira Rahmat, 2009). Dalam undang-undang Islam, wakaf itu boleh dibuat sama ada untuk kaum keluarga atau kerabat yang dikenali sebagai wakaf keluarga, atau untuk kepentingan kebajikan dan agama yang dikenali sebagai wakaf am (Mohd. Ridzuan Awang, 1994).

Wasiat pula berbeza dengan hibah di mana ia telah ditetapkan jumlah yang boleh diberi kepada bukan waris iaitu  $\frac{1}{3}$  dan ia mestilah mendapat persetujuan daripada semua waris-waris. Manakala hibah pula merupakan kaedah perancangan harta yang berbeza dengan wasiat. Ia tidak memperuntukkan jumlah yang boleh diberi berbanding dengan wasiat dan hibah pula boleh diberi kepada sesiapa sahaja iaitu bukan waris sama ada orang Islam atau bukan Islam (Nurul Hazira Rahmat, 2009).

Walau bagaimanapun, kaedah perancangan harta melalui hibah kurang dikenali oleh masyarakat berbanding dengan wasiat sedangkan wasiat hanyalah salah satu instrumen yang boleh dibuat untuk mengagihkan harta pusaka. Maka wasiat bukanlah suatu kaedah yang boleh menyelesaikan semua masalah dalam harta pusaka. Oleh itu, pengetahuan tentang hibah ini perlulah diperluaskan dan dipertingkatkan lagi oleh kerajaan serta pihak-pihak yang mempraktikkan hibah (Nurul Hazira Rahmat, 2009).

Selain itu, tiada peruntukan atau akta yang khusus berkaitan dengan hibah kecuali sesetengah negeri yang memperuntukkan di dalam perundangan negeri mereka contohnya seperti negeri Selangor. Oleh itu, pengetahuan tentang hibah ini perlulah diperluaskan dan dipertingkatkan lagi oleh kerajaan serta pihak-pihak yang mempraktikkan hibah.

## **2.0 Masalah Harta Beku di Malaysia dan Hibah Sebagai Jalan Penyelesaian**

Walaupun konsep pengurusan harta sangat penting dan mempunyai manfaat dan tujuan kebaikan, namun malangnya, masih ramai dalam kalangan masyarakat di negara ini yang kurang kesedaran atau minat untuk membuat perancangan awal pengagihan harta. Menyedari masalah itu, suatu penyelesaian terbaik perlu dicari dan diteliti secara serius (Rusnadewi Abdul Rashid & Noor Inayah Yaakub, 2015).

Menurut statistik pada tahun 2006, dianggarkan lebih sejuta kes tuntutan harta pusaka di Malaysia yang nilainya mencecah RM38 bilion masih lagi tertunggak kerana tidak diuruskan oleh pihak pewaris kebanyakan kes tersebut iaitu hampir 90 peratus daripadanya melibatkan harta milik orang Islam (Norliza Abas, 2006). Walau bagaimanapun, jumlah tersebut telah meningkat kepada nilai yang mencecah RM40 bilion pada awal tahun 2007 dan jumlah ini melibatkan lebih daripada satu juta kes pembahagian pusaka yang masih belum diselesaikan. Daripada jumlah itu, sebanyak RM38 billion harta pusaka dalam bentuk hartanah, RM1.5 bilion berupa wang tunai, dan RM70 juta daripada Kumpulan Wang Simpanan Pekerja (KWSP) (Rejal Arbee, 2007).

Utusan Malaysia (2009), melaporkan kemungkinan rakyat negara ini terlalu kaya dan begitu berjaya sehingga sanggup membiarkan harta pusaka termasuk wang tunai bernilai RM31 juta disimpan dan dijaga oleh Amanah Raya Berhad (ARB). Statistik pada tahun 2010 juga menunjukkan anggaran jumlah RM40 bilion harta milik lebih 500,000 waris dari kalangan umat Islam masih belum dapat dicairkan (Anon, 2010). Terbaru, statistik dianggarkan tunggakan kes tuntutan harta pusaka di Malaysia telah mencecah RM42 bilion. Kebanyakan kes tersebut iaitu hampir 90 peratus daripadanya melibatkan harta milik orang Islam (Md. Ghazali Ibrahim, 2011).

Dalam satu kenyataan lain di dalam media, Jabatan Kehakiman Syariah Malaysia (JKSM) sedang mengusahakan Projek Al-Mafqud untuk mencari kaedah mencairkan semula wang atau aset-aset harta yang tidak dituntut, berjumlah RM66.6 bilion untuk dimanfaatkan sebaik mungkin (Sinar Harian, 2013).

Menyedari masalah itu, suatu penyelesaian terbaik perlu dicari dan diteliti secara serius. Justeru itu, hibah dilihat mampu menjadi alternatif kepada pengagihan harta pusaka sebagai langkah mengurangkan masalah yang timbul akibat kegagalan dan kelewatan pengagihan harta melalui Faraid tanpa mengetepikan hukum Faraid dalam aspek pembahagian harta. Ini adalah bagi memastikan pembahagian harta yang dilaksanakan menjadi lebih mudah dan dapat memberikan faedah yang maksimum bukan sahaja pada waris-warisan malahan kepada orang yang meninggal dunia. Pelaksanaan hibah dilihat amat sesuai untuk diamalkan seiring dengan peredaran masa serta perubahan corak hidup dan tabiat masyarakat. Ini adalah memandangkan pengagihan secara hibah tidak perlu melalui proses pentadbiran seperti yang diperlukan dalam tempoh dan penyelesaian harta pusaka secara Faraid. Justeru itu, tidak timbul masalah dari segi kelewatan dan tunggakan kes pengagihan harta. Selain daripada itu, masalah pengabaian harta juga tidak akan timbul memandangkan pemberian telah dibuat semasa hayat si mati kepada waris-warisan tersebut (Rusnadewi Abdul Rashid & Nor Hisyam Ahmad (2013).

Islam telah menyediakan cara yang terbaik untuk mengurus dan mentadbir harta secara lebih bijaksana, namun ruang dan peluang berkenaan tidak digunakan sepenuhnya. Soal pengurusan dan perancangan harta seharusnya dipandang serius oleh orang Islam keseluruhannya. Perancangan dan pengurusan harta ini sepatutnya diuruskan ketika masih hidup lagi bagi mengelakkan berlakunya masalah yang timbul kelak di antara waris-warisan harta tersebut (Nurul Hazira Rahmat, 2009).

Walaupun bagaimanapun, instrumen hibah ini agak kurang dikenali berbanding dengan perancangan harta yang lain. Pada masa sekarang orang Islam menjangkakan bahawa cara wasiat dan Faraid sahaja cara yang terbaik dalam menguruskan dan merancang harta pusaka maka cara hibah ini kurang mendapat perhatian.

Dalam pada itu, di Malaysia masih belum ada enakmen undang-undang tertentu yang diwartakan di mana-mana Majlis Agama Islam Negeri (MAIN) mengenai garis panduan hibah yang sekata dan boleh diguna pakai. Di samping itu, tiada keseragaman dari segi pelaksanaan hibah di setiap Majlis Agama Islam Negeri (MAIN) dan amalan hibah dalam kalangan masyarakat Malaysia juga tidak dibuat secara dokumentasi rasmi yang sah. Tidak dinafikan juga, tahap kesedaran masyarakat untuk menguruskan harta melalui hibah berada pada tahap yang rendah.

Akhir sekali, ramai dalam kalangan masyarakat Malaysia masih tidak tahu bahawa hibah juga boleh dibuat di mana-mana Majlis Agama Islam Negeri (MAIN) serta kurangnya fatwa yang terperinci yang dibahaskan oleh Majlis Fatwa Kebangsaan Malaysia. Pendedahan melalui media cetak dan media elektronik berhubung hibah juga masih kurang. Ini membuktikan terdapat banyak faktor-faktor yang menghalang pelaksanaan hibah di negara kita pada masa kini.

### **3.0 Sorotan Kajian**

Untuk beberapa dekad kebelakangan ini, minat terhadap isu pewarisan harta dalam kalangan anak, ahli keluarga dan generasi telah mendesak lebih banyak kajian dilakukan kerana banyak aspek yang tidak disentuh oleh penyelidik sebelum ini. Tiga persoalan yang kerap menjadi tumpuan dalam kajian ialah apakah motif utama yang mendorong keputusan seseorang individu membuat pemberian harta dalam bentuk hadiah, bagaimanakah motif pemberian ini memberikan kesan terhadap pengagihan harta dan kepada siapa pemberian ini dibuat. Menurut Albertini & Radl (2012), dan Cox & Rank (1992), pemberian dianggap sebagai satu mod pemindahan aset kepada generasi berikutnya dan ia dianggap sebagai satu pemberian sukarela. Sikap dalam pemberian akan mempengaruhi motif sesuatu pemberian.

Dalam kajian oleh Cox & Rank (1992) dan Norton & Van Houtvenf (2006), motif yang dominan yang dikenal pasti dalam pemberian yang dilakukan oleh individu ialah atas motif permindahan. Manakala dalam kajian oleh Halvorsen & Halvorsen & Thoresen (2011), pula mendapati motif altruism merupakan faktor yang dominan. Selain daripada dua motif ini, terdapat juga motif lain yang telah dikaji oleh pengkaji lain di mana pemberian dibuat atas motif sebagai simpanan sewaktu kecemasan, pemberian kasih sayang dan tuntutan kekeluargaan (Norton & Van Houtvenf, 2006). Seterusnya motif egoistik (Nordblom & Ohlsson, 2011), motif status pengagihan semula (Albertini & Radl, 2012) dan pembahagian secara adil (Halvorsen & Thoresen, 2011) turut antara motif yang dikenal pasti dalam kajian pemberian hadiah kalangan seseorang individu.

Kajian ini tidak membincangkan apakah motif atau tujuan seseorang individu membuat pemberian hadiah. Namun, kajian lepas berhubung perkara ini membantu untuk lebih memahami apa yang mendorong ibu bapa membuat pemberian hadiah kepada anak-anak dan bagaimana mengagihkan aset-aset yang dimiliki. Kajian empirikal berhubung amalan hibah di Malaysia adalah terhad. Tumpuan adalah kajian yang pernah dilakukan oleh Salleh et. al., (2007) di Lembah Klang, Malaysia. Bagaimana kajian oleh beliau adalah dalam bentuk analisis deskriptif semata-mata. Dalam kajian yang dilakukan, keputusan menunjukkan daripada 300 orang responden yang dikaji, hanya 31.7% sahaja yang menerima hibah dan majoriti responden iaitu 68% tidak menggunakan hibah sebagai mekanisme pengagihan harta. Ini menunjukkan bahawa masyarakat beragama Islam tidak mempunyai kesedaran yang tinggi tentang kewujudan instrumen lain yang boleh digunakan dalam pengagihan harta selain Faraid.

Kajian-kajian lain yang dilakukan adalah lebih tertumpu pada hukum hibah dalam perundangan Islam. Misalnya, kajian oleh Buang, A. H., (2007), Laluddin, H, Mohamad, M.N., Nasohah, Z. & Ahmad, S. (2012), Mohamed Said, N.L., Awang, M.R. & Mohd Nor, A. H. (2010), Muda, M.Z. (2008), Nor Muhammad, N. H. (2009), perundangan hibah di Malaysia oleh Abdul Rashid, R. & Yaakub, N.I. (2010 & 2011), Ahmad, M.Y. & Ibrahim, I. (2006), Mujani et. al (2012), Mujani, W.K., Wan Hussain, W.M.H., Yaakub, N.I, Abdul Rashid, R. (2011b), Nor Muhammad, N. H. (2008) dan pelaksanaan rangka kerja hibah dalam pengurusan harta di Malaysia oleh Abdul Razak, M.Z. & Ahmad, S. (2008), Abdullah, N.I. & Abdul Aziz, N.A., (2010), Alma'amun, S. (2010b), Azhar, A. & Ishak, A.M. (2011), Hassan, A.A. & Yusop, Y. (2006), Ismail, A. (2009), Mohd Bustamam, B. & Muhammad Yusak, Y. (2009), Mohd Noor, A. & Abdullah, M.A. (2009), Nor Muhammad, N.H. (2010), Sabirin, A. (2009) dan Yaacob, O. (2006).

Kajian oleh Rusnadewi Abdul Rashid & Nor Hisyam Ahmad (2013), menunjukkan bahawa terdapat dua jenis perancangan pengurusan harta dalam Islam iaitu perancangan semasa hidup dan pembahagian harta selepas kematian. Antara bentuk perancangan harta semasa hidup ialah hibah, wasiat, wakaf, sedekah dan nazar. Manakala, pengurusan harta selepas berlaku kematian pula ialah pembahagian harta pusaka tertakluk kepada hukum Faraid.

Berdasarkan Wan Abdul Halim Wan Harun (2006), menerangkan isu-isu pembahagian harta pusaka orang Islam dalam konteks perundangan Malaysia. Kajian ini dijalankan untuk mengkaji institusi yang mengendalikan pembahagian harta pusaka dan undang-undang yang berkaitan dengannya. Selain itu, penyelidik ingin mengetahui bagaimana harta pusaka orang Islam dibahagikan di bawah Akta Harta Pusaka Kecil (Pembahagian) 1955 (Akta 98).

Menurut kajian Siti Juwariah Ab. Razak (2008), Islam mempunyai kaedah pembahagian pusaka yang pelbagai terutamanya Faraid tetapi ramai yang masih belum memahaminya. Akibatnya, timbul pelbagai tanggapan yang salah berkaitan hukum dan sistem pembahagian pusaka tersebut, khususnya berkenaan siapakah yang berhak menerima pusaka, berapa bahagian yang lepas dipusakai serta perkara-perkara yang berkaitan dengannya seperti wasiat, hibah, hutang si mati, belanja pengurusan pengebumian dan sebagainya. Penyelidik menyatakan penyediaan wasiat yang telah berakar umbi dalam masyarakat, Selain itu, tahap kesedaran yang rendah terhadap wasiat dalam kalangan masyarakat luar bandar kerana tahap pendidikan yang mereka terima.

Wasiat pula berbeza dengan hibah di mana ia telah ditetapkan jumlah yang boleh diberi kepada bukan waris iaitu  $\frac{1}{3}$  dan ia mestilah mendapat persetujuan daripada semua waris-warisan. Manakala hibah pula merupakan kaedah perancangan harta yang berbeza dengan wasiat. Ia tidak memperuntukkan jumlah yang boleh diberi berbanding dengan wasiat dan hibah pula boleh diberi kepada sesiapa sahaja iaitu bukan waris sama ada orang Islam atau bukan Islam (Nurul Hazira Rahmat, 2009).

Berdasarkan Nurul Hazira Rahmat (2009), hibah merupakan satu instrumen penting dalam perancangan harta menurut undang-undang Islam. Hibah ialah pemberian harta yang berlaku semasa hidup pemberi hibah, sedangkan wasiat ialah pemberian harta yang berlaku selepas kematian pewasiat. Penyelidik mendapati bahawa ketidakfahaman masyarakat mengenai kedua-dua instrumen ini sering kali timbul terutamanya apabila berlaku kematian pihak yang member hibah atau pewasiat. Kewujudan agensi-agensi yang menguruskan perancangan harta termasuk hibah dan wasiat sedikit sebanyak dapat membantu menyelesaikan permasalahan yang berlaku dalam kalangan umat Islam berkaitan dengan perancangan harta.



Jasni Sulong (2009), dalam Islam, hak untuk mewarisi harta dalam kalangan waris yang hidup adalah berdasarkan syariat Islam. Apabila seseorang itu, meninggal dunia tanpa meninggalkan wasiat, pembahagian harta pusaka akan dilaksanakan sebagaimana yang telah digariskan oleh hukum syarak. Melalui kajian tersebut kebanyakan responden mempunyai tahap pengetahuan yang tinggi mengenai agensi yang menguruskan harta pusaka. Agensi yang menguruskan harta pusaka adalah seperti Amanah Raya Berhad (pusaka ringkas), Pejabat Tanah/ Unit Pembahagian Pusaka (pusaka kecil) dan Mahkamah Tinggi (pusaka besar).

Menurut Mohd Khairy Kamarudin & Suhaili Alma'amun (2013) dalam penulisannya yang bertajuk *Analysing The Knowledge and Practice of Hibah (Inter Vivos Gift) Within The Contextual Form of Islamic Estate Planning in Malaysia: Variations Across Control Variables* di mana pengkaji lebih memfokuskan kepada kajian terhadap pengetahuan mengenai hukum- hukum asas hibah dan perundangan hibah di Malaysia. Penyelidik juga mengkaji amalan pemberian hibah daripada ibu bapa kepada anak dalam konteks perancangan harta pusaka Islam di Malaysia.

Menurut Mohd Kamil Mokhtar (2007), dalam penulisannya yang bertajuk *Al-Hibah: The Principles And Operational Mechanism In The Contemporary Malaysian Reality* di mana pengkaji lebih tertumpu pada penyelesaian kepada masalah yang berkaitan dengan pelupusan harta di kalangan orang Islam tanpa mengetepikan cara pelupusan melalui Faraid dan wasiat dan lebih memfokuskan kepada hibah.

Muhamadul Bakir Yaakub (2011), mengkaji konflik pembahagian harta pusaka (Al- Mirath) dan krisis identiti dalam institusi kekeluargaan masyarakat Melayu. Kajian ini menemukan beberapa dapatan penting. Antaranya ialah, sekiranya pewaris merasakan di antara ahli waris yang bakal mewarisi harta warisnya nanti merupakan ahli waris yang bermasalah, maka jalan yang terbaik ialah dengan menghadiahkan (hibah) sebahagian daripada harta warisan kepada ahli waris yang sesuai dengannya sebelum pewaris wafat. Pendekatan ini boleh menyelesaikan sebahagian daripada konflik dan juga krisis yang mungkin berlaku di kemudian hari.

Setiap satu kaedah pengurusan harta ini adalah berbeza antara satu sama lain. Kaedah melalui Faraid telah ditetapkan bahagian-bahagian yang perlu dibahagikan kepada waris-waris yang telah ditetapkan mengikut syarak. Wakaf, wasiat dan hibah digunakan ketika pemilih harta tersebut masih hidup (Nurul Hazira Rahmat, 2009). Dalam undang-undang Islam, wakaf itu boleh dibuat sama ada untuk kaum keluarga atau kerabat yang dikenali sebagai wakaf keluarga, atau untuk kepentingan kebajikan dan agama yang dikenali sebagai wakaf am (Mohd. Ridzuan Awang, 1994).

Hibah dilihat mampu menjadi alternatif kepada pengagihan harta pusaka sebagai langkah mengurangkan masalah yang timbul akibat kegagalan dan kelewatan pengagihan harta melalui Faraid tanpa mengetepikan hukum Faraid dalam aspek pembahagian harta. Ini adalah bagi memastikan pembahagian harta yang dilaksanakan menjadi lebih mudah dan dapat memberikan faedah yang maksimum bukan sahaja pada waris-waris malahan kepada orang yang meninggal dunia. Pelaksanaan hibah dilihat amat sesuai untuk diamalkan seiring dengan peredaran masa serta perubahan corak hidup dan tabiat masyarakat. Ini adalah memandangkan pengagihan secara hibah tidak perlu melalui proses pentadbiran seperti yang diperlukan dalam tempoh dan penyelesaian harta pusaka secara Faraid. Justeru itu, tidak timbul masalah dari segi kelewatan dan tunggakan kes pengagihan harta. Selain daripada itu, masalah pengabaian harta juga tidak akan timbul memandangkan pemberian telah



dibuat semasa hayat si mati kepada waris-waris tersebut (Rusnadewi Abdul Rashid & Nor Hisyam Ahmad (2013).

Walau bagaimanapun, kaedah perancangan harta melalui hibah kurang dikenali oleh masyarakat berbanding dengan wasiat sedangkan wasiat hanyalah salah satu instrumen yang boleh dibuat untuk mengagihkan harta pusaka. Maka wasiat bukanlah suatu kaedah yang boleh menyelesaikan semua masalah dalam harta pusaka. Oleh itu, pengetahuan tentang hibah ini perlulah diperluaskan dan dipertingkatkan lagi oleh kerajaan serta pihak-pihak yang mempraktikkan hibah (Nurul Hazira Rahmat, 2009).

#### 4.0 Metodologi dan Pengumpulan Data

Kajian ini telah dijalankan di Politeknik Nilai Bandar Enstek, Negeri Sembilan. Soal selidik telah digunakan sebagai instrumen dalam kajian ini bagi mencapai matlamat kajian. Antara objektif kajian ini adalah mengkaji tentang:

- 4.1 tahap pengetahuan tentang hibah di kalangan ketua keluarga pelajar Diploma Kewangan dan Perbankan Islam, Politeknik Nilai, Negeri Sembilan.
- 4.2 tahap pengetahuan tentang perundangan hibah di Malaysia di kalangan ketua keluarga pelajar Diploma Kewangan dan Perbankan Islam, Politeknik Nilai, Negeri Sembilan.
- 4.3 amalan hibah yang dilaksanakan di kalangan ketua keluarga pelajar Diploma Kewangan dan Perbankan Islam, Politeknik Nilai, Negeri Sembilan.

Satu kesimpulan yang dapat dibuat ialah kekurangan kajian empirikal mengenai hibah. Dalam kajian sebelum ini, pemilihan pembolehubah tidak bersandar telah mengambil kira kajian pemberian dalam kalangan bukan muslim yang pernah dilakukan oleh Salleh et. al, (2007). Walaupun mungkin timbul pertikaian dengan mengambil pendekatan konvensional dalam konteks pemberian, bagaimanapun dari segi definisi dan syarat asas pemberian didapati tiada sebarang pencanggahan antara hibah dan yang dibuat oleh Muslim dan pemberian yang dibuat oleh bukan muslim. Dalam kajian ini, pemilihan pembolehubah tidak bersandar telah dilakukan oleh Mohd Khairy Kamarudin & Suhaili Alma'amun (2013) yang telah menggunakan kajian yang dilakukan oleh Salleh et. al, (2007).

Pemilihan pembolehubah bersandar dalam kajian ini dengan mengambil kira kajian- kajian yang telah dilakukan oleh penyelidik-penyelidik sebelum ini dan melakukan penambahan item-item dalam instrumen kajian yang digunakan. Maklumat yang diperoleh akan dinilai mengikut aspek yang telah ditentukan dan ditafsirkan secara kuantitatif. Instrumen kajian ini mengandungi empat bahagian iaitu bahagian A, B, C dan D. Soal selidik yang digunakan adalah merupakan soal selidik yang diubahsuai daripada kajian lepas. Jadual di bawah menunjukkan pembahagian bahagian dan soalan untuk soal selidik yang disediakan.

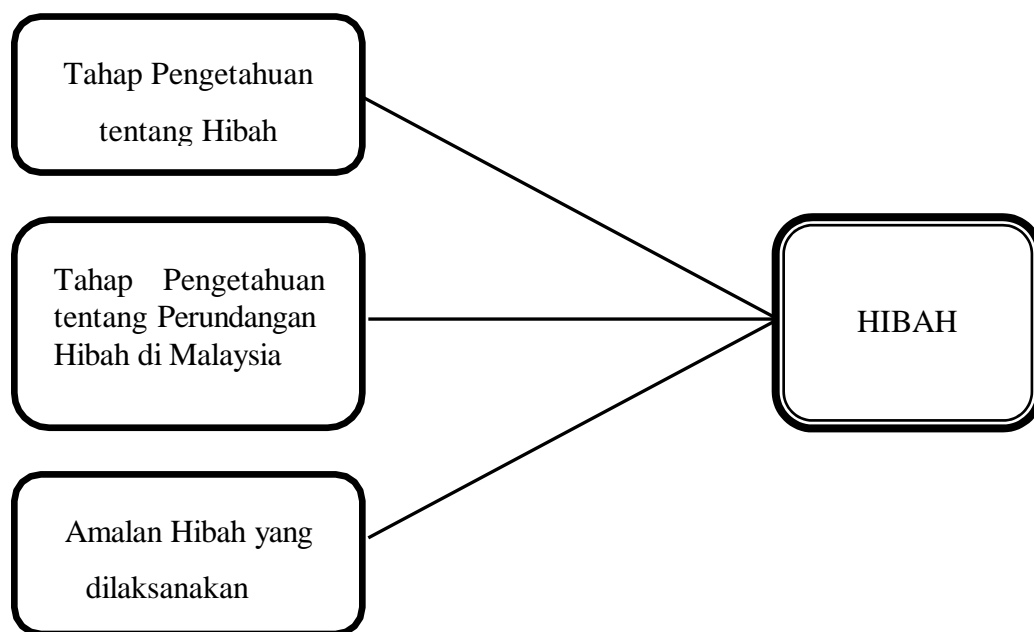
Jadual 1: Item-item kajian bagi Bahagian A Bahagian B, Bahagian C dan Bahagian D.

Bil	Faktor	Item
1.	Bahagian A: Latar Belakang Responden	9

2.	Bahagian B: Pengetahuan Tentang Hibah	20
3.	Bahagian C: Perundangan Hibah di Malaysia	8
4.	Bahagian D: Amalan Hibah	47

Sumber: Mohd Khairy Kamarudin & Suhaili Alma'amun (2013)

Setelah mengambil kira semua pembolehubah tidak bersandar dan pembolehubah bersandar maka Rangka Kerja Bagi Kajian Tahap Pengetahuan dan Amalan Hibah di kalangan ketua keluarga pelajar Diploma Kewangan dan Perbankan Islam, Politeknik Nilai, Negeri Sembilan dapat ditunjukkan oleh Rajah 4.1.1 berikut.



Sumber: Mohd Khairy Kamarudin & Suhaili Alma'amun (2013)

Rajah 1: Rangka Kerja Kajian

Setelah borang soal selidik yang telah diagihkan kepada responden dikumpulkan semula, bermulalah proses menganalisis data dilakukan, Analisis data adalah suatu proses mengubah data hasil penelitian menjadi informasi yang dapat digunakan untuk memberikan kesimpulan penelitian. Segala maklumat yang ada di dalam borang soal selidik itu dimasukkan ke dalam sistem perisian program SPSS (*Statistical Package for Social Science (SPSS) for MS Windows Release Version 21.0*). Kaedah yang diguna pakai adalah analisis deskriptif. Analisis deskriptif merupakan data dari setiap pemboleh ubah yang diterima diringkaskan dalam bentuk jadual, peratusan dan kekerapan.

## 5.0 Keputusan dan Perbincangan

Jadual 2 menunjukkan taburan responden mengikut jantina. Seramai 98 orang (72.1%) responden terdiri daripada lelaki dan seramai 38 orang (27.9%) responden terdiri daripada perempuan. Ini menunjukkan responden lelaki mencatatkan peratusan yang tertinggi sebagai responden yang menjawab dalam soal selidik ini. Analisis menunjukkan bahawa majoriti responden adalah terdiri daripada mereka yang berumur 36-45 iaitu seramai 69 orang (50.7%) responden. Seramai 38 orang responden pula terdiri daripada 26-35 orang (27.9%). Sementara responden yang berusia 46 tahun dan ke atas pula adalah seramai 29 orang (21.3%) dan tiada seorang responden pun yang berumur kurang daripada 25 tahun (0%). Hasil kajian menunjukkan bahawa 71 orang (52.2%) mempunyai bilangan anak 0 hingga 2 orang, 62 orang (45.6%) mempunyai bilangan anak seramai 3 orang hingga 6 orang dan seramai 3 orang (2.2%) bilangan anak lebih daripada 6 orang. Analisis data turut menunjukkan bahawa majoriti daripada responden mempunyai pendidikan pada tahap Sarjana Muda iaitu seramai 80 orang (58.8%). Manakala seramai 29 orang (21.3%) mempunyai tahap pendidikan peringkat Sarjana. Sementara itu seramai 10 orang (7.4%) responden berpendidikan pada tahap SPM dan terdapat 2 orang responden berkelulusan Doktor Falsafah. Akhir sekali seramai 2 orang (4%) mempunyai tahap pendidikan pada tahap pendidikan STP/STPM/Diploma.

Data turut menunjukkan taburan kekerapan dan peratusan mengikut sektor pekerjaan responden. Hasil daripada analisis menunjukkan majoriti daripada responden bekerja di sektor swasta seramai 69 orang (50.7%). Sementara seramai 44 orang (32.4%) daripada responden bekerja di sektor kerajaan dan akhir sekali hanya 23 orang (16.9%) yang bekerja di lain-lain sektor. Hasil daripada analisis menunjukkan seramai 9 orang (6.6%) daripada responden berpendapatan bulanan di bawah RM1,500. Majoriti responden berpendapatan bulanan di antara RM1,501 hingga RM3,000 iaitu seramai 66 orang (48.5%). Diikuti dengan RM3,001 hingga RM5,000 seramai 44 orang (32.4%) dan seramai 17 orang (12.5%) berpendapatan bulanan yang melebihi RM5,001 dan ke atas. Jadual 2 juga menunjukkan bilangan responden yang mempunyai nilai harta yang kurang dari RM100,000 adalah seramai 5 orang (3.7%). Sementara itu bagi nilai harta lebih daripada RM500,000 adalah seramai 11 orang (8.1%). Manakala bagi nilai harta RM200,001 hingga RM300,000 pula adalah seramai 55 orang (40.4%). Diikuti dengan RM100,001 hingga RM200,000 iaitu seramai 34 orang (25.0%). Seramai 26 orang (19.1%) mempunyai harta sebanyak RM300,001 hingga RM400,000 dan akhir sekali bagi nilai harta RM400,001 hingga RM500,000 adalah seramai 11 orang (8.1%).

Jadual 3 menunjukkan taburan kekerapan, peratus dan skor min mengenai tahap pengetahuan responden tentang hibah. Kajian ini mendapati bahawa pengetahuan responden tentang hibah adalah tinggi dan ia ditunjukkan melalui skor min keseluruhan iaitu 3.47, manakala kekerapan dan peratusan yang tertinggi adalah seramai 76 orang responden (55.9%) yang tahu akad hibah berkuatkuasa ketika pemberi hibah masih hidup.

Jadual 4 menunjukkan taburan kekerapan, peratus dan skor Min mengenai perundangan hibah di Malaysia. Kajian ini mendapati bahawa responden tahu penama dalam polisi takaful, Tabung Haji dan KWSP adalah pemegang amanah dan mereka bertanggungjawab untuk mengedarkan harta mengikut faraid dan ini ditunjukkan melalui skor min keseluruhan iaitu 3.59, manakala kekerapan responden yang tertinggi adalah seramai 64 orang (47.1%).

Jadual 5 menunjukkan taburan kekerapan dan peratusan mengenai amalan jenis hibah yang dibuat untuk anak. Merujuk kepada persoalan yang pertama iaitu jenis hibah yang dibuat untuk anak, dapatan menunjukkan bahawa seramai 3 orang (2.2%) membuat hibah dalam bentuk saham syarikat,

89 orang (65.4%) membuat hibah dalam bentuk simpanan dalam Tabung Haji, ASN/ASB/ASW/lain-lain unit amanah iaitu seramai 55 orang (40.4%). Manakala simpanan dalam akaun deposit/akaun semasa adalah seramai 96 orang (70.6%), 93 orang (68.4%) membuat hibah dalam takaful dan barang kemas pula mencatatkan seramai 44 orang (32.4%). Seramai 55 orang (40.4) pula bagi kenderaan. Hibah yang dibuat dalam bentuk rumah adalah seramai 103 orang (75.7%). Seramai 21 orang (15.4%) membuat hibah dalam bentuk tanah. Bagi insurans pula adalah seramai 3 orang (2.2%). Dapatan juga menunjukkan seramai 69 orang (50.7%) membuat hibah dari segi tunai manakala KWSP adalah seramai 39 orang (28.7%) dan akhir sekali sijil premium adalah seramai 22 orang (16.2%).

Jadual 6 menunjukkan taburan kekerapan dan peratusan mengenai kaedah yang digunakan untuk membuat hibah kepada anak-anak. Hasil daripada analisis kajian menunjukkan seramai 23 orang (16.9%) menggunakan kaedah peguam. Manakala wasiat pula adalah seramai 73 orang (53.7%). Diikuti dengan kaedah secara lisan iaitu seramai 109 orang (80.1%). Seramai 94 orang (69.1%) menggunakan kaedah pindah milik. Bagi syarikat swasta pula adalah seramai 5 orang (3.7%). Pemegang amanah terdiri daripada 27 orang (19.9%). Seramai 52 orang (38.2%) menggunakan kaedah perbincangan dalam ahli keluarga. Kaedah penamaan adalah seramai 39 orang (28.7%). Dapatan kajian juga menunjukkan seramai 96 orang (70.6%) membuka akaun untuk anak. Ini diikuti dengan mendepositkan wang ke dalam Tabung Haji iaitu seramai 89 orang (65.4%). Potongan gaji dalam akaun Tabung Haji pula adalah seramai 56 orang (41.2%). Kaedah dokumen insurans pula seramai 93 orang (68.4%) dan akhir sekali pengagihan yang sama rata adalah seramai 90 orang (66.2%).

Jadual 7 menunjukkan taburan kekerapan dan peratusan mengenai tujuan membuat hibah kepada anak-anak. Analisis kajian mendapati seramai 128 orang (94.1%) berharap anak-anak akan menjaga mereka pada masa akan datang. Sementara itu seramai 9 orang (6.6%) membuat hibah kerana anak-anak mereka telah menjaga mereka. Bagi status ekonomi anak-anak mereka tidak begitu baik pula adalah seramai 17 orang (12.5%). Seramai 95 orang (69.9%) membuat hibah kerana tanggungjawab kekeluargaan. Diikuti dengan 88 orang (64.7%) membuat hibah adalah untuk mengelakkan harta mereka daripada diagihkan mengikut faraid. Bagi item kerana anak-anak angkat mereka tidak akan mendapatkan harta mereka mengikut faraid pula adalah seramai 77 orang (56.6%). Seramai 133 orang (97.8%) membuat hibah kerana kasih sayang saya kepada mereka. Selain itu, seramai 134 orang (98.5%) membuat hibah kerana anak mereka adalah waris mereka. Bagi item kerana ia adalah suatu tradisi terdiri daripada 82 orang (60.3%). Seramai 93 orang (68.4%) membuat hibah adalah kerana ia adalah sumbangan mereka kepada anak mereka. Untuk keperluan masa depan mereka pula adalah seramai 111 orang (81.6%). Dapatan kajian menunjukkan seramai 120 orang (88.2%) membuat hibah adalah untuk kebajikan anak mereka dan akhir sekali ia adalah untuk pendidikan mereka mencatatkan seramai 126 orang (92.6%).

Jadual 8 menunjukkan taburan kekerapan dan peratusan mengenai faktor-faktor penghalang dalam perlaksanaan hibah. Hasil kajian menunjukkan seramai 96 orang (70.6%) tidak tahu institusi yang menguruskan hibah. Seterusnya kos pengurusan hibah yang tinggi adalah seramai 88 orang (64.7%) Diikuti dengan kurangnya pendedahan melalui media cetak dan media elektronik berhubung dengan hibah iaitu seramai 81 orang (59.6%). Seramai 90 orang (66.2%) mengiakan bahawa tiada enakmen undang-undang tertentu yang diwartakan mana-mana Majlis Agama Islam Negeri (MAIN) dalam pelaksanaan hibah. Bagi ketiadaan keseragaman dari segi pelaksanaan Hibah di setiap Majlis Agama

Islam Negeri (MAIN) pula adalah seramai 95 orang (69.9%). Amalan Hibah tidak dibuat secara dokumentasi rasmi yang sah seramai 126 orang (92.6%) responden yang bersetuju. Seramai 121 orang (89.0%) tidak tahu bahawa hibah juga boleh dibuat di mana-mana Majlis Agama Islam Negeri (MAIN) dan yang terakhir sekali adalah kurangnya fatwa yang terperinci yang dibahaskan oleh Majlis Fatwa Kebangsaan Malaysia adalah seramai 111 orang (81.6%).

## **5.0 Kesimpulan dan cadangan**

Secara keseluruhannya, dalam kajian ini menunjukkan bahawa tahap pengetahuan responden tentang hibah adalah tinggi. Ini dapat dilihat dengan lebih jelas apabila keseluruhan item soalan yang dikaji menunjukkan tahap pengetahuan yang tinggi di kalangan ketua keluarga pelajar Diploma Kewangan dan Perbankan Islam, Politeknik Nilai, Negeri Sembilan. Responden menjadikan hibah sebagai satu bentuk perancangan awal pewarisan harta sebagai pelengkap kepada sistem pengagihan harta dalam Islam. Hibah bukan sahaja telah mendapat pengiktirafan di dalam Islam malah pelaksanaannya telah dipelopori oleh Nabi Muhammad S.A.W. sendiri melalui hadis Saidatina Aisyah. Justeru bertindak sebagai suatu pelengkap kepada kesempurnaan sistem pengagihan harta dalam Islam, konsep hibah amat sesuai diamalkan oleh masyarakat terutama apabila sistem pewarisan secara faraid gagal berfungsi dengan baik disebabkan masalah-masalah tertentu seperti kejahilan waris dalam memahami konsep Faraid, pengabaian penyelesaian pusaka dan kelewatan akibat masalah pentadbiran.

Seterusnya, bagi penyelidik dapat merumuskan pengetahuan responden tentang perundangan hibah di Malaysia juga mencapai tahap yang tinggi. Penyelidik telah menilai berdasarkan hasil kajian melalui soal selidik terhadap responden dan ia menunjukkan hasil yang diperoleh adalah positif. Sebagai usaha bagi mengatasi masalah yang timbul, kaedah pelaksanaan hibah ini bukan sahaja dikatakan dapat menjamin penurunan hak milik harta kepada waris mengikut kehendak pemberi hibah, malah akan mengurangkan jumlah kes harta pusaka di seluruh negara. Tujuan utama pelaksanaan hibah adalah untuk menyelesaikan masalah yang timbul apabila pembahagian harta secara pusaka gagal ditadbir dengan sempurna atau memberikan kesan yang kurang baik. Ini adalah kerana pembahagian harta pusaka sebenarnya tidak boleh dianggap selesai sekiranya bahagian yang diperoleh setiap waris tidak dapat dimanfaatkan atau memberi apa-apa faedah kepada penerima.

Akhir sekali tentang amalan hibah yang dilaksanakan, hasil kajian ini telah menunjukkan secara jelas bahawa responden mengamalkan hibah. Ini dapat dilihat dengan lebih jelas bahawa hibah dilihat sebagai suatu cara berkesan untuk pembahagian yang lebih berfaedah. Sebagai usaha bagi mengatasi masalah yang timbul, kaedah pelaksanaan hibah ini bukan sahaja dikatakan dapat menjamin penurunan hak milik harta kepada waris mengikut kehendak pemberi hibah, malah akan mengurangkan jumlah kes harta pusaka yang tidak dituntut di seluruh negara.

Hibah merupakan salah satu kaedah perancangan yang boleh digunakan oleh seseorang yang memiliki harta. Ia merupakan kaedah perancangan harta yang terbaik disebabkan oleh kelebihan yang dimilikinya berbanding dengan kaedah perancangan harta yang lain. Dengan adanya konsep perancangan harta melalui hibah ini, permasalahan seperti harta pusaka yang tidak dituntut oleh waris dapat dielakkan dan ini dengan sekali gus dapat mengurangkan masalah tanah pusaka yang tidak dibangunkan disebabkan oleh masalah pembahagian harta yang tidak dapat diselesaikan oleh waris.

Oleh itu, hibah diperlukan bagi mengatasi masalah-masalah yang timbul akibat daripada pengurusan harta pusaka melalui faraid. Ia juga merupakan kaedah perancangan harta yang lebih baik berbanding dengan wasiat dan perancangan harta yang lain. Cuma konsep hibah ini perlu lebih diperkenalkan kepada masyarakat kerana tidak semua masyarakat mengetahui tentang wujudnya konsep perancangan harta melalui hibah ini.

Wujudnya keperluan kepada satu penyelesaian untuk membolehkan seseorang yang baru memeluk Islam untuk membolehkan mereka memberikan harta mereka kepada keluarga terutamanya ibu bapa yang telah banyak berjasa sebagai menghargai pengorbanan sekurang-kurangnya melahirkan dan membesarkan mereka walaupun berlainan agama. Sehubungan itu, hibah adalah satu-satunya cara yang baik bagi tujuan tersebut. Kelonggaran dalam konsep hibah ini boleh memperlihatkan keindahan Islam sebagai agama yang amat menitikberatkan soal penghormatan kepada ibu bapa dan keluarga serta menggalakkan kasih sayang sesama manusia.

Jadual 2: Latar Belakang Responden

Latar Belakang Responden	Kekerapan (orang)	Peratus (%)
<b>Jantina</b>		
Lelaki	98	72.1
Perempuan	38	27.9
<b>Umur</b>		
Kurang daripada 25	0	0.0
26 - 35	38	27.9
36 - 45	69	50.7
46 dan ke atas	29	21.3
<b>Bilangan Anak</b>		
0 - 2	71	52.2
3 - 6	62	45.6
Lebih daripada 6	3	2.2
<b>Pendidikan Tertinggi</b>		
SPM	10	7.4
STP/STPM/Diploma	15	11.0
Sarjana Muda	80	58.8
Sarjana	29	21.3
Doktor Falsafah	2	1.5
<b>Sektor Pekerjaan</b>		
Kerajaan	44	32.4
Swasta	69	50.7
Lain-lain	23	16.9
<b>Pendapatan Bulanan</b>		
Kurang daripada 1500	9	6.6
1,501-3000	66	48.5
3,001-5000	44	32.4
5,001 dan ke atas	17	12.5
<b>Nilai Harta Yang Dimiliki</b>		

Kurang daripada 100,000	5	3.7
100,001-200,000	34	25.0
200,001-300,000	55	40.4
300,001-400,000	26	19.1
400,001-500,000	11	8.1
Lebih daripada 500,000	5	3.7

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Jadual 3: Kekerapan, Peratus Dan Skor Min Tahap Pengetahuan Responden Tentang Hibah:

Bil	Perkara		STS	TS	KS	S	SS	Tafsiran	
Skor Min									
1.	Saya tahu Hibah adalah pemberian milikan harta seseorang kepada seseorang yang lain, semasa hidupnya secara sukarela tanpa mengharapakan balasan (iwad).	(k)	0	3	19	81	33	4.06	Tinggi
		%	0.0	2.2	14.0	59.6	24.3		
2.	Saya tahu Hibah mempunyai 4 rukun iaitu pemberi Hibah (al-Wahi), penerima Hibah (al-Mawhublahu), barang atau harta yang dihibahkan (al-Mawhub), dan ijab dan qabul (Sighah).	(k)	9	28	44	33	22	3.23	Tinggi
		%	6.6	20.6	32.4	24.3	16.2		
3.	Saya tahu Hibah terbahagi 2 jenis iaitu Hibah Al-'Umra dan Hibah Al-'Ruqba.	(k)	33	29	23	41	10	2.75	Rendah
		%	24.3	21.3	16.9	30.1	7.4	2.75	Rendah
4.	Saya tahu hibah adalah suatu akad pemberian hak milik harta kepada semua pihak.	(k)	33	29	23	41	10		
		%	7	19	26	61	23		
5.	Saya tahu Hibah adalah harta yang boleh dihibah bukannya yang terdiri daripada hutang atau manfaat.	(k)	5.1	14.0	19.1	44.9	16.9	3.54	Tinggi
		%	3.7	17.6	13.2	40.4	25.0	4.06	Tinggi
6.	Saya tahu akad Hibah dibuat	(k)	0	3	19	81	33		
7.	Saya tahu akad Hibah berkua kuasa ketika pemberi Hibah masih hidup.	(k)	0	1	4	76	55	4.36	Tinggi
		%	0.0	0.7	2.9	55.9	40.4		
8.	Saya tahu Hibah yang	(k)	2	15	17	76	26	3.80	Tinggi
9.	Saya tahu kadar pembahagian mengikut hukum Hibah adalah 1/3	(k)	25	30	68	4	9	2.57	Rendah
		%	18.4	22.1	50.0	2.9	6.6		
10.	Saya tahu bahawa agensi yang menguruskan Hibah ada 3 iaitu Amanah Raya Berhad (Pusaka Ringkas), Pejabat	(k)	9	21	66	28	12	3.10	Tinggi
		%	6.6	15.4	48.5	20.6	8.8		
11.	Saya tahu kesan apabila tidak menguruskan Hibah dengan betul dari segi hukum syarak.	(k)	2	17	33	76	9	3.32	Tinggi
		%	1.5	12.5	24.3	55.9	5.9		
12.	Saya tahu dokumen-dokumen yang diperlukan dalam permohonan Hibah	(k)	21	27	30	47	11	3.00	Sederhana
		%	15.4	20.6	22.1	35.4	8.3		
13.	Saya tahu Hibah kepada anak boleh dibatalkan.	(k)	0	1	4	76	55	4.36	Tinggi
		%	0.0	0.7	2.9	55.9	40.4		
14.	Saya tahu Hibah kepada adik-beradik boleh	(k)	13	10	28	76	9	3.43	Tinggi
		%	9.6	7.4	20.6	55.9	6.6		
15.	Saya tahu Hibah kepada anak angkat boleh dibatalkan.	(k)	19	19	27	69	2	3.12	Tinggi
		%	14.0	14.0	19.9	50.7	1.5		
16.	Saya tahu tujuan membuat Hibah								
17.	Saya tahu Hibah adalah lengkap meskipun tanpa pemindahan hak milik.	(k)	21	16	11	70	18	3.35	Tinggi
		%	15.4	11.8	8.1	51.5	13.2		

						%	2.9	5.1	19.1	55.9	16.9			
(k)	4	7	26	76	23									
	3.79	Tinggi												
18.	Saya tahu Hibah boleh					(k)	2	13	23	71	27	3.79	Tinggi	
d	19.	Saya tahu Hibah boleh dibuat semasa					(k)	65	23	5	12	31	2.42	Rendah
ban.	kematian.						%	17.8	16.9	3.7	8.8	22.8		
20.	Saya tahu Hibah dapat					(k)	5	14	32	65	20	3.60		
menghindari harta saya daripada						%	3.7	10.3	23.5	47.8	14.7			Tinggi
Jumlah Min												69.50		
Min (Pengetahuan tentang Hibah)														3.475

Jadual 4: Kekerapan, Peratus Dan Skor Min Tahap Pengetahuan Perundangan Hibah di Malaysia

Bil	Perkara	STS	TS	KS	S	SS	Tafsiran Skor Min
1.	Saya tahu sekiranya berlaku apa-apa masalah yang berkaitan dengan Hibah boleh dirujuk kepada Mahkamah Sivil.	7.	Saya tahu Hibah yang saya buat sendiri adalah sah tetapi ia boleh dibicarakan semula di mahkamah.				
2.	Saya tahu sekiranya berlaku apa-apa masalah yang berkaitan dengan Hibah boleh dirujuk kepada Mahkamah Syariah.	8.	Saya tahu Hibah yang dibuat mengikut cara yang profesional adalah sah dan tidak boleh dibicarakan semula di mahkamah.				
3.	Saya tahu Hibah boleh dibuat tanpa dokumentasi rasmi yang sah.						
4.	Saya tahu syarat (terma) Hibah dalam setiap Enakmen Syariah bagi setiap negeri adalah sama.						
5.	Saya tahu penama dalam polisi takaful, Tabung Haji dan KWSP adalah pemegang amanah dan mereka bertanggungjawab untuk mengedarkan harta mengikut Faraid.						
6.	Saya tahu Hibah yang melibatkan pemindahan hak milik itu dikenakan duti setem.						

(k)	6	23	47	30									
	30	3.40	Tinggi	%	33.1	24.3	20.6	9.6	12.5				
				(k)	5	16	30	64	21	3.59	Tinggi		
%	4.4	16.9	34.6										
	22.1	22.1											
(k)	11	19	47	30									
	29	3.35	Tinggi	%	3.7	11.8	22.1	47.1	15.4				
				(k)	8	13	37	59	19	3.50	Tinggi		
%	8.1	14.0	34.6	%	5.9	9.6	27.2	43.4	14.0				
	22.1	21.3		(k)	13	26	31	55	11	3.18	Tinggi		
(k)	33	59	27	13									
	4	2.24	Rendah										
				%	9.6	19.1	22.8	40.4	8.1				
				(k)	10	23	39	52	12	3.24	Tinggi		
%	24.3	43.4	19.9										
	9.6	2.9											
(k)	45	33	28	13									
	17	2.44	Rendah	%	7.4	16.9	28.7	38.2	8.8				

Jumlah Min	29.94
Min (Tahap Pengetahuan Perundangan hibah di Malaysia)	3.12

Jadual 5: Kekerapan Dan Peratus Terhadap Jenis Hibah Yang Dibuat Untuk Anak

Bil	Perkara		Ya	Tidak
<b>Amalan Hibah: Jenis Hibah yang dibuat untuk anak</b>				
1.	Saham syarikat	(k)	3	133
		%	2.2	97.8
2.	Simpanan dalam Tabung Haji	(k)	89	47
		%	65.4	34.6
3.	ASN/ASB/ASW/Lain-lain unit amanah	(k)	55	81
		%	40.4	59.6
4.	Simpanan dalam akaun deposit/akaun semasa	(k)	96	40
		%	70.6	29.4
5.	Takaful	(k)	93	43
		%	68.4	31.6
6.	Barang kemas	(k)	44	92
		%	32.4	67.6
7.	Kenderaan	(k)	55	81
		%	40.4	59.6
8.	Rumah	(k)	103	33
		%	75.7	24.3
9.	Tanah	(k)	21	115
		%	15.4	84.6
10.	Insurans	(k)	3	133
		%	2.2	97.8
11.	Tunai	(k)	69	67
		%	50.7	49.3
12.	KWSP	(k)	39	97
		%	28.7	71.3
13.	Sijil Premium	(k)	322	114
		%	16.2	83.8

Jadual 6: Kekerapan Dan Peratus Terhadap Kaedah Yang Digunakan Untuk Membuat Hibah Kepada Anak-Anak

Bil	Perkara		Ya	Tidak
<b>Amalan Hibah: Kaedah yang digunakan untuk membuat Hibah kepada anak-anak</b>				
1.	Peguam	(k)	23	113
		%	16.9	83.1
2.	Wasiat	(k)	73	63
		%	53.7	46.3
3.	Lisan	(k)	109	27
		%	80.1	19.9
4.	Pindah milik	(k)	94	42
		%	69.1	30.9
5.	Syarikat swasta	(k)	5	131
		%	3.7	96.3
6.	Pemegang amanah	(k)	27	109
		%	19.9	80.1
7.	Perbincangan dalam ahli keluarga	(k)	52	84
		%	38.2	61.8
8.	Penamaan	(k)	39	97
		%	28.7	71.3
9.	Buka akaun untuk anak	(k)	96	40
		%	70.6	29.4
10.	Mendepositkan wang ke dalam akaun (k)		89	47
	Tabung Haji	%	65.4	34.6
11.	Potongan gaji dalam akaun Tabung (k)		56	80
	Haji	%	41.2	58.8
12.	Dokumen insurans	(k)	93	43
		%	68.4	31.6
13.	Pengagihan yang sama rata	(k)	90.0	46
		%	66.2	33.8

Jadual 7: Kekerapan Dan Peratus Terhadap Tujuan Membuat Hibah Kepada Anak-Anak

Bil	Perkara		Ya	Tidak
<b>Amalan Hibah: Tujuan membuat Hibah kepada anak-anak</b>				
1.	Saya berharap anak-anak akan menjaga saya pada masa akan datang.	(k)	128	8
		%	94.1	5.9
2.	Anak-anak saya telah menjaga saya.	(k)	9	127
		%	6.6	93.4
3.	Status ekonomi anak-anak saya tidak begitu baik.	(k)	17	119
		%	12.5	87.5
4.	Tanggungjawab kekeluargaan.	(k)	95	41
		%	69.9	30.1
5.	Untuk mengelakkan harta saya daripada diagihkan mengikut Faraid.	(k)	88	48
		%	64.7	35.3
6.	Kerana anak-anak angkat saya tidak akan mendapatkan harta saya mengikut Faraid.	(k)	77	59
		%	56.6	43.4
7.	Kerana kasih sayang saya kepada mereka.	(k)	133	3
		%	97.8	2.2
8.	Kerana mereka adalah waris saya.	(k)	134	2
		%	98.5	1.5
9.	Kerana ia adalah suatu tradisi.	(k)	82	54
		%	60.3	39.7
10.	Kerana ia adalah sumbangan saya kepada mereka.	(k)	93	43
		%	68.4	31.6
11.	Untuk keperluan masa depan mereka.	(k)	111	25
		%	81.6	18.4
12.	Untuk kebajikan mereka.	(k)	120	16
		%	88.2	11.8
13.	Ia adalah untuk pendidikan mereka.	(k)	126	10
		%	92.6	7.4



Jadual 8: Kekerapan Dan Peratus Terhadap Faktor-Faktor Penghalang Dalam Pelaksanaan Hibah

Bil	Perkara		Ya	Tidak
<b>Amalan Hibah: Faktor-faktor penghalang dalam pelaksanaan Hibah</b>				
1.	Tidak tahu institusi yang menguruskan Hibah.	(k)	96	40
		%	70.6	29.4
2.	Kos pengurusan Hibah yang tinggi.	(k)	88	48
		%	64.7	35.3
3.	Kurangnya pendedahan melalui media cetak dan media elektronik berhubung dengan Hibah.	(k)	81	55
		%	59.6	40.4
4.	Tiada enakmen undang-undang tertentu yang diwartakan mana-mana Majlis Agama Islam Negeri (MAIN) dalam pelaksanaan Hibah.	(k)	90	46
		%	66.2	33.8
5.	Tiada keseragaman dari segi pelaksanaan Hibah di setiap Majlis Agama Islam Negeri (MAIN).	(k)	95	41
		%	69.9	30.1
6.	Amalan Hibah tidak dibuat secara dokumentasi rasmi yang sah	(k)	126	10
		%	92.6	7.4
7.	Tidak tahu bahawa Hibah juga boleh dibuat di mana-mana Majlis Agama Islam Negeri (MAIN)	(k)	121	15
		%	89	11.0
8.	Kurangnya fatwa yang terperinci yang dibahaskan oleh Majlis Fatwa Kebangsaan Malaysia.	(k)	111	25
		%	81.6	18.4

## BIBLIOGRAFI

- Abdullah, N. I., & Abdul Aziz, N. A. (2010). Case Studied of The Practice of Nomination and Hibah by Malaysian Takaful Operators. *ISRA International Journal of Islamic Finance* 2, 2(2), 67–100.
- Abdul Rashid, R., & Yaakub, N. I. (2010). Hibah: Isu Pindah Milik dan Pembatalan Hibah Hartanah di bawah Kanun Tanah Negara. *Shariah Law Reports*, 1, 14–29.
- Abdul Rashid, R., & Yaakub, N. I. (2011). Konflik Bidang Kuasa Mahkamah dalam Hibah, Wasiat, Wakaf dan Pusaka Selepas Pindaan Perkara 121(1A) Perlembagaan Persekutuan. *Shariah Law Reports*, 1, xx–xxxix.
- Abdul Razak, M. Z., & Ahmad, S. (2008). Pelaksanaan Hibah dalam Industri Takaful: Bentuk dan Hukum. In A. F. Omar, Z. Zakaria, & Z. Nasohah (Eds.), *Isu Fiqh dan Persoalan Semasa* (pp. 207–

220). Bangi: Fakulti Pengajian Islam, Universiti Kebangsaan Malaysia.

Ahmad, M.Y., & Ibrahim, I. . (2006). Ahmad, M.Y. & Ibrahim, I.A. 2006. Kekangan statut ke atas bidang kuasa Mahkamah Syariah dalam pentadbiran harta orang-orang Islam di Malaysia. Prosiding Seminar Kebangsaan Pengurusan Harta dalam Islam (pp. 151–163).

Ahmad, Md Yazid, & Laluddin, H. (2010). Pengurusan Harta Pusaka: Permasalahan Sikap Masyarakat Islam di Malaysia dan Penyelesaiannya Menurut Perspektif Islam. *Shariah Law Reports*, 4, 30–54.

Akta Harta Pusaka Kecil (Pembahagian) 1955 (Akta 98)

Akta Probet dan Pentadbiran 1959 (Akta 97)

Albertini, M., & Radl, J. (2012). *Acta Sociologica*. *Acta Sociologica*, 55(2), 107–123.  
doi:10.1177/0001699311431596.

Alex Sent. (2010). Laporan Kaedah Persampelan, <http://www.scribd.com/doc/42279107/laporan-kaedah-persampelan#scribd> (tarikh akses: 28 Ogos 2015).

Alma'amun, S. (2010a). *Islam Estate Planning: Analysing The Malaysian Perceptions on Wasiyyah (Will) and Bequest Practices*. Durham University.

Alma'amun, S. (2010b). *Islamic Estate Planning : Malaysian Experience*. *Kyoto Bulletin of Islamic Area Studies*, 165–185.

Alma'amun, S. (2012). Searching for Bequest Motives and Attitudes to Leaving a Bequest Among Malaysian Muslims. *Jurnal Ekonomi Malaysia*, 46(1), 73–84.

Amanah Raya Berhad (ARB), <http://www.arb.com.my/bm/index.asp>(tarikh akses: 30 Jun 2015).

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (4<sup>th</sup> ed.). Washington, DC: Author.

Anon. Firma bangun pangkalan data jejak waris. (2010). *Berita Harian*, 5 Ogos: 6. Rujuk juga temu ramah dengan Datuk Khairul Anuar Rahmat bertajuk Perkhidmatan 'Jepak Waris' Untuk Cairkan RM40 Bilion Aset Beku Kini Dilancarkan' dalam rancangan Wanita Hari ini, Rabu, 4 Ogos 2010.

Azhar, A., & Ishak, A. M. (2011). Instrumen Hibah dan Takaful dalam Aspek Pengurusan Harta Pusaka. *Jurnal Pengurusan JAWHAR*, 5(1), 35–62.

Berita Harian. (2007). Hibah Secara Bertulis Boleh Elak Salah Faham Antara Waris, [http://www.warisanmukmin.com/berita/berita\\_01002.html](http://www.warisanmukmin.com/berita/berita_01002.html) (tarikh akses: 12 Ogos 2015)

Buang, A. H. (2008). Appreciation of Syariah Principles in Property Management in Contemporary Malaysia Society. *Jurnal Syariah*, 16, 555–566.

Cavana, Y.R., Delahaye, L.B. & Sekaran, U. (2003). *Applied Bussiness Research: Qualitative and Quantitative Methods*. Australia: John Wiley and Sons Ltd.

Chua Yan Piaw. (2006). *Kaedah dan Statistik Penyelidikan: Kaedah Pendidikan*. Kuala Lumpur: McGraw Hill.

Chua Yan Piaw. (2006). *Kaedah dan Statistik Penyelidikan: Kaedah Penyelidikan*. Kuala Lumpur: McGraw Hill.

Chua Yan Piaw. (2008). *Kaedah dan Statistik Penyelidikan: Asas Statistik Penyelidikan, Analisis Data Skala Ordinal dan Skala Nominal*. Kuala Lumpur: McGraw Hill.

Chua Yan Piaw. (2012). *Kaedah dan Statistik Penyelidikan: Asas Statistik Penyelidikan (Edisi Kedua)*. Kuala Lumpur: McGraw Hill.

Cox, D., & Rank, M. R. (1992). Inter-Vivos Transfers and Intergenerational Exchange. *The Review of Economics and Statistics*, 74(2), 305–314.

Dewan Bahasa dan Pustaka. (1996). *Kamus Ekonomi*. Cet. Pertama. Kuala Lumpur: Dewan Bahasa dan Pustaka.

De Vaus, D.A. (2001). *Research Design in Social Research*. London: Sage.

Halvorsen, E., & Thoresen, T. O. (2011). Parents ' Desire to Make Equal Inter Vivos Transfers. *CESifo Economic Studies*, 57(1), 121–155.

Hassan, A. A., & Yusop, Y. (2006). Perancangan harta di ZAR Perunding Pusaka Sdn. Bhd. In S. M. Mahamood (Ed.), *Harta Amanah Orang Islam di Malaysia: Perspektif Undang-undang dan Pentadbiran* (pp. 149–170). Kuala Lumpur: Penerbit Universiti Malaya.

Imam al-Raghib al-Isfihani. (2008). *Mu'jam Mufradat Alfaz al-Qur'an*. Beirut: Dar Kutub. Institut Pendidikan Guru Kampus Pendidikan Teknik (IPG), <http://ipgkpt.edu.my/site/> (tarikh akses: 26 Jun 2015).

International Centre for Education in Islamic Finance. (2006). *Wealth Planning and Management for Certified Islamic Finance Professional*. Kuala Lumpur: INCEIF.

Ismail, A. (2009). Nomination and Hibah Issues in the Takaful Industry. *ISRA Shariah Conference on Takaful*, 1–18.

ISRA. (2010). *Isra Compendium For Islamic Financial Terms: Arabic-English*. Kuala Lumpur: ISRA.

Jantan, O. (2001). *Pedoman Mu'amalat dan Munakahat*. Singapore: Pustaka Nasional Pte Ltd.

Karuthan Chinna & Choo Wan Yuen. (2009). *Statistical Analysis Using SPSS (2<sup>nd</sup> ed)*. Julius Centre University of Malaya.

Kotlikoff, L. J. (1988). Intergenerational Transfers and Savings. *Journal of Economic Perspectives*, 2(2), 41–58.

Laluddin, H., Mohamad, M. N., Nasohah, Z., & Ahmad, S. (2012). The Contract of Hibah (gift) from an Islamic Perspective. *Advance in Natural and Applied Sciences*, 6(7), 1080–1085.

Likert, R. (1932). *A technique For A measurement Of Attitudes*. New York: Columbia Universiti Press.

Maria Bernard Sarimuda. (2010). *Kajian Mengenai Pemakanan, Pengetahuan, Sikap Dan Amalan Pencegahan Kanser Di Kalangan Kakitangan Awam Lelaki Dan Wanita Di Kompleks Pentadbiran Persekutuan Negeri Sabah*. Sekolah Sains Makanan Dan Pemakanan, Universiti Malaysia Sabah.

McCaffery, K., Wardle., and Waller, J.2003. Knowledge, Attitude and Behavioral Intentations in Relation to Early Direction of Colorectal Cancer in United Kingdom. *Preventive Medicine*. 36: 525-535.

Md. Ghazali Ibrahim. (2011). *Bahagi Biar Adil, Memepelajari Konsep Ilmu Faraid dan Kaedah Dalam Pembahagian Pusaka*. Kuala Lumpur.

Menchik, P. L., & Jianakoplos, N. A. (1998). Economics of Inheritance. In R. K. J. Miller & S. J. McNamee (Eds.), *Inheritance and Wealth in America* (pp. 45–59). New York: Plenum Press.

Mohd Bustamam, B. ., & Muhamad Yusak, Y. (2009). Hibah dan Wasiat Pelengkap Warisan Islam Kajian di Wasiyyah Shoppe. *Proceeding International Seminar on Muamalat, Islamic Economics and Finance*, 435–459.

Mohd. Fitri Abdul Rahman. (2007). *Bagaimana Mengurus Harta Pusaka*, PTS Professional Publishing Sdn. Bhd.

Mohd Kamil Bin Mokhtar. (2007). *Al-Hibah: The Principles And Mechanism In The Contemporary Malaysian Reality*, Sarjana Muda Pentadbiran Dan Pembangunan Tanah, Universiti Teknologi Malaysia.

Mohd Khairy Kamarudin & Suhaili Alma'amun. (2013). *Analysing The Knowledge and Practice of Hibah (Inter Vivos Gift) Within The Contextual Form of Islamic Estate Planning in Malaysia: Variations Across Control Variable*. Fakulti Ekonomi dan Pengurusan, Universiti Kebangsaan Malaysia.

Mohd Noor, A., & Abdullah, M. A. (2009). Takaful (Islamic Insurance) Benefit: Ownership and Distribution Issues in Malaysia. *Journal od Islamic Economics, Banking and Finance*, 5(3), 35– 48.

Mohd Najib Abd Ghafar. (1998). *Penyelidikan Pendidikan*. UTM : Skudai, Johor.

Mohamed Said, N. L., Awang, M. R., & Mohd Nor, A. H. (2010). Qabd dan Hukum Penarikan Balik Hibah. *Jurnal Muamalat*, 3, 157–184.

Mohd. Ridzuan Awang. (1994). *Undang-Undang Tanah Islam: Pendekatan Perbandingan*. Dewan Bahasa Dan Pustaka, Selangor.

Mohd Sheffie Abu Bakar. (1991). *Methodologi Kajian Edisi Kedua*, Bangi: Universiti Kebangsaan Malaysia.

Mohammad Zaki Yahpar Al-Yahya. (2012). *Urus Harta Cara Rasulullah, Fiqh Muamalat Undang-undang Perundangan Dalam Islam*. Kuala Lumpur.

Mohd Zamro Muda & Mohd. Ridzuan Awang. (2006). *Undang-undang pusaka Islam: pelaksanaannya di Malaysia*. Kuala Lumpur: Syarikat Percetakan Putrajaya Sdn Bhd.

Mohd Zamro Muda. (2008). *Instrumen Hibah Dan Wasiat: Analisis Hukum Dan Aplikasi Di Malaysia*, Jabatan Syariah, Fakulti Pengajian Islam, Universiti Kebangsaan Malaysia.

Mohd Zamro Muda, Mohd. Ridzuan Awang, Abdul Basir Mohamad, & Md. Yazid Ahmad. (2008). *Undang-undang dan Pentadbiran Pusaka, Wasiat dan Wakaf Orang Islam di Malaysia*.

Jabatan Syariah, Fakulti Pengajian Islam, Universiti Kebangsaan Malaysia, Bangi, Selangor. Muda, M. Z. (2008). *Instrumen Hibah dan Wasiat: Analisis Hukum dan Aplikasi di Malaysia*.

Mujani, W. K., Abdul Rashid, R., Wan Hussain, W. M. H., & Yaakub, N. I. (2012). Gift Inter Vivos For Charged Property. *The Social Sciences*, 7(2), 196–199.

Muhamadul Bakir Yaakub. (2011). *Konflik Pembahagian Harta Pusaka (al-Mirath) dan Krisis Identiti dalam Institusi Kekeluargaan Masyarakat Melayu: Satu Tinjauan dari Perspektif Islam*. Kuliyyah Ilmu Wahyu dan Sains Kemanusiaan, Universiti Islam Antarabangsa Malaysia.

Mujani, W. K., Wan Hussain, W. M. H., Yaakub, N. I., & Abdul Rashid, R. (2011b). The Concept of Law of Gift Inter Vivos Under Islamic Law and the Contracts Act, 1950. *International Business Management*, 5(6), 319–325.

Nasrul Hisyam Nor Muhamad. (2008). *Bidang Kuasa Hibah Di Mahkamah Syariah Di Malaysia*.

Nizamuddin, Zainuddin, Badruddin A.Rahman, Abu Bakar Hamed, Thi Lip Sam, Azrain Nasyrah Mustapa, Nazlina Zakaria, Norita Deraman, Norzalila Jamaludin, Shamsul Huda Abd Rani, & Suhaila Abdul Hanan. (2010). *Penyelidikan Saintifik Asas dan Aplikasi*. Universiti Utara Malaysia, Sintok, Kedah.

Norlizah Abas. (2006). 38b tidak dituntut. *Berita Harian*, 4 Julai.

Nor Hidayah Binti Mohamed. (2004). Pembinaan E-Modul Mata Pelajaran Hidrologi: Kajian Di Politeknik Shah Alam. Tesis, Kolej Universiti Teknologi Tun Hussein Onn.

Nor Muhamad, N. H. (2008). Bidang Kuasa Hibah di Mahkamah Syariah di Malaysia. *Jurnal Muamalat*, 16(2), 367–392.

Nor Muhamad, N. H. (2009). Elemen Qabd ( Pindahan Milikan ) Dalam Hibah : Analisis Terhadap Keperluan Dan Pelaksanaannya Mengikut Perspektif Undang-Undang Islam Nasrul Hisyam Nor Muhamad, 17(2), 243–266.

Nor Muhamad, N. H. (2010). Pemakaian Prinsip Hibah dalam Sistem Kewangan Islam di Malaysia: Tumpuan Kepada Industri Perbankan Islam dan Takaful. *Jurnal Teknologi*, 52, 69–81. Nurul Hazira Rahmat. (2009). Perancangan Harta Mengikut Undang-Undang Islam Menggunakan Konsep Hibah. Jabatan Pentadbiran Tanah Fakulti Kejuruteraan dan Sains Geoinformasi Universiti Teknologi Malaysia.

Nurul Natasha Daud, Hendon Redzuan & Rubayah Yakob. (2017). Hibah Dalam Perancangan Harta dan Takaful. *Jurnal of Islamic, Social Economics and Development*, 2, 30-39.

Rejal Arbee. (2007). Mengapakah Rm40 bilion Harta Pusaka Tidak Diwasiatkan? *Dewan Masyarakat*, Julai: 36.

Rusnadewi Abdul Rashid & Nor Hisyam Ahmad. (2013). Pengurusan Harta Melalui Hibah: Kepentingan Dan Manfaat Dari Pelbagai Aspek Untuk Kemajuan Ummah. *Fakulti Undang- undang, Universiti Teknologi Mara Perlis, Malaysia Peguam bela & Peguam cara Mahkamah Tinggi Malaya*.

Rusnadewi Abdul Rashid & Noor Inayah Yaakub. (2015). Masalah Kegagalan dan Kelewatan Pengagihan Harta Pusaka di Malaysia. *Fakulti Undang-undang, Universiti Teknologi Mara Arau Perlis*.

Sinar Harian. (2013). Pelabur Unit Amanah, ASNB Di galak Sertai, <http://www.sinarharian.com.my/pelabur-unit-amanah-asnb-digalak-sertai-1.205617> (tarikh akses: 4 Ogos 2015)

Sitorus, R.H. 1993. Kamus Sinonim. Dewan Bahasa dan Pustaka

Tarmizi Abdul Rahim. (2009). RM31 Juta Harta Pusaka Masih Tidak Dituntut, <http://www.utusan.com.my> (tarikh akses: 27 Julai 2015)

Tuan Haji Wan Abdul Halim bin Wan Harun. (2006). Isu-isu Pembahagian Harta Pusaka Orang Islam Dalam Konteks Perundangan Malaysia. Jabatan Ketua Pengarah Tanah dan Galian Negeri Perak.

- Othman Yaacob. (2006). Pembentukan Trust Hibah Sebagai Alternatif Perancangan Harta, Universiti Malaya..
- Ridzuan Awang. (1994). Undang-Undang Tanah Islam: Pendekatan Perbandingan, Dewan Bahasa Dan Pustaka, Selangor.
- Sabiq, al-Sayyid. (1988). Fiqh al-Sunah. Jil. 3. t.tp.: Taba at-al Mu'allif.
- Sabirin, A. (2009). Instrumen Perancangan Harta bagi Saudara Baru. Kuala Lumpur.
- Salleh, A., Abu Hasan, M., & Sabtu, N. (2007). The Practise of Hibah Among The Malays: A Case Study in Klang Valley. Shah Alam.
- Sharif S. (2008). Data Analysis Using SPSS. Kedah: Universiti Utara Malaysia.
- Siti Juwariah Ab. Razak. (2008). Persepsi Pelajar Sarjana Muda Sains Serta Pendidikan (Pengajian Islam) Terhadap Wasiat, Universiti Teknologi Malaysia.
- Siti Mashitoh Mahamood. (2006). Harta Amanah Orang Islam Di Malaysia: Perspektif Undang-Undang Dan Pentadbiran, Universiti Malaya.
- Syed Arabi Idid. (1992). Kaedah Penyelidikan Komunikasi dan Sains Sosial, Kuala Lumpur: Dewan Bahasa dan Pustaka (DEB).
- Tan Juat Hong. (2008). Statistical Techniques in Business Research A Practical Approach (2<sup>nd</sup> ed).
- Tanzil-ur-Rahman. (1980). A Code of Muslim Personal Law. Pakistan: Islamic Publishers.
- Uma Sekaran. (2007). Research Methods For Bussiness: A Skill-Building Approach 4<sup>th</sup> edition, John Wiley & Sons.
- Utusan Malaysia. (2006). Harta Pusaka Gagal Dimajukan, <http://www.utusan.com.my> (tarikh akses: 18 Ogos 2015).
- Utusan Malaysia. (2007). Harta Pusaka Tidak Dituntut Cecah RM40b, <http://www.utusan.com.my> (tarikh akses: 9 September 2015).
- Utusan Malaysia. (2009). Bahaya Lewat Urus Harta Pusaka, <http://www.utusan.com.my> (tarikh akses: 16 September 2015).
- Utusan Malaysia. (2009). Ambil berat pelan penurunan harta pusaka, <http://www.utusan.com.my> (tarikh akses: 20 September 2015).
- Wahbah al-Zuhaili. (2000). Fiqh dan Perundangan Islam, Jilid IV. Kuala Lumpur.



Wiersma W. (2005). *Research Methods in Education*. London: Allyn and Bacon.

Yaacob, O. (2006). Pembentukan Trust Hibah Sebagai Alternatif Perancangan Harta. In S.M Mahamood (Ed.), *Harta Amanah Orang Islam di Malaysia: Perspektif Undang-undang dan Pentadbiran* (pp. 171–205). Kuala Lumpur: Penerbit Universiti Malaya.

Zurina Shafii, Zarinah Mohd. Yusoff, & Shahizan Md. Noh. (2013), *Islamic Financial Planning & Wealth Mnagement*. Kuala Lumpur: IBFIM.

## **KEUSAHAWANAN SOSIAL: KAJIAN USAHAWAN KG BUKIT CHERAKAH, SHAH ALAM DAN PERSATUAN OKU BAKTI MALAYSIA**

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### **ABSTRAK**

*Perusahaan Kecil dan Sederhana (PKS) di Malaysia memainkan peranan yang sangat penting dalam ekonomi Malaysia kerana ianya menyediakan asas-asas yang kukuh dalam menjana pertumbuhan pelbagai industri baru mahupun industri sedia ada. Kekuatan PKS ini juga dapat dilihat dalam aspek pembangunan keusahawanan, penyediaan peluang tenaga kerja, penciptaan pendapatan, penggunaan sumber tempatan dan penggunaan modal secara cekap selain ianya menjadi pelengkap kepada industri lain. Justeru itu, pembangunan PKS terutama di luar bandar juga perlu diberi penekanan ke arah pembangunan dan perkembangan PKS Malaysia yang lebih kompetitif dan berwibawa memandangkan kadar survival PKS untuk meneruskan perniagaan dalam tempoh 5 tahun agak rendah. Oleh itu, keusahawanan sosial dilihat sebagai satu kaedah untuk memperkasakan PKS luar bandar melalui Program Sebutir Permata Sebutir Perniagaan (SPSP). Objektif kajian ini adalah untuk mengenalpasti tahap peningkatan pengetahuan keusahawanan, tahap peningkatan manfaat pemasaran dan tahap peningkatan pendapatan perniagaan yang diperolehi peserta program SPSP. Kajian dilakukan dengan menggunakan kaedah survey dan temubual mendalam bagi memperolehi data dan maklumat. Pendekatan kajian juga melibatkan brainstorming penyelesaian masalah dengan menggunakan Business Model Canvas, personal coaching, seminar, latihan dalam kumpulan dan lain-lain pendekatan yang bersesuaian. Seramai 14 orang peserta dari Kampung Bukit Cherakah dan 4 orang peserta dari Persatuan OKU Bakti Malaysia telah terlibat dan menjadi responden dalam penyelidikan keusahawanan ini. Responden melalui proses kerangka pembangunan usahawan yang berstruktur jangka panjang yang melihat kepada pertumbuhan ekonomi kumpulan sasar. Kerangka Pembangunan Usahawanan ini melibatkan 4 Fasa iaitu Start Up, Scale Up, Student in Real Enterprise dan Sustainable Profitable Entrepreneurship. Jangka masa pengendalian penyelidikan adalah dalam tempoh 12 bulan. Hasil kajian menunjukkan bahawa responden mampu meningkatkan taraf ekonomi keluarga bahkan turut dapat memperkasakan diri mereka melalui latihan dan pengalaman kerja yang diterima melalui program SPSP.*

**Katakunci :** *Perusahaan Kecil dan Sederhana, keusahawanan sosial, pemerksaan*

## **PENGENALAN**

Perusahaan Kecil Dan Sederhana (PKS) adalah merupakan pemangkin kepada transformasi ekonomi ke arah menjadikan Malaysia sebagai sebuah negara yang berpendapatan tinggi. Melalui PKS ini maka lahir golongan usahawan-usahawan yang mampan dan berupaya menjana peluang-peluang pekerjaan, menangani pengangguran dan membasmi kemiskinan. Menurut Umami Salwa dan Isma Addi Jumbri [1], usahawan bukan sahaja bekerja untuk kepentingannya sahaja, malahan mereka juga menyediakan peluang pekerjaan kepada orang lain. Peranan PKS adalah sangat besar memandangkan mereka juga berperanan untuk merangsang inovasi dan bertindak sebagai penstabil pertumbuhan ekonomi semasa [2]. Klasifikasi PKS ini terbahagi kepada tiga kategori iaitu mikro, kecil, dan sederhana bergantung kepada kriteria ke- layakan yang terdiri daripada jualan tahunan dan bilangan pekerja sepenuh masa.

Memandangkan peranan PKS yang penting di dalam kelestarian ekonomi di Malaysia, justeru isu kegagalan sebahagian perusahaan kecil dan sederhana juga wajar diperhalusi. Berdasarkan Norashidah et.al [3], di antara faktor-faktor kejayaan atau kegagalan Perusahaan Kecil dan Sederhana adalah disebabkan bagaimana cara pengusaha menguruskan perniagaannya. Sebagai seorang pengusaha atau usahawan, mereka perlu memiliki kompetensi sebagai seorang usahawan seperti tekun, bekerja keras, yakin dengan kebolehan, kreatif dan mengetahui keperluan untuk mencapai kecemerlangan dalam perniagaan [4].

Istilah usahawanan sosial pula adalah model keusahawanan yang menekankan kepada pewujudan masyarakat yang berimpak positif dan saksama dengan tidak hanya mementingkan keuntungan semata-mata [5] . Keusahawanan sosial dilihat sebagai satu pendekatan terbaik ke arah transformasi sosial masyarakat melalui penyelesaian inovatif kepada masalah sosial yang sedang dihadapi oleh masyarakat di sekeliling. Seorang usahawan sosial akan mengambil peluang untuk memperbaiki sistem masyarakat, mengilhamkan pendekatan baru dan juga memikirkan cara penyelesaian yang baru untuk memperbaiki lagi masyarakat sekitarnya. Justeru itu, program Sebutir Permata Sebutir Perniagaan yang diwakili oleh sekelompok usahawan dalaman (intrapreneur) telah mengembelingkan tenaga dan usaha mereka membantu sosialisasi keusahawan PKS di Bukit Cherakah ini.

## **LITERASI KAJIAN**

### **Perusahaan Kecil dan Sederhana**

Perusahaan Kecil dan Sederhana (PKS) memainkan peranan yang sangat penting di dalam merencanakan kegiatan ekonomi Negara. Sesebuah perniagaan akan ditakrifkan sebagai PKS bergantung kepada kriteria jumlah jualan tahunan atau bilangan pekerja sepenuh masa [2] . Bagi industri pembuatan, perniagaan dikatakan mikro sekiranya jumlah jualan tahunan kurang daripada RM300,000 atau memiliki kurang dari 5 orang pekerja. Definisi ini terpakai di kesemua sektor sama ada sektor pembuatan mahupun perkhidmatan dan lain-lain sektor. Di dalam sektor pembuatan, sebuah perniagaan pula dikategorikan sebagai perusahaan kecil sekiranya jualan tahunan di antara RM300,000 hingga RM15 juta atau memiliki 5 orang hingga 75 orang pekerja. Namun demikian, bagi sektor perkhidmatan dan sektor lain, jualan tahunan adalah di antara RM300,000 hingga RM3 juta.

Bagi kategori perusahaan sederhana pula, jumlah jualan adalah di antara RM15 juta hingga RM50 juta atau memiliki di antara 75 orang hingga 200 orang pekerja bagi sektor pembuatan. Bagi sektor perkhidmatan dan lain-lain sektor, sesebuah perniagaan dikatakan berada pada tahap sederhana sekiranya jumlah jualan tahunan sebanyak RM3 juta hingga 20 juta atau memiliki 30 hingga 75 pekerja.

Berdasarkan analisis hasil kajian [6], terdapat enam faktor yang akan mempengaruhi kejayaan sesebuah PKS. Faktor-faktor tersebut adalah penerapan inovasi dan teknologi, pembangunan modal insan, akses kepada pembiayaan, akses kepada pasaran, persekitaran perundangan dan kawal selia serta infrastuktur. Menurut Amran [7], PKS bumiputera masih tidak dapat mencapai prestasi perniagaan mereka. Di antara faktor tersebut adalah kelemahan ketiadaan rangka kerja strategik perniagaan dan kurangnya pengetahuan serta pelaksanaan strategi keusahawanan yang tidak berkesan.

### **Keusahawanan sosial**

Konsep keusahawanan kini telah dipelbagaikan dengan bukan hanya setakat aktiviti perniagaan tulen yang melibatkan penghasilan dan pencapaian pasaran dan pelaksanaan strategi-strategi inovatif sahaja. Menurut Suraiya Ishak dan Ahmad Rafli [5] , konsep keusahawanan kini turut diperluaskan melalui aktiviti yang

bukan berobjektifkan keuntungan malahan memberi keutamaan kepada pembangunan sosial dalam masyarakat. Berdasarkan Kostetska dan Berezyak [8], keusahawanan sosial berkait rapat dengan tindakbalas kepada masalah sosial masyarakat seperti masalah pengangguran, kemiskinan dan keadilan sosial secara menyeluruh. Menurut Suraiya Ishak dan Ahmad Rafli [5] lagi, keusahawanan sosial berperanan menggabungkan peranan dan tanggungjawab yang perlu dilaksanakan di kalangan kerajaan, swasta dan badan kebajikan. Hasil daripada keusahawanan sosial ini dijangka mampu menghasilkan kecekapan dan keberkesanan pencapaian sosial, meningkatkan daya saing dan kemampanan golongan sasaran. Menurut Neck et al [9], definisi keusahawanan sosial dibahagikan kepada dua iaitu definisi berasaskan proses dan definisi berpusatkan usahawan. Menurutnya lagi, definisi berasaskan proses melibatkan pembentukan struktur baru bagi menyelesaikan masalah sosial melalui kelakuan yang positif. Definisi berpusatkan usahawan pula memberi penekanan kepada sifat usahawan sosial.

Keusahawanan sosial turut memberi tumpuan kepada pemikiran dan tindakan pengambilan peluang yang ada dalam persekitaran bagi menyelesaikan masalah sosial [10]. Justeru itu, segala tindakan menangani isu sosial samada oleh individu ataupun organisasi, yang mempunyai ciri mengambil peluang, responsif kepada peluang yang timbul, sanggup mengambil risiko, pro-aktif dan agresif dalam persaingan, adalah memenuhi kerangka konsep keusahawanan sosial.

Zahra et al [11] pula menyatakan keusahawanan sosial memerlukan pengiktirafan ke atas motivasi individu atau kumpulan yang sanggup mengambil risiko dalam melahirkan, membina, melancarkan dan mengekalkan organisasi baru ke arah peningkatan kekayaan sosial dan peningkatan pendapatan individu.

Berdasarkan Laporan Penyiasatan Pendapatan Isi Rumah dan Kemudahan Asas 2016 [12] kumpulan golongan pendapatan di kemiskinan (PGK) iaitu RM950.00 sebulan. Malaysia di kategorikan kepada 3 golongan iaitu golongan B40, M40 dan T40. Kumpulan B40 ini merujuk kepada isi rumah yang mempunyai pendapatan di bawah RM4,360. Kumpulan ini juga merangkumi isi rumah miskin yang berpendapatan bulanan kurang daripada pendapatan garis kemiskinan (PGK) iaitu RM950 sebulan. Golongan M40 pula adalah kumpulan isi rumah berpendapatan di antara RM4,360 dan RM9,619. Kumpulan T40 pula merujuk kepada isi rumah yang berpendapatan bulanan RM9,620 dan ke atas. Dari segi agihan pendapatan, 46.2% rakyat Malaysia berada dalam kumpulan T20, M40 sebanyak 37.4% dan B40 sebanyak 16.4%.

Dalam usaha untuk menjadikan Malaysia sebagai sebuah negara yang mempunyai pendapatan tinggi, masyarakat Malaysia perlu berada di dalam kalangan T40 dan bukannya B40. Justeru pemerkasaan usahawan PKS perlu dipertingkatkan di dalam usaha negara memacu pertumbuhan ekonomi yang mampan.

### **Teori Kirkpatrick**

Di dalam melaksanakan sesuatu aktiviti atau program, penilaian adalah aspek yang sangat penting. Melalui penilaian yang dilaksanakan, sebarang masalah atau kelemahan yang wujud di program tersebut akan dapat diperbaiki. Menurut Tyler [13], penilaian adalah proses penentuan sama ada sesuatu objektif program dapat dicapai atau sebaliknya. Terdapat pelbagai model yang digunakan untuk melaksanakan penilaian program seperti Model Penilaian CIPP, Model Penilaian Hamblin dan Model Penilaian Kirkpatrick. Model Penilaian Kirkpatrick [14] mempunyai 4 elemen dan tahap iaitu reaksi, pembelajaran, perubahan tingkahlaku dan hasil. Tahap reaksi ini juga sebagai penilaian berkaitan dengan kepuasan pelanggan. Pada peringkat ini, persepsi para peserta terhadap program yang dihadiri akan diukur. Di antara soalan yang boleh dikemukakan adalah berkaitan teknik pengajaran dan penyampaian, kesesuaian topik kursus, penilaian modul latihan dan lain-lain. Menurut Nor Shahida dan Norasmah [15] penilaian reaksi adalah sangat penting kerana ia dapat memberikan maklumbalas yang diperlukan oleh pihak penganjur menilai program dan membuat penambahbaikan program di masa depan.

Menurut Jarvis [16] pengetahuan yang diperolehi oleh peserta adalah merupakan satu peringkat kesedaran atau hubungan rapat dengan sesuatu yang memberi keuntungan melalui pengalaman, pembelajaran mahupun pemikiran. Bagi Kirkpatrick [14], proses penilaian pembelajaran adalah penting. Sekiranya tanpa pembelajaran maka perubahan tingkahlaku tidak akan berlaku. Menurut Kirkpatrick [17] lagi, sikap dan tingkahlaku boleh diukur dengan melibatkan ujian pra (sebelum) dan ujian selepas program latihan (ujian pos).

Elemen seterusnya adalah hasil. Menurut Kirkpatrick [17], penilaian terhadap kesan latihan melibatkan pengukuran impak sesuatu program sama ada berjaya atau sebaliknya. Kejayaan sesebuah program boleh diterjemahkan sebagai peningkatan kualiti, nilai wang, kecekapan, keuntungan, keselamatan, pulangan pelaburan dan semangat kerja berpasukan.

### **Pemeriksaan perusahaan kecil dan sederhana**

SME Corporation Malaysia [2] menyatakan bahawa Pelan Induk Perusahaan Kecil dan Sederhana (PKS) 2012-2020 menunjukkan sebanyak 42% perusahaan yang wujud pada tahun 2000 telah ditutup pada tahun 2005. Ini bermakna kadar survival di kalangan PKS adalah sekitar 58% sahaja. Keadaan ini menjadi cabaran utama kepada pelabur-pelabur dana sama ada agensi kerajaan mahupun swasta. Justeru itu, pemeriksaan usahawan PKS adalah perlu bagi memastikan kemampuan PKS untuk terus berdaya saing di pasaran. Menurut Umami Munira et.al [18], di antara faktor-faktor kejayaan atau kegagalan PKS adalah bergantung kepada cara pengusaha menguruskan perniagaannya. Seseorang pengusaha perlu memiliki sifat ketekunan, bekerja keras, keyakinan yang tinggi, sentiasa bersedia dengan risiko, kreatif dan menyedari akan keperluannya untuk mencapai tahap kecemerlangan dalam perniagaan [4].

Kewujudan sistem pengurusan yang cekap dan berkualiti juga dilihat sebagai faktor penyumbang kepada pemeriksaan PKS. Sebagai contoh, mereka perlu mahir di dalam menguruskan modal perniagaan dan pengurusan pekerja. Menurut Nur Hafizah dan Rahimah [19], sistem pengurusan yang sistematik dan pengalaman pengoperasian perniagaan akan membantu menggerakkan perniagaan dengan lancar.

Faktor bantuan dan sokongan agensi-agensi kerajaan juga turut mempengaruhi prestasi perniagaan PKS. Di antara bantuan tersebut adalah pendedahan ilmu asas tentang perniagaan kepada usahawan-usahawan yang baru melibatkan diri dalam perniagaan. Menurut Norashidah et.al [3], kerajaan juga mengambil inisiatif melalui mempromosikan Industri Kecil dan Sederhana agar industri ini dapat dikembangkan dan mendapat perhatian untuk lebih diceburi oleh masyarakat tempatan. Menurutnya lagi, apabila bilangan Perusahaan Kecil dan Sederhana semakin meningkat di Malaysia, maka semakin kerajaan semakin berpeluang untuk meningkatkan pendapatan negara.

### **METODOLOGI KAJIAN**

Metodologi kajian yang digunakan adalah rekabentuk kajian penyelidikan kuantitatif di bawah program pembangunan keusahawanan sosial. Responden akan di temubual dan di minta menjawab soalan kajian oleh pasukan penyelidik PSA yang merangkap sebagai mentor dan dibantu oleh pelajar-pelajar yang mempunyai kemahiran dan pengetahuan tentang permasalahan yang dihadapi oleh kumpulan sasaran. Selain itu, soal selidik juga akan digunakan bagi memudahkan capaian data yang diperlukan Responden



melalui proses kerangka pembangunan usahawan yang berstruktur jangka panjang yang melihat kepada pertumbuhan ekonomi kumpulan sasar.

Kerangka Pembangunan Usahawanan ini melibatkan 4 Fasa iaitu *Start Up*, *Scale Up*, *Student in Real Enterprise* dan *Sustainable Profitable Entrepreneurship*. Jangka masa pengendalian penyelidikan adalah dalam tempoh 12 bulan. Pendekatan kajian adalah secara temu bual pemasalahan, *brainstorming*, penyelesaian masalah dengan menggunakan Business Model Canvas, '*personal coaching*', seminar, latihan dalam kumpulan sangkutan pelajar di premis usahawan dan penganjuran program-program keusahawanan bagi mengembangkan lagi pasaran produk usahawan Kg Bukit Cherakah dan Persatuan OKU BAKTI Malaysia. Responden juga telah dibimbing secara bersemuka dan secara '*hands on*'.

### **Kawasan dan kaedah kajian**

Kampung Bukit Cherakah, Mukim Bukit Raja, Daerah Petaling, Negeri Selangor Darul Ehsan terletak di kawasan Parlimen Kapar, DUN Meru mengandungi lebih kurang 150 buah keluarga . Kampung ini telah dibangunkan sejak 20 tahun yang lepas. Kampung ini dikelilingi oleh jalan - jalan besar antaranya jalan menuju ke Kg. Meru, Kg. Bukit Kapar, dari Meru ke Puncak Alam, dari Puncak Alam ke Shah Alam. Kampung Bukit Cherakah berada di pertembungan pemodenan penempatan dan pengangkutan dan ianya memegang status sebagai Kampung Tradisi.

Pelan Pembangunan Luar Bandar Negeri Selangor (2010), antara teras yang digariskan bagi membantu menyediakan penduduk luar bandar ke arah pembangunan adalah pemerksaan pembangunan modal insan, melonjakkan pendapatan masyarakat dan menggerakkan ekonomi dan industri secara bersepadu. Oleh yang demikian, program ini dilihat dapat membantu penduduk kampung ke arah kampung tradisi yang maju dari segi sosioekonomi. 60% penduduk kampung ini tidak mempunyai pendapatan tetap kerana bekerja sendiri dan memperolehi pendapatan kurang dari RM3000 sebulan. Sebahagian responden lain pula adalah terdiri daripada ahli Persatuan OKU Bakti Malaysia yang terdiri daripada responden yang mengalami kecacatan penglihatan.

### **Kerangka Pembangunan Usahawan SPSP**



Rajah 1: Kerangka pembangunan Usahawan SPSP

Menurut Zimmerman [20], pemerkasaan adalah keupayaan peserta untuk membuat pilihan, melibatkan diri dalam membuat keputusan dan membangunkan rasa kawalan, peluang untuk mengakses, mendapat dan menguruskan sumber dan mengambil bahagian dalam komuniti mereka. Menurut Lyons, Smuts & Stephens [21], pemerkasaan individu pula memerlukan kepelbagaian jenis kemahiran dan kebolehan yang diperolehi daripada pengalaman dan latihan daripada projek-projek pemerkasaan. Kerangka Konsep Pemerkasaan oleh Kabeer [22] pula menggabungkan tiga dimensi yang paling berkaitan iaitu kepelbagaian sumber, agensi (proses) dan hasil pencapaian.

Berdasarkan Model Kirkpatrick [14], di dalam memastikan latihan dan sesuatu aktiviti pembangunan berkesan, ia perlu melibatkan empat kriteria iaitu reaksi, pembelajaran, perilaku dan hasil. Reaksi adalah pengukuran bagi mengenalpasti bagaimana pandangan peserta terhadap latihan yang diperolehi. Pembelajaran pula adalah tahap yang akan menilai apa yang telah dipelajari oleh peserta. Perilaku pula merujuk kepada perubahan tingkahlaku selepas melalui proses pembelajaran yang akan melihat sama ada peserta mengaplikasikan apa yang dipelajari dan hasil pula adalah penilaian kesan latihan pembangunan yang membawa perubahan kepada budaya kerja yang lebih baik. Justeru itu, berdasarkan model ini, maka pasukan SPSP mewujudkan Kerangka Pembangunan Usahawan SPSP.

Berdasarkan rajah 1 di atas, kerangka kajian ini melibatkan empat (4) fasa iaitu fasa *start up module*, fasa *scale up module*, *student in real enterprise module* dan *sustainable and profitable entrepreneurship module*. Di dalam fasa pertama (1) iaitu start up program, ia melibatkan pengenalan masalah perniagaan menggunakan pendekatan Temubual dan menjawab soalan kaji selidik *open ended*. Berdasarkan

hasil kaji selidik yang telah dibuat, maka satu struktur pemeraksanaan usahawan PKS di Bukit Cherakah telah dibangunkan. Di dalam fasa ini, responden akan melalui proses asas pengurusan perniagaan dan keusahawan melalui modul-modul seperti modul Mulakan Perniagaan Anda Sekarang, Kenali Diri, Kompetensi Usahawan Berjaya, Validasi Idea dan peluang perniagaan, *Business Model Canvas*, dan Rancangan Perniagaan. Mentor dan penceramah akan memberi bimbingan kepada responden dan pelajar bertindak sebagai fasilitator bagi setiap usahawan. Usaha ini adalah sebagai usaha *Knowledge Transfer Program* daripada mentor-mentor kepada responden. Tempoh latihan dan pemantauan adalah selama 1 bulan

Setelah responden melengkapkan fasa 1, mereka akan meneruskan program-program di Fasa 2 yang dikenali sebagai *Scale Up Program*. Di dalam fasa ini, kursus-kursus peringkat lebih tinggi telah diberikan kepada para responden. Kursus-kursus yang terlibat adalah Urus Akaun Perniagaan Sendiri, Penjenamaan, Pendaftaran dan Pengkomersilan Cap Dagang, Budget dan Ramalan Jualan, Pemasaran dan Jualan, Perniagaan Online dan Pengurusan Operasi dan Pembungkusan Produk. Mentor dan penceramah akan memberi bimbingan kepada peserta dan pelajar bertindak sebagai fasilitator bagi setiap usahawan *Knowledge Transfer Program*. Tempoh latihan dan pemantauan adalah selama 4 bulan

Fasa 3 pula dikenali sebagai *Student in Real Enterprise Program*. Di dalam siri ini, pelajar akan ditempatkan di syarikat perniagaan OKU dan Usahawan Kg Bukit Cherakah untuk membantu para usahawan PKS dari segi pemasaran, pengoperasian dan pengurusan perniagaan. Pelajar merancang dan menjalankan aktiviti-aktiviti yang dapat meningkatkan pendapatan usahawan. Penyelidik dan pelajar juga perlu mengenalpasti masalah perniagaan yang wujud dan membangunkan kaedah penyelesaian inovatif untuk mengatasi masalah yang dihadapi. Tempoh latihan dan pemantauan adalah selama 4 bulan

Fasa seterusnya adalah fasa ke empat (4) iaitu Fasa *Sustainable and Profitable Entrepreneurship*. Di dalam fasa ini, ia melibatkan elemen *Tracking and Monitoring Sales Performance*. Pelajar perlu mengawal operasi perniagaan di premis mereka dan juga *tracking* pencapaian perniagaan secara online. Laporan prestasi perniagaan telah dihantar ke PSA pada setiap bulan. Pelajar yang merupakan fasilitator usahawan akan membantu meningkatkan jualan mereka. Pembentangan pelaporan dalam tempoh 6 bulan dan 12 bulan.

## **Pemeriksaan usahawan Perusahaan Kecil dan Sederhana dan Pelan Tindakan Program**



Di dalam usaha memperkasakan usahawan Perusahaan Kecil dan Sederhana luar bandar ini, pasukan SPSP telah membuat perancangan dan penyelarasan program seperti berikut:

### **a. Mengadakan bengkel dan latihan keusahawanan dan perniagaan**

Siri perbengkelan dan kursus pemeriksaan bermula pada 29 Julai 2017 sehingga September 2017 hasil daripada kajian profil yang pernah dilaksanakan kepada usahawan Kampung Bukit Cherakah. Di antara siri perbengkelan tersebut adalah Bengkel Pengurusan Akaun Perniagaan, Bengkel Pembinaan Rancangan Perniagaan, dan Kursus Asas Pemasaran. Bengkel-bengkel dan kursus ini di adakan di Balairaya Kg Bukit Cherakah. Kursus Keusahawanan Digital pula dilaksanakan di Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA) memandangkan kekangan liputan internet dan peralatan komputer di kampung tersebut.

Foto 1: Bengkel pembinaan rancangan perniagaan di

### Balairaya Kg Bukit Cherakah

Foto 2: Bengkel keusahawanan Digital di PSA

Melalui pelaksanaan siri perbengkelan dan kursus ini telah dapat memperkasakan usahawan-usahawan dalam pengurusan perniagaan mereka. Para usahawan telah mampu untuk menyediakan Rancangan Perniagaan dan *Business Model Canvas* yang bersesuaian dengan perniagaan mereka. Melalui Bengkel Pengurusan Akaun Perniagaan, mereka telah memahami bagaimana perekodan tunai perniagaan perlu direkodkan. Mereka juga memperoleh banyak ilmu lain seperti ilmu keusahawanan digital yang mana aktiviti pemasaran dilakukan menggunakan media sosial selain menggunakan kaedah tradisional secara bersemuka. Ilmu yang telah diperolehi ini seterusnya diaplikasikan di dalam kegiatan ekonomi mere-



ka. Fasa *Student in Real Enterprise* pula mula dilaksanakan pada 25 Ogos 2017 dengan memberi peluang kepada usahawan-usahawan Bukit Cherakah menyertai program My Best Buy (MBB) di Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA). Program My Best Buy (MBB) ini adalah merupakan satu inisiatif pembudayaan keusahawanan di kalangan pelajar-pelajar PSA bagi memberi peluang kepada para pelajar merasai pengalaman menjalankan perniagaan sebenar. MBB ini adalah merupakan aktiviti anjuran Unit Pembangunan Keusahawanan PSA dengan kerjasama FAMA Selangor yang seringkali dilaksanakan di sepanjang semester. Penglibatan usahawan Kg Bukit Cherakah di program MBB ini telah dapat memberi ruang kepada mereka untuk memasarkan dan mempromosikan produk mereka ke kawasan bandar.



Foto 3: Aktiviti jualan produk usahawan melalui fasilitator SPSP



Foto 4: Usahawan bersama mentor-mentor dan fasilitator

Para pelajar PSA pula bertindak sebagai pembantu jualan kepada usahawan – usahawan ini dan ianya telah mewujudkan satu ekosistem keusahawanan yang menarik kerana para pelajar turut merasai pengalaman perniagaan secara praktikal. Hasil kerjasama yang erat di antara PSA dan FAMA juga telah membuka ruang kepada Usahawan-usahawan Kg Bukit Cherakah untuk menyertai beberapa siri *booth* promosi FAMA di Pasar Tani Shah Alam yang di adakan setiap hari Ahad.





Foto 5: Kerjasama usahawan bersama fasilitator



Foto 6: Pembukaan booth jualan bunga bersama fasilitator



Foto 7: Proses pertukaran ilmu kemahiran di antara usahawan dan fasilitator





Foto 8: *Student in Real Enterprise* di RNR Sungai Buloh, Selangor.

**b. Mengadakan gotong royong baik pulih pusat jualan**

Di fasa ini juga, satu program gotong royong SPSP di Bukit Cherakah telah diadakan pada 20 September 2017. Melalui aktiviti ini, satu pusat jualan hasil pertanian Kg Bukit Cherakah telah di baik pulih melalui penglibatan pelajar-pelajar- pelajar Kejuruteraan Awam yang sememangnya mahir di dalam kaedah pembinaan bangunan selain pasukan SPSP yang lain.



Foto 9: Keadaan sebelum dan selepas gotong royong di pusat jualan sayur-sayuran Kg Bukit Cherakah



Foto 10: Aktiviti menggantikan meja jualan usang kepada meja jualan yang lebih kukuh.

### **c., *Monitoring dan personal coaching***

Fasa *monitoring and tracking* pula bermula pada 31 Ogos 2017 sehinggalah Jun 2018 di anggap sebagai *exit programme* para usahawan yang telah memiliki kemampanan dalam perniagaan. Menurut Asfaw [23] , kemampanan perniagaan adalah peningkatan usia perniagaan seiring dengan kemajuan perniagaan. Dari aspek usahawan bimbingan, para usahawan telah dapat diperkasakan melalui bimbingan dan sokongan.

Pelaksanaan projek penyelidikan dan pembangunan keusahawanan memerlukan satu jangka masa panjang. Program ini akan diteruskan sehingga tempoh 1 tahun dan usahawan akan dibimbing secara berterusan oleh mentor-mentor program ini. Pencapaian perniagaan setiap 3 bulan akan direkodkan. Produk yang berdaya saing akan dibawa oleh kumpulan ini ke agensi tertentu seperti agensi FAMA bagi menambahkan produk-produk berasaskan makanan. Sebagai contoh , agensi FAMA telah membantu dari segi pembungkusan yang mengikut piawaian dan bagi mendapatkan pembiayaan pembelian mesin dan sebagainya.

Hasil daripada penglibatan semua peserta program ini, mereka telah berjaya memperkasakan diri mereka. Mereka mempunyai hubungan yang baik dengan pasukan SPSP yang terdiri daripada mentor-mentor berpengalaman dan pelajar-pelajar PSA, dilibatkan dalam pelbagai aktiviti yang dirancang dan mempunyai hubungan yang baik dengan pihak berkepentingan seperti FAMA dan Politeknik Sultan Salahuddin Abdul Aziz Shah.

Berdasarkan perbincangan di atas, penglibatan komuniti dianggap penting bagi mencapai objektif program pembangunan. Rasional para usahawan PKS menyertai program SPSP adalah untuk meningkatkan pengetahuan dalam asas perniagaan selain menjalin hubungan kerjasama yang erat bagi kepentingan bersama. Bermula dengan kekurangan ilmu dan kemahiran dalam menguruskan sesebuah perniagaan, kini usahawan PKS di Bukit Cherakan dan Persatuan OKU BAKTI Malaysia telah banyak mengetahui pelbagai ilmu keusahawanan dan pengurusan perniagaan .

## DAPATAN DAN KEPUTUSAN KAJIAN

### Kepentingan program SPSP kepada usahawan PKS Bukit Cherakah dan Persatuan OKU BAKTI Malaysia

Setiap program yang dirancang diharapkan mempunyai manfaat kepada peserta-peserta yang menyertainya termasuklah di dalam program Sebutir Permata Sebutir Perniagaan ini. Berikut adalah dapatan kajian berkaitan peningkatan pertambahan ilmu keusahawanan, tahap peningkatan manfaat pemasaran dan tahap peningkatan pendapatan perniagaan peserta program SPSP.

Pencapaian program SPSP	Bilangan peserta	Pertus
Menambahkan ilmu memasarkan produk/perkhidmatan	18	94
Menambahkan ilmu pengurusan kewangan	18	83
Menambahkan ilmu pembinaan rancangan perniagaan	18	78
Menambahkan ilmu keusahawanan digital	18	89

Jadual 1. Peningkatan tahap pengetahuan keusahawanan peserta program

Berdasarkan kepada Jadual 1, 94% responden bersetuju bahawa program SPSP melalui siri perbengkelan dan kursus asas pemasaran berjaya menambahkan ilmu memasarkan produk atau perkhidmatan mereka. Ilmu kewangan perniagaan pula seringkali tidak dianggap penting oleh usahawan PKS. Justeru itu, perkongsian ilmu berkaitan pengurusan kewangan perniagaan telah memberi kesedaran kepada mereka tentang kepentingan ilmu pengurusan kewangan perniagaan sebanyak 83.%. Responden yang sebelum ini tidak membuat sebarang catatan wang keluar masuk tunai telah menyediakan buku khas untuk merekodkan transaksi tersebut. Berdasarkan manfaat penambahan ilmu pembinaan rancangan perniagaan, seramai 78% bersetuju bahawa program SPSP ini membantu mereka untuk menambahkan ilmu pembinaan kertas kerja. Justeru itu, responden lebih berkeyakinan untuk menyediakan rancangan perniagaan mereka dengan baik.

Melalui perkongsian sesi ilmu keusahawanan digital, 89% bersetuju bahawa mereka telah menambahkan ilmu keusahawanan digital terutama di dalam penggunaan media sosial seperti Facebook dan Instagram sebagai platform memasarkan produk dan perkhidmatan mereka.

<b>Pencapaian program SPSP</b>	<b>Bil. Peserta</b>	<b>Persatus</b>
<b>Produk usahawan berjaya menembusi pasaran baharu.</b>	18	78
<b>Penjenamaan dan pembungkusan semula produk usahawan meningkatkan penerimaan pelanggan baharu</b>	18	83
<b>Pembangunan bahan-bahan pengiklanan membantu melonjakkan perniagaan usahawan</b>	18	89
<b>Peningkatan kemudahan pengedaran produk usahawan</b>	18	94

<b>Meningkatkan rangkaian</b>	18	83
<b>kenalan perniagaan</b>		

Jadual 2. Peningkatan tahap manfaat pemasaran yang diperolehi peserta program

Berdasarkan Jadual 2 di atas, program Sebutir Permata Sebutir Perniagaan turut memberikan manfaat pemasaran dalam perniagaan mereka. Seramai 14 orang atau 78% peratus bersetuju bahawa program SPSP telah membolehkan usahawan memasarkan produk mereka ke pasaran yang baharu seperti di Politeknik Sultan Salahuddin Abdul Aziz Shah dan Pasar Tani Shah Alam. 83% responden juga bersetuju bahawa penjenamaan dan pembungkusan semula produk usahawan meningkatkan penerimaan pelanggan baru. Sebagai contoh, pengusaha pes rendang sebelum ini hanya menggunakan plastik kosong sebagai pembungkusan produk. Namun demikian, selepas melalui program SPSP ini, usahawan ini telah menambah baik pembungkusan pes rendangnya dengan meletakkan stiker menarik yang mengandungi info perniagaan dan produk yang dijual.

Berdasarkan kajian juga menunjukkan bahawa pembangunan bahan-bahan pengiklanan membantu melonjakkan perniagaan usahawan sebanyak 89%.

Melalui program ini, fasilitator – fasilitator yang merupakan para pelajar membantu mengenalpasti keperluan bahan pengiklanan yang diperlukan oleh para usahawan. Mereka telah berjaya membantu merekacipta logo, menghasilkan brochure, *bunting* dan *banner* yang menarik.

Dari segi kemudahan pengedaran produk usahawan juga, kajian mendapati bahawa sebanyak 94% setuju bahawa program SPSP ini telah berjaya membantu mereka untuk menambahkan lagi pengedaran produk mereka melalui program My Best Buy di PSA, pasar tani Shah Alam dan juga agen-agen jualan melalui fasilitator mereka.

83% responden pula bersetuju bahawa melalui program SPSP ini telah dapat membantu mereka meningkatkan kenalan dan rangkaian perniagaan mereka. Sebelum program SPSP ini bermula, ramai di antara responden tidak mempunyai hubungan dengan ramai kakitangan dan pelajar-pelajar PSA. Namun selepas penyertaan di dalam program ini, hubungan kerjasama semakin erat terutama di dalam urusan berkaitan

kerjasama keusahawanan dan perniagaan. Selain itu, melalui program ini juga telah membuka banyak peluang keusahawanan bersama FAMA dan MDEC.

<b>Pencapaian program SPSP</b>	<b>Bil. peserta</b>	<b>Peratus</b>
<b>Pertambahan pendapatan perniagaan.</b>	18	83
<b>Pendapatan semasa melebihi pendapatan golongan B40 RM4320</b>	18	61

Jadual 3. Peningkatan tahap pendapatan peserta program

Berdasarkan Jadual 3, sebanyak 83 % responden bersetuju bahawa program SPSP yang dilaksanakan telah dapat membantu meningkatkan pendapatan perniagaan mereka. Jika sebelum ini pendapatan perniagaan mereka sekitar RM3000 sebulan, kini pendapatan tersebut telah meningkat kepada RM5700 sebulan di sepanjang program berlangsung. Usahawan yang menjual sayur-sayuran sebagai contoh telah berjaya meningkatkan hasil jualan daripada RM400 sebulan kepada RM700 sebulan. Dari segi dapatan responden yang telah berjaya melepasi tahap pendapatan semasa B40, seramai 11 orang memberikan maklumbalas yang mereka telah berjaya melepasi tahap pendapatan B40 iaitu sebanyak 61%.

## KESIMPULAN

Program Sebutir Permata Sebutir Perniagaan (SPSP) melalui keusahawanan sosial telah memberi peluang kepada usahawan PKS Bukit Cherakah dan Persatuan OKU BAKTI Malaysia untuk meningkatkan ilmu perniagaan dan keusahawanan. Selain mempelajari ilmu-ilmu tersebut juga, ia telah dapat menjalinkan sebuah kerjasama dan semangat perpaduan yang mantap di kalangan semua peserta program dan pasukan SPSP. Justeru itu program seperti SPSP ini sangat sesuai untuk dijadikan strategi memperkasa usahawan Perusahaan Kecil dan Sederhana terutama di kawasan luar bandar seterusnya dapat membantu membantu memajukan ekonomi luar bandar di Malaysia secara umumnya.

Daripada kajian yang telah dijalankan ini, terdapat beberapa cadangan penambahbaikan yang boleh dilakukan untuk memantapkan lagi kajian yang boleh dilakukan dimasa akan datang antaranya adalah men-

jalankan kajian menggunakan data bulanan. Menggunakan kaedah kajian yang berlainan supaya dapat mengesahkan bahawa dengan menggunakan metodologi yang berlainan masih memperoleh hasil dapatan yang sama.

## RUJUKAN

- [1] U. S. A. B. & I. A. Jumbri, "Mentransformasi Usahawan Mikro: kajian kes sahabat AIM.," *Kertas kerja Persidangan Libatsama Universiti dan Komuniti (LUK)*, 2012.
- [2] S. C. Malaysia, "Ringkasan Pelan Induk PKS 2012-2020.," p. 187, 2012.
- [3] N. O. & N. B. Norashidah Hashim, "Konsep kesediaan keusahawanan berdasarkan kajian kes usahawan kecil dan sederhana (IKS) di Malaysia.," vol. 34(1), no. *Jurnal Pendidikan Malaysia*, pp. 187-203, 2009.
- [4] M. A. H. Abdullah, *Industri kecil di Malaysia, pembangunan dan masa depan*, Kuala Lumpur: Dewan Bahasa dan Pustaka, 1997.
- [5] A. R. C. O. Suraiya Ishak, "Keusahawanan sosial sebagai pendekatan inovatif ke arah transformasi sosial masyarakat: Kajian kes di Malaysia," *Geografia online TM Malaysian Journal of Society and Space* 11, no. 8, pp. 38-51, 2015.
- [6] E. P. U. a. D. o. S. P. M. D. M. World bank, "Productivity of the investment climate private Enterprise survey 2007," 26 September 2013. [Online]. Available: <https://microdata.worldbank.org/index.php/catalog/652>. [Accessed 15 May 2017].
- [7] A. Awang, "Orientasi keusahawanan firma dan prestasi perusahaan kecil dan sederhana(PKS) Bumiputera: kajian impak penyederhana beberapa faktor persekitaran yang ditanggap.," 2006.
- [8] B. I. Kostetka I, "Social entrepreneurship as an innovative solution mechanism of social,problem of society. Management theory and studies for rural business and infrastucture development.," vol. 36, no. 3, pp. 569-577, 2014.
- [9] B. C. A. E. Neck H, *The landscape of social entrepreneurship*, Business Horizons, 2009.
- [10] T. JL, "Social enterprise and social entrepreneurship: where have we reached? A summary of," *Social Enterprise Journal*, vol. 4, no. 2, pp. 149-161, 2008.
- [11] G. E. N. D. d. S. J. Zahra SA, "A typology of social entrepreneurs: motives,search process and ethical challenge," *Journal of Business Venturing*, vol. 24, pp. 519-532, 2009.
- [12] D. M. U. b. Mahidin, "Laporan penyiasatan pendapatan isi rumah dan kemudahan asas 2016," *Jabatan Perangkaan Nalaysia*, 2017.
- [13] R. Tyler, *Basic principles of curriculum and instruction.*, Chicago: The University of Chicago Press, 1950.



- [14] D. D. K. a. D. J. Kirkpatrick, *Evaluating training programs: The four levels* (3rd.ed), San Francisco: Berrett-Koehler Publisher, 2013.
- [15] N. O. Nor Shahida Zakaria, "Reaksi usahawan perusahaan kecil dan sederhana terhadap program latihan keusahawanan," *Journal of Global Business and Social Entrepreneurship* , vol. 1, no. 1, pp. 73-85, 2017.
- [16] J. P, *Adult and Continuing Education*, New York: Routledge Publisher, 1996.
- [17] D. Kirkpatrick, *Evaluating training programs – the four levels. The ASTD Handbook*, New york: McGraw-Hill, 2000.
- [18] M. A. N. H. M. R. W. S. W. & W. S. Umni Munirah Syuhada, "Faktor-faktor yang mempengaruhi kejayaan usahawan wanita tekun: satu kajian di Daerah Hulu Langat.," *Proceeding of teh 4th International Conference on management and Muamalah (ICoMM 2017)*, 2017.
- [19] N. H. Y. & R. A. Aziz, "Pemeriksaan wanitadesa: Kajian ke atas Kumpulan Ekonomi Wanita (KEW), Kuala Teriang Langkawi Kedah," *Geografia-Malaysia Journal of Society and Space*, no. 8(6), pp. 15-23, 2012.
- [20] M. Zimmerman, *Empowerment theory: Psychological ,organizational and community levels of analysis*, New York: Springer Science Business Media, 2000.
- [21] C. A. S. Michal Lyons, "Participation ,empowerment and sustainability: (How) do the links work?," *SAGE Journal*, vol. 38, no. 8, pp. 1233-1251, 2001.
- [22] K. Naila, "The conditions and consequences of choice :reflections on the measurement of women's empowerment," *UNSRID discussion paper*, p. 108, 1999.
- [23] Y. Asfaw, "Growth determinants of manufacturing micro and small enterprises in Ethiopia : An empirical study of Tigray province," *Enterprise Development and Microfinance*, vol. 27, no. 4, pp. 273-297, 2016.
- [24] N. A. Bachik, "Industri Kecil dan Sederhana," *Researchgate*, 2017.

## THE IMPACT OF CONTENTS, MEDIA AND POSTING TIME ON ONLINE CONSUMER ENGAGEMENT

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## ABSTRACT

*The use of social media is growing rapidly all over the world. Today social media users not only use social media to share interesting stories, share pictures, share daily activities but users are beginning to realize the importance of social media in business. This generation will be proficient and every brand must have mastered the art of digital connection but in a way that also drives foot traffic, purchase and consumption. Social media will play more of a multi-purpose role in real entertainment plus driving stronger attitude and behavioral shifts. Social media have inspired new ways of making decisions, socializing, entertaining, interacting with each other and even shopping. Firms are looking for the most effective marketing strategy with minimum cost and social media has become the optimum choice. Even though the social media can spread out very quickly which types of message appeals will generate the highest consumer engagement on social media platforms and what is the ideal post time can create the highest consumer engagement within communities on social media platform. The aims of this conceptual paper was to identify the impact of contents, media and posting time on online consumer engagement on social media brand pages. This study will be conducted using quantitative research and the targeted respondent will be the Malaysian customers who have purchased online in social media. The results from the study will contribute to the existing knowledge and literature by providing deeper understanding of which different types of message appeals contents, media and posting time will generate the highest consumer engagement on social media platforms. Further the results of the study are believed to put significant contribution to practice of Malaysian entrepreneur about which creative messages to use in different industries, and when they should be posted to gain the highest consumer engagement on social media platform.*

**Keywords :** Content, Image, Posting Time, Online Consumer Engagement

## 1. Introduction

The usage of social media will continue to increase among the people all over the world. This generation will be proficient, and every brand must have mastered the art of digital connection but in a way that also drives foot traffic, purchase and consumption. Social media will play more of a multi-purpose role in real entertainment plus driving stronger attitude and behavioral shifts (Mohit Pande, 2013). Before the existence of the internet, business owners only need to advertise the products or services through television, radio or printed. . This is very different to today's business scenario because users are not easily in-

fluenced by advertisements that are out there. This is because of the existence of a social media and websites like facebook, instagram, twitter and so was changing buying patterns of consumers. Social media have inspired new ways of making decisions, socializing, entertaining, interacting with each other and even shopping (Cvijikj & Michahelles, 2013). Social media include online channels for sharing and participating and have quickly become the most popular online activities among consumers worldwide and have been increasingly attracting the interest of marketers all over the world to reach and interact with a brand's target audience (Mangold & Faulds, 2009). The nonstop growth of social media has attracted the interest of marketers worldwide to be present on at least one social media platform (Hanna R, Rohm A, Crittenden VL (2011). The aim of this study is to focus on the impacts of contents, media and posting time on online consumer engagement. This is the process that empowers individuals to promote their websites, products, or services through online social platform and tap into a much larger community that may not have been available via traditional channels. According to Digital Media Asia 2018 a total of 25.8 million of Malaysians use the internet and Facebook is the most visited site in Malaysia. Specifically in Malaysia, Facebook has a total of 2167 million monthly active users and there are more than 3.5 billion pieces of content (web links, news stories, blog posts, etc.) shared each week on Facebook.

## 2. Problem Statement

As the cost of advertising and promoting activities dramatically increase in recent years the entrepreneurs are turning to price related promotions as the way to encourage consumer purchasing and repurchasing decisions. In this current highly competitive environment, the improvement of consumer brand loyalty allows companies to secure themselves with a comfortable and sustainable position in the market at a reasonable cost structure. After the global recession firms have looked for the most effective marketing strategy with minimum cost. Social media has become the optimum choice which serves to this strategy. Because it can reach millions of people with the highest speed and it can spread out very quickly, then firms prefer to use social media even in substitution for traditional media tools (Kirtis & Karahan, 2011). Even though the social media can spread out very quickly which types of message appeals will generate the highest consumer engagement on social media platforms and what is the ideal post time can create the highest consumer engagement within communities on social media platform. The fundamental problem that drives this study is: *which message components will effectively engage consumers on social media brand pages?*

The study will also contribute to the understanding of which message strategies are most efficient in different industry domains and when they should be posted to achieve the highest level of consumer engagement on social media platforms for the target consumers of different industries. The highest consumer engagement on social media platform will ultimately lead to increased consumer loyalty and further equity.

## 3. Research Objectives

The main objective of this study is to examine the effects of content, media and posting time on online consumer engagement. The specific objectives of this study are:

- To examine the impact of content type on online consumer engagement
- To examine the impact of media type on online consumer engagement.

- To examine the impact of posting at different time on online consumer engagement.
- To examine the impact of brand experience on online consumer engagement
- To test the mediator role of brand experience in the relationship between content, media, posting time and online consumer engagement.

#### **4. Research Questions**

In order to achieve the research objective, the following research questions are formulated:

- What are the impacts of content type on online consumer engagement?
- What are the impacts of media type on online consumer engagement?
- What are the impacts of posting at different time on online consumer engagement?
- What are the impacts of brand experience on online consumer engagement?
- Do brand experience mediate the relationship between content, media, posting time and online consumer engagement?

#### **5. Significance Of The Study**

The contributions and significance of this research can be divided into three areas;

##### **5.1 Theoretical Contribution**

Literature is a tools in helping to develop and expand research ideas and helping in understanding of relevant topics. Research in social media focusing on content, media and posting time and also consumer engagement is becoming more prominent in literature and prior studies have touched some of the important topics that help marketers gain knowledge regarding this fast- moving concept. However, it is still not clear in Malaysia which message components will create the most effective consumer engagement on social media platforms. The results from the study will contribute to the existing knowledge and literature by providing deeper understanding of which different types of message appeals contents, media and posting time will generate the highest consumer engagement on social media platforms.

##### **5.2 Practical Contribution**

The results of the study are believed to put significant contribution to practice and literature since social media marketing can be defined as a new, but rapidly growing platform for building relationships with customers and forming positive image of the brands in their eyes. This study is hoped to open the mind Malaysian entrepreneur on the importance of content, media type and post time social media strategies in promoting and increasing customer brand engagement. Therefore, the results of the study will provide Malaysian entrepreneur about which creative messages to use in different industries, and when they should be posted to gain the highest consumer engagement on social media platform that will ultimately lead to increased consumer loyalty and further equity.

#### **Malaysian Polytechnics and College Community**

The Department of Polytechnic and College Community Education (DPCCE) have to take positive action in fully-utilized the used of social media not purposely for internal used but also external. Therefore,

DPCCE needs to use the right technique promoting Polytechnics and College Community programs through social media.

With this study, it can provide guideline to the top management of DPCCE to upgrade the brand of polytechnic and college community product/services in order to be preferred institution among Malaysia students.

## **6. Scope Of Study**

This will mainly aim to measure the impact of content, media and posting time in social media marketing on online consumer brand engagement. For the purpose of this study, the data will mainly gathered from the Malaysian customers who have purchased 3 top sectors item online in social media. From the total population 25.8 million population are using internet and 70% from the population are users of Facebook. According to (Digital Media Asia, 2018) the 3 top sector of business online is Fashion, Automotive and Health and Beauty. According Malaysia Digital Association 2018 Facebook is the highest social sites and Instagram is the second top ranking social media platform in Malaysia. This study is only focusing to Facebook and Instagram brand fans and follower.

## **7. Literature Review**

### **Social Exchange Theory**

Social exchange theory proposes that social behavior is the result of an exchange process. The purpose of this exchange is to maximize benefits and minimize costs (George Homans, 1961). According to this theory, developed by sociologist George Homans (1961), people weigh the potential benefits and risks of social relationships. In 21<sup>st</sup> century era online social networks seem to be an ideal platform for social exchange because they provide an opportunity to keep social relations with a relatively low cost compared to offline relations. According to J. Surma (2015) the concept of reciprocity under this perspective states that individuals can directly reward his benefactor or another person in the social exchange process.

### **Social networks and brand fan pages.**

Social networks and brand fan pages have been investigated from many different perspectives including the network structure, characteristics of users, usage patterns and motivation for participation just to name a few, hence making the research of social networks and brand communities quite rich and diverse (Cvijikj & Michahelles, 2013). Tufecki (2008) found that many activities on social networking sites could be conceptualized as forms of self-expression, where the consumers present themselves to society by joining groups, uploading pictures, and demonstrating their likes and dislikes through it. Vries et al. (2012) indicated that social networking sites allow consumers to become fans of a brand on the brands fan page, where they are able to share their excitement about the brand and thereby be united by their joint interest in the brand.

According to Cvijikj & Michahelles, (2013) Facebook brand page is consumers can “engage with a company by (1) posting content on the wall, when it is possible, (2) commenting on the existing post shared by the company’s page moderator, (3) indicating interest in an existing post by liking or sharing the post on their profile wall for their friends to see”.

### **Social Media Marketing**

“Social networks, as the largest social media platform, play a key role in the future of marketing” (Cvijikj

& Michahelles, 2013). The new global marketing environment has shifted the power away from the firm towards the individuals and communities, leading towards the concept of social media marketing (Berthon et al., 2012). Hanna R, Rohm A, Crittenden VL (2011) indicated that social media could be seen as experience and supposed that experience would arise when marketers were able to incorporate reach, intimacy, and engagement into the firm's overall integrated marketing strategy, which she suggested would lead to a positive outcome. Smith et al. (2012) described social media as an important tool for marketing and stated that it is critical for marketers to recognize how to engage with consumers (Smith et al., 2012). Smith et al. (2012) stated that marketers can engage with consumers by creating content more regularly and initiating and maintaining conversations with consumers on an ongoing basis, which would lead to more satisfied and engaged consumers and thereby create more loyalty (Smith et al., 2012).

### **Content Type**

Rowley (2008), defined digital content marketing as: "the management process responsible for identifying, anticipating, and satisfying consumer requirements profitably in the context of digital content, or bit-based objects distributed through electronic channels" (Rowley, 2008). Rowley (2008) states that content marketing focuses on the nature of the product being marketed, and the consequences of the marketing opportunities and approaches. The uses and gratification (U&G) theory, proposed by Katz (1959), has been found particularly useful for application to new media such as online communities and social networking sites (Jahn & Kunz, 2012). The U&G theory is used frequently by researchers to gain an understanding of the goals and motivations behind consumers willingness to engage with different forms of content (Cvijikj & Michahelles, 2013). According to U&G theory, consumers use media to satisfy various needs and achieving their goals (Jahn & Kunz, 2012).

### **Media Type**

Different media types create different levels of media richness, which is defined as "the ability of information to change understanding within a time interval" (Cvijikj & Michahelles, 2013). The term of media richness is also referred to as the vividness of an online content (Cvijikj & Michahelles, 2013).

The vividness relates to the breadth and depth of the message, where breadth is the number of sensory dimensions, cues and senses presented, and depth is the quality and resolution of the presentation (Fortin & Dholakia, 2005). According to Brookes (2010), images receive 22% more engagement from users than video posts and 54% more engagement than text posts, but video posts receive 27% more engagement from users than text posts (Brookes, 2010). Moreover, the study by Sabate et al. (2014) confirms that images cause the greatest level of engagement and are an important element of the posting strategy, which significantly increases brand post.

### **Posting Time**

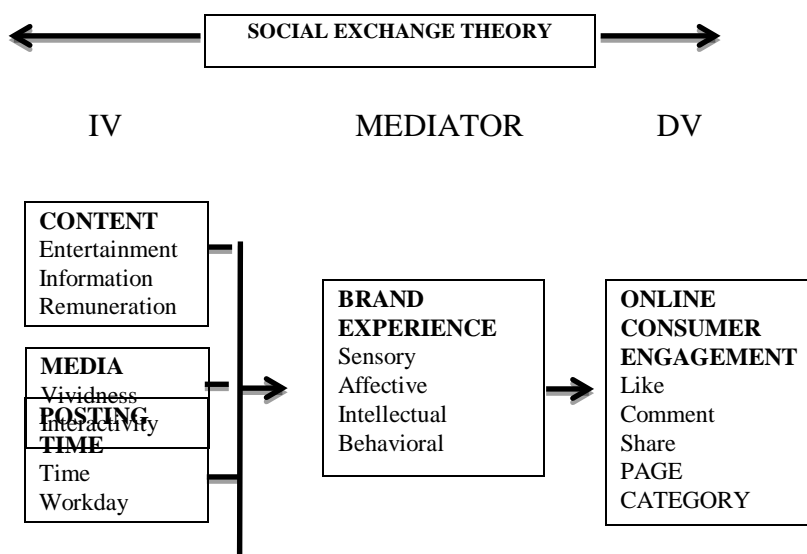
In an environment like Facebook, where user profile walls are constantly overloaded with different types of content coming from numerous sources, brand posts can get lost in the mass. Therefore, posting time can be an important element in consumer - brand engagement, which should be taken into account. The research of Cvijikj & Michahelles, 2013 supports the statement, and suggests that scheduling advertisement plays an important role in developing marketing strategies and can lead to increased revenue. Previous studies have investigated the time used by consumers on online social network services are during workdays (Cvijikj & Michahelles, 2013). Similarly, a study on online advertisement reported that the volume of CTR drops significantly over the weekend.



## Brand Experience

Most of the research on experiences to date has focused on utilitarian product attributes and category experiences, not on experiences provided by brands. When consumers search for, shop for, and consume brands, they are exposed to utilitarian product attributes. However, they are also exposed to various specific brand-related stimuli, such as brand-identifying colors (Bellizzi and Hite 1992; Gorn et al. 1997; Meyers-Levy and Peracchio 1995), shapes (Veryzer and Hutchinson 1998), typefaces, background design elements (Mandel and Johnson 2002), slogans, mascots, and brand characters (Keller 1987). Brand experience is conceptualized as sensations, feelings, cognitions, and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments. The authors distinguish several experience dimensions and construct a brand experience scale that includes four dimensions: sensory, affective, intellectual, and behavioral (J.Josko Brakus, 2009). Brand experiences vary in strength and intensity; that is, some brand experiences are stronger or more intense than others. As with product experiences, brand experiences also vary in valence; that is, some are more positive than others, and some experiences may even be negative.

## 8. Research Framework



Adapted Conceptual Framework: Cvijkj & Michahelles, 2013 Online Engagement Factors on Facebook Brand Pages.

## Conceptual Framework : The Impact of Content, Media and Posting Time on Online Consumer Engagement

## 9. Research Design

### 9.1 Population and Sampling

A cross-sectional survey design will be use in this study. Babbie (2001,p.101) defines a cross-sectional study “to involve observations of sample, of cross section, of a population or phenomenon that are made at one point in time”. A great deal of social science research relies on cross-sectional surveys (Hair et al. 2006; Babbies, 2001). According to Digital Media Asia (2016) there are 16.8 million internet population



of Malaysia. About 60% of the internet populations have bought item online (Digital Media Asia, 2016). The population of this study is 8 million people. This study focuses on Malaysian customers who have purchased 3 top categories online business from the 8 million people. Fashion & Accessories, Home & Living and Health & Beauty are the top 3 categories of consumer online. Purposive sampling will be used in this study. Purposive sampling is a non probability sampling method and it occurs when elements selected for the sample are chosen by the judgement of the researcher. The researcher will judge the population base on the element been identify. In this case is the sampling are from the population of people who purchase product online.

## 9.2 Data Collection

Data for this study will be collected by distributing structured questionnaire to respondents who have purchased using social media marketing. Number of respondent identify from the population of people who purchase product online are based on table developed by Krejcie & Morgan (1970).

### *Instruments*

Two filter questions were employed to make sure that the respondents qualified to be included in the research. One question asked whether the respondent was using social media more than once a week. Another question asked whether the respondent followed at least one brand on social media. If the answers to both of the questions were positive, then the respondent was given the questionnaire.

Items to measure consumer brand engagement and reason to follow brands on social media using likert scale ranging from 1–strongly disagree to 5–strongly agree to suit Malaysian culture. The elements under brand loyalty measure include intention to interact more with the brand, intention to increase sales from the brand, trust towards the brand, intention to get interactive with other brands through social media, and intention to recommend the brand to friends. Items to measure reasons to engage brands on social media will be adapted from the instrument developed by Irem & Cicek's (2012). Which covers advantages campaigns, relevancy of the content, frequent update of the contents, popularity of the content among other users and friends, and variety of platforms and applications provided on social media. The effects of content, media type and posting time to online consumer brand engagement will be measure. To measure brand experience, the 12 items developed by Brakus, Schmitt & Zarantonellu (2009) using likert scale ranging from 1–strongly disagree to 5–strongly agree will be adapted.

## 9.3 Data Analysis

The data collected will be analyzed using descriptive statistics, correlation and multiple regression analysis. The analysis will be using SPSS 19. Descriptive statistic will be used to identify the level of effects content, media and posting time towards online consumer brand engagement and brand experience. Descriptive statistic will also be used to detail out the demographic. Correlation is used to study the relationship between dependent variable, independent variable and mediating variables of respondents. Multiple regression analysis is used to measure the impact of the variables.

## 10. Hypothesis

Based on the literature review discussed earlier, the study has identified 5 basic hypothesis. Among the hypothesis that will tested are as follows:

- H1: There is a relationship between content type on online consumer engagement
- H2: There is relationship between media type on online consumer engagement
- H3: There is relationship between posting at different time on online consumer engagement.
- H4: There is relationship between brand experience on online consumer engagement
- H5: Brand experience mediate the relationship between content, media, posting time and online consumer engagement.

## 11. Summary

This research intends to identify the impact of content, media type and posting time on online consumer brand engagement of the consumers in Malaysia. The study will highlight the relationship between dependent variable, independent variable and mediating variables of respondents.

## References

- Aaker, D. A. (1991). *Managing Brand Equity*. New York: The Free Press.
- Ashley, C. & Tuten, T. (2015). *Creative Strategies In Social Media Marketing: An Exploratory Study Of Branded So-cial Content And Consumer Engagement*. *Psychology and Marketing*
- Bennett, R. and S. Rundle-Thiele (2002). A Comparison of Attitudinal Loyalty Measurement Approaches. *Journal of Brand Management*. 9.3: 193-209.
- Cvijikj, I.P. & Michahelles, F. (2013). *Online Engagement Factors On Facebook Brand Pages*. Springer-Verlag, 26 January. pp.843-61.
- Fortin DR, Dholakia RR (2005). Interactivity And Vivid-ness Effects On Social Presence And Involvement With A Web-Based Advertisement. *J Bus Res* 58(3):387–396
- Ilina Golshani (2015). *Consumer Engagement Factors On Online Social Media Platforms*.

Hanna R, Rohm A, Crittenden VL. (2011) .We're All Connected: The Power Of The Social Media Ecosystem. *Bus Horizons* 54(3): 265–273

Jahn, B. & Kunz.(2012). How To Transform Consumers Into Fans Of Your Brand. *Journal Of Service Management*

Jerzy Surma. (2015). Social Exchange in Online Social Networks. The Reciprocity Phenomenon On Facebook, Institute of Informatics and Digital Economy, Warsaw School of Economics, Aleja Niepodleglosci 162, 02-554 Warsaw, Poland.

J. Josko, Bernard H. and Lia Z. (2009). Brand Experience: What is it? How is it Measured? Does it Affect Loyalty?. University of Leeds.Vol:73,pp: 52-68

J. Josko, Bernard H. and Lia Z. (2009). Brand Experience: What is it? How is it Measured? Does it Affect Loyalty?. University of Leeds.Vol:73,pp: 52-68

Keller, K. L. (2008). Strategic Brand Management: Building, Measuring and Managing Brand Equity. Third Edition. New Jersey:Pearson Prentice Hall

Mangold WG, Faulds DJ. (2009). Social Media: The New Hybrid Element Of The Promotion Mix. *Bus Horizons* 52(4):357–365

Michael A Stezner ( 2014), Social Media Marketing Industry Report 2014, Cox Business

## THE DETERMINANTS OF LIQUIDITY RISK: EVIDENCE FROM CONVENTIONAL AND ISLAMIC BANKS IN MALAYSIA

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### ABSTRACT

*Liquidity risk has become an important risk since the previous financial crisis happened in year 2008. Many financial institutions have taken account the risk seriously. Bank Negara Malaysia has implied Liquidity Coverage Ratio as the minimum ratio every financial institution must comply. But then, why many banks are still exposed to liquidity risk? What are the factors that affecting liquidity risk? Focusing on conventional and Islamic banks in Malaysia from year 2008 to 2018 by employing Pooled Ordinary Least Square method, the findings uncovered that bank size, return on asset (ROA) and capital adequacy ratio (CAR) are the significant factors affecting liquidity risk among conventional and Islamic Banks in Malaysia. The other variables like return on equity, Gross Domestic Products and inflation rate are not significant at any level.*

**Keywords:** Liquidity risk; bank size; return on asset, capital adequacy ratio; conventional and Islamic banks

### 2.0 Introduction

#### 3.0

Based on Keynesian theory, there are three (3) motives of holding liquid asset: 1) transaction motive, 2) precaution motive, and 3) speculative motive. For banks, all three are important for them as they are considered to be important sources of financing for most businesses. However, when the financial crisis happened in year 2008, it showed the importance of liquidity for financial institutions and has been noticed in most of the current banking literature (Ghenimi, 2015).

According to Goodhurt (2008), liquidity risk happens when depositors rush to withdraw their money due to doubts in solvency of the institution and causes liquidity shortage. Another situation would be a doubt on value of underlying asset that could lead to less demand on short term securities issued by banks that lead to liquidity crisis.

Liquidity risk can be divided into two (2) categories. One is financing liquidity risk (cash flow) and market liquidity risk (asset/product risk). Many banks have difficulties in managing liquidity. Bank's liquidity is a measure of ability where short-term assets can convert into cash to meet its short-term obligations. Liquidity risk arise when the bank does not have enough cash in hand or is lacked of investment that cannot be bought or sold quickly enough to prevent or minimize loss (Mazreku et al., 2019).

It can collapse the whole financial system in the country when bank panic occurs. When the collapse happens, that means the bank or financial institution failed to meet deposits, withdrawals, either to purchase bank liability or to quickly sell liquid assets there is no capability. It is extremely important for banks to maintain adequate liquidity to withstand various events (Zhang et al., 2019). According to Fuhrer et al. (2016), recent financial crisis gave a lesson to hold adequate liquidity to be able to withstand short term liquidity shocks. Hence, the Basel Committee on Banking Supervision proposed to harmonize liquidity standard, "Liquidity Coverage Ratio" so that the banks strengthen their liquidity no matter what situation might occur. This proposal is part of Basel III (Basel Committee on Banking Supervision, 2013). Due to previous crisis, market or banking institutions have realized the importance of managing liquidity risk effectively. This is to avoid liquidity pressures due to the financial market turmoil (A. Abdul Rahman, 2018). Each of the variable chosen are based on the frequency stated in articles and availability of data. Begin with size, size is used to categorize the size of the bank. Toh et al. (2019), Nisman et al. (2015), Ayadi et al (2016) define size of bank by looking at the total asset of the bank.

Next, return on asset has the standard formula of profit after tax and zakat divided with total asset. ROA is the most comprehensive accounting measure of a bank's overall performance. Since it is defined as net income over total assets, it shows the profit earned per dollar of assets. It is an indicator of bank's efficiency and a measure of the bank's ability to earn rent from its total operations (Noraini, 2012).

Furthermore, Mongid (2015) explores the liquidity risk management of small Indonesian Islamic banks and claims that liquidity risk of Islamic banks is determined by capital adequacy as well as asset management and leverage (Dolgun et al., 2019). According to Muriithi (2019), ROE represents the return on equity used as the measure of performance of bank. Therefore, the formula will be net income (annual) divided with shareholder equity. It also can be used to measure the liquidity of the banks. Besides that, this study also takes count of macroeconomics (GDP and INF) to see whether the outside factors affect the liquidity in banks. These factors are uncontrollable factors hence the bank has to be more careful in deciding how much liquid need to hold in hand.

This study was carried out to examine the relationship among total asset, return on asset, capital adequacy ratio, return on asset, growth of gross domestic product and inflation rate with liquidity risk. This study will be held in Malaysia only. Dependent and independent variable sources are collected from secondary data derived from EIKON database for the total asset, return on asset capital adequacy ratio and return on asset. Meanwhile, gross domestic product and inflation are retrieved from Trading Economics. All of the data collected include commercial and Islamic banks. Furthermore, the study also uses a period of 10 years from year 2008 to year 2018 in determining the relationship among dependent and independ-

ent variables. The financial crisis was on 2007, hence taking data 1 year after crisis is to see the changes after the crisis. The period of data includes a year before crisis, the year the year Basel III introduced and a year before current year.

## 2.0 Literature Review

### *Dependent variable- Liquidity risk*

The 2007-2009 global financial crisis highlights the financial system's exposure to liquidity shocks, and reveals that bank failure is harmful to shareholder interests, banking system stability, and the real economy (Zhang et al., 2019). Liquidity management has become one of the top priorities in management of assets and liabilities of a financial institution. The ongoing viability of the banking institution is critical in the context of banking, liquidity, or the ability to fund increases in assets and meet obligations as they come due (Ariffin, 2012).

Liquidity risk can be divided into two: the financing liquidity risk (cash flow) and the market liquidity risk (asset risk) (Drehmann and Nikolaou, 2013; Iskandar, 2014). Previous researchers followed basic accounting metrics such as the ratio of total deposit to total assets (in Sulaiman et al., 2013), the ratio of cash to total assets (in Akhtar et al., 2011; Anam et al., 2012; Abdul Karim, 2013; Iqbal, 2012 and Ramzan and Zafar, 2014), the ratio of capital to total assets (in Abdullah and Khan, 2012) and the ratio of current asset to total liabilities (in Ahmad et al., 2011) in analysing the impact of various factors on liquidity risk.

Next, by considering the economic cycles for Malaysian Islamic banks, Sulaiman et al. (2013) examined the determinants of liquidity risk (measured by total deposit to total asset). Their main contribution to the liquidity literature was the introduction of macroeconomics variables. Using the Generalized Moments Method (GMM) to estimate panel regression for 17 Islamic banks for the period from 1994 to 2009, they found inflation and GDP to be inversely related to liquidity risk. They argued that the expansionary economy provides banks with a good opportunity to produce more profits, thereby raising their liquidity risk exposure.

On the other hand, Akhtar (2011) explores the liquidity risk relation with a financial institution's solvency through a comparative analysis between conventional and Islamic banks in Pakistan between 2006 and 2009. The study found positive but insignificant relationship between bank size and networking capital with liquidity risk.

In the analysis of Alzoubi (2017), the dependent variable is liquidity risk (L), which is calculated to total assets as total deposits. Since this ratio reflects the percentage of assets funded by deposits from customers and as these deposits are subject to regular withdrawal, any change in this ratio would imply a higher liquidity risk level. This study is also similar to Abdul Rahman et al. (2018) which the study also uses liquidity risk with the same formula. Mohamed et al. (2013) and Khan et al. (2015) also used the same ratio on their study. The reason behind the formula are: cash on total assets was used as one of the independent variables to understand how cash already kept within the bank could affect the liquidity risk, and more importantly because deposits endogenously decide the liquidity reserves of banks as suggested by Acharya and Naqvi (2012).

### *Independent variables*

#### *Bank Size*

According to Abdullah and Khan (2012), the study looks at the Factors Influencing on the Credit risk managing of domestic and foreign banks in Pakistan. They have used 10 years of time series data from the year 2001 to 2010 for them to analyse the Liquidity Risk in Pakistan. The collected data were analysed using recent Augmented Dickey Fuller test and Johansson's Co-integration is used for long run relationship. The findings of this study reveal the relationship of bank size with liquidity risk is negative and significant in domestic banks and negative and insignificant in foreign banks. Jaara et al. (2017) stated that bank size increases banks' investment diversification, while capital protects financial obligations and is likely to minimize risk.

In addition, the result is similar to Abdel Karim (2013) which is credit risk and bank size are significant. Ramzan and Zafar (2014) who also examined Pakistani Islamic banks from 2007 to 2011, using a different proxy of liquidity risk (the ratio of cash to total assets) but similar independent variables, found that only size is significant in influencing liquidity risk. The different specifications of liquidity risk as well as the time period could be the source of the inconsistent results.

Contrast to Akhtar et al. (2011), using cash to total asset ratio for liquidity risk, examined Pakistani banks covering a period of 4 years from 2006 until 2009. They analysed whether networking size influences liquidity risk. They showed evidence that size has positive relationship with liquidity risk. The result is supported by Iqbal (2012). The study shows that the bank size is positive and significant to liquidity risk. The reason behind it is the better size of bank indicates that the banks have the better ability to establish big market share and generate higher profits.

In addition to that, Anam et al. (2012) compared liquidity risk between Islamic and conventional banks in Bangladesh for a period of 5 years, from 2006 to 2010. They focused on bank-specific variables such as networking capital, size, ROE, ROA, and capital buffer. Adopting cash to total asset ratio in measuring liquidity risk, their findings discovered that size and networking capital are negatively related to liquidity risk for Islamic banks and conventional banks, respectively. Alzoubi (2012) supported the result by stating larger banks can reduce their liquidity risk as they can provide greater confidence for both their customers and non-financiers, thus reducing liquidity risk.

#### *Return on assets (ROA)*

Akhtar et al. (2011) examined Pakistani banks covering a period of 4 years from 2006 until 2009. The variables that influence liquidity risk are either networking capital, size, return on equity (ROE), return on assets (ROA), or capital buffer. The result shows that only ROA has a negative relationship with liquidity risk. Result shows on a study by Muriithi et al. (2017) in Kenya, profitability or ROA has a negative relationship. This is because the banks hold liquid asset as an obligation and may lead to low bank profitability as low returns are expected. Therefore, when there is not enough liquid, it cannot obtain fund through liabilities or even by converting assets. Hence, it affects their profits.

To support the above statement, a study made to determinants of liquidity risk by Yaacob et al. (2016) stated that bank holding less liquidity, increase their financing and investment to increase their profitability. This shows that ROA or also known as profitability have negative significance relationship. Accordance with Ahmed et al. (2011), and Akhtar et al. (2011) the same results are supported by Sawada (2010) showed that this study found to have a significant positive relation with ROA and significant relation of capital adequacy ratio. Akhtar et al. (2011) also expressed that return on assets in Islamic banks is found to be positive and significant at a 10% significance level. He has two opinions on the result



of ROA to Liquidity Risk. To support the result, Alzoubi (2012) study also has the same result with positive significant relationship to liquidity risk. Given a number of assets, these assets can be spread by the management of a bank between high liquid assets with low returns and high returns illiquid assets.

#### *Capital adequacy ratio (CAR)*

Akhtar et al (2011) focused on both conventional and Islamic banks of Pakistan using the sample of 12 banks for the time period of 2006 to 2009. The data was collected through secondary sources. Pearson correlation was used to find the relationship between variables and regression was used to find the coefficients. As a result, capital adequacy ratio in conventional banks and return on assets in Islamic banks is found to be positive and significant at 10% significance level. Clementi (2001) presented an outline of the tendency in consolidation of the market, prior to reviewing present suggestions on new Basel Accord and on the bank's capital adequacy. The study highlighted the returning difficulty of liquidity and then presented some examination of fresh developments, predominantly in risk transfer method. The study stressed that modernism must be handled with care, and found risk management as significant goal of financial system. Their result shows that Capital Adequacy Ratio have a positive impact on liquidity risk for Islamic banks.

According to study done by Bitar et al. (2019), highly efficient banks may react differently to capital and liquidity ratios than less efficient ones for two reasons; 1) highly efficient banks might hold less-capital because being highly efficient provides them with buffers needed to increase their capital in future (Fiordelisi et al, 2011) and to avoid any liquidity problems, which explain why regulators are more flexible with banks in terms of capital requirements. 2) highly efficient banks may need more capital and high liquid because of their high risk, which may make it difficult for them to raise capital on short notice. A study in an Albanian banking system by Shingjergji et al. (2015), it noticed a negative relationship between capital adequacy ratio and liquidity risk. The reason behind it is because banks with higher liquidity risk tend to have lower capital rates. Study by Al-Tamimi et al. (2013) proves that there is an inverse relationship between liquidity risks and the degree of capital adequacy. This ratio represents bank liquid assets' ability to meet consumer (depositors) withdrawal processes. To support the negative relationship, Dahl and Shrivs (1992) find that capital and risk have a negative relationship. Risk occurs when a flat premium is paid to depositors. As a consequence, we can conclude that higher risk could be minimized by sufficient capital requirements. Aggarwal and Jacquers (2001) examine how FDICIA's corrective actions influenced bank capital and risk. The result was that a regulatory action allowed U.S. banks to increase their capital ratios and reduce their risk, both capitalized and undercapitalized.

#### *Return on equity (ROE)*

The study by Iqbal et al. (2015) in Punjab, Pakistan using 20 banks including government and private commercial banks listed at Karachi stock Exchange (KSE) from 1991-2011 to conduct the study, the result shows ROE has significant negative relationship with liquidity risk. The result of coefficient shows one unit of increase in ROE decreases liquidity risk by 3.122. It explains the fact that poor asset quality leads to lower profitability and less liquidity or higher exposure to liquidity risk. To support the above result, a study by Ariffin (2012) shows that liquidity risk and ROE has a negative correlation of 0.334. Which is the opposite to the ROA. This explains some impact of global financial crisis on Islamic banks, meaning that during the year of crisis, the higher the liquidity risk, the lower will be the ROA and ROE. The correlations for 2008 show that the relationship of liquidity risk and both ROA and ROE are positive.

### *Gross domestic products (GDP)*

In the current study, it revealed that there is a significant positive relationship with GDP and liquidity risk, and both are consistent with the outcomes of the study by Yaacob et al. (2015). Sulaiman et al. (2013) spoke in terms of macroeconomic since the previous studies specifically about banks. Based in study of Determinants of Liquidity Risk: A Panel Study of Islamic Banks in Malaysia by Yaacob et al. (2016) GDP results indicate positive significance with liquidity risk exposure. Increasing on Gross Domestic Product will increase the liquidity risk for Islamic Banks. The results are contrast with (Ahmad Azam, 2013) and (Doriana 2013). It means Islamic banks in Malaysia do not remain the liquidity ratio even after economy growth. This may have happened due to banks holding less liquidity and increasing their financing and investment to increase their profitability during the stable economic situation.

However, Sulaiman et al. (2013) estimating dynamic panel regression for 17 Islamic banks for the period covering the year 1994 until 2009 and found that inflation and GDP are inversely related to liquidity risk, this use Generalized Method of Moments (GMM). When expansionary occurs, economy will provide more opportunity for banks to create and increase their income, hence, it will be reducing their exposure to the liquidity risk.

### *Inflation*

Vodava (2010) observed that bank liquidity is determined not only by bank-specific variables but also by macroeconomic variables such as inflation. The study by Yaacob et al. (2015), in which it shows a significant negative association for Islamic banking as increasing inflation rate will reduce the liquidity risk of Islamic banking. This result will increase bank's liquidity position to take necessary precaution to protect the depositors' production. It is expected that higher inflation reduces liquidity ratio that may increase liquidity risk for banks. Moussa (2015) empirically studied banks of the Tunisia and findings revealed that the impact of changes in inflation rates on bank liquidity is negative.

Similar study is done by Bhati et al. (2015) on the Indian banks, and it is found that inflation rate negatively influences the banks liquidity. There are also other studies on banks liquidity and inflation by Tseganesh, (2012) and Horváth et al. (2014). According to Tseganesh, (2012), inflation has positive impact on the liquidity while study by Horváth et al. (2014) found insignificant effect on the bank's liquid assets. Favourable economic conditions will stimulate an improvement in the supply and demand for banking services, and will consequently have a positive effect on bank efficiency (Lozano-Vivas and Pasiouras, 2010). Furthermore, high inflation can affect bank performance in a number of ways: it might encourage banks to compete through excessive branch networks, thus affecting cost (Kasman and Yildirim, 2006), or it might have a beneficial effect on bank margins (Demirgüç, -Kunt et al., 2004).

## **3.0 Data and Methodology**

In order to investigate the relationship between the independent variables and liquidity ratio, we extracted data from Eikon Thompson Reuters and Trading Economics unbalanced panel of 33 banks over the years 2010 to 2018. The data was analyzed using Stata 14 package. The variables used in this study and the measurements for each variable are as followed:

### *Liquidity risk*

When the depositors starting to pull back their money, the bank has less cash and caused .

*Liquidity risk = Total Capital / Total Assets*

#### *Size*

Size is defined as total asset which is anything that a business owns, has value, and can be converted to cash. Assets are broken down into two main categories. These two categories are current assets and non-current assets. Sum of all current and noncurrent assets and must equal the sum of total liabilities and stockholders' equity combined (Hill, 2018).

*Size = Total assets of the bank*

#### *Return on Asset (ROA)*

Return on asset (ROA) can be defined as how much profit a company earned in comparison to its overall asset in simple word, bank profitability. The value of ROA varies from industry and company. In general, the higher the value, the better a company is (Wilkinson, 2013).

*ROA = Profit after tax and zakat / Total Assets*

#### *Capital Adequacy Ratio (CAR)*

The capital adequacy ratio (CAR) is a measurement of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures. The capital adequacy ratio, also known as capital-to-risk weighted assets ratio (CRAR), is used to protect depositors and promote the stability and efficiency of financial systems around the world (Hayes, 2019).

#### *Return on Equity (ROE)*

Return on equity is measured as the ratio of profit generated to the total investment capital provided by the owners of the company. Thus, return on equity measures the profitability with which the owner's money was managed (Khidmat and Rehman, 2014).

*ROE = Net income / shareholders' equity*

#### *Gross Domestic Product (GDP)*

Gross domestic product can be defined as the final value of product and services that produced within a geographic boundary of a country within a sure time frame, generally a year or 12 months. It is also used to measure the economic growth of the country (Ebiringa & Emeh, 2013).

*GDP = Value of the growth of the gross domestic product*

#### *Inflation Rate (INF)*

Inflation refers to the overall general growth within the Consumer Price Index (CPI) that is the weighted average of the unique items, that increases the probabilities cost of cash holdings and capital appreciation collection (Munir, Mansur & Furuoka, 2009).

### 3.1 Model estimation

$$LR_{i,t} = \beta_0 + \beta_1 SIZE_{i,t} + \beta_2 ROA_{i,t} + \beta_3 CAR_{i,t} + \beta_4 ROE_{i,t} + \beta_5 GDP_{i,t} + \beta_6 INF_{i,t} + \varepsilon_{i,t}$$

Where:

$LR_{i,t}$  : Liquidity risk ratio for bank i time t

$SIZE_{i,t}$  : Bank Size (logarithm of total assets) for bank i time t

$ROA_{i,t}$  : Return on assets for bank i time t

$CAR_{i,t}$  : Capital adequacy ratio for bank i time t

$ROE_{i,t}$  : Return on equity for bank i time t

$GDP_{i,t}$  : Gross domestic products bank i time t

$INF_{i,t}$  : Inflation rate for bank i time t

$\beta$  : The Coefficient Representing the Independent Variables.

$\varepsilon_{i,t}$  : Error Terms for bank i time t.

### 4.0. Findings and Discussions

#### *Descriptive statistics*

	LR	SIZE	ROA	CAR	ROE	GDP	INF
<b>MEAN</b>	.73487 84	70747. 57	0. 73585 63	16.335 63	10.340 83	4.7406 36	2.4345 45
<b>MAX</b>	.9526	80699 2	2.125	148.07	108.38 7	7.425	5.43
<b>MIN</b>	0	0	-5.044	0	-9.531	-1.514	0.6
<b>VARIA</b>	725.17	1.52e+	0.4396	118.54	135.56	4.6046	1.7174
<b>NCE</b>	48	10	992	56	14	77	29
<b>COEF.</b>							
<b>OF</b>	.01331	1.7407	0.9158	.66651	1.1259	0.4526	0.5382
<b>VARIA</b>	92	08	086	02	33	504	964
<b>TION</b>							
<b>STD.</b>							
<b>DEVIA</b>	.25376	12315	0.6630	10.887	11.643	2.1458	1.3105
<b>TION</b>	49	2.8	982	86	08	51	07

#### *Correlation analysis*

	LR	ROA	CAR	ROE	GDP	INF	LGSIZE
<b>LR</b>	1.0000						
<b>ROA</b>	0.0736	1.0000					
<b>CAR</b>	- 0.3790	- 0.5873	1.0000				
<b>ROE</b>	0.0392	0.4135	- 0.1708	1.0000			

<b>GDP</b>	-	0.2067	0.0294	0.1362	1.0000		
	0.0570						
<b>INF</b>	-	0.0360	0.0889	0.0365	0.4470	1.0000	
	0.0219						
<b>LGSIZE</b>	0.3088	0.0673	-	0.0435	-	0.0128	1.0000
			0.1625		0.0363		

*Regression analysis (POLS)*

<b>LR</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>t</b>	<b>P &gt;  t </b>	<b>[ 95% Conf. Interval ]</b>	
<b>LGSIZE</b>	0.0076752	0.0015518	4.95	0.000	0.0046221	0.0107283
<b>ROA</b>	-	0.0126574	-3.58	0.000	-	-
	0.0452723				0.0701748	0.0203698
<b>CAR</b>	-0.005091	0.0006693	-7.61	0.000	-	-
					0.0064077	0.0037743
<b>ROE</b>	0.0004385	0.0005062	0.87	0.387	-	-
					0.0005574	0.0014345
<b>GDP</b>	-	0.0030279	-0.03	0.977	-	-
	0.0000855				0.0060427	0.0058717
<b>INF</b>	0.002535	0.0055653	0.46	0.649	-	-
					0.0084142	0.0134842
<b>_cons</b>	0.855652	0.0270494	31.63	0.000	0.8024343	0.9088698

The result has uncovered that bank size is found to be significantly affecting LR. This result is conjunction with Akhtar et al. (2011) and Iqbal (2012). Both studies have positive and significant results between size and liquidity risk. The reason behind this is; the bigger the size of bank, the higher the liquidity risk is because the banks have the better ability to establish big market share and generate higher profits. Therefore, the banks are more exposed to the risk. However, the result showed are contradictory to the expected result. Studies by Abdullah and Khan (2012), Abdel Karim (2013), Anam et al. (2012), and Ahmed et al. (2011) stated that the smaller the size of banks, the higher the banks are exposed to liquidity risk.

Return on asset is found to be significantly affecting LR. This result is similar with Ahmed et al. (2011), Sawada (2010) and Alzoubi (2012). Alzoubi revealed that given a number of assets, these assets can be spread by the management of a bank between high liquid assets with low returns and high returns illiquid assets. The more return on asset the banks are, the more risk they are exposed. This to say, the banks have to use up their asset to get profit. Therefore, they do not have back up asset to liquid into cash. Therefore, the banks are more exposed to liquidity risk. Besides that, a study done by Muriithi et al. (2017) in Kenya, profitability or ROA has a negative relationship. This is because the banks hold liquid asset as an obligation and may lead to low bank profitability as low returns are expected. Therefore, when there is not enough liquid, it cannot obtain fund through liabilities or even by converting assets. Hence, it affects their profits. When it affects the profit, the banks are at dangerous state.

Capital adequacy is found to be significantly affecting liquidity risk. The reason behind it is because banks with higher liquidity risk tend to have lower capital rates. The result is in line with a study in an Albanian

banking system by Shingjergji et al. (2015), noticed a negative relationship between capital adequacy ratio and liquidity risk. The reason behind this is because banks with higher liquidity risk tend to have lower capital rates. Dahl and Shrives (1992) find that capital and risk have a negative relationship too. It stated its reason that risk occurs when a flat premium is paid to depositors. As a consequence, we can conclude that higher risk could be minimized by sufficient capital requirements.

## 5.0. Conclusion

The results showed two variables are opposite with the expected result. The Return on Asset and Capital Adequacy Ratio have negative and significant relationship with Liquidity Risk. Meanwhile, Size showed the bigger the banks, the higher the liquidity risk which means positive relationship. The other variables like return on equity, Gross Domestic Products and inflation rate are not significant at any level.

## References

- 1) Abdel Karim, Mohammad, (2013). *Liquidity risk management: a comparative study between Saudi and Jordanian banks*. Interdisc. J. Res. Bus. 3 (2), 1–10.
- 2) Abdul-Rahman, A., & Said, A. A. (2017). *Does financing structure affects bank liquidity risk?* Pacific-Basin Finance Journal, 26-39.
- 3) Acharya, V., & Naqvi, H. (2012). The seeds of a crisis: A theory of bank liquidity and risk taking over the business cycle. *Journal of Financial Economics*, 106(2), 349-366.  
<https://doi.org/10.1016/j.jfineco.2012.05.014>
- 4) Adalsteinsson, Godni, (2014). *The liquidity risk management guide: From policy to pitfalls*. United Kingdom Hohn Wiley & Sons Ltd.
- 5) Aggarwal, R., & Jacques, K. T. (2001). The impact of FDICIA and prompt corrective action on bank capital and risk: Estimates using a simultaneous equations model. *Journal of Banking & Finance*, 25(6), 1139-1160.
- 6) Ahmed, N., Akhtar, M. F., & Usman, M. (2011). “*Risk Management Practices and Islamic Banks: An Empirical Investigation from Pakistan*” *Interdisciplinary Journal of Research in Business*, 1 (6)50-57.
- 7) Ahmed, N., Ahmed, Z., & Naqvi, I. H. (2011). Liquidity risk and Islamic banks: Evidence from Pakistan. *Interdisciplinary Journal of Research in Business*, 1(9), 99-102.
- 8) Akhtar, Muhammad Farhan, Ali, Khizer, Sadaqat, Shama, (2011). *Liquidity risk management: a comparative study between conventional and Islamic banks of Pakistan*. Interdisc. J. Res. Bus. 1 (1), 35–44.
- 9) Almumani, M. A. (2013), *Liquidity risk management: A comparative study between Saudi and Jordanian banks*. *Interdisciplinary Journal of Research in Business*, 3(2), 1-10.
- 10) Ariffin, Noraini Mohd, 2012. *Liquidity risk management and financial performance in Malaysia*. Empirical evidence from Islamic banks. *Aceh Int. J. Soc. Sci.* 1 (2), 6–75.
- 11) Asim, Abdullah, Khan, Abdul Qayyum, (2012). *Liquidity risk management: a comparative study*



- between domestic and foreign banks in Pakistan. J. Manag. Sci.* 6 (1), 62–72.
- 12) Aspachs, O. Nier, E., & Tiesset, M. (2005). *Liquidity, banking regulation and the macroeconomy*. Evidence on bank liquidity holdings from a panel of UK-residence banks. Bank of England working paper 2005.
  - 13) Bhati, S. DeZoysa, A., & Jitaree, W. (2015). *Determinants of liquidity in nationalized banks of India*. Retrieved from: [world-finance-conference.com/papers\\_wfc/173.pdf](http://world-finance-conference.com/papers_wfc/173.pdf)
  - 14) Bunda I. & Desquilbet J. (2008). *The bank liquidity smile across exchange rate regimes*. International Economic Journal, 22(3), 361–386.
  - 15) Cetina, J. (2015). *Incorporating liquidity shocks and feedbacks in bank stress test*. Office of Financial Research Brief Series.
  - 16) Chen, N., & Lin, H.-H. H.-H. (2018). *Equator principles and bank liquidity*. International Review of Economics and Finance, 185–202.
  - 17) Choon, L.K, Hooi, L.Y, Murthi, L, Yi, T.S, Shzen, T.Y. (2013). *The determinants influencing liquidity of Malaysia commercial banks, and its implication for relevant bodies: evident from 15 Malaysian commercial banks*.
  - 18) Clementi, D. (2001). *Financial markets: implications for financial stability*. Balance sheet, 9(3), 7–12.
  - 19) Cucinelli, (2013). *The determinants of bank liquidity risk within the context of euro area*. Intersdisc. J. Res. Bus. 2 (10), 51–64.
  - 20) Drehmann, Mathias, Nikolaou, Kleopatra, 2013. *Funding liquidity risk: definition and measurement*. J. Bank. Financ. 37, 2173–2182.
  - 21) Ebiringa, O., & Emeh, Y. (2013). *Determinants of foreign direct investment inflow: A focus on Nigeria*. European Journal of Business and Management, 5(24), 41–52.
  - 22) Fuhrer, Lucas Marc, Basil Guggenheim & Silvio Schumacher, (2016). *Reuse of collateral in the repo market*. Journal of Money Credit and Banking, 48(6), 1169–1193.
  - 23) Goodhart, C. (2008). Liquidity risk management. *Banque de France Financial Stability Review*, 11, 39–44.
  - 24) Hartlage, A. W. (2012). *The Basel III liquidity coverage ratio and financial stability*. Michigan Law Review, 111(3), 453–484.
  - 25) Hayes, A. (2019, April 21). *Capital Adequacy Ratio (CAR) Definition*. Retrieved from Investopedia: <https://www.investopedia.com/terms/c/capitaladequacyratio.asp>
  - 26) Hill, R. (2018). Total Assets. Retrieved from Study: <https://study.com/academy/lesson/total-assets-definition-lessonquiz.html#lesson>
  - 27) Ibish Mazreku Et Al (2019). Exploring the Liquidity Risk Factors in the Balkan Region Banking System, European Research Studies Journal Volume XXII Issue 1, 91–102
  - 28) Iqbal, S., Murtaza, F., Yousouf, M., Ibrahim, M., & Hussain, S. (2015). Impact of Liquidity Risk on Banks (A Case Study of Punjab, Pakistan). *Developing Country Studies* [www. iiste. org](http://www.iiste.org) ISSN, 2225-0565.
  - 29) Iskandar, Khadijah, 2014. Risk Management in Islamic Financial Institutions. IBFIM, Kuala Lumpur.



- 30) Khalid, M. S., Rashed, M., & Hossain, A. (2019). The Impact of Liquidity Risk on Banking Performance: Evidence from the Emerging Market. *Global Journal of Management And Business Research*.
- 31) Khidmat, W., & Rehman, M. (2014). Impact of Liquidity & Solvency on Profitability Chemical Sector of Pakistan. *Economics Management Innovation*, 6(3), 3-13.
- 32) M. A. B. Moosa, (2015). *The determinants of bank liquidity: Case of Tunisia*. *International Journal of Economics and Financial Issues*, 5(1), 249-259.
- 33) Munir, Q., Mansur, K., & Furuoka, F. (2009). *Inflation and economic growth in Malaysia: A threshold regression approach*. *ASEAN Economic Bulletin*, 26(2), 180-193.
- 34) Muriithi, J. G., & Waweru, K. M. (2017). Liquidity risk and financial performance of commercial banks in Kenya. *International Journal of Economics and Finance*, 9(3), 256-265.
- 35) R. Horváth, J. Seidler, L. Weill, (2014). *Bank capital and liquidity creation: Granger-causality evidence*. *Journal of Financial Services Research*, 45(3), 341-361.
- 36) Rahman, M. L., & Banna, S. H. (2015). Liquidity risk management: a comparative study between conventional and Islamic banks in Bangladesh. *Journal of Business and Technology (Dhaka)*, 10(2), 18-35.
- 37) Ramzan, M., & Zafar, M. I. (2014). *Liquidity risk management in Islamic Banks: a study of Islamic banks of Pakistan*. *Interdisciplinary Journal of Contemporary Research in Business*, 5(12), 199-215.
- 38) S. Ben Naceura, K. M. (2018). *Basel III and bank-lending: Evidence from the United States and Europe*. *Journal of Financial Stability*, 1-27.
- 39) Sawada, M. (2010). *Liquidity risk and bank portfolio management in financial system without deposit insurance: Empirical evidence from pre-war Japan*. *International Review of Economics and Finances*, 392-406.
- 40) Sayedul Anam et al. (2012). *Liquidity risk management: A comparative study between conventional and Islamic banks of Bangladesh*. *Journal of Economics, Business and ICT*, 5, 1-5.
- 41) Shingjergji, A., & Hyseni, M. (2015). The determinants of the capital adequacy ratio in the Albanian banking system during 2007-2014. *International Journal of Economics, Commerce and Management*, 3(1), 1-10.
- 42) Shrieves, R. E., & Dahl, D. (1992). *The relationship between risk and capital in commercial banks*. *Journal of Banking & Finance*, 16(2), 439-457. [https://doi.org/10.1016/0378-4266\(92\)90024-T](https://doi.org/10.1016/0378-4266(92)90024-T)
- 43) Singh, A., & Sharma, A. K. (2016). *An Empirical Analysis of Macroeconomic and Bank-Specific Factors Affecting Liquidity of Indian Banks*. *Future Business Journal*, 40-53.
- 44) Sulaiman, Ahmad Azam, Mohamad, Mohammad Taqiuddin, Samsudin, Muhamad Lukman (2013). *How Islamic Banks of Malaysia Managing Liquidity? An emphasis on Confronting Economic Cycles*. *Int. J. Bus. Soc. Sci.* 4 (7), 253-263.
- 45) Tseganesh, T. (2012). *Determinants of banks liquidity and their impact on financial performance: empirical study on commercial banks in Ethiopia (Doctoral dissertation, aau)*.
- 46) V. Dinger, (2009). *Do foreign-owned banks affect banking system liquidity risk?* *Journal of Comparative Economics*, 37(4), 647-657.

- 47) Valla, N, Saes-Escorbiac, B. (2006) *Bank liquidity and financial stability*. Banque de France Financial Stability Review, 89-104.
- 48) Vodova, P. (2011) *Liquidity of Czech commercial banks and its determinants*. International Journal of Mathematical Models and Methods in Applied Sciences, 6, 1060-1067.
- 49) Wilkinson, J. (2013, July 24). *Return on Asset*. Retrieved from The Strategic CFO: <https://strategiccfo.com/return-on-asset>
- 50) Yaacob, Siti Fatimah, Abdul-Rahman, Aisyah, Abdul Karim, Zulkefly, (2015). *The determinants of liquidity risk: a panel study of Islamic banks in Malaysia*. Natl. Res.Semin. 2015, 705–713.
- 51) Zhang, J., He, L., & An, Y. (2019). Measuring banks' liquidity risk: An option-pricing approach. *Journal of Banking*

## THE STUDY OF SAFETY AND HEALTH CULTURE OF WORKING ORGANIZATION THROUGH ACADEMIC INSTITUTION IN TVET PLATFORM

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### ABSTRACT

*As an important organizational concept, safety climate is regarded as the product of collective sense-making in which members assess their organizational safety environment. In construction projects, the participation of multiple stakeholders increases the complexity of the sense-making process because the safety climates in these participant organizations are iterated. Employers of work organization were optimistic that TVET institution would be able to mold their students to be skill full and knowledgeable of work they had always dream. Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations. Thus, having some type of thinking skills benefit workers to assure the work progress of whole organization duties going on in timeframe although unexpected trouble interrupted but solve effectively. It would be helpful to know thinking skills, how effective thinking skills will thrive in work. This helps TVET institution to decide the curriculum that best fits their students. By using the collected quantitative data analyzed by factor analysis (FA). The objective of this research is to investigate the effect of safety and health culture on decreasing occupational accident and to evaluate the influence of TVET academic institution on developing and improving skill of workers.*

### Keywords

Safety and Health Culture, Safety Climates, Working Organization & TVET

### 1.0 INTRODUCTION

Occupational safety and health have been and still is a topic of intense research and practical developments. Globally, there has been a substantial improvement on occupational safety and health in the construction industry, at large motivated by the publication and ongoing implementation of the two most relevant standards in the field, the ILOOSH 2001 and the BS OHSAS 18001, and increasingly stringent regulations. Nevertheless, accidents still occur in the construction industry at a substantial higher rate than in most of the other industries and with severe consequences, both for the workers and the public. This scenario of occupational safety and health in the working organization is motivated by several interrelated and complex factors that can be related to the industry in general and to the working environment in particular. There are several characteristics inherent to the contributing to this scenario. Although the relationship is not supported by empirical evidence, their identification is based on solid theories and several years of observations [1]. Some of the inherent characteristics are [2]: (i) industry fragmentation; (ii) dynamic work environments (multiple teams performing multiple tasks simultaneously and in proximity); and (iii) industry culture.

Institutional theory views organizations as open systems that are subject to the influences of particular environments. It emphasizes the critical role of the institutional environment in driving organizational decisions, behaviors and changes with the aim of gaining social legitimacy. This is in contrast to the efficiency-seeking logic of transaction cost economics. Indeed, many previous studies have proved that institutional theory can provide powerful explanations of several organizational behaviors, such as innovation acceptance and strategic change [3]. As an important organizational concept, safety climate is regarded as the product of collective sense-making in which members assess their organizational safety environment. It reflects the extent to which an organization prioritizes and pays attention to safety [4]. This sense-making process can be influenced by both individual personalities and organizational characteristics [5]. Although safety climate is positively related to safety behavior and safety performance, its benefits cannot always counteract the difficulties faced in developing a safer climate, which demands the efforts of all organization members and must be accompanied by organizational structural changes [6]. For this reason, the cultivation of a safety climate has been somewhat ignored by organizations due to related practical concerns, such as the implications on cost and project schedule.

According to [7], he organizes occupational safety and health research into three main groups: (i) accident analysis studies; (ii) accident prevention studies; and (iii) risk evaluation studies. The construction stage has been the focus of several prevention related studies, including: (i) the measurement of the efficiency of prevention; (ii) the influence of human behavior; (iii) the contribution of safety and health plans; (iv) the influence of financial incentives; and (v) the responsibility of involved parties.

Technical and Vocational Training is established for the purpose of geared up workforce to accomplish job duty. Job duties were array by job organization to consolidate the finding of a number of organization target, which contend, are incomplete. Almost professional workforce is produced by professional body and semi-professional and k- worker are produce by TVET. At this moment TVET function are helpful to fulfil employer needs. Kuala Lumpur Industrial Training [8] stated that general-ly program offer in TVET are for the purpose to produce competence and skill-full semi-professional workforce. A series of training courses and programs in TVET institution has organized to strengthen the work skills of workforce in workplace. The programs were aim at enabling students to obtain semi-professional knowledge and grasp current issues. TVET are also to endeavor equipped trainee with innovative attitude, creative and highly etiquette while to accomplish responsibility in work. To bring in-to existence the workers that are almost able to fulfil work organization requirement, TVET institution should be identified the knowledge and skills given to the students [9]. Thus, the objectives of this research is to investigate the effect of safety and health culture on decreasing occupational accident and to understand the influence of TVET academic institution on developing and improving skill of workers.

## 2.0 RESEARCH METHODOLOGY

The study involved the participation of five (5) department of Polytechnic Nilai academic staff by completing the questionnaire related with safety and health culture in working environment. The real experience from the academicians.

**Questionnaire design:** A questionnaire was designed in which the first part is getting the demographic background of the respondents. Using validated constructs from previous research, the second part looks at the relationships between Organizational Identity/Human [10] and [11]. A questionnaire survey was chosen as the main method of data collection as it is an effective instrument for gauging people's perceptions. Furthermore, the information acquired can be used for further inter-correlation mining [12]. The questionnaire was designed and developed based on information from the literature review, project observation and short semi-structured interviews. The safety climate section of the questionnaire was adopted from the Safety Climate Index survey of the Occupational Safety and Health Council of Hong Kong. The three items are used to measure the normative influences of consultants, universities and industry associations. All safety climate items and institutional pressure items are rated on a five-point scale from 1 (strongly disagree) to 5 (strongly agree).

**Tools for data analysis:** The collected quantitative data was further analyzed by factor analysis (FA). FA is widely adopted as an effective statistical technique to identify a small number of individual factors that represent sets of interrelated variables [13]. Exploratory Factor Analysis (EFA) with the Principal Component Analysis (PCA) extraction method was conducted to identify the underlying grouped factors, and condense and summarize the safety climate measurement items involved [14]. Where measures are out of acceptable bounds for measures such as correlation, significance, factor loading, and communality, then further decisions were taken to treat with the data. A common approach to out-of-limit measures would be to discard the variable in question and to do another iteration within the software. In the course of the analysis, a total of 12 variables were discarded for various reasons (correlation  $<0.3$ , significance  $<0.05$ , communality  $<0.5$ , and cross-loading of variables onto more than one factor), and a total of 5 iterations were done before all conditions were met.

### 3.0 Factor Analysis of Influencing Factors

The factor analysis of influencing factors on working organization can be divided into target layer and factor layer. The target and factor layer on Table 1, includes four primary indicators as described below. Both target and factor represent as H, M and E.

Factor analysis on the elements resulted in all correlations being statistically significant and greater than 0.3 and statistically significant at  $p < 0.05$ . Each individual element's Human Factor had improved, ranging from 0.758 to 0.838. Management values were acceptable, ranging from 0.695 to 0.876. While the Environment indicators revealed the value between 0.524 to 0.712.

Target Layer	Factor Layer	
	Primary Indicators	Secondary Indicators
Occupational Safety And Health Level	Human (H)	Skill training
		Safety consciousness
		Working habits
		Safety motivation
	Management (M)	Safety education and training
		Safety supervision
		Safety atmosphere
		Risk assessments
	Environment (E)	Working Space
		Dust and hazard
		Natural Factor
		Harmful Gas & Toxic Chemical

As shown in Table 2 indicates that there is a dependency between the three (3) indicators. According to the calculation, the weights of OSH influencing factors can be obtained. The criteria in the control layer are ordered by weight: skill training (0.38), risk assessment (0.876), and safety education and training (0.88). It can be seen that skill training, risk assessment, and Safety education and training are the most direct factors affecting the OSH of employees. The weights of the primary and secondary indicators of the network layer for OSH are shown in Table 2.

	Factor Layer
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Target Layer	Primary Indicators	Secondary Indicators
Skill training (H1)	0.838	0.215
Safety consciousness (H2)	0.795	0.209
Working habits (H3)	0.780	0.168
Safety motivation (H4)	0.758	0.486
Safety education and training (M1)	0.882	0.503
Safety supervision (M2)	0.718	0.430
Safety atmosphere (M3)	0.695	0.492
Risk Assessment (M4)	0.876	0.330
Working Space	0.712	0.421
Dust and hazard	0.524	0.307
Natural Factor	0.741	0.241
Harmful Gas & Toxic Chemical	0.524	0.307

#### 4.0 Conclusion

This paper analyzed the influencing factors of OSH in working organization by combining Human, management and environment Indicator. The main conclusions are as follows:

- The influence factor in safety and health culture in- working organization were analysed on three (3) aspect human, management and environment high correlation value between primary and secondary indicators.
- Factor analysis was used to analyse the weights of the influencing factors. The results indicate that all the primary indicators human, management and environment affecting OSH in working organization. The correlation value of the secondary indicators indicates that the weights factors such as Skill training, Safety education and training, risk assessments, safety consciousness, working habits and safety motivation which are the key factors for the formulation of management and control measures.
- It can be seen from the statistics that the combination of Human, Management, and Environment and also the control measures have effectively improved the OSH in working environment.

- In the future, by considering the machine or equipment indicator the research results of this paper will continue to improve the OSH level of the whole organization.

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## 6.0 REFERENCES

1. Hallowell, M.R., Gambatese, J.A., 2008. Quantification and communication of construction safety risk. In: Proc., 2008 Working Commission on Safety and Health on Construction Sites Annual Conference. International Council for Research and Innovation in Building and Construction, Gainesville, Florida.
  2. Fredericks, T.K., Abudayyeh, O., Choi, S.D., Wiersma, M., Charles, M., 2005. Occupational injuries and fatalities in the roofing contracting industry. *J. Constr. Eng. Manage.* 131 (11), 1233–1240.
  3. Bhakoo, V., Choi, T., 2013. The iron cage exposed: institutional pressures and heterogeneity across the healthcare supply chain. *J. Oper. Manag.* 31 (6), 432–449.
  4. Hon, C.K.H., Chan, A.P.C., Yam, M.C.H., 2013. Determining safety climate factors in the repair, maintenance, minor alteration, and addition sector of Hong Kong. *J. Constr. Eng. Manag.* 139 (5), 519–528.
  5. Sunindijo, R.Y., Zou, P.X.W., 2012. Political skill for developing construction safety climate. *J. Constr. Eng. Manag.* 138 (5), 605–612.
  6. Kheni, N.A., Gibb, A.G.F., Dainty, A.R.J., 2010. Health and safety management within small- and medium-sized enterprises (SMEs) in developing countries: study of contextual influences. *J. Constr. Eng. Manag.* 136 (10), 1104–1115.
  7. Peláez, G.I.C., 2008. Modelo de cuantificación de riesgos laborales en la construcción: RIES-CO. Tesis Doctoral, Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil, Universidad Politécnica de Valencia, Valencia, España (in Spanish).
  8. Zain, Z. M. (2008). TVET in Malaysia. Universiti Malaysia Perlis, 2008-2012.
  9. Ahamad Sipon (2002). Educational Strategies for KEconomy: Laying the Foundation for Training a Flexible and Competent Workforce. In International Conference on Technical Education and Vocational Training. Organize by GMI and GTZ on June 24th –25th 2002, Kuala Lumpur.
- [10] Brickson, S. L. (2002). Organizational identity orientation: Making the link between organizational identity and organizational behavior (Doctoral dissertation, Harvard University).
- [11] Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, 17(3), 601-617.
- [12] Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of organizational behavior*, 385-392.
- [13] Hon, C. K., Chan, A. P., & Yam, M. C. (2013). Determining safety climate factors in the repair, maintenance, minor alteration, and addition sector of Hong Kong. *Journal of construction engineering and management*, 139(5), 519- 528.

[14] Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.

## POLYTECHNIC ENGLISH LECTURERS' BELIEFS ABOUT USING MOBILE APPS IN TEACHING COMMUNICATIVE ENGLISH

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### ABSTRACT

*In the state of our nation facing Covid-19 pandemic, the Ministry of Education, Malaysia has urged higher learning institutions to use the online learning application. The use of technology is one of the teaching and learning media and the use of ' Mobile App ' is popular among students. This paper aimed to discover the English lecturers' beliefs about using mobile apps in teaching communicative English. This descriptive study was conducted survey method among polytechnic lecturers in order to extract opinion on how using mobile apps in teaching communicative English. A set of questionnaire was designed to collect data from the respondents. Moreover, this study will list down the use of mobile apps that the lecturers feel by using this mobile apps online learning method. The data collection was carried out to the 50 lecturers particularly among polytechnic lecturers who had used online activity which basically familiar with online teaching and learning. This study will provide a clearer idea about the perception and the use of mobile apps in helps the reader to understand the advantage on improving English language through mobile apps that lead to sustainable online learning. The finding of the previous studies revealed that mobile apps offers great experiences to the lecturers who want to teach English language effectively. Majority of the respondents agreed that using mobile apps significantly influence students in learning English in order fully prepare in terms of relating to speaking and listening. As conclusion, some ideas have been made in to encourage lecturers' participation to use mobile apps in teaching communicative English.*

**Keyword:** *Mobile App, online learning, English*

### INTRODUCTION

English language is considered the international language of the whole world and is commonly used in many fields as the main language for communication, business, education...etc. Thus, many learners around the world have directed their efforts to learn English and use it as their mother tongue and for many users as second language (SL) not mere a foreign language (FL). Most countries around the world have also recognized the importance of the English language in education and have addressed deficiencies

by making English language learning a primary factor in their planning and strategy (Thomas, Costa, & Oliveira, 2016). Owing to the importance of the English language in non-native English-speaking countries, applying modern technologies to support learners in learning English is a critical issue (Cho & Chan, 2015). Meanwhile, learners face many problems while trying to learn English as a second or foreign language (ESL/EFL).

In addition to that, the appeal of internet-based learning cannot be denied. Mobile Apps are a new strategy in learning and education system which purposely launched to replace the old teaching method. Mobile Apps are also one of popular new web-based applications which rapidly used by all levels of education institutions to improve their learning programs. This system is expanding rapidly and widely used as an information system and teaching strategy for managing and controlling the activities of teaching and learning process. Moreover, Mobile Apps are enabling the student who lives in rural areas to conduct further studies. Mobile Apps effectively facilitate the process of learning with the use of the widespread methods on the Internet such as forums, email, and video chatting (Davies, Jo, and Martin Graff, 2005).

This study investigates English lecturers of all polytechnics in Malaysia. The focus of the study is centered on their beliefs about using Mobile Apps in teaching English in their classrooms. Teachers of English as a second language (ESL) and English as a foreign language (EFL) try their best efforts to maintain or improve English proficiency of their students. In this study the authors begin with describing the contextual factors that motivated the study. Then present the study objectives and questions, and briefly overview the study's approach to investigate the research questions, with relevant research literature as well as the research methodology.

## **PROBLEM STATEMENT**

Speaking English is a frustrating among English language learners, particularly the L2 English learners. Learners are aware of the importance of learning English but couldn't afford resisting the current trend of pursuing the popularity of using internet slang. They gradually become less concerned about the accuracy of speaking correct English. However, it's often said that the interference of internet slang has jeopardized the appropriate use of English. Over time, learners become less competent in constructing correct sentences.

This study was motivated by three contextual factors surrounding the problem of teaching English with the help of Mobile Apps in order to support learners to maintain or improve their English proficiency: the worldwide trend of English learning, the trends towards merging technology in the educational process and the problem of less or lack of accessibility to use Mobile Apps in teaching English in classrooms. Taking these factors into important consideration provides the rationale for this study. Based on the worldwide trend of English becoming “increasingly favored as a second language” (Crystal, 2012; Duff & Anderson, 2015; Leung, Davidson, & Mohan, 2014; McCargo, 2004), or “linguistic imperialism” (Canagarajah, 1999) a large number of English language learners invest their time, money and efforts to learn English with the best modern methods such Mobile Apps with or without the teachers support. Furthermore, one of the most challenges learners face on the way of their English accuracy is to use English correctly. So, in this study, the researchers aim to investigate about the English lecturers’ beliefs in using the Mobile Apps to teach communicative English.

### **OBJECTIVES OF THE STUDY**

This study aims to meet its main objective which is to explore the polytechnic English lecturers’ beliefs about using Mobile Apps for teaching communicative English. Through this study, the researchers also aim to reach these objectives: -

- To discover the challenges that polytechnic English lecturers’ face in using Mobile Apps for teaching English.
- To identify the benefits of using Mobile Apps in teaching English.
- To recommend the use of Mobile Apps to other English lecturers in order to support English teaching and learning.

### **RESEARCH QUESTIONS**

This study is conducted to answer the following research questions:

- 1-What are the polytechnic English lecturers’ beliefs in using Mobile Apps for teaching English?
- 2-What are the challenges that English lecturers face while using Mobile Apps for teaching English in classrooms?
- 3-What are the benefits of using Mobile Apps in teaching English?

## **SIGNIFICANCE OF THE RESEARCH**

The findings of this study are expected to benefit the various parties such as students, teachers, scholars and the community. The interests of this research are the following:

1. Bring the awareness of English teachers and students towards utilizing Mobile Apps in teaching and learning especially the teachers who use Mobile learning system in teaching English language.
2. Identify the importance of students' using Mobile Apps effectively in order to achieve notable improvements in acquiring English.
3. Giving a boost to other learners and communities rather than Malaysia who choose mobile learning in preference to learn themselves English constantly.
4. This study will help in creating mobile learning awareness to all parties and promote for the effectiveness of teaching and learning English Grammar with the help of Mobile Apps among all public and private educational institutions in Malaysia.

## **LIMITATION AND RECOMMENDATION OF THE STUDY**

Although this study gives some understanding and shows the English teachers' thoughts about using Mobile Apps in secondary classrooms, there are some probable drawbacks in conducting the interviews, due that different teachers have different teaching practices and background of exposure to internet use. It might not be easy to get five voluntary English teachers who will be interested to share their feedback regarding the issue studied what may not provide the needed information. On other hand, the findings cannot be generalized because it will be conducted on a limited number of participants (5 teachers only) from only one school what reflects that the sample size might not be sufficient to produce a convincing generalization. In addition to that, the study focuses only on secondary level. Thus, further research is recommended in order to enhance the results of this study and provide more investigation on the benefits and shortages of using Mobile Apps in English classes for teaching grammar. Moreover, more research is recommended to be done on other levels such as primary and higher education level. With the existence of such possible limitations, future research should consider improving the design of the study instruments and apply mixed method or quantitative study to obtain a more comprehensive and conclusive claims. It is suggested that a more systematic and inclusive study to be conducted to prove the significance of using Mobile Apps in teaching grammar. Apart from that, further studies involving more samples and larger area could be conducted in order to include the use of Mobile Apps in the school curriculum. Nonethe-



less, the findings of the study are expected to be useful for teachers in other schools which are on par with the school studied.

## **REVIEW OF LITERATURE**

### **Introduction**

Teaching English to students is never an easy task for English teachers. They need to help their students how to use English accurately in order to write and speak correctly. They should push their students to speak up in front of the audience. Mostly, students have problems to speak English, due to some obstacles to produce words, phrases and arrange them into a good sentence to speak up. So, teaching English language skills with communicative and Mobile based activities and applications becomes a needed thing. In this part of research, the authors review the body of research relating teaching English and Mobile based applications as the following sections:

### **The role of the Mobile Apps in language learning**

With the application of ICT in education, learning is made much more easily accessible with using computers, tablets, smartphones and the Internet. The integration of ICT in school education covers from the implementation of digital board, VLE FROG, to mobile learning. Moving towards modernization, owning a mobile phone is more of a necessity, no longer a luxury compared to a decade ago. Mobile phones are not only important for communication, but also for the purpose of education. Malaysians are making efforts in adopting 21st century learning skills; hence, mobile phones especially the learning apps in the smartphones play significant roles in improving the learning of language skills, activating autonomy learning and even enhancing knowledge acquisition.

Eppard, Nasser & Reddy (2016), in their study on “Mobile Apps in the English language classroom”, made suggestions and developed a list of criteria for choosing Apps. The findings of their study highlight the significance of collaboration between mobile learning and language learning. According to Eppard, Nasser & Reddy (2016), there are new online apps constantly being created from time to time, hence it is impossible to keep up with all the English learning apps available for educational purposes. Their ultimate goal was to create a list of core apps relevant for English language learning. Their study notes that there

were no guidelines on how to choose suitable Apps for educational purposes for tablet devices. After reviewing websites suggested by sustainable individuals and established institutions or organizations, this study intends to fill that gap. Eppard, Nassar & Reddy are hoping that other researchers would consider replicate a similar study by employing mixed method or quantitative study and consider creating a rubric that could generally be substantiated for specific, different and/or various context areas.

### **Mobile Apps improve language learning skills**

In the early 2010s, when smartphones were still not commonly used, SMS had begun to serve as part of mobile-assisted learning. Both Azabdaftari & Mozaheb (2012) and Alemi, Sarab & Lari (2012) who have conducted experiments on mobile assisted learning in vocabulary acquisition, have discovered that SMS in mobile phone-based vocabulary program (Spaced Repetition System) enables students to obtain better vocabulary retention. When smartphones become more common, Mobile Apps emerge to become an alternative access to effective mobile learning. This is supported by Shih, Lee & Cheng (2015) who agree that the utilization of Mobile Apps has developed students' confidence and capabilities in English spelling and thus students are able to make a good progress in the overall achievement of the language learning, especially in listening to vowels, phonemes, and syllables. (Al-Jarf, 2012) proves that the use of self-study MP3 L2 English lessons (Talk English) as an extra practice manages to improve learners in listening and speaking skills. Correspondingly, this is acknowledged by Kim (2013) who discovers that repeated listening practice using smartphone apps as a part of mobile-assisted language learning (MALL) improves listening skills effectively as learners find learning more favorable being exposed to authentic and meaningful learning resources, whereas Cavus (2016) highlights the use of developed intelligent mobile learning application makes the learning of pronunciation more enjoyable.

Wang and Smith (2013) investigated the feasibility and limitations of developing English reading and grammar skills through mobile phone interfaces. Results indicated that mobile-phone-assisted learning is perceived positively by students as an effective method for improving reading and grammar ability. Similarly, Chen (2013) investigated how students used tablets to learn English in informal settings outside class and how to foster more effective use of the tablet for independent language learning. Findings suggested that tablets or any mobile technology are ideal tools to foster learners' autonomy and ubiquitous

learning in informal settings. Students also reported positive attitudes toward usability, effectiveness, and satisfaction with mobile technologies as language learning tools.

### **Mobile Apps promote autonomy learning**

The proliferation of MALL devices (e.g. smartphones and tablets) has facilitated the development and implementation of applications for educational purposes, including game applications and self-study applications. Mobile technology has been described as easily accessible and good for self-study. Applications in mobile technology focus on forms, primarily at the lexical level, and facilitate the development of receptive instead of productive skills (Kim & Kwon, 2012). They can also engage students in interactive activities outside the traditional classroom (Kim, Rueckert, Kim, & Seo, 2013). For example, they can allow traditional or non-traditional learners to access language input (e.g. iTunes U Materials) for casual learning purposes instead of form-focused learning (Rosell-Aguilar, 2013). Oberg & Daniels (2013) also agree that self-paced mobile learning instructional method promotes positive attitudes towards self-study. This is due to the accessibility and mobility of MALL that attract learners interest and further intentions to pursue more knowledge through the use of mobiles (Kim, 2013), also due to the fact that using mobile devices in the language classroom can leverage individual preferences to personalize learning and develop learner autonomy, and encourage lifelong language learning (Godwin-Jones, 2018). Similarly, Howlett & Waemusa (2019) also believe that mobile learning encourages autonomy learning, improves learning potential and satisfaction in acquiring 21st century learning skills.

### **Mobile Apps Make Learning Easier**

According to Cakir (2015), he explored the current use of mobile phones in a foreign language teaching from the prospective teachers' opinions and attitudes on exploiting the mobile phone as an instructional tool for foreign language learning purposes in the educational and instructional setting of foreign language teaching classrooms. Results showed that most of the participants liked to use their mobiles as instructional to help them in learning English. The results also gave some insights as to how foreign language teachers could employ suitable approaches to make the process of learning and teaching English meaningful and communicative. They suggested that the participants would like to make use of mobile phones for educational purposes when they become teachers of English. Alfaki and Alharthy (2014) studied the influence of using social networks to promote learners' English language. Their results disclosed

that learning through social networks was more operative than old-style learning which looked to the classroom as a place of acquiring information. Besides, they discovered that teamwork was a useful learning strategy in improving one's foreign language, and WhatsApp encourages collaboration among students.

### **Criteria for English Learning Apps**

It is important to encourage students on how to best use Mobile Apps to learn English. As we know that the easy availability of apps on mobile devices means students will obviously using online resources to learn. It's also worth considering the benefits of Apps that can help students to organize and compare different sources as part of projects and revision. When using information online as an English learning resource, there are some criteria about the online English learning resources that need to be mentioned. Tomlinson (2010) stated the design of practical criteria for English resources. Some of them are as follows:

1. English materials should contain enough spoken and written text.
2. Language input in materials should be contextualized.
3. Learners should be exposed sufficient samples of language in authentic use.
4. English materials should include activities that provide critical thinking and encourage learners to visualize.
5. English materials should include interesting and engaging tasks.

According to Howard and Major (2004), a series of specific guidelines was listed for online English resources.

1. Online English resources should be stimulated interaction and be generative.
2. Learners are encouraged to develop learning skills and strategies when they use online English resources.
3. Online English resources should link to each other to develop a progression of skills, understandings and language items.
4. Online English resources have appropriate instructions.
5. Online English resources should be attractive and flexible.

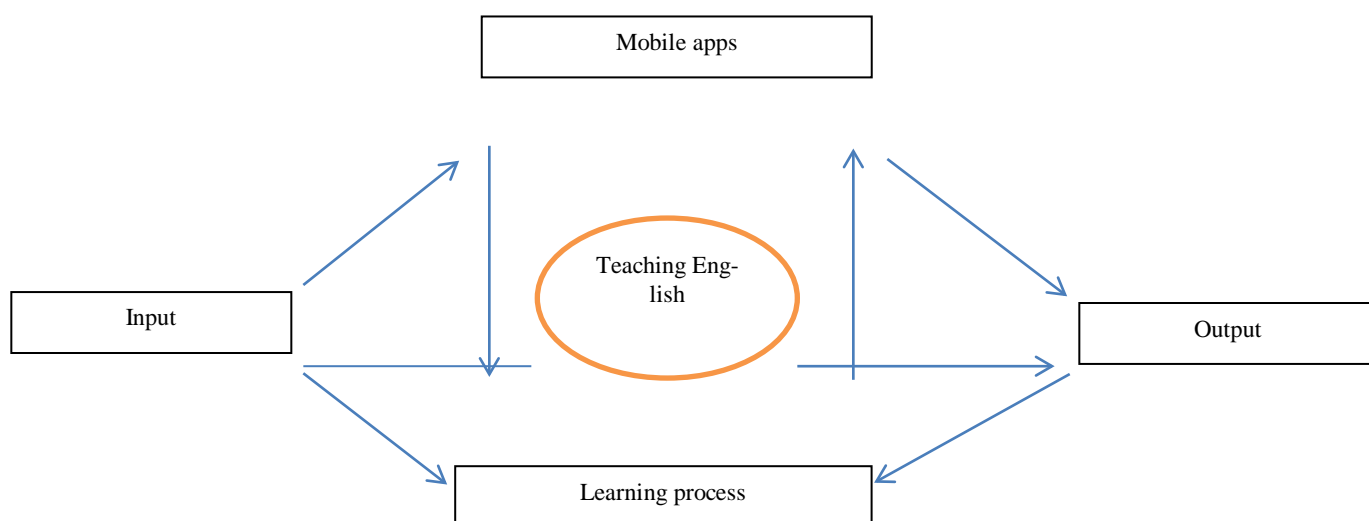
Ahmet (2013) mentioned that the updatability of Apps is one of the most important criteria. In terms of updatability, if students think there is a need for a change in the material depending on the needs and level of what they have learned, they can easily adapt the material. Moreover, when self-regulated students use their smartphones or iPads to learn English, updatability becomes more important, because English resources keep continuously updating every day. It means that high updatability can save their time, money and energy in the progress of learning English.

### Conceptual Framework of the Study

In this study, the research model integrates two main theories used in the study of the Language Acquisition: Krashen's Input Hypothesis and Social Constructivism Theory. This combined model is felt to offer a superior framework by which the drivers of using Mobile Apps in teaching communicative English can be identified.

In Figure (4), the authors provide an overview of the already discussed theories in a condensed form to make it easy for the readers to get an overall idea about the theories behind this study.

Figure 4: Research Conceptual Framework



## RESEARCH METHODOLOGY

### Research Design

This descriptive study using quantitative data collection methods, to gather data. The primary data collection methods will be used to describe the characteristics of the sample group (Sekaran, 2003). According to Hair (2006), the questionnaire more practical and effective tool use this because it can improve the accuracy and truth responses given by the participants and it also not affected by gestures researchers. The participants are free to express their own opinion to answer any item submitted in the questionnaire. In addition to getting a lot of information in a short time, (Nadelson, 2012) argued that the data collected is used for ensure the quality of the data obtained is easily controlled and data processed by computer help. According Braxton (2013), Quantitative study was provides a descriptive solution and description of the existing situation. The research design of this study was descriptive because its suitability for collecting information on the variables studied, information and particulars required (Loke 2013; Root 2013; Yin, 2013). This descriptive research is aims to discover some new approach which not have been reviewed or investigate that could be new idea to the reader or scholars.

The population in this study was selected from Krejcie and Morgan (1970) diagram. The total respondents of 50 polytechnic lecturers were give respond to this study. The reason why this specific group was chooses as a respondent in this study because they have experience in teaching English courses with using e-learning. In the questionnaire there were two sections it was demography details and 11 questions regarding the use of mobile apps.

The data analysis utilized is the Statistical Package Social Science (SPSS). Frequency analysis is performed to examine the learners' responses with respect to using Mobile Apps in teaching English.

### Validity

In order to ensure the list of questionnaire questions is measuring what it's supposed to measure, it is examined and validated by two expertise in TESL field. The questionnaire is more flexibly carried out to give room for the respondents to respond freely. Since the respondents involved are qualified experienced English teachers.

**Reliability**

Reliability is described as consistency of a measure. In purpose to increase the appropriateness of the instrument, a pilot test will be conducted on other three English teachers who are not the actual respondents of the study. Amendment and improvement are made to make the questions more direct and simpler. The same set of instruments will be used to predict the reliability of the possible outcomes.

**Data analysis**

The data analysis was conducted among Polytechnic English lecturers which have experience in using online learning. The (SPSS) version 19 was accounted to analyse the respondent reply on questionnaire. In this study the demographic details, Factor Analysis and correlation analysis test was done in order to clarify the reliability of the research question and respondent perception one-learning.

**Factor analysis**

Factor analysis is one statistical technique that can be used to provide a relatively simple description through reduction of the number of variables called factors. Factor analysis is a procedure for identifying items or variables based on similarity. The similarity is indicated by the high correlation value. Items that have a high correlation factor would form a crowd. The basic principle in the factor analysis is to simplify the description of the data by reducing the number of variables / dimensions. In this study the exploratory factor analysis was used to analyse weight if the each questions. Basically the researcher uses the exploratory factor analysis to identify what factors exist in the set of the item. Meanwhile confirmatory factor analysis is indicating the researchers designed a measuring instrument to seek and determines whether the measurement tool made really explain the fifth dimension (four point likert scale).

**Correlation**

Correlation analysis is included in one of the measuring technique association / relationship (measures of association). Measurement of the association is an umbrella term that refers to a group of techniques in bivariate statistics was used to measure the strength of association between two variables. Among the many techniques of measurement of the association, there are two techniques correlated highly popular



until now, the Pearson Product Moment Correlation and Spearman Rank Correlation. Measurement of association impose numerical values to determine the level of association or the strength of the relationship between variables. Two variables are said to be associated if one variable that influences the behaviour of other variables. If there is no effect, then the second is called the independent variable.

## **RECOMMENDATION**

Due to the increasing e-learning scenarios in Malaysia the finding of this study suggested that e-learning (using mobile apps) must offer courses according to students' demand. In particular, the e-learning must be offer in various language this because Malaysia is a multicultural country. In other hand the e-learning field need to improve the adaptive nature of the student because the effectiveness of e-learning (using mobile apps) which not depending on normal class environment should have a perfect activity will lead to knowledge base society. Moreover, the researcher of this study personally recommended that e-learning instructor and developer should collaborate with developed countries that used e-learning (using mobile apps) in variety ways that will help to improve learners understanding by addressing critical e-learning factors. Using mobile apps in e-learning environment need to be collaborate with the several improvements such as adaptive, hyper Media, Intelligent Tutoring Systems and advance solution.

## **CONCLUSION**

This study has illustrated the importance of e-learning (using mobile apps) in enhancing students English language skills effectively. Moreover, some preliminary results show that when the researcher trying to clarify which factor was influencing the learners to improve their English skills through e-learning finally she found that the advance leaning strategy of English e-learning course was motivate the students to learn quickly without instructor. The findings of all the previous studies shows that student involvement in e-learning (using mobile apps) is depending on the flexibility of their schedule and self-motivation to participate in the e-learning activities.

## **BIBLIOGRAPHY**

1. Alemi, M., Sarab, M., & Lari, Z. (2012). Successful learning of academic word list via MALL: Mobile assisted language learning. *International Education Studies*, 5(6), 99109. Retrieved from <http://www.ccsenet.org>

2. Al-Jarf, R. (2012). Mobile technology and student autonomy in oral skill acquisition. In J. Díaz-Vera (Ed.), *Left to my own devices: Learner autonomy and mobile-assisted language learning innovation and leadership in English language teaching*. Bingley, UK: Emerald Group. Retrieved from <http://dx.doi.org>
3. Ally, M. (2004). Foundations of educational theory for online learning. *Theory and Practice of Online Learning*, 2, 15-44.
4. Azabdaftari, B., & Mozaheb, M. (2012). Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards. *The Eurocall Review*, 20(2), 4759. Retrieved from [http://www.eurocall-languages.org/review/20\\_2/index.html](http://www.eurocall-languages.org/review/20_2/index.html)
5. Ballance, O. J. (2012). Mobile language learning: more than just “the platform”. *Language Learning & Technology*, 16(3), 21-23.
6. Cabrera, P., Castillo, L., Gonzalez, P., Quinonez, A. & Ochoa, C. (2018). The impact of using pixton for teaching grammar and vocabulary in the EFL Ecuadorian context. *Teaching English with Technology*, 18(1), 53-76, <http://www.tewjournal.org>
7. Castañeda, D. A., & Cho, M. H. (2016). Use of a game-like application on a mobile device to improve accuracy in conjugating Spanish verbs. *Computer Assisted Language Learning*, 29(7), 1195-1204.
8. Cavus, N (2016). Development of an intelligent mobile application for teaching English pronunciation. *Procedia Computer Science* 102, 365-369.
9. Chambers, A. (2010). Computer-assisted language learning: Mapping the territory Michael Levy, *Computer-assisted language learning: Context and conceptualization*. Oxford: Clarendon Press, 1997. Pp. xv+ 298. ISBN 978-0-19-823631-3 (paperback).
10. Carol A. Chapelle, *Computer applications in second language acquisition: Foundations for teaching, testing and research* (Cambridge Applied Linguistics Series). Cambridge: Cambridge University Press, 2001. Pp. xvii+ 215. ISBN 978-0-521-62646-0 (paperback).
11. Mike Levy & Glenn Stockwell, *CALL dimensions: Options and issues in computer-assisted language learning*. Mahwah, NJ: Lawrence Erlbaum, 2006. Pp. xviii+ 310. ISBN 0-8058-5634X (paperback). *Language Teaching*, 43(01), 113-122.

12. Cho, V., & Chan, A. (2015). An integrative framework of comparing SaaS adoption for core and non-core business operations: An empirical study on Hong Kong industries. *Information Systems Frontiers*, 17(3), 629-644.
13. Coryell, J. E., & Chlup, D. T. (2007). Implementing E-Learning components with adult English language learners: Vital factors and lessons learned. *Computer Assisted Language Learning*, 20(3), 263-278. doi: 10.1080/09588220701489333
14. Creswell, J. W. (2012). *Education research: Planning, conducting and evaluating quantitative and qualitative research*. Boston: Pearson.
15. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
16. Eppard, J., Nasser, O., & Reddy, P. (2016). The next generation of technology: Mobile apps in the English language classroom. *International Journal of Emerging Technologies in Learning*, 11(4).
17. Evans, C. (2017). *Analysing semi-structured interviews using thematic analysis: Exploring voluntary civic participation among adults*. SAGE Research Method Datasets.
18. Fikron, M. R. (2018). Grammatical competence within L2 communication: Language production, monitor hypothesis, and focus on forms instruction. *Pancaran Pendidikan FKIP Universitas Jember*, Vol. 7(1), 101-112. Retrieved from DOI:10.25037/pancaran.v7i1.140
19. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2016). *How to design and evaluate research in education* (9th edition). New York: McGraw-Hill.
20. Godwin-Jones, R. (2018). *Using mobile devices in the language classroom*. Cambridge Papers in ELT series. Cambridge: Cambridge University Press.
21. Hammarberg, K., Kirkman, M. & Lacey, S. D. (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, Vol 31(3), 498–501. Retrieved from <https://doi.org/10.1093/humrep/dev334>
22. Helm, F., Bradley, L., Guarda, M., & Thouësny, S. (Eds.). (2015). *Critical CALL—Proceedings of the 2015 EUROCALL Conference*, Padova, Italy. Research-publishing. net.
23. Helm, F., Bradley, L., Guarda, M., & Thouësny, S. (Eds.). (2015). *Critical CALL—Proceedings of the 2015 EUROCALL Conference*, Padova, Italy. Research-publishing. net.

24. Herold, B. (2015). Why ed tech is not transforming how teachers teach. *Education Week*, 34(35), 8.
25. Howlett, G. and Waemusa, Z. (2019). 21st century learning skills and autonomy: Students perceptions of mobile devices in the Thai EFL context. *Teaching English with Technology*, 19(1), 72-85.
26. Kim, H., & Kwon, Y. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31-57.
27. Kim, H. S. (2013). Emerging mobile apps to improve English listening skills. *Multimedia-Assisted Language Learning*, 16(2), 11-30.
28. Kukulska-Hulme, A., Norris, L., & Donohue, J. (2015). *Mobile pedagogy for English language teaching: a guide for teachers*.
29. Larsen-Freeman, D. (2001). Teaching grammar. *Teaching English as a second or foreign language*, 3, 251-266.
30. Li, Z., & Hegelheimer, V. (2013). Mobile-assisted grammar exercises: Effects on self-editing in L2 writing. *Language Learning & Technology*, 17(3), 135-156.
31. Ministry of Education (2012). *Malaysia education blueprint 2013-2025-executive summary* [Online]. Retrieved from <http://www.moe.gov.my/userfiles/file/PPP/Preliminary-Blueprint-Eng.pdf>.
32. Ministry of Education Malaysia (2013). *Malaysia education blueprint 2013-2025: Preschool to post-secondary education*. Kuala Lumpur.
33. Oberg, A., & Daniels, P. (2013). Analysis of the effect a student-centred mobile learning instructional method has on language acquisition. *Computer Assisted Language Learning*, 26(2), 177-196. Retrieved from <http://www.tandfonline.com>
34. Paris, S., Paris, A. 2001, "Classroom Applications of Research on Self-Regulated Learning", *Educational Psychologist*, vol. 36, no. 2, pp. 89-101
35. Park, Y. (2011). A pedagogical framework for mobile learning: Categorizing educational applications of mobile technologies into four types. *The International Review of Research in Open and Distributed Learning*, 12(2), 78-102.

36. Salam, Z. A. A., & Mansur, A. (2005). MyGfL: A lifelong learning platform for Malaysian society. In *Proceedings of the 4th European Conference on e-Learning (ECEL 2005): ECEL2005* (p. 15). Academic Conferences Limited.
37. Sandberg, J., Maris, M., & Hoogendoorn, P. (2014). The added value of a gaming context and intelligent adaptation for a mobile learning application for vocabulary learning. *Computers & Education*, 76, 119-130.
38. Savage, K. L., Bitterline, G., & Price, D. (2010). *Grammar matters*. New York: Cambridge University Press.
39. Shih, R.C., Lee, C. & Cheng T.F. (2015). Effects of English spelling learning experience through a mobile LINE app for college students. *Procedia - Social and Behavioral Sciences* 174, 2634 – 2638
40. Son, J. B. (2016). Selecting and evaluating mobile apps for language learning.
41. Soong, D. 2012, "A study on EFL students' use of e-learning programs for learning english -[59] taking a Taiwanese university as an example", *English Language Teaching*, vol. 5, no. 4, pp. 87-95.
42. Thomas, K., & O'Bannon, B. (2013). Cell phones in the classroom: Preservice teachers' perceptions. *Journal of Digital Learning in Teacher Education*, 30(1), 11-20.
43. Thomas, K. M., O'Bannon, B. W., & Britt, V. G. (2014). Standing in the schoolhouse door: Teacher perceptions of mobile phones in the classroom. *Journal of Research on Technology in education*, 46(4), 373-395.
44. Thomas, M., Costa, D., & Oliveira, T. (2016). Assessing the role of IT-enabled process virtualization on green IT adoption. *Information Systems Frontiers*, 18(4), 693-710.
45. Weihua, S. 2011, "A research of college students self-learning ability", from: <http://www.cnki.com.cn/Article/CJFDTotat-DAJI201120274.htm>
46. Weller, M. (2011). *The digital scholar: How technology is transforming scholarly practice*: A&C Black.
47. Weston-Sementelli, J. L., Allen, L. K., & McNamara, D. S. (2018). Comprehension and writing strategy training improves performance on content-specific source-based writing tasks. *International Journal of Artificial Intelligence in Education*, 28(1), 106-137.

48. Winne, P.H. & Perry, N.E. 2000, "Measuring self-regulated learning", In P. Pintrich, M. Boekaerts, & M. Seidner (Eds.), Handbook of self-regulation (p. 531-566). Orlando, FL: Academic Press.
49. Yang, J. (2013). Mobile assisted language learning: review of the recent applications of emerging mobile technologies. English Language Teaching, 6(7), 19-25.
50. Yin, R. K. (2013). Case study research: Design and methods: Sage publications.

## Appendix A: Teachers' pre-questionnaire

Purpose: The aim of this questionnaire is to collect information to identify prior knowledge about the use of Mobile Apps as a digital tool for teaching English

### Part 1: Background information

- 1) Gender: Male ( ☐ ), Female ( ☐ )
- 2) Teaching Experience: 0-2 years ( ☐ ), 3-5 years ( ☐ ), 6-10 years ( ☐ ), 11-15 years ( ☐ ), 15 years and above ( ☐ )
- 3) Age: \_\_\_\_\_.

### Part 2: Lecturers' Beliefs on Mobile Apps

- 4) Are you using Mobile applications for teaching English?  
Yes ( ☐ )      No ( ☐ )
- 5) Do you think that Mobile Apps are useful for teaching English in the classroom?  
Yes ( ☐ )      No ( ☐ )
- 6) Do you think that using Mobile Apps is effective for teaching in the classroom?  
Yes ( ☐ )      No ( ☐ )

- 7) What are the challenges you encounter when teaching English using Mobile applications?

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8) What are the benefits of using Mobile Apps in teaching English?

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9) Do you think that the use of Mobile Apps for teaching English is motivating?

Yes (   ), No (   )

10) Why do you consider that the use of Mobile Apps for teaching English is motivating / not motivating?

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11) Would you recommend using Mobile Apps for teaching English?

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Thanks for your cooperation



## **KAJIAN TERHADAP KESEDARAN PEMBELAJARAN KONVENSIONAL KEPADA PEMBELAJARAN E-PEMBELAJARAN PELAJAR-PELAJAR PASTRI DAN KULINARI KOLEJ-KOLEJ KOMUNITI MALAYSIA**

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### **ABSTRAK**

Kemajuan teknologi dunia kini telah membawa banyak perubahan terutamanya penggunaan internet dalam bidang pendidikan. Buktinya dapat dilihat melalui transformasi kaedah pembelajaran konvensional yang telah berupaya menggantikan kepada kaedah pembelajaran digital teknologi terkini yang lebih interaktif dan menarik. *E-pembelajaran* adalah salah satu instrumen teknologi pembelajaran yang dapat mengembangkan sistem pendidikan secara meluas tanpa dibatasi ruang dan masa. Kajian ini dilakukan bagi mengetahui tahap kesedaran pelajar-pelajar Sijil Pastri, Kolej Komuniti terhadap pembelajaran kon-

veksional kepada pembelajaran *e-pembelajaran* dalam bidang pastri yang semakin mendapat permintaan yang tinggi. Ini kerana bidang tersebut merupakan kemahiran yang mampu memberi peluang pekerjaan dan perniagaan. Pembelajaran *e-pembelajaran* ini adalah satu perubahan pengajaran, pedagogi dan reka-bentuk pengajaran dan pembelajaran secara digital atau online seiring revolusi IR4.0. Pembelajaran dalam talian menggunakan online untuk mengakses bahan pembelajaran, berinteraksi dengan kandungan, pengajar, dan rakan pelajar, mendapatkan sokongan semasa proses pembelajaran berlaku agar dapat menimba ilmu, membina sesuatu yang bermakna dan dapat berkembang hasil daripada pengalaman pembelajaran (Alley, 2004). Terdapat kekurangan pembelajaran secara konvensional ini diantaranya adalah ruang dan peluang untuk mempelajari ilmu tersebut tidak berlaku apabila pelajar tidak menghadiri kelas, mengikuti program luar dan proses ulangkaji agak terhad dan terbatas. Melalui *e-pembelajaran* pelajar dapat mempelajari dan mengulangkaji pelajaran kemahiran atau teori tanpa batasan masa dan dimana-mana sahaja. Pembelajaran *e-pembelajaran* membantu meningkatkan kecenderungan pelajar minat belajar dan memudahcara pengurusan pengajaran dan pembelajaran di dalam kelas. Seramai 146 orang responden dikalangan pelajar pastri di empat (4) buah Kolej Komuniti iaitu Kolej Komuniti Baling, Kolej Komuniti Sungai Petani, Kolej Komuniti Kuala Kangsar dan Kolej Komuniti Bayan Baru telah terpilih untuk proses kajian. Kajian ini dilakukan secara kuantitatif dengan menggunakan borang kajiselidik yang diedarkan kepada pelajar-pelajar pastri dan kulinari. Data kajian dianalisis menggunakan SPSS, hasil dapatan di-huraikan melalui statistik diskriptif mengikut min paling tinggi dan min paling minima serta sisihan piawai. Secara keseluruhannya hasil kajian menunjukkan responden, menunjukkan tahap penggunaan sistem *e-pembelajaran* adalah tinggi dan memberikan persepsi yang positif terhadap pembelajaran bidang pastri ini secara *e-pembelajaran* di kalangan pelajar-pelajar kolej komuniti .

**Kata Kunci:** *Pembelajaran dan Pengajaran, Pembelajaran Konvensional, Pembelajaran elearning, Pelajar Pastri dan Kulinari.*

## 1.0 PENGENALAN

Kertas kerja ini membincangkan tentang kesedaran penggunaan *e-pembelajaran* yang berkesan dalam PdP. *E-pembelajaran* adalah pembelajaran dalam talian dengan penggunaan Internet untuk mengakses bahan pembelajaran, berinteraksi dengan kandungan, pengajar, dan rakan pelajar; mendapatkan sokongan semasa proses pembelajaran berlaku agar dapat menimba ilmu, membina sesuatu yang bermakna dan dapat berkembang hasil daripada pengalaman pembelajaran (Alley, 2004).

Pembelajaran secara *e-pembelajaran* menjadi tuntutan dunia global sekarang selaras dengan penggunaan teknologi di dunia kini bagi meningkatkan mutu pendidikan terutamanya dalam penggunaan teknologi dan komunikasi didalam dunia pendidikan dimana proses semakin kearah dunia moden dan maju abad 2020 ini

(Rusman, dkk. 2011: 1). Cara pembelajaran ini sesuai dan mengikuti perubahan zaman kerana remaja kini banyak menggunakan internet sebagai sumber carian maklumat didalam pembelajaran. Sehubungan dengan hal itu pendidikan zaman sekarang amat mementingkan teknologi internet dan informasi bagi mendapat kelancaran didalam proses pembelajaran secara e-pembelajaran ini.

Terdapat banyak inovasi dan kreativiti dalam mencipta pembaharuan keatas teknologi pembelajaran yang dapat menarik minat pelajar-pelajar dalam mempelajari ilmu pembelajaran pada era yang maju kearah IR 4.0. Fungsi media pembelajaran cukup penting dalam meningkatkan kualiti proses pembelajaran terutama membantu siswa untuk belajar. Dua unsur yang sangat penting dalam kegiatan pembelajaran, iaitu method dan media pembelajaran. Kedua hal ini saling berkaitan satu sama lain (Rusman, dkk. 2011:171). E-pembelajaran pada peringkat pendidikan tinggi pula menjadi kaedah pembelajaran pada masa kini dan masa hadapan. Ia berupaya mempercepatkan pengajaran dan proses pembelajaran dengan lebih efektif. Penerimaan e-pembelajaran bukan sahaja untuk menukarkan modul tradisional, kos program dan bilik darjah dalam versi atas talian, bahkan penggunaan teknologi e-pembelajaran boleh menyumbang kepada persekitaran pengajaran dan pembelajaran yang fleksibel. Di Malaysia, e-pembelajaran merupakan teknologi yang asas. Impak dan penerimaan oleh masyarakat contohnya di Institut Pengajian Tinggi (IPT) amat menggalakkan kerana pelajar lebih seronok untuk menjelajah dunia teknologi untuk mendapat bahan-bahan didalam PdP mereka. Tahap pelaksanaan e-pembelajaran pada masa kini akan lebih diperluaskan kerana dunia sekarang kearah IR4.0 dimana semua aktiviti banyak berlandaskan teknologi. Corak yang sama akan turut diselidiki di Kolej Komuniti Malaysia. Ahli akademik berperanan mengubah minda pelajar daripada pasif kepada aktif terutama dengan penggunaan teknologi Internet melalui talian yang boleh didapati di dalam kampus kolej. Kemudahan ini membolehkan e-pembelajaran disampaikan dalam pelbagai jenis penyelesaian. Kajian ini telah menggunakan Sistem MyCakeDeco dimana sistem ini dirancang bagi memudahkan pengguna ataupun pelajar dalam bidang Pastri dan kulinari untuk mendapat satu capaian sistem pembelajaran yang menyeronokkan dimana sistem MyCakeDeco ini boleh digunakan di mana-mana sahaja dengan menggunakan teknologi maklumat dan komunikasi (ICT). Bagi melihat keberkesannya penggunaan e-learning ini diolah mengikut silibus Hiasan Kek yang menepati ciri-ciri dan diguna pakai Sijil Pastri Kolej Komuniti dimana ia lengkap ,dan tersusun serta menerapkan ciri-ciri e-pembelajaran seperti gaming , video dan penilaian diakhir sistem MyCakeDeco yang dapat menarik minat

pelajar remaja generasi z untuk belajar. Hasilnya pelajar-pelajar kini dapat mempelajari dekorasi kek dengan menggunakan system e-pembelajaran ini dimana mana saja dengan mudah serta menyeronokkan.

## 2.0 PENYATAAN MASALAH

Pendidikan secara tradisional sebelum ini lebih konvensional dimana ia melibatkan proses pembelajaran secara tradisi melibatkan dua hala iaitu tenaga pengajar bersama pelajar. Komunikasi dua hala banyak berlaku dimana tenaga pengajar menyampaikan maklumat atau ilmu dan pelajar lebih kepada mendengar dan melihat sahaja. Secara amnya di Institusi atau universiti lebih tertumpu melalui cara pengajaran seperti syarahan atau demonstrasi.

Seiring dengan dunia yang semakin moden ini perkembangan teknologi komputer dan multimedia telah mengubah cara pembelajaran yang lebih interaktif dan lebih moden iaitu perubahan corak pengajaran tenaga pengajar telah diperkukuhkan dengan lebih menarik dengan penggunaan bahan-bahan multimedia disamping itu memberi nilai tambah (*value added*) kepada proses pengajaran dan pembelajaran (PdP). Strategi persembahan maklumat disusun dan diolah dengan lebih menarik, interaktif serta lebih mesra pengguna "*user friendly*". *E-pembelajaran* yang diuruskan dengan baik dapat menyimpan rekod pembelajaran yang berkesan dan sistematik untuk rujukan pelajar, guru, mentor atau fasilitator (Wahyu binti Idrus Yahya Buntat).

Sebelum sistem e-pembelajaran dilaksanakan pembelajaran TVET matapelajaran hiasan kek amali di Kolej Komuniti dan Politeknik adalah berkonsepkan konvensional dimana proses pembelajaran amali di dalam kelas secara demonstrasi dan *face to face*. Permasalahan penyampaian pembelajaran konvensional dilihat kurang proaktif apabila ketidakhadiran pelajar di kelas. Tajuk atau topik tertentu ketinggalan dan proses mengulangkaji kemahiran tersebut tidak dapat diulangi.

Faktor kemodenan teknologi, tenaga pengajar perlu kreatif dalam menangani proses pengajaran apabila berdepan dengan golongan pelajar Gen-Z ini. Mereka lebih cenderung terhadap penggunaan teknologi yang berasaskan kepada *digital-native* iaitu sentiasa terangsang untuk mencuba sesuatu yang baru, suka belajar secara kreatif, interaktif, menyeronokkan serta berfikir di luar kotak selari dengan perkembangan teknologi.

Sistem e-pembelajaran dengan menggunakan program MyCakeDeco ini memudahkan pengguna untuk melayari dimana-mana sahaja samaada menggunakan telefon bimbit ataupun komputer atau laptop, tidak memerlukan kos yang tinggi, masa yang fleksibel dan mudah dicapai kerana semua maklumat atau video MyCakeDeco dikumpulkan di dalam satu sistem yang sangat lengkap dalam proses pembelajaran tahap asas sehingga ke tahap mahir. Ia boleh dicapai dengan mudah melalui **URL: mycakedeco.com**. Bahan pengajaran dan pembelajaran e-pembelajaran yang dirancang dan disediakan mengikut silibus TVET Kolej Komuniti. Pengguna boleh memilih masa, tahap pembelajaran dan penilaian mengikut kesesuaian mereka bagi *upskilling* dan *reskilling* yang ingin dipelajari. Usaha untuk mendidik semua pengguna sistem maya dalam era Revolusi Industri 4.0 kini adalah satu tugas memberi pendedahan terhadap penggunaan teknologi maya. Pendekatan pembelajaran dan pengajaran (PdP) sangat cepat berubah dan kita perlu menyesuaikan perubahan teknologi yang pantas bagi keberkesanan PdP.

Oleh itu, kajian ini dijalankan bertujuan untuk melihat sejauh manakah kesedaran para pelajar menerima e-pembelajaran dalam aktiviti pengajaran dan pembelajaran mereka dan apakah faktor yang menjadi penyebab penerimaan atau penolakan kepada kaedah ini.

### 3.0 OBJEKTIF

Kajian ini berkaitan penggunaan sistem e-pembelajaran MyCakeDeco oleh pengguna iaitu pelajar-pelajar bidang Pastri dari kolej komuniti Baling untuk mempelajari satu subjek dari kursus Pastri iaitu subjek Hiasan Kek secara di atas talian. Objektif kajian ini adalah untuk :

- 3.1. Membangunkan sistem pembelajaran subjek Pastri secara fleksibel, berinteraktif dan mesra pengguna supaya dapat menjimatkan masa/kos.
- 3.2. Mengkaji keberkesanan dan kesedaran terhadap konsep e- pembelajaran dalam sistem pengajaran dan pembelajaran.

- 3.3. Menjadikan pembelajaran TVET menepati pembangunan teknologi digital dan revolusi industri 4.0.

## **4.0 SOROTAN KAJIAN**

### **4.1 Kaedah Pembelajaran Konvensional berteraskan Pendidikan Asas Vokasional (PAV)**

Kajian dibuat oleh Faridah Mariani Binti Johari et al, 2014 menunjukkan Pendidikan Asas Vokasional (PAV) adalah berbentuk konvensional *hands-on* merupakan satu kaedah pembelajaran yang berkesan bagi pelajar yang menghadapi kesukaran untuk mengikuti pendidikan yang lebih berat kepada kaedah akademik. Pada tahun 2012, PAV telah bermula perlaksanaannya merangkumi pelajar Tingkatan 1 di 15 buah sekolah menengah. Pada tahun berikutnya sejumlah 135 buah sekolah telah dipilih oleh Kementerian Pendidikan Malaysia untuk menjalankan kaedah PAV secara penuh (KPM, 2012).

Menurut Ahmad (2006), Pendidikan Teknikal dan Latihan Vokasional (TVET) mampu melahirkan ramai tenaga kerja yang berkualiti untuk pembangunan ekonomi Malaysia. Tenaga kerja yang memiliki kebolehan dan kemahiran yang tinggi serta mampu untuk bersikap profesional akan mampu untuk berdayasaing di pasaran kerja (Asnul, Nor Fadila, Ruhizan & Ramlee, 2012). Mereka juga mampu untuk menjadi modal insan yang boleh bersaing di peringkat global (Mohamad Rizal, 2011). Namun begitu, pelaksanaan PAV memerlukan pelbagai jenis sumber seperti tenaga pengajar, kemudahan infrastruktur, peralatan, bahan dan kewangan (Nurulhuda & Roslan, 2008). Menurut Faizatul Hafilah, Nor Syahilia, 2017, pembelajaran menggunakan kaedah elearning ini lebih menarik berbanding konvensional. Selain itu, ianya sangat fleksibel, mudah untuk digunapakai, penerimaan yang luas, mudah untuk diakses dan ia juga konsisten apabila digunakan.

### **4.2. Pembelajaran Berasaskan kaedah epembelajaran menggantikan kaedah pembelajaran konvensional dalam Pendidikan dan Latihan Vokasional**

Kaedah konvensional atau pembelajaran sehala kajian oleh Butt (2014) mendapati pelajar menerima maklumat secara pasif ketika sesi kuliah berlangsung. Berbeza pula pendekatan yang dibuat oleh Flumerfelt dan Green (2013) iaitu dari sudut perubahan kurikulum di sekolah. Bagi memastikan kurikulum sekolah bergerak selari dengan pembelajaran abad ke-21, kurikulum pendidikan memerlukan perubahan yang berani dan kajian terhadap PdP diperlukan secara berterusan. Penggunaan teknologi dalam PdP memberi impak yang positif terhadap sistem pendidikan. Penggunaan teknologi secara tepat dan bersiste-

matik bukan sahaja dapat membantu guru dalam pengajaran tetapi juga membantu meningkatkan kefahaman pelajar dalam mata pelajaran yang sukar (Abu Bakar, 2013).

Menyedari bahawa penggunaan epembelajaran yang menggunakan media internet sebagai sumber untuk mengakses sesuatu topik, maka sistem ini amat baik dan sangat mudah untuk dipraktikkan tanpa dibatasi oleh masa, tempat mahupun jarak, Hamonangan Tambunan (2011) selain itu pelajar juga dapat mengakses sistem pada bila-bila masa untuk menyambung pembelajaran yang tertangguh.

### **4.3 Peningkatan Kemahiran Dan Ilmu Baru Untuk Warga Pendidik**

Penggunaan teknologi dalam PdP memberi impak yang positif terhadap sistem pendidikan. Penggunaan teknologi secara tepat dan bersistematik bukan sahaja dapat membantu guru dalam pengajaran tetapi juga membantu meningkatkan kefahaman pelajar dalam mata pelajaran yang sukar (Abu Bakar, 2013). Golongan pendidik juga semakin minat dan menyokong penggunaan permainan digital dalam epembelajaran (Demirbilek, 2010; Porath, 2011). Pensyarah yang cekap dalam penggunaan ICT serta kerap menggunakan ICT untuk mengajar akan lebih terdorong untuk gunakan permainan digital bagi tujuan pengajaran dan pembelajaran (Schmitz, Felicia, & Bignami, 2015). Menurut Annetta, Frazier, Folta, Holmes, Lamb & Cheng (2013), pensyarah yang sering menggunakan teknologi yang berasaskan komputer di dalam kehidupan seharian boleh menjadi calon yang sesuai untuk menceburi bidang pembangunan profesional berkenaan dengan teknologi inovasi dan kaedah pengajaran. Kemahiran ICT yang mencukupi juga akan melahirkan pandangan yang positif di pihak pensyarah untuk menggunakan bahan epembelajaran digital (Kreijns et al., 2014). Para pensyarah juga yakin dengan kuasa motivasi yang dimiliki oleh permainan digital untuk pembelajaran dan mereka menghargai potensi pendidikannya (Jordaan & Surujlal, 2014).

## **5.0 METODOLOGI**

Metodologi yang digunakan bagi mendapat hasil kajian untuk melihat kesedaran pembelajaran konvensional kepada pembelajaran e-pembelajaran bagi pelajar-pelajar pastry dan kulinari kolej –kolej komuniti Malaysia dengan menjalankan proses kajian menggunakan sistem pembelajaran online iaitu sistem MycakeDeco sebagai model rujukan bagi pembangunan sistem MyCakeDeco. Sampel kajian adalah seramai 146 orang responden dikalangan pelajar pastri di empat (4) buah Kolej Komuniti iaitu Kolej Komuniti Baling, Kolej Komuniti Sungai Petani, Kolej Komuniti Kuala Kangsar dan Kolej Komuniti



Bayan Baru telah terpilih untuk proses kajian. Kajian ini dilakukan secara kuantitatif dengan menggunakan borang kajiselidik yang diedarkan kepada pelajar-pelajar pastri dan kulinari. Data kajian dianalisis menggunakan SPSS, hasil dapatan dihuraikan melalui statistik diskriptif mengikut min paling tinggi dan min paling minima serta sisihan piawai. Secara keseluruhannya hasil kajian menunjukkan responden, menunjukkan tahap penggunaan sistem e-pembelajaran adalah tinggi dan memberikan persepsi yang positif terhadap pembelajaran bidang pastri ini secara e-pembelajaran di kalangan pelajar-pelajar kolej komuniti.

### **5.1 Analisis Keperluan**

Bagi memastikan kesedaran pelajar-pelajar sijil pastri dan sijil kulinari terhadap pembelajaran e-pembelajaran ini dapat memberikan impak yang menarik didalam pembelajaran sekarang, Sistem MyCakeDeco ini dipilih untuk menjadi sistem pembelajaran e-pembelajaran yang telah dibangunkan untuk melihat perubahan pengajaran, pedagogi dan rekabentuk pengajaran dan pembelajaran secara digital atau online seiring revolusi IR4.0 i. Sistem yang dapat memberi nilai tambah kepada pengguna kerana ia dirangka untuk memudahkan pengguna mencari capaian yang mudah bagi mempelajari semua berkaitan dengan dekorasi kek mengikut aturan yang sangat memudahkan pengguna untuk melayari video-video dari tahap asas sehingga ke tahap mahir. Sistem MyCakeDeco ini telah disusun dari awal pemulaan bagaimana hendak menghias kek pembelajaran secara e-pembelajaran dari sebijik kek yang selepas dibakar sehingga menghias sebijik kek menjadi kek yang cantik dan menarik dengan menggunakan semua tip-tip dekorasi kek.

Sistem ini mudah kerana video disusun dan tidak sukar untuk dicari kerana ia berada di dalam satu aplikasi. Dengan cara ini pelajar lebih rasa mudah untuk mendapat maklumat disatu aplikasi sahaja. Berbanding video yang ada di dalam internet seperti You Tube bagi pengguna yang tidak mempunyai asas-asas dalam pembuatan dan hiasan kek mereka mungkin sukar untuk mencari video yang perlu ditonton kerana mungkin mereka tidak tahu nama-nama video yang mereka perlu cari di dalam internet sepertinya jika hendak membuat dekorasi coklat, nama-nama yang perlu mereka cari di dalam You tube tetapi di dalam sistem MyCakeDeco ini mudah dicapai di dalam satu sistem. Ia dapat menarik lagi minat pelajar terhadap pembelajaran secara e-pembelajaran ini kerana ia merupakan satu pembelajaran yang menarik dan berteknologi.

Sistem e-pembelajaran MycakeDeko ini sangat menyeronokkan kerana tidak terikat dengan cara tradisional dimana jika hendak mempelajari sesuatu kita perlu hadir ke kelas malah dunia ke arah Industri 4.0 ini yang lebih ke arah multimedia memudahkan semua pihak sama ada pelajar malahan surirumah, orang yang bekerja untuk melayari dan mempelajari sistem e-pembelajaran MyCakeDeco ini mengikut masa mereka sendiri dan dimana-mana sahaja melalui telefon bimbit, laptop, komputer dan sebagainya.

Sistem e-pembelajaran ini juga dibangunkan kerana dapat melihat keberkesanan terhadap proses pembelajaran secara e-pembelajaran dengan mempelajari cara-cara hiasan kek di rumah sahaja dimana video-video pembelajaran yang ada di dalam sistem ini dapat mengajar pengguna untuk mempelajarinya sendiri dirumah tanpa perlu keluar rumah dan tidak perlu mengambil kelas masakan diluar yang lebih tinggi kos dan yuran malah yang mempunyai masa yang sangat terhad. Walaupun pembelajaran sistem ini secara maya, pengguna masih juga boleh berinteraksi dengan chef-chef, pensyarah-pensyarah yang dapat menjawab persoalan pengguna di dalam ruangan forum. Ini akan lebih menarik kerana pengguna juga akan rasa lebih dekat dengan chef –chef/pensyarah-pensyarah kerana mereka sendiri melalui pengalaman pembelajaran secara e-pembelajaran ini boleh berkomunikasi secara terus dengan menggunakan teknologi pembelajaran secara e-pembelajaran ini bagi pelajar kurang yakin ia akan menimbulkan minat pelajar lebih tinggi. .

Bagi pelajar-pelajar dan Pensyarah di IPTA, IPTS dan Kolej-kolej yang mengambil jurusan Pastri dan Seni Kulinari boleh juga menggunakan sistem ini sebagai sumber rujukan tambahan. Ini kerana sistem yang lengkap dan jelas ini lebih interaktif kerana sistem e-pembelajarannya yang mengikut peredaran semasa dimana mengutamakan ICT di dalam pembelajaran yang mana sangat memenuhi keperluan pelajar-pelajar kini

## **5.2 Pengumpulan Fakta**

Dalam fasa analisis, beberapa proses telah dijalankan untuk mengumpul fakta dan maklumat berkenaan sistem yang akan dibangunkan. Antaranya ialah sesi perbincangan dan temubual yang telah dilakukan antara ahli kumpulan dan tenaga pengajar. Segala fakta dan masalah yang diperolehi dikumpul untuk menghasilkan objektif pembangunan dan keperluan sistem.

### 5.2.1 Mengenalpasti Keperluan Sistem

Semua maklumat yang telah dikumpul sepanjang sesi pengumpulan fakta dianalisis secara terperinci untuk mengenalpasti dengan lebih jelas tentang keperluan sistem yang ingin dibangunkan secara keseluruhannya. Di peringkat ini, kami mengkaji semula dengan lebih terperinci tentang objektif pembangunan dan keperluan sistem dengan mengambil kira impak dari segi penyelesaian masalah, penggunaan masa, tenaga dan kos. Selain itu, sasaran pengguna juga turut dikenalpasti agar kesediaan sistem untuk peringkat pengguna akhir dapat diambil kira semasa proses merekabentuk antaramuka, rekabentuk interaksi dan rekabentuk antaramuka sistem. Semua analisis yang telah diperoleh diterjemahkan menjadi satu gambaran keseluruhan perjalanan sistem serta isi kandungannya menjadi lakaran awal dan aturan sistem dibangunkan agar lebih jelas dan terperinci serta akan lebih mudah difahami.

### 5.2.2 Penjanaan Alternatif dan Pemilihan

Setelah selesai proses menganalisis keperluan kajian, pelbagai alternatif penyelesaian telah dibincangkan bersama ahli kumpulan. Antara penyelesaian yang dicadangkan adalah dengan membangunkan sebuah sistem yang berkonsepkan e-pembelajaran secara atas di talian bagi mengubah persekitaran pembelajaran konvensional kepada kaedah pembelajaran yang lebih menarik dengan mengadaptasikan teknologi terkini. Selaras dengan perkembangan revolusi industri 4.0, kami telah merangka pembangunan sebuah sistem yang mengintegrasikan elemen *Internet Of Thing* (IOT), *Augmented Reality* (AR) dan *Gamification* selari dengan objektif dan tujuan asal pembangunan sistem bagi mengukuhkan lagi kajian ini dimana kepentingan pembelajaran e-pembelajaran ini yang semakin menjadi permintaan dari generasi Z yang lebih bercirikan teknologi dalam pembelajaran.

## 5.3 Pengujian

Fasa implementasi merupakan fasa peralihan dari penggunaan kaedah pembelajaran cara lama kepada kaedah baharu yang ingin diperkenalkan. Bagi melihat keberkesanan pembelajaran secara e-pembelajaran ini, kami telah membuat kajian dengan menggunakan sistem MyCakeDeco ini yang juga merupakan sistem yang dibangunkan oleh kami juga dirangka adalah untuk menambahbaik kaedah pengajaran dan pembelajaran Dekorasi Kek secara konvensional kepada kaedah yang lebih fleksibel dan lebih menarik. Dalam proses pembangunan sistem MyCakeDeco, fasa implementasi sistem telah kami lakukan secara serentak bersama fasa pengujian sistem untuk menjimatkan masa dan mempercepatkan proses untuk

mendapatkan maklumbalas pengguna dan seterusnya pembetulan terhadap sistem dibuat secara terus berdasarkan maklumbalas yang telah diberikan oleh pengguna.

Proses Implementasi dan pengujian sistem telahpun dijalankan kepada pelajar-pelajar di beberapa buah Kolej Komuniti yang menawarkan kursus Pastrri iaitu di Kolej Komuniti Baling, Kolej Komuniti Sungai Petani, Kolej Komuniti Bayan Baru dan Kolej Komuniti Kuala Kangsar. Kami telah memohon kebenaran secara bertulis kepada Kolej Komuniti tersebut untuk menjalankan sesi Implementasi dan Pengujian Sistem myCakeDeco. Institusi terlibat telah memberikan kerjasama sepenuhnya kepada ahli kumpulan kami yang menjalankan proses tersebut.

Di sana, kami telah disediakan makmal komputer dengan capaian internet bersama dengan pelajar-pelajar Sijil Pastrri. Kami menjalankan sesi pengajaran bersama para pelajar. Setiap pelajar diberi masa dan peluang untuk mengikuti sesi pembelajaran melalui sistem MyCakeDeco mengikut tahap yang ada. Dalam sesi pembelajaran tersebut, kami mendapati pelajar-pelajar sangat fokus dengan sesi pembelajaran yang diikuti. Selain dari itu, kami juga dapati pelajar-pelajar dapat mengikuti sesi pembelajaran secara fleksibel dan bebas serta tidak membosankan.

Setelah sesi pembelajaran dijalankan, para pelajar diberi peluang untuk mengikuti sesi penilaian. Para pelajar dikehendaki untuk menjawab penilaian dalam tempoh masa yang diberikan dan markah dikira secara automatik mengikut jawapan tepat yang telah pelajar berikan. Setelah sesi penilaian tamat, markah keseluruhan yang diperolehi akan dipaparkan dan sekiranya peratus lulus pelajar ada 80 peratus, pelajar dibenarkan untuk menekan butang aplikasi untuk mencetak sijil. Setiap tahap mengandungi soalan penilaiannya yang tersendiri.

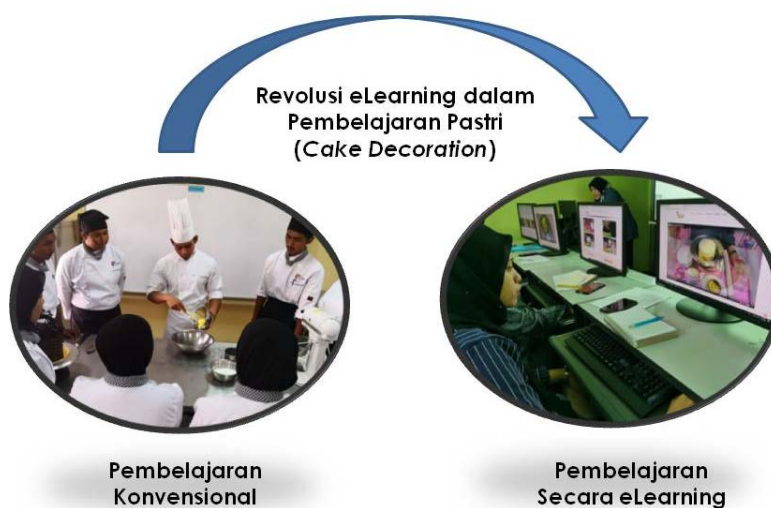
Setelah selesai sesi pembelajaran, pelajar-pelajar juga boleh mencuba untuk mengikuti penilaian yang formatif yang berbentuk *gamification* dan juga mengulangkaji topik keseluruhan bagi setiap tahap dengan menggunakan teknologi *Augmented Reality*. Secara pemerhatiannya, pelajar dilihat tertarik dan seronok menggunakan sistem pembelajaran dengan kaedah yang baharu. Mereka kelihatan lebih fokus dan berminat dengan kaedah baharu yang diperkenalkan.

Selain dari pelajar, kami juga mengadakan sesi pengenalan dan demonstrasi sistem kepada pensyarah-pensyarah yang terlibat sebagai tenaga pengajar kursus Dekorasi Kek dan juga kepada beberapa wakil industri dalam bidang Pastri untuk mendapatkan maklumbalas dan cadangan penambahbaikan. Keseluruhannya, sistem myCakeDeco mendapat maklumbalas yang positif dari segi penggunaan dalam aktiviti pengajaran dan pembelajaran.

## 6.0 ANALISIS/DAPATAN/OUTPUT

### 6.1 Analisis Keperluan Sistem

E-pembelajaran dengan menggunakan Sistem MyCakeDeco merupakan sistem pembelajaran secara online bagi memenuhi tuntutan pembelajaran masa kini. Ini menepati hasrat dan revolusi industri 4.0 iaitu memastikan revolusi pembelajaran TVET perlu ditingkatkan menepati perubahan teknologi dan gaya hidup generasi muda.



**Gambarajah 4.1: Revolusi e-pembelajaran Pembelajaran Pastri**

Di samping itu, perubahan ke arah teknologi digital menjadikan sistem pembelajaran lebih fleksibel sehingga memberi peluang kepada masyarakat terutama pelajar, komuniti dan warga kerja untuk mempelajari secara online tanpa meninggalkan kerjaya dan tugas mereka. Pembelajaran sistem e-learning

MyCakeDeco ini adalah pembelajaran alternatif kepada pengguna yang ingin belajar tanpa menghadiri kelas, jika mereka ketinggalan kelas mereka dapat mengulangkaji modul tersebut. Pembelajaran secara konvensional yang sedia ada kurang efektif kerana memerlukan pengguna fokus di dalam kelas. Ketidakhadiran kelas TVET mengikut waktu yang ditetapkan menyebabkan mereka akan terlepas sesi pembelajaran tersebut. Sistem ini dapat memberikan nilai komersial yang tinggi kerana menggunakan teknologi digital yang melengkapi komponen *IOT*, *AR* & *Gamification*. Perubahan sistem pembelajaran yang berinteraktif ke arah revolusi 4.0 iaitu menjurus pelan pembangunan pengajian tinggi (PPPT). Revolusi 4.0 menekankan sistem pendidikan ke arah berteknologi tinggi kepada mesra pengguna, menjimatkan kos, masa dan fasiliti di dalam pengajaran & pembelajaran hiasan kek yang sesuai diikuti oleh pelajar-pelajar dalam bidang pastri dan kulinari. Sistem e-pembelajaran ini menerapkan Teknik *Gamification* dibahagian *fun game*, *IOT* iaitu dibahagian mesej pemberitahuan penilaian di telefon bimbit & *Augmented Reality* untuk pembelajaran hiasan kek pula dibahagian mengulangkaji pelajaran hiasan kek.

## 6.2 Instrumen Kajian

Instrumen soal selidik yang digunakan dalam kajian ini terdiri daripada item-item soalan pembelajaran e-pembelajaran yang diadaptasi daripada Normashitah binti Nazri, Kamarul Hazri Bin Ghazali dan Ruslina binti Yusoff (2019) melalui kajian e-pembelajaran Mempengaruhi Peningkatan Kemahiran Dan Potensi Pelajar Pastri Di Kolej Komuniti Kuala Kangsar, Perak dan juga item-item soalan kepada penggunaan sistem diadaptasi daripada Schmitz, Felicia, dan Bignami (2015) yang pada asalnya digunakan untuk menguji penerimaan dan penggunaan pembelajaran berasaskan permainan bagi pendidikan dan latihan vokasional.

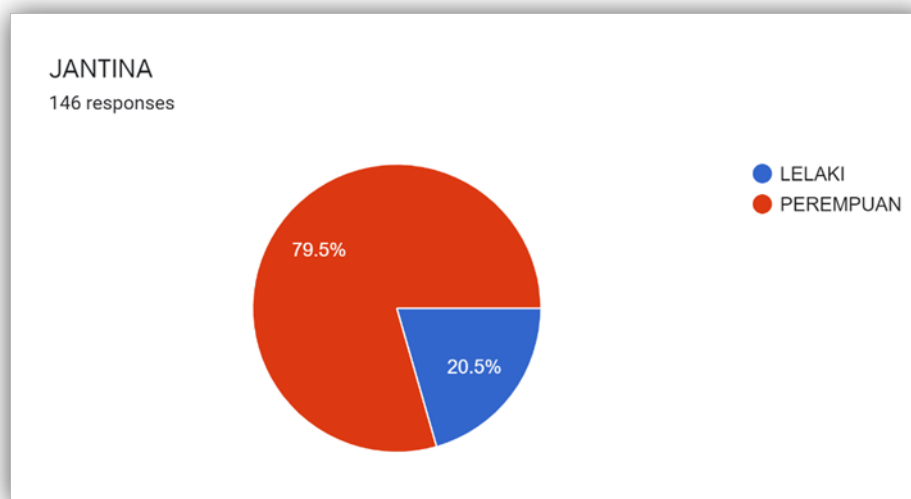
Kesemua item di dalam borang kaji selidik ini menguji penerimaan para pelajar terhadap penggunaan aplikasi *IOT for Teaching Module* (MyCakeDeco) untuk mempelajari kursus asas dekorasi kek dalam kaedah e-pembelajaran. Item soalan ini menumpukan kepada kemudahan penggunaan sistem, pemahaman sistem, kepuasan penggunaan sistem, produktiviti sistem dan menumpukan kepada kebolehpercayaan sistem tersebut. Borang kaji selidik ini juga menggunakan skala Likert sebagai asas pengukuran data. Terdapat empat (4) pecahan pembahagian item soalan borang kaji selidik iaitu bahagian A (Keperluan e-pembelajaran), Bahagian B (Pembangunan Peningkatan Kemahiran), Bahagian C (Keberkesanan e-pembelajaran) dan bahagian D (Penggunaan Sistem).

Manakala tambahan Borang selidik ini terdiri daripada Bahagian Demografi Responden, dan bahagian ini juga memuatkan item-item soalan yang terdiri daripada umur, jantina, agama, tahap penggunaan ICT dan kategori pengguna sistem.

### 6.2.1 Pengumpulan Dan Analisa Data

Berikut diuraikan cara terperinci data diperolehi dan cara ianya dianalisa. Data diperolehi menerusi pengedaran borang kajiselidik secara *google form* kepada NGO (*Kedah Chef Associate*) dan pelajar pastri dari empat kolej komuniti iaitu Kolej Komuniti Baling, Kolej Komuniti Bayan Baru, Kolej Komuniti Sungai Petani dan Kolej Komuniti Kuala Kangsar. Para pelajar diberikan masa selama satu jam untuk mengisi borang kajiselidik.

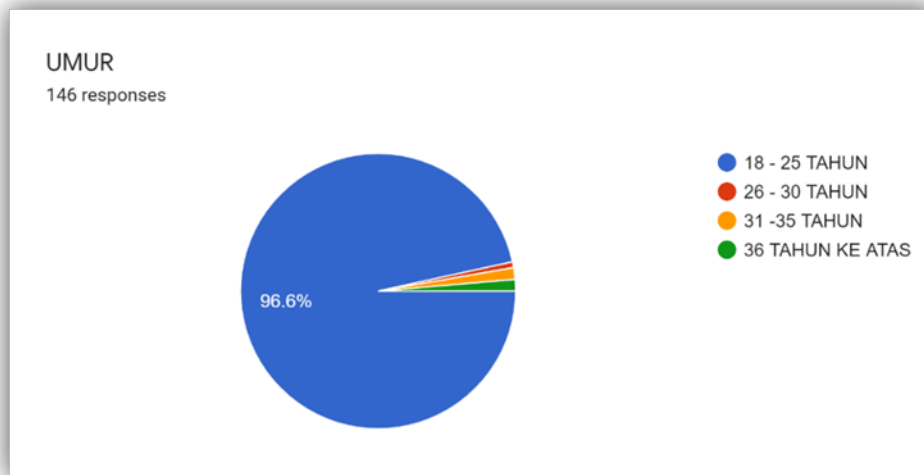
Analisa ni adalah menggunakan formula-formula daripada SPSS dalam pengukuran min dan sisihan piawai. Keputusan kajian ini untuk mendapatkan peratusan dan purata bagi setiap item daripada borang kajiselidik yang telah dikembalikan oleh responden memberi maklumbalas positif terhadap pembelajaran e-pembelajaran bagi sistem MyCakeDeco. Bilangan responden bagi soal selidik tersebut ialah seramai 146 orang.



Gambarajah 4.2: Jantina

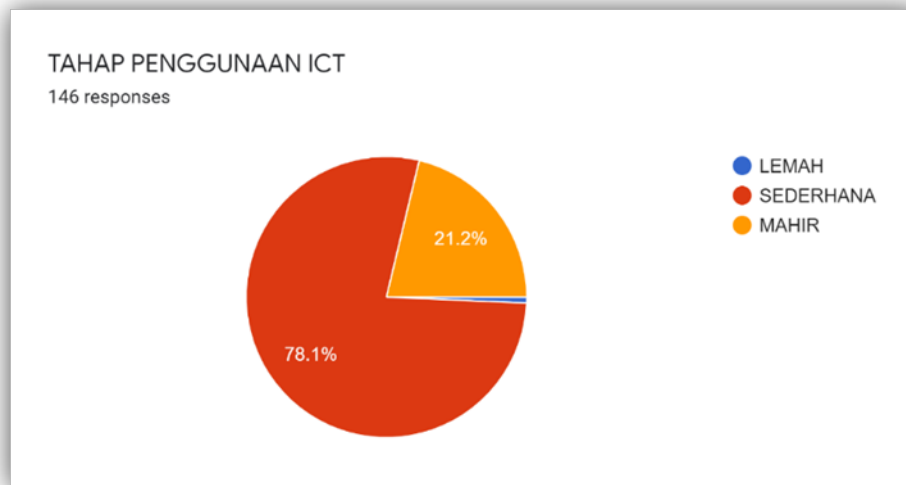


Seramai 146 orang yang telah mengisi borang kaji selidik yang terdiri daripada 79.5% perempuan dan 20.5% lelaki.



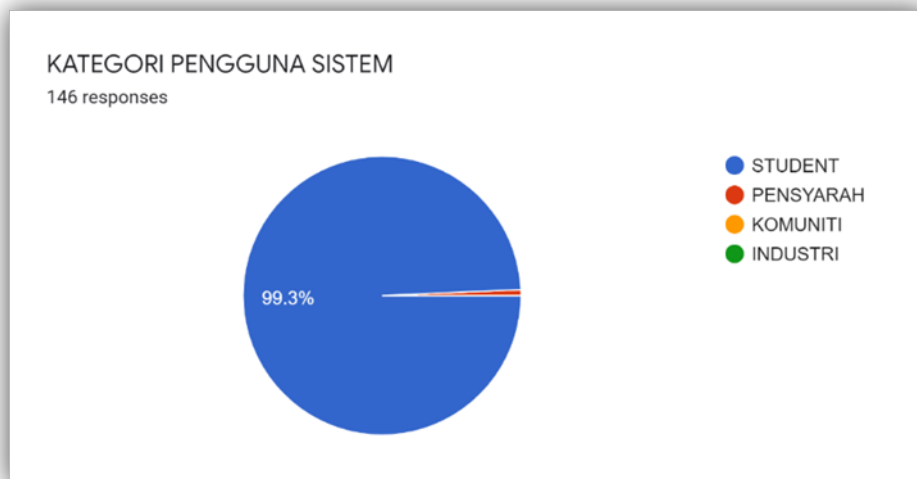
**Gambarajah 4.3: Umur**

Pecahan umur bagi responden adalah kebanyakan berumur 18-25 tahun iaitu 96.6% dikalangan pelajar-pelajar empat kolej komuniti yang dinilai. Selebihnya adalah tenaga pengajar dan pihak NGO (Kedah Chef Association)



**Gambarajah 4.4: Tahap Penggunaan ICT**

Majoriti 146 responden mempunyai tahap penguasaan penggunaan ICT pada tahap sederhana iaitu 78.1%, manakala tahap mahir iaitu 21.2% dan 0.7% pada tahap lemah.



**Gambarajah 4.5: Kategori Pengguna Sistem**

Majoriti kategori pengguna sistem MyCakeDeco adalah responden dikalangan pelajar. Sebanyak 0.7% dikalangan pensyarah, komuniti dan industri.

### 6.3 DAPATAN DAN PERBINCANGAN

Nilai min menerangkan kecenderungan setiap pemboleh ubah bersandar dan pemboleh ubah tidak bersandar. Jadual 1.1 di bawah menunjukkan analisa pengelasan bagi skor min dan tahap penilaian.

Skor Min	Tahap
0.1 - 1.67	Rendah
1.68 - 3.34	Sederhana
3.35 - 5.00	Tinggi

**Jadual 1.1: Interpretasi Skor Min bagi Setiap Pemboleh Ubah**

Dapatan ini diperolehi daripada 146 orang responden. Perbincangan dimulakan dengan dapatan dari Borang Kajiselidik Bahagian A, B, C & D. Dapatan akan dihuraikan mengikut min paling banyak dan min paling minima serta sisihan piawai. Kesemua item tersebut ialah seperti berikut:

### A. PEMBELAJARAN KONVENSIONAL KEPADA eLEARNING SISTEM: Keperluan e-pembelajaran dalam pembelajaran TVET - Cake Decoration

Statistik Diskriptif		
Pembolehubah	Min	Sisihan Piawai
A1. Saya sedar bahawa e-pembelajaran penting dalam pembelajaran dan pengajaran.	4.46	.612
A2. Saya mempunyai kemahiran menggunakan e-pembelajaran.	3.97	.787
A3. E-pembelajaran sangat praktikal dengan suasana pembelajaran masa kini.	4.42	.693
A4. Saya sedar bahawa e-pembelajaran mempunyai banyak kelebihan.	4.49	.667
A5. Saya tahu bahawa saya akan ketinggalan jika tidak menggunakan e-pembelajaran.	4.29	.735
<b>Min keseluruhan</b>	<b>4.32</b>	<b>.546</b>

**Jadual 1.2: Keperluan eLearning dalam pembelajaran TVET**

Berdasarkan Jadual 1.2, dapatan kajian menunjukkan majoriti responden berpersepsi bahawa kesemua item bagi pemboleh ubah kesedaran keperluan e-pembelajaran dalam pembelajaran TVET berada pada tahap tinggi (min = 4.32, S.P = 0.546). Tiga (3) item tahap yang paling tinggi min iaitu Item no A4 (Saya sedar bahawa e-pembelajaran mempunyai banyak kelebihan) merupakan item tahap yang paling tinggi (min = 4.49, S.P = 0.667) dan diikuti dengan item no A1 (Saya sedar bahawa e-pembelajaran penting dalam pembelajaran dan pengajaran.) (min = 4.46, S.P = 0.612). Item A3 mendapat skor min ketiga tertinggi (skor min = 4.42, sisihan piawai = 0.693). Item no A5 (Saya tahu bahawa saya akan ketinggalan jika tidak menggunakan e-pembelajaran.) merupakan item kedua tahap rendah (min = 4.29, S.P = .735) dan Item no A2 (Saya mempunyai kemahiran menggunakan e-pembelajaran.) (min = 3.97, S.P = .787). Ini menunjukkan bahawa e-pembelajaran adalah diperlukan oleh pembelajaran TVET pada masa kini.

## B. PEMBELAJARAN KONVESIONAL KEPADA SISTEM ePEMBELAJARAN: Pembangunan Peningkatan Kemahiran Pembelajaran TVET Cake Decoration

Statistik Diskriptif		
Pemboleh Ubah	Min	Sisihan Piawai
B1. Pengguna boleh memilih masa, kandungan serta mengikut kesesuaian mereka.	4.25	.693
B2. Pengguna tidak perlu rasa malu untuk bertanya dan berpeluang belajar tajuk yang susah berulang kali sehingga pemahaman mereka tercapai.	4.51	.602
B3. Pengguna yang bebas melakukan carian maklumat mengikut keperluan, tahap pencapaian dan pengetahuan.	4.48	.646
B4. Saya tahu bahawa banyak bahan pembelajaran boleh diperolehi dari e-pembelajaran.	4.49	.646
B5. Saya tahu bahawa e-pembelajaran boleh meningkatkan pencapaian amali saya.	4.45	.633
B6. Saya menganggap bahawa kaedah e-pembelajaran adalah cara pembelajaran pilihan saya.	4.32	.672
<b>Min keseluruhan</b>	<b>4.41</b>	<b>.529</b>

**Jadual 1.3: Pembangunan Peningkatan Kemahiran Pembelajaran TVET**

Berdasarkan Jadual 1.3, dapatan kajian menunjukkan majoriti responden berpersepsi bahawa kesemua item bagi pemboleh ubah pembangunan peningkatan e-pembelajaran pembelajaran TVET berada pada tahap tinggi (min = 4.41, S.P = 0.529). Dua item tahap yang paling tinggi iaitu item no B2 (Pengguna tidak perlu rasa malu untuk bertanya dan berpeluang belajar tajuk yang susah berulang kali sehingga pemahaman mereka tercapai.) merupakan item tahap yang paling tinggi (min = 4.51, S.P = 0.602) dan diikuti dengan item no B4 (Saya tahu bahawa banyak bahan pembelajaran boleh diperolehi dari e-pembelajaran.) (min = 4.49, S.P = 0.646). Manakala item B3 mendapat skor min ketiga tertinggi (skor min = 4.48, sisihan piawai = 0.646) Item no B6 (Saya menganggap bahawa kaedah e-pembelajaran adalah cara pembelajaran pilihan saya.) merupakan item kedua tahap rendah (min = 4.32, S.P = 0.672) dan Item no B1 (Pengguna boleh memilih masa, kandungan serta mengikut kesesuaian mereka (min = 4.25, S.P = 0.693). Ini menunjukkan bahawa pembangunan peningkatan e-pembelajaran pembelajaran TVET sangat penting.

### C. PEMBELAJARAN KONVESIONAL KEPADA SISTEM ePEMBELAJARAN: Keberkesanan e-pembelajaran dalam pembelajaran TVET - Cake Decoration

Statistik Diskriptif		
Pemboleh Ubah	Min	Sisihan Piawai
C1. E-pembelajaran memberi manfaat kepada kelas teknikal.	4.38	.666
C2. E-pembelajaran memberangsangkan pembelajaran dalam kelas amali.	4.32	.702
C3. Saya berasa seronok menggunakan e-pembelajaran dalam kelas amali.	4.45	.644
C4. E-pembelajaran memudahkan saya untuk mempelajari teknik baharu dalam kelas teknikal.	4.40	.670
C5. Saya dapati bahan pembelajaran teknikal mudah diakses dalam e-pembelajaran.	4.39	.647
<b>Min keseluruhan</b>	<b>4.38</b>	<b>.564</b>

**Jadual 1.4: Keberkesanan ePembelajaran dalam pembelajaran TVET**

Berdasarkan Jadual 1.4, dapatan kajian menunjukkan majoriti responden berpersepsi bahawa kesemua item bagi pemboleh ubah keberkesanan e-pembelajaran dalam pembelajaran TVET berada pada tahap tinggi (min = 4.38, S.P = 0.564). Dua item tahap yang paling tinggi iaitu item no C3 (Saya berasa seronok menggunakan e-pembelajaran dalam kelas amali) merupakan item tahap yang paling tinggi (min = 4.45, S.P = 0.644) dan diikuti dengan item no C4 (E-pembelajaran memudahkan saya untuk mempelajari teknik baharu dalam kelas teknikal.) (min = 4.40, S.P = 0.670). Item no C1 (E-pembelajaran memberi manfaat kepada kelas teknikal) merupakan item kedua tahap rendah (min = 4.38, S.P = 0.666) dan Item no C2 (E-pembelajaran memberangsangkan pembelajaran dalam kelas amali) merupakan item tahap paling rendah (min = 4.32, S.P = 0.702). Oleh itu, dapat disimpulkan e-pembelajaran sangat berkesan di dalam kaedah pengajaran pelajar TVET di dalam peningkatan kemahiran tambahan mereka.

#### D. PEMBELAJARAN SISTEM ePEMBELAJARAN: Keberkesanan Sistem MyCakeDeco dalam penerapan kemahiran Cake Decoration

Statistik Diskriptif		
Pemboleh Ubah	Min	Sisihan Piawai
D1. Saya suka menggunakan antaramuka aplikasi Sistem MyCakeDeco.	4.36	.703
D2. Susunatur maklumat dalam aplikasi Sistem MyCakeDeco jelas.	4.43	.704
D3. Antaramuka pengguna aplikasi MyCakeDeco menyenangkan (User Friendly).	4.35	.701
D4. Aplikasi yang terdapat dalam MyCakeDeco mempunyai segala fungsi dan keupayaan yang saya harapkan.	4.38	.717
D5. Maklumat yang terdapat dalam aplikasi MyCakeDeco adalah efektif dalam membantu saya untuk menyelesaikan tugas.	4.39	.689
D6. Semua fungsi dalam aplikasi MyCakeDeco berfungsi dengan baik.	4.47	.687
D7. Aplikasi dalam MyCakeDeco mudah digunakan.	4.45	.705
D8. Adalah mudah untuk mencari maklumat yang diperlukan dalam aplikasi MyCakeDeco.	4.49	.635
D9. Maklumat yang disediakan dalam aplikasi MyCakeDeco adalah jelas.	4.48	.667
D10. Keseluruhannya, aplikasi MyCakeDeco mudah untuk digunakan.	4.41	.681
D11. Adalah mudah untuk mempelajari cara menggunakan aplikasi MyCakeDeco.	4.42	.630
D12. Tidak ada terlalu banyak maklumat yang perlu dibaca sebelum saya boleh menggunakan aplikasi MyCakeDeco.	4.33	.676
D13. Maklumat yang disediakan dalam aplikasi MyCakeDeco mudah difahami.	4.43	.674
D14. Saya selesa menggunakan aplikasi MyCakeDeco.	4.45	.644
D15. Saya seronok menerokai aplikasi MyCakeDeco.	4.45	.655
D16. Keseluruhannya, saya berpuas hati dengan aplikasi MyCakeDeco.	4.49	.624
D17. Saya percaya saya boleh menjadi lebih produktif dengan menggunakan aplikasi MyCakeDeco.	4.42	.642
D18. Saya akan menggunakan aplikasi MyCakeDeco dengan lebih kerap lagi.	4.41	.629
D19. Setiap kali saya membuat kesilapan, dengan menggunakan aplikasi MyCakeDeco saya boleh cepat mempelajarinya.	4.34	.709
D20. Aplikasi MyCakeDeco ini memberi mesej ralat yang jelas memberitahu saya bagaimana untuk menyelesaikan masalah.	4.38	.717
<b>Min keseluruhan</b>	<b>4.41</b>	<b>.548</b>

Jadual 1.5: Keberkesanan Sistem MyCakeDeco

Berdasarkan Jadual 1.5, dapatan kajian menunjukkan majoriti responden MyCakeDeco berpersepsi bahawa kesemua item bagi pemboleh ubah keberkesanan Sistem MyCakeDeco dalam penerapan kemahiran Hiasan Kek berada pada tahap tinggi (min = 4.41, S.P = 0.548). Dua item tahap yang paling tinggi iaitu item no D8 (Adalah mudah untuk mencari maklumat yang diperlukan dalam aplikasi MyCakeDeco) merupakan item tahap yang paling tinggi (min = 4.49, S.P = 0.624) dan D16 (Keseluruhannya, saya berpuas hati dengan aplikasi MyCakeDeco) merupakan item tahap yang paling tinggi (min = 4.49, S.P = 0.624) . Manakala item no D9 (Maklumat yang disediakan dalam aplikasi MyCakeDeco adalah jelas.) (min = 4.48, S.P = 0.667). Item no D19 (Setiap kali saya membuat kesilapan, dengan menggunakan aplikasi MyCakeDeco saya boleh cepat mempelajarinya) merupakan item kedua tahap rendah (min = 4.34, S.P = 0.709) dan Item no D12 (Tidak ada terlalu banyak maklumat yang perlu dibaca sebelum saya boleh menggunakan aplikasi MyCakeDeco) merupakan item tahap paling rendah (min = 4.33, S.P = 0.676). Sistem MyCakeDeco sangat praktikal digunakan di dalam kaedah pengajaran dan pembelajaran bagi pelajar, komuniti dan industri untuk menambah nilai kemahiran sedia ada pengguna.

#### 6.4 PENUTUP

Berdasarkan kajian yang dijalankan, pengkaji mendapati bahawa kesedaran pembelajaran konvensional kepada pembelajaran e-pembelajaran terhadap pelajar-pelajar Pastri dan Kulineri Kolej-kolej komuniti adalah sangat tinggi terhadap pembelajaran secara e-pembelajaran dengan menggunakan pembelajaran sistem e-pembelajaran MyCakeDeco ini dapat menarik minat, tahap fokus pelajar dalam pembelajaran lebih tinggi kerana terdapat juga *gaming* di dalam pembelajaran amali hiasan kek dan juga sistem yang bercirikan teknologi 4.0 yang lebih dapat menarik minat pelajar generasi Z. Pembelajaran alternatif ini membantu pengguna yang ingin belajar tanpa menghadiri kelas, tidak mempunyai masa yang sesuai dan ingin menjimatkan perbelanjaan kewangan tetapi masih mendapat ilmu kemahiran. E-pembelajaran juga ini memberi ruang pembelajaran yang fleksibel bagi peningkatan kemahiran *upskilling* dan *reskilling* pengguna. Pembelajaran e-pembelajaran ini menggunakan Sistem MyCakeDeco menjurus kepada bidang kemahiran iaitu modul dekorasi kek. Sistem e-pembelajaran ini mempunyai modul yang lengkap dan mengintegrasikan teknologi terkini bersesuaian dengan aktiviti pembelajaran Aplikasi ini menyeluruh, menarik, lengkap dan mesra pengguna. Selain dari itu, kelebihan e-pembelajaran ini adalah menjimatkan masa dan bersifat fleksibel dimana pengguna boleh mengikuti sesi pembelajaran mengikut kesesuaian



masa mereka sendiri berbanding pembelajaran secara konvensional yang terpaksa mengikut masa dan jadual yang ditentukan oleh pihak institusi. Proses analisis data melalui SPSS menunjukkan keputusan min 4.00 ke atas iaitu di tahap tinggi. Ini menunjukkan sistem ini diterima di dalam e-pembelajaran TVET dan mesra pengguna.

## RUJUKAN

- Abdullah, A. B. (2006). Laporan Kajian Separuh Penggal RMK 9. *Berita Harian Online*. Dicapai pada 12 Februari 2013, dari <http://klikkhas.bharian.com.my/klikkhas/RMK9>
- Annetta, L. A., Frazier, W. M., Foltz, E., Holmes, S., Lamb, R., & Cheng, M. T. (2013). Science teacher efficacy and extrinsic factors toward professional development using video games in a design-based research model: The next generation of STEM. *Journal of Science Education and Technology*, 22(1), 47–61. doi:10.1007/s10956-012-9375-y
- Azizi, N., & Roslan, M. A. (2008). Penilaian terhadap keberkesanan pelaksanaan program lukisan kejuruteraan dari aspek pengajaran dan pembelajaran. Dlm *isu-isu pendidikan teknik dan vokasional* (pp. 181-189). Universiti Teknologi Malaysia: Penerbit UTM.
- Azman Rifin, M. R. (2011, Februari 17). Wajah baru pendidikan vokasional. *Berita Harian*, Bil. 58, 23 (Varsiti).
- Baek, Y. K. (2008). What hinders teachers in using computer and video games in the classroom? Exploring factors inhibiting the uptake of computer and video. *Cyberpsychology & Behavior*, 11(6), 665–671. doi:10.1089/cpb.2008.0127 PMID:19006464
- Baker, R. S. J., D'Mello, S. K., Rodrigo, M. M. T., & Graesser, A. C. (2010). Better to be frustrated than bored: The incidence, persistence, and impact of learners' cognitive-affective states during interactions with three different computer-based learning environments. *International Journal of Human-Computer Studies*, 68(4), 223–241. doi:10.1016/j.ijhcs.2009.12.003
- Bonari, B. Bin, Hanifah, A., Mohd, B., Bt, R., & Rahman, A. (2017). The Examination of Teaching Aid Board Game Innovation in Bakery Module for Disabilities Students of Malaysian Polytechnic (Hearing Impaired Categories ), 1(4), 1–3. <https://doi.org/10.26666/rmp.ajtve.2017.4.1>
- Deen, M., & Shouten, B. (2011). Games that motivate to learn: Design serious games by identified regulations. In P. Felicia (Eds.), *Improving learning and motivation through educational games: Multi-disciplinary approaches*. Hershey: Idea Group Reference. doi:10.4018/978-1-60960-495-0.ch016

- Demirbilek, M. (2010). Investigating attitudes of adult educators towards educational mobile media and games in eight European countries. *Journal of Information Technology Education: Research*, 9(1), 235–247.
- Duffrin, M. W. (2003). Integrating Problem-based Learning in an Introductory College Food Science Course, 2.
- Egenfeldt-Nielsen, S. (2011). *What makes a good learning game? Going beyond edutainment*. Dicapai January 24, 2015 dari <http://elearnmag.acm.org/archive.cfm?aid=1943210>
- Erol, S., Jäger, A., Hold, P., Ott, K., & Sihm, W. (2016). Tangible Industry 4 . 0 : a scenario-based approach to learning for the future of production. *Procedia CIRP*, 54, 13–18. doi:10.1016/j.procir.2016.03.162
- Fraser, J., Shane-Simpson, C., & Asbell-Clarke, J. (2014). Youth science identity, science learning, and gaming experiences. *Computers in Human Behavior*, 41, 523–532. doi:10.1016/j.chb.2014.09.048
- Georgouli, K., & Guerreiro, P. (2008). A Framework for Adopting LMS to Introduce e-Learning in a Traditional Course, 11, 227–240.
- Hussin, A. A. (2018). Education 4 . 0 Made Simple: Ideas For Teaching. *International Journal of Education and Literacy Studies*, 6(3), 92-98. doi:10.7575/aiac.ijels.v.6n.3p.9
- Ibrahim, Z., Haji Masrol, H. J., & Mohamad Nordin, N. (n.d). Kajian kepenggunaan sistem e-testimoni kolej komuniti.
- Idrus, Wahyu and Buntat, Yahya (2006). Aplikasi 'e-learning' dalam pengajaran & pembelajaran di sekolah-sekolah malaysia : isu dan cadangan perlaksanaannya. In: Seminar TVE06, 09-10 December 2006, Hotel Sofitel Palm Resort. (Unpublished)
- Irjus Indrawan (2012). *Meningkatkan Mutu Pendidikan Melalui Metode E-Learning*, S.Pd.I., M.Pd.I Dosen Fakultas Ilmu Agama Islam Universitas Islam Indragiri (UNISI) Tembilahan Kabupaten Indragiri Hilir
- Itmazi, J. A. (2005). A COMPARISON AND EVALUATION OF OPEN SOURCE LEARNING MANAGMENT SYSTEMS, 1–11.
- Jarvis, P. (2009). *Learning to be a person in society*. London: Routledge.
- Johari, F. M., Othman, W., Ismail, H. N., & Isa, Z. M. (2014). Isu dan cabaran pelaksanaan Pendidikan Asas Vokasional (PAV) di sekolah menengah harian, Malaysia. Dicapai dari

[https://www.academia.edu/17979206/Isu\\_dan\\_Cabaran\\_Pelaksanaan\\_Pendidikan\\_Asas\\_Vokasional\\_PAV\\_di\\_Sekolah\\_Menengah\\_Harian\\_Malaysia](https://www.academia.edu/17979206/Isu_dan_Cabaran_Pelaksanaan_Pendidikan_Asas_Vokasional_PAV_di_Sekolah_Menengah_Harian_Malaysia)

- Jordaan, D. B., & Surujlal, J. (2014). Using Technology to Enhance Learning: Computer Science Lecturers' Perceptions towards Mobile Technology and Serious Games in Class. *Mediterranean Journal of Social Sciences*, 5(13), 487–494.
- Kebritchi, M. (2010). Factors affecting teachers' adoption of educational computer games: A case study. *British Journal of Educational Technology*, 41(2), 256–270. doi:10.1111/j.1467-8535.2008.00921.x
- Kementerian Pelajaran Malaysia (2012). *Panduan pelaksanaan kurikulum: PAV di sekolah menengah harian, tingkatan 1 hingga 3*. Wilayah Persekutuan Putrajaya: Bahagian Pembangunan Kurikulum.
- Ketelhut, D. J., & Schifter, C. C. (2011). Teachers and game-based learning: Improving understanding of how to increase efficacy of adoption. *Computers & Education*, 56(2), 539–546. doi:10.1016/j.compedu.2010.10.002
- Kreijns, K., Van Acker, F., Vermeulen, M., & van Buuren, H. (2014). What stimulates teachers to integrate ICT in their pedagogical practices? The use of digital learning materials in education. *Computers in Human Behavior*, 29(1), 217–225. doi:10.1016/j.chb.2012.08.008
- Marwad, A. S., & Peshave, M. (2017.). *Need for a specialized module for bakery and confectionery in hospitality education*. Dicapai dari <http://aissmschmct.in/wp-content/uploads/2017/08/71.pdf>
- Minghat, A. D., Amin, N. F., Yasin, R. M., & Mustapha, R. (2012). *Pembinaan indikator kelestarian pendidikan teknikal dan vokasional sekolah menengah harian melalui kajian delphi*. Kertas kajian dibentang di Seminar Kebangsaan Majlis Dekan Pendidikan IPTA, 07 - 09 Oktober 2012: The Zon Regency by The Sea, Johor Bahru, Universiti Teknologi Malaysia.
- Ministry of Education Malaysia. (2014). *Malaysia Education Blueprint 2015 2025 (Higher Education)*.
- Miswan, M., & Adenan, H. (2013). *PEMBANGUNAN APLIKASI IPAD UNTUK PENDIDIKAN KANAK-KANAK*.
- Mitchell, A., & Savill-Smith, C. (2004). *The use of computer and video games for learning. A review of the literature*. London: Learning and Skills Development Agency.
- Mohammad Yazdi Dosen (2012). e-Learning sebagai media pembelajaran interaktif berbaris teknologi informasi Vol. 2, No. 1

- Mohamed Amin Embi (2011) *e-Learning in Malaysian Institutions of Higher Learning: Status, Trends and Challenges* Universiti Kebangsaan Malaysia
- Mohamed Amin Embi Norazah Mohd Nordin Supyan Hussin Afendi Hamat (2010), *Rumusan Amalan, Trend dan Cabaran Pelaksanaan e-Pembelajaran di IPT Malaysia*
- Normashitah binti Nazri, Kamarul Hazri Bin Ghazali dan Ruslina binti Yusoff (2019) melalui kajian e-Learning Mempengaruhi Peningkatan Kemahiran Dan Potensi Pelajar Pastri Di Kolej Komuniti Kuala Kangsar, Perak
- O'Bannon, B., & Thomas, K. (2014). Teacher perceptions of using mobile phones in the classroom: Age matters! *Computers & Education*, 74, 15–25. doi:10.1016/j.compedu.2014.01.006
- Porath, S. (2011). Text messaging and teenagers: A review of the literature. *Journal of the Research Center for Educational Technology*, 7(2), 86–99.
- Profesor Dr Yusup Hshim (2012). *Penggunaan E-Pembelajaran Dalam Pengajaran Dan Pembelajaran Yang Berkesan*. Konvensyen Kebangsaan Pendidikan Guru (Kkpg) Kuantan Pahang/ Asia e University Kuala Lumpur
- Rabeah Binti Hj Manshor Universiti Teknologi Malaysia (April 2006). Penggunaan system e-pembelajaran (e-pembelajaran ) bagi matapelajaran teknologi Audio dan Video digital di Fakulti Pendidikan UTM
- Rohaila Mohamed Rosly<sup>1</sup> , Fariza Khalid<sup>2</sup>. Gamifikasi : Konsep dan Implikasi dalam Pendidikan Bangi, Malaysia
- Schmitz, B., & Czauderna, A. (2011). *Designing a browser game to engage learners difficult to reach in IT learning*. Kertas kajian dibentang di Proceedings of the 2nd international conference on serious gaming (GameDays) (pp. 41-53). Darmstadt, Germany,.
- Schmitz, B., Felicia, P., & Bignami, F. (2015). Acceptance and use of game-based learning in vocational education and training. *International Journal of Game-Based Learning*, 5(4), 50–63. doi:10.4018/ijgbl.2015100104
- Schmitz, B., Klemke, R., & Specht, M. (2012). Effects of mobile gaming patterns on learning outcomes: A literature review. *International Journal of Technology Enhanced Learning*, 4(5-6), 345–358. doi:10.1504/IJTEL.2012.051817

- Tobias, S., Fletcher, J. D., & Wind, A. P. (2014). Game-based learning. In *Handbook of Research on Educational Communications and Technology* (pp. 485-503). New York: Springer.  
doi:10.1007/978-1-4614-3185-5\_38
- Ulicsak, M. (2010). *Games in education: Serious games. A report for Futurelab*. Dicapai January 4, 2010, dari: <http://archive.futurelab.org.uk/resources/publications-reports-articles/literature-reviews/>
- Yee M. H., Sharberi, S. N. M., Othman, N., Kok B. C., Yeo K. J., (2020). *The Perception of Electronic Learning System Among Students in the College Poly-Tech Mara Batu Pahat*