



**PROCEEDING:
3RD INTERNATIONAL CONFERENCE ON
GLOBAL BUSINESS AND SOCIAL SCIENCE
2020 (3RD ICGBSS 2020)**

3-4 OCTOBER 2020

eISBN: 978-967-2426-17-2



Published By:

**GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD
(1257579-U)**

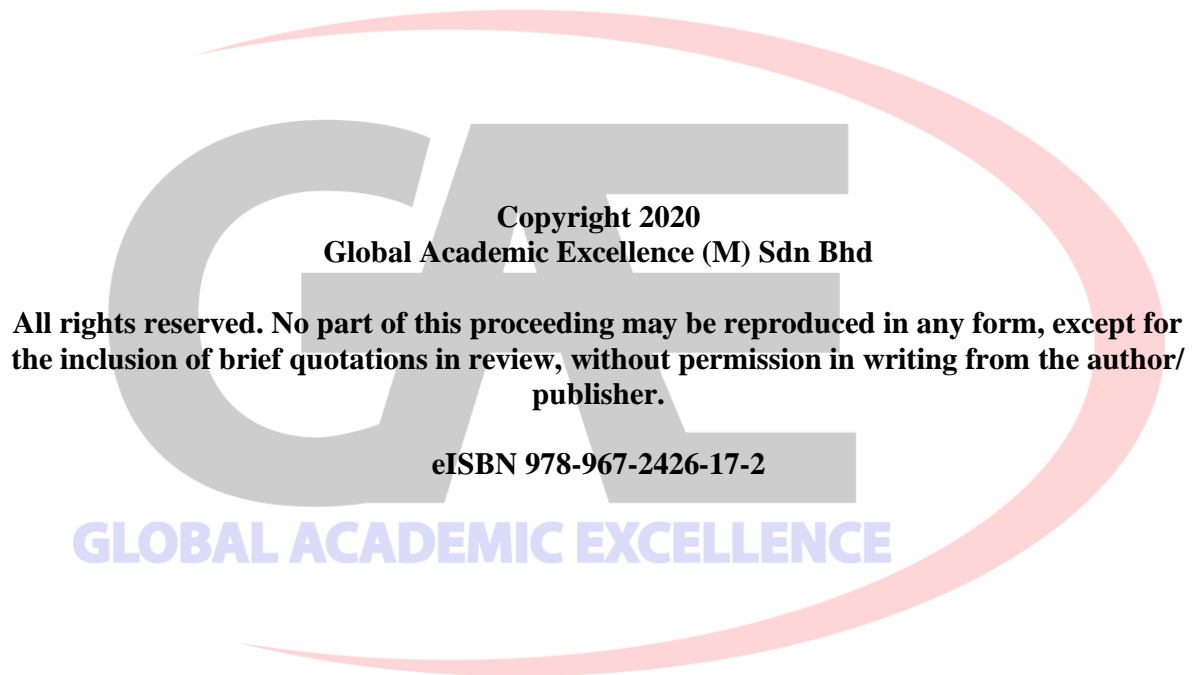
Lot 1156 Tingkat 2 Kompeni Niaga LUTH

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Kelantan, MALAYSIA

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3rd International Conference on Global Business and Social Science 2020 (3rd ICGBSS 2020)
eISBN 978-967-2426-17-2
3rd - 4th October 2020



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eISBN 978-967-2426-17-2

GLOBAL ACADEMIC EXCELLENCE

PUBLISHED BY:
GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD
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KELANTAN
MALAYSIA

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ACADEMIC ARGUMENTS EMPLOYED IN MALAY RESEARCH ARTICLES

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Abstract: *This paper explains a combination of genre-based knowledge and evaluative stance in the context of academic arguments used in the conclusion sections of Malay research articles. For this purpose, it draws on an analysis of the features in Appraisal theory (Martin & Rose, 2003) together with an analysis of communicative purposes within a genre analysis framework (Swales, 1990, 2004). The data is limited to empirical research articles. The conformity with the standard IMRD (Introduction- Method- Results- Discussion) is taken as the first similar feature in the selection of the set of empirical research articles from the selected journals. Among others, the findings observe that evaluative stances produce rhetorical effects in Malay conclusions. The present study has pedagogical implications in an academic writing classroom.*

Keywords: *Evaluative Stance, Conclusion, Malay, Research Articles, Rhetorical Effects*

Introduction

This paper explicates a range of rhetorical strategies employed by academic writers of Malay research articles in concluding their studies. It also demonstrates how evaluative stances have been employed to realize these strategies by drawing on an analysis of the features in Appraisal theory (Martin & Rose, 2003) integrated with the analysis of communicative purposes within the genre analysis framework (Swales, 1990, 2004) (see the Methodology section for the description of the two frameworks).

This study extends the Malay data presented in Loi, Lim & Wharton (2016). In the collaborative study (Loi, Lim & Wharton, 2016), a comparison was made between English and Malay research article conclusions in the evaluative stance and rhetorical strategies employed by authors of the two sets of data (English and Malay) while this study only focuses on the evaluative stance and rhetorical strategies employed by academic writers of Malay research articles (the Conclusion section) with one aspect [the Engagement element in Martin and Rose's (2003) Appraisal theory] not being looked into and at the same time extending the Malay data with additional insights. The purpose of the present study is therefore to extend the findings of the Malay data in the study (Loi, Lim & Wharton, 2016) by having these objectives: (i) to investigate the genre structure of Malay research article conclusions in terms of *moves* and *steps* using Swales's (1990, 2004) notion of genre analysis and (ii) to explore the evaluative stance used by writers of Malay research articles (the Conclusion section) using Martin and

Rose's (2003) model of Appraisal. The research questions addressed in the present study are as follows:

- i. What are the rhetorical strategies used in Malay research article conclusions in terms of rhetorical *moves* and *steps*?
- ii. In constructing the writers' stances, how do Attitude and Graduation options co-articulate with each other to produce the rhetorical effects in (i)?
- iii. Do writers of Malay research articles conclude their writing by using both the evoked and inscribed Attitudes?
- iv. Writers of Malay research articles conclude their articles by using the evoked and inscribed Attitudes (separately/simultaneously) to realize which communicative purposes/rhetorical strategies?
- v. What could be the reason(s) for (iv)?

Literature Review

In Swales's theory which serves as one of the theoretical bases for the present research, move analysis provides the theoretical framework for analyzing texts. In move analysis, texts are conventionally divided into elements or stages, which represent the writers' communicative purposes. These stages are known as 'moves' (Swales, 1990, p. 141). A 'move' is, "the defined and bounded communicative act that is designed to achieve one main communicative objective" (Swales & Feak, 2000, p. 35), and "a discorsal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse" (Swales, 2004, p. 228). Swales's studies (1990 & 2004) show that a move can be further divided into sub-moves (steps). A 'step' is defined by Swales (1990) as a smaller unit of discourse that builds moves (p. 142). In other words, each step supports and guarantees the validity of the move. The difference between a move and a step is that a move describes both the function and purpose of a segment of text, whereas a step details the rhetorical means of realizing the function of a move.

With regard to the overall organization of the three introductory moves in Swales's (1990) CARS (Create a Research Space) model, in some cases, Move 1 and Move 2 might occur cyclically before Move 3 (e.g. move pattern of '1-2-3-1-2-3'), while in other cases Move 2 does not occur "immediately prior to the onset of Move 3" (Swales, 1990, p. 163) or in other words, there may be no Move 2 that could be related to Move 3 (e.g. move pattern of '1-3'). The cyclicity between Move 1 and Move 2, however, may occur after some paragraphs. Swales (1990) gave an example of cyclicity, which shows the cycles of Move 1 Step 3 and Move 2 Step 1B recur (p. 159).

The Appraisal theory (Martin & Rose, 2003) identifies patterns of attitudinal choices that display the writers' stances, the force of these stances and their engagement options. Figure 1 (reproduced from Martin & Rose, 2003) below illustrates the composition of these elements:

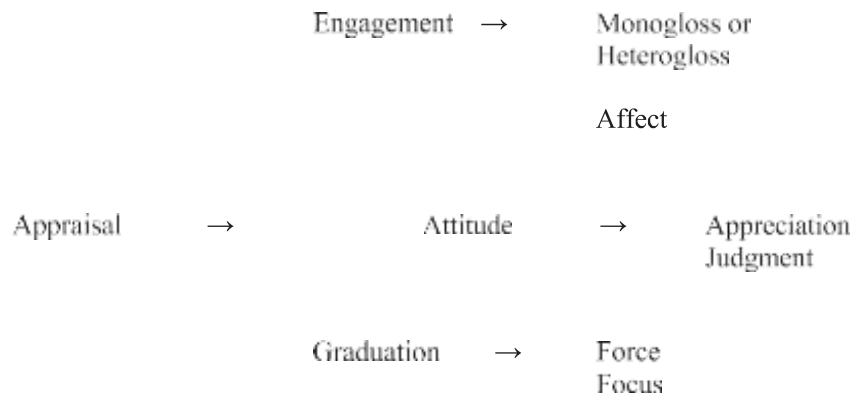


Figure 1: Appraisal Theory

Source: Martin & Rose (2003)

The category of Appreciation (appreciation of things) with positive/negative and inscribed/evoked dimension can be further sub-classified in terms of valuation, reaction and composition. Valuation codes the ideational (the content). Reaction codes the speaker/writer's interpersonal response while composition is concerned with the textual response (to the overall texture) (Eggs & Slade, 1997, p. 128, as cited in Hood, 2004, p. 74).

In the present study, the term 'evoked' is generally used to mean that an attitudinal meaning can be interpreted although none is explicitly encoded (cf. Hood, 2004). In other words, the evoked Attitude implicitly encodes a value by employing Graduation. Graduation can be expressed in terms of high/low force or focus. In the present study, force is further categorized into intensity (as a quality), quantity (as a thing) and enhancement (as a process) (adapted from Hood, 2004). 'Focus' is further categorized into focusing entities ('valeur' is the term used by Martin & Rose, 2003). 'Focus: valeur' is interpreted in terms of authenticity and specificity (Hood, 2004). In the present study, the intensification of attitudinal attributes (e.g., very efficient) can include the grading of attributes that inscribe a positive and negative value as well as those which do not inscribe a positive and negative value (e.g., limited research, few studies) (cf. Hood, 2004). 'Limited' and 'few' for example, retain some evaluative potential although it does not occur alongside an inscribed evaluative term (cf. Hood, 2004).

In the Engagement network (the present study does not include the analysis of this aspect), the category of contraction can be sub-classified as 'proclaim' and 'disclaim' while the category of expansion can be further classified in terms of 'attribute' and 'entertain'. The writers can draw on certain modality (e.g., modality of necessity such as 'should' which expresses a strong suggestion), projection and concession resources (Martin & Rose, 2003, p.54) to contract the their own position and in contrast, the writers can draw on different modality, (e.g., modality of possibility such as 'may'/'could' which offers ideas as possible solution), projection and concession resources to entertain alternatives from the readers (cf. Chang & Schleppegrell, 2011; Love & Arkoudis, 2006).

Methodology

The selected research articles are from the field of psychology. The reason for the choice of the discipline represented in this study is that the discipline is among the fields the researchers are most familiar with. Having a fair background in the field has facilitated the reading and interpretation of the selected research articles. A total of 20 research article conclusions published between 2009 and 2014 were randomly chosen from the selected journals. The data was limited to empirical research articles. Articles which consisted of reviews and (re) interpretations of previous research were excluded. The conformity with the standard IMRD

(Introduction- Method- Results- Discussion) was taken as the first similar feature in the selection of the set of empirical research articles from the selected journals. The Conclusion section is defined as the last section of a research article which is found after the ‘discussion’ section or ‘results and discussion’ section.

The Malay articles were selected from two journals which include psychology articles. They are (i) *Sosiohumanika: Jurnal Pendidikan Sains Sosial dan Kemanusiaan* published by Association of Indonesian Scholars of History Education (ASPENSI) and (ii) *e-Bangi* published by the Faculty of Social Sciences and Humanities (FSSK), Universiti Kebangsaan Malaysia. The particular fields of interest in the selected Malay articles are educational psychology and social psychology. These Malay articles were written by academics who are attached to the department of psychology/the department of psychology and human development/health psychology unit at the higher institutions in Malaysia and Indonesia.

Swales’s (1990 & 2004) model of move analysis and Martin and Rose’s (2003) Appraisal theory as described above have been used as the analysis frameworks for the present study. In stage one, the corpus was coded for the moves and steps found using Swales’s framework of genre analysis. A model that consisted all the moves and steps coded in the corpus emerged after the coding. A quantitative analysis then was carried out to calculate the number of research articles (the conclusion sections) that contain the particular moves. The statistical data is in the form of percentage of conclusions /the number of conclusions that employ the particular moves. In stage 2 of the analysis, the rhetorical strategies coded were then analyzed to discover the evaluative stance used based on Martin and Rose’s (2003) framework of evaluative stance (as elaborated in the literature review). For this paper, the identification of the evaluation stance was descriptive or qualitative in nature to discover the evaluation stance used by writers of Malay research articles to conclude their writing in their articles.

Findings and Discussion

Overall, Malay research article conclusions show the presence of three moves: Move 1 (summarizing the study), Move 2 (evaluating the study) and Move 3 (providing a deduction). These three moves and their respective steps occur cyclically rather than linearly (in a composite manner). Although it is not the aim of the present study to examine statistical data on the cyclicity of rhetorical moves/steps in Malay conclusion sections, it is worth noting that in past studies (e.g., Brett, 1994; Holmes, 1997; Hopkins & Dudley-Evans, 1988; Loi, 2010; Loi & Sweetnam Evans, 2010; Swales, 1990; Yang & Allison, 2003), rhetorical moves/steps have been shown to be highly cyclical in research articles. The move-structure of the conclusion section of Malay research articles is shown below (cf. Loi, Lim & Wharton, 2016):

Malay conclusions are more inclined to use Move 1 (summarizing the study) (85%) compared to the other two moves, namely Move 2 (evaluating the study) (70.6%) and Move 3 (providing a deduction) (55%).

A higher number of step options employed in Move 2 (evaluating the study) compared to Move 1 (summarizing the study) and Move 3 (providing a deduction) of the conclusions, strongly indicates that the communicative focus (in terms of a wide range of rhetorical strategies) in the conclusions is primarily in the *evaluation move* (Move 2).

Writers of Malay research article conclusions use Attitude strategically in arguing/evaluating their own and past research in Move 1 (summarizing the study), Move 2 (evaluating the study) and Move 3 (providing a deduction).

The low force Graduation is found in instances of counter-claiming such as, to evoke the small amount of past research carried out on a particular research area or to evoke a

limitation of past or present studies by accentuating a point [e.g., *hanya* menfokuskan/ *only* focus on (M2)].

The occurrences of low force Graduation to realize the above rhetorical effects in Malay conclusions are congruent with Malay conclusions employing the evaluative Move 2 (evaluating the study), that is, a functional move which contains these two rhetorical steps ‘indicating a limitation’ and ‘providing a counter-claim’. The following exemplifies the above phenomenon:

[M2]: Ketiga, keputusan analisis regresi berganda *hanya* [evoked appreciation: valuation encoded in graduation low focus: valeur/specificity] menfokuskan kepada penerangan tentang varian tahap pretasi berdasarkan persamaan regresi (Tabachnick & Fidell 2001), tetapi masih banyak lagi faktorefaktor lain yang penting perlu dimasukkan dalam analisis ... (Move 2 Step 3 - providing a counter-claim).

{[M2]: Third, the results of multiple regression analysis *only* [evoked appreciation: valuation encoded in graduation low focus: valeur/specificity] focus on the description of the variant level of performance based on the regression equation (Tabachnick & Fidell, 2001), but there are still many more other factors that are important to be included in the analysis ... (Move 2 Step 3 - providing a counter-claim).}

In the Malay corpus, M3 and M14 below, show that evoked instead of inscribed Attitudes are used when taking a stance in relation to the findings of the study (e.g. in M3, ‘*kebanyakan* remaja hamil luar nikah mempunyai ...’ / ‘*most* teenagers who are pregnant out of wedlock have ...’ and in M14, ‘*sebahagian besar...majoriti*’/ ‘*largely... majoriti*’):

[M3]: Dapatan kajian memperlihatkan bahawa *kebanyakan* [evoked appreciation: valuation encoded in graduation high force: quantity] remaja hamil luar nikah mempunyai latar belakang keluarga yang *kurang* [evoked appreciation: valuation encoded in graduation low force: intensity] *sempurna* [inscribed appreciation: valuation] ... (Move 1 Step 1- presenting overall findings).

{[M3]: The findings show that *most* [evoked appreciation: valuation encoded in graduation high force: quantity] teenagers who are pregnant out of wedlock have *less* [evoked appreciation: valuation encoded in graduation low force: intensity] *ideal* [inscribed appreciation: valuation] family background ... (Move 1 Step 1- presenting overall findings).}

[M14]: Belia di Muar juga menyokong aspirasi kerajaan dalam memantapkan agenda pembangunan belia negara dan *sebahagian besarnya* [evoked appreciation: quantity] menyatakan bahawa gagasan 1 Malaysia: ‘Rakyat Didahulukan, Pencapaian Diutamakan’ disokong, dihayati dan dimanifestasikan oleh generasi *muda* [inscribed appreciation: composition]. Dari aspek governans pula, *majoriti* [evoked appreciation: quantity] menyatakan Indeks Petunjuk Prestasi (KPI) untuk wakil rakyat dan Menteri adalah *baik* [inscribed appreciation: valuation] dan mempengaruhi sokongan rakyat terhadap kerajaan dan... (Move 1 Step 1- presenting overall findings).

{[M14]: Youth in Muar also support the government's aspiration to strengthen the agenda of the development of the country's youth and *largely* [evoked appreciation: quantity] states the idea of ‘1 Malaysia: People are placed First, Achievement is prioritized’ is supported, appreciated and endorsed by the *younger* generation [inscribed appreciation: composition]. On the other hand, the *majority* [evoked appreciation: quantity] state that the Index of Performance Indicators (KPIs) for the representatives of the people and the Minister is *good* [inscribed appreciation: valuation] and affects the people's support for the government and ... (Move 1 Step 1- presenting overall findings).}

On the other hand, M5 and M16 show that an overt and amplified attitudinal stance instead of an implicit one is used when commenting on an aspect related to the field as a

domain. For example, in M5, when the writer comments about the global issue of sexual abuse (e.g., ‘penderaan seksual ... dan tidak mustahil berlaku ...’/‘sexual abuse ... and it is **not impossible** to happen ...’ while in M16, when the writer comments on the personalities and qualities prisoners should/should not possess (e.g. ‘sifat-sifat **terpuji**’/ ‘**praiseworthy** traits’; ‘sifat-sifat **tercela**’/‘**degrading** traits’; ‘seorang yang **produktif** dan berakhlak **mulia**’/ ‘someone who is **productive** and has **virtuous** character’) after they have been released from the jail to live in the community. The inscribed Attitudes seem to be used by the Malay writers to overtly and explicitly express an attitudinal stance to highlight the importance of the issues. These two examples are presented below:

[M5]: Penderaan seksual [inscribed appreciation: composition] merupakan isu *sejagat* [inscribed appreciation: composition]. Mangsanya adalah kanak-kanak, remaja, individu dewasa, dan tidak *mustahil* [inscribed appreciation: valuation] berlaku juga kepada warga *tua* [inscribed appreciation: composition] (Move 1 Step 1- presenting overall findings).

{[M5]: *Sexual* [inscribed appreciation: composition] abuse is a *global* [inscribed appreciation: composition] issue. The victims include children, adolescents, individual adults, and it is not *impossible* [inscribed appreciation: valuation] to happen to the *elderly* [inscribed appreciation: composition] people as well (Move 1 Step 1- presenting overall findings).}

[M16]: Selain itu ia juga membolehkan banduan mengamalkan sifat-sifat yang *terpuji* [inscribed appreciation:valuation] dan menjauhi sifat yang *tercela* [inscribed appreciation: valuation] sehingga mampu membimbing mereka untuk kembali kepada masyarakat sebagai seorang yang *produktif* [inscribed appreciation:valuation] dan berakhlak *mulia* [inscribed appreciation:valuation] (Move 1 Step 1- presenting overall findings).

{[M16]: It also enables prisoners to practise *praiseworthy* [inscribed appreciation:valuation] traits and avoid *degrading* [inscribed appreciation:valuation] traits till it is able to guide them to return to the society as people who are *productive* [inscribed appreciation:valuation] and have *virtuous* [inscribed appreciation:valuation] character (Move 1 Step 1- presenting overall findings).}

In the Malay corpus, writers also use both the evoked and inscribed Attitudes simultaneously when taking a stance in relation to Move 2 (evaluating the study) by indicating the significance (M15), providing an explanation (M11) and a pedagogical/theoretical implication (M8) as shown in the following examples:

[M15]:Maka guru dan kakitangan sekolah *terutamanya* [evoked appreciation: valuation] pekerja sosial sekolah merupakan pihak yang amat *penting* [inscribed appreciation: valuation] dalam membantu menangani pencegahan *awal* [inscribed appreciation: composition] kes penderaan dan pengabaian kanak-kanak (Move 2 Step 1 – indicating the significance).

{[M15]: Therefore, school teachers and staff, *especially* [evoked appreciation: valuation] the school social workers, are very *important* [inscribed appreciation: valuation] in helping to deal with the *early* [inscribed appreciation: composition] prevention of child abuse and child neglect cases (Move 2 Step 1 - indicating the significance).}

[M11]: Perhubungan dan bimbingan ibu bapa yang *baik* [inscribed appreciation: valuation] dengan anak *mampu* [evoked appreciation: valuation] mendidik dan membentuk personaliti anak dengan *baik* [inscribed appreciation: valuation]. Namun demikian sokongan guru, rakan dan rakan sekelas juga tidak boleh diabaikan kerana ia juga dilihat *mampu* [evoked appreciation: valuation] mempengaruhi penghargaan sendiri remaja sekolah apabila remaja sekolah berhadapan masalah tekanan di rumah, sekolah mahupun komuniti (Move 2 Step 5- providing an explanation).

{[M11]: *Good* [inscribed appreciation: valuation] parenting relationships and guidance educate and shape the child's personality *well* [inscribed appreciation: valuation]. However, the support of teachers, friends and classmates cannot be neglected as it is also seen as *able* to [evoked appreciation: valuation] influence school teenaged self-esteem when school children are facing stress at home, school or community (Move 2 Step 5- providing an explanation). }

[M8]: Oleh itu, maka *wajar* [evoked appreciation: valuation] satu tindakan *drastik* [inscribed appreciation: composition] diambil oleh pihak PUSPEN *khasnya* [evoked appreciation: valuation] untuk memantapkan tingkahlaku dan jatidiri penagih melalui proses rawatan dan pemulihan yang disediakan (Move 3 Step 1- Providing a pedagogical/theoretical implication).

{[M8]: Therefore, it is *appropriate* [evoked appreciation: valuation] that a *drastic* action [inscribed appreciation: composition] is taken by PUSPEN *especially* [evoked appreciation: valuation] to strengthen the behaviour and identity of the addicts through the treatment and recovery process provided (Move 3 Step 1- Providing a pedagogical/theoretical implication). }

In sum, the above findings show that evaluative stance with emphasis put on either the evoked attitude or inscribed attitude and a combination on the use of both the evoked and inscribed attitudes jointly produce the rhetorical effects [to realize the communicative purposes (moves)] in the conclusions.

Conclusion

Generally, it is seen that in, the discursive activities rest heavily on the writers' manipulation of two linguistic resources (Attitudes and Graduation) to create a convincing stance as perceived by members of the discourse communities. In the conclusions, writers navigate the reader by aligning their works with the meta-evaluation thus, signaling that their study is warranted or worthwhile. This is reflected in the employment of Move 2 Step 1 (indicating significance) and Move 3 Step 1 (providing a pedagogical/theoretical implication).

The above findings show how rhetorical meanings are achieved and reinforced by writers as a result of co-articulation of the linguistic resources employed (cf. Chang & Schleppegrell, 2011). In other words, evaluative stance (Attitudes) and force of the stance (Graduation) jointly produce the rhetorical effects in the conclusions.

This study uses a relatively small corpus (20 conclusions) to explore the evaluative stance employed by the writers of Malay research articles by focusing on the Conclusion section thus, the present study does not aim to generalize the findings to an entire discipline of psychology. However, the findings should allow writing instructors to make informed pedagogical decisions that are grounded in the understanding of the rhetorical strategies, to guide Malay ESL (English as a Second Language) students in producing acceptable and comprehensible arguments in academic writings.

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CEO SUCCESSION ORIGIN, TYPES AND ITS EFFECT ON PERFORMANCE IN MALAYSIA

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Abstract: *The purpose of this study is to investigate the effect of CEO succession origin (Internal versus External), types (Voluntary and Force) on firms' performance. The effect of CEO succession on firms' performance is investigated using a sample size of 80 firms which consists of 40 firms that had been identified from the list in Bursa Malaysia to have experienced CEO succession and 40 firms that do not experience CEO succession in the year 2014. All financial data and variables are gathered from annual reports and Emerging Market Information System (EMIS). The findings of this study indicate that CEO origin has no effect on performance. However, the study found positive association between forced CEO succession on performance. Our finding suggests forced change in the CEOs improve the performance over the lag two years' period. This study offers insights into the importance of CEOs technical expertise in improving firms' performance. The appointment of new CEOs via forced, allows for comprehensive change in the strategy, business operations and firm's future growth.*

Keywords: *CEO succession, corporate governance, performance*

Introduction

Malaysia has seen its fair share of CEO successions over the years. For instance, within the span of three years, Malaysia largest aircraft carrier, Malaysian Airlines has changed its CEO for four times and the nature of the departures of these two-outsider successors was vague as both announced their departure unexpectedly. Due to the vague nature of their departure, there is concerned over its implication on Malaysian airlines performance as a national flight carrier.

Evidently conflicting findings in the literature were found on the effects of CEO succession on performance (Berns and Klarnar, 2017; Zhang et al, 2016). For instance, some studies argue that CEO succession does not influence firm performance (Schepker et al, 2017; Choi et al, 2012; Chen & Hambrick, 2012; Shen & Cannella, 2002), whilst some studies argue that CEO succession results in decreasing firm performance (Pukthuanthong et al, 2017; Zhang et al, 2016; Boyne et al, 2011). In Malaysia there are limited studies conducted on CEO succession and some studies suggest that firms are more likely to change their CEOs when they are facing low performance (Ishak et. al, 2012).

Further, due to the different nature of CEO resignation, few studies have also shown that CEO succession plan is one of the majors concerned in a good transition between voluntary CEO resignation and the newly appointed CEO. Voluntary CEO resignation may positively

improve performance as delegation of tasks was properly executed prior to their resignation. In fact, those firms with proper CEO succession plan have been found to perform better in comparison to those without CEO succession plan (Berns and Kalrner, 2017). Also, when succession planning was not in place, more costs are required due to third party involvement to find suitable CEO candidates. Under duress, limited time frame and strong pressure from certain parties, less qualified CEO may be appointed to fulfil the needs of various parties (Khurana, 2000; Zhang, 2008; Chen and Hambrick, 2012).

Nonetheless, circumstances surrounding the nature of appointment either internal (CEO Insider) or external (CEO Outsider) is an interesting avenue for research due to major differences between different types of CEOs appointment. For instance, Malaysian Airlines externally appointed CEOs publicly discussed the struggle for reform in the airlines due to various factors ranging from cultural, political, trade unions, business operations and conflicting needs of the stakeholders (Tan, 2017). Internal CEOs are argued to perform better due to their ability to leverage their goals with the right business culture and operation ethics. Nonetheless, for change or reform to exist, the roles of external CEO are imperative for a comprehensive change in the operations and business culture of the firms.

Therefore, due to the different nature of CEOs appointment and resignation, this research aims to explore more on CEOs appointment either internal or external, voluntary versus forced and its influence over firms' performance. The data collected in this research is collected from annual reports and Emerging Market Information System (EMIS). The size of the sample is 80 which consists of 40 firms that had been identified from the list in Bursa Malaysia to have experience CEO succession and 40 firms that do not experience CEO succession. The CEO succession year is 2014 to allow transition period from 2007-2008 financial crisis. The firms' performance is measured on year 2016 to effectively measure the CEOs after their appointment in year 2014. A two-year lag is chosen as most CEOs in Malaysia has a contractual agreement of 2 years to improve the level of performance of the firms.

The result of this research would be significant for academics and practitioner whereby it contributes to the growing literature on CEO succession and effective CEO practices in Malaysia. Malaysia is a diverse ethnic country with different religion, cultural and political beliefs. The roles of skilful and competent CEOs are important to improve the company's performance. Though, competent CEOs, can be less effective when there is lack of CEO awareness on the divergence of ethnic, cultural and political factors. Therefore, we suggest future studies to delve on cultural and political issues to understand its implication on CEO effectiveness. Also, the outcome of this research would also help companies to understand the significant impact of CEO succession and measures to be taken by companies to ensure that future CEO succession planning is being done in the most strategic ways.

Literature Review

Research on CEO succession have long existed since the 1960s (Grusky, 1963; Gamson & Scotch, 1964; Lambertides, 2009). The roles of CEO as a steward in achieving firms' goals is an essential factor of a successful performing firms. Upper echelon theory has recognised the roles of CEO as the central factors in running, initiating and adapting to strategy changes in an organization (Zhang et al, 2016; Berns and Kalrner, 2017; Schepker et al, 2017).

Past studies on the stock market reaction and firm performance show that market react positively to the announcement of CEO succession (Rhim et al., 2006; Huson et al., 2004). On top of that, Bernard et al (2016) finding also indicate that CEO succession have a positive influence on firm performance which occur five years after the succession event. On a short period of CEO succession, Ishak et al (2013) find that CEO succession improves post firm performance two years after the CEO succession.

Despite the important roles of CEO, past literature on CEO succession has raised suspicions about the benefit of CEO succession¹ and some studies suggest improvement of the firm performance can only be observed when capable CEO was appointed in comparison to its predecessor (Haveman, 1993; Chen and Hambrick, 2012). In fact, CEO succession is argued as a ritual rather than a sincere effort in improving corporate performance (Chen & Hambrick, 2012; Pukthuanthong et al, 2017). In a few circumstances, the appointment of unqualified CEOs resulted in discontinued operations of firms due to CEOs inability to revive the company's financial condition (Barron et al., 2011). Since conflicting findings are found in previous, we posit the first hypothesis as follows:

H1: CEO succession effects firm's post performance.

CEO Successor Origin and Firms' Performance

Past studies on CEO succession has identified CEO successor origin either internal or external appointment as an important factor influencing firm performance (Ishak et al, 2012; Lauterbach et al, 1999). CEO experienced is measured based on CEOs ability to transform companies into a profitable company after their appointment. Nevertheless, the experience differs between those who develop their experience within the organisation and those externally appointed CEOs.

Previous studies suggest that external candidate is considered when their qualification is far more superior than internal candidate and has greater capabilities in managing the firms (Ishak et al, 2013; Lauterbach et al, 1999). Further, firms' may also opt for external candidates when there are no candidates available internally that fit the roles of the CEO (Parrino, 1997; Barron et al, 2011). In a technical industry like Malaysian Airlines CEO expertise is vital, and finding a suitable, and well experience candidate is a daunting task. Also, announcement of CEO succession may negatively affect the stock market if the financial situation of a firm is in a dire state. Instead, news on the appointment of well qualified CEOs may improve market confidence and send positive signal to the market (Finkelstein & Hambrick, 1996; Parrino, 1997; Shen & Cannella, 2002; Lambertides, 2009).

Chen and Hambrick (2012) on their research on CEO replacement in turnaround situations, conclude that firms that hire outsider as CEO had a better chance of improving firm performance when the firm is said to be underperformed. In fact, Khurana & Nohria (2000) find that no improvement is observed in the performance of the firms that internally appointed their CEO as compared to external appointed CEO post succession event.

Conclusively, the effectiveness of internal CEOs over external successor varies between firms, some appoints internal candidate for the CEO position to ensure that firms' current strategy is continued and some prefer external CEOs due to their technical expertise (Parrino, 1997; Berns & Klarner, 2017). Further, change in the top management may negatively influence employee's motivation when outside CEOs are appointed (Shen & Cannella, 2002). Since conflicting findings are found on the research on CEO successor origin and performance, this study posits the second hypothesis as follows:

H2: Internal and external CEO succession types effects firms' post performance.

¹ CEO succession is defined as the departure of a CEO from its official position but does not necessarily the firm because some CEO will take up another position such as the Chairman when they relinquish the CEO position (Barron et al, 2011).

Succession Type and Firm Performance

Aside from CEO successor origin, there is also a difference between the performance of the CEO when the resignation is either voluntary or forced. Lambertides (2009) on the study of CEO vacancy and long run economic effects reports that voluntary CEO succession as a result of retirement have a significant positive relationship with post firm performance. Plausible explanation is due to its planned transition of the CEO, and firm's ability to understand the effect of CEO succession on market reactions. It is argued that planned transition will allow the firms to adjust with the new management leadership and this positively influence post firms' performance. Whereas, when CEOs departure were forced succession, the negative effects of the change in the new management may reduce the firms' focus on their strategy and post-performance (Khurana & Nohria, 2000; Huson et al, 2004). Further, forced succession of the CEO may be linked to negative activities such as earnings management, fraud, political influence and also CEO incapability to manage firms' internal conflicts.

Despite the consequences of forced succession, effective management leadership after forced succession also illustrate firms' ability to embrace on new ideas and strategic goals. Also, by appointing a more qualified and experience CEOs after forced succession, firms' can effectively implement positive work culture, strategic goals and direction. Amidst the ongoing debate on the effect of forced succession on performance, recent study findings found that both voluntary and forced CEO succession is not significantly related to post firm performance (Bernard et al, 2016; Ishak et al., 2013). Due to the conflicting findings, we aim to investigate CEO resignation either forced or voluntary on firms' performance.

Hence, the third hypothesis is as follows:

H3: CEO succession types effects firms' performance.

Research Methodology

The research model is as follows:

$$PERFORMANCE = \alpha 0 + \beta 1 TURNOVER + \beta 2 ORIGIN + \beta 3 TYPE + \beta 4 LEV + \beta 5 FIRMSZ + \beta 6 ROA_{t-1} + \beta 7 ROE_{t-1} + \beta 8 ROS_{t-1} + \beta 9 CURRENT + e$$

The explanation of dependent, independent and control variable is as follows:

$\alpha 0$	Intercept
<i>TURNOVER</i>	CEO turnover (1 or 0)
<i>ORIGIN</i>	Origin of successor (Internal or External)
<i>TYPE</i>	Turnover Type (Voluntary or Forced)
<i>LEV</i>	The debt level of the firm
<i>FIRMSZ</i>	Firm size
ROA_{t-1}	Return on Assets (1 year before succession)
ROE_{t-1}	Return on Equity (1 year before succession)
ROS_{t-1}	Return on Sales (1 year before succession)
<i>CURRENT</i>	Current Ratio (Liability of the firm)
<i>e</i>	Error term

Table 1 presents the list of variables and its measurement. The dependent variables used to measure firm performance are ROA, ROE and ROS. We select the CEO succession in year 2014 based on the announcement made in Bursa Malaysia. CEO succession (SUCCESSION) is indicated as 1 if the firm had experience CEO succession or 0 otherwise (Ishak et al., 2013).

Similarly based on Bursa Malaysia announcement, the CEO origin (ORIGIN) is indicated as 1 if their CEO is from within the firms or 0 otherwise. Following Georgakakis and Ruigrok (2017), successor from within the firm is known as an insider/internal CEO while successor, other than within the firm is known as an outsider/external CEO successor. Similar to Schepker et al. (2017) research, CEO succession type (TYPE) is indicated as 1 if the firm CEO succession is voluntary or 0 otherwise.

There are six control variables used for this study. Firm size is measured using the natural logarithm of total assets collected from annual report of the firms. Past studies have considered firm size to control for large firms' reaction and their ability to change their management (Pi and Lowe, 2011). Firm's leverage ratio is collected from Emerging Market Information System (EMIS) database to measure the percentage of total liabilities over total assets, and control for firm's financial risk (Zhang et al, 2016; Chen and Hambrick, 2012). Three control variables (ROA_{t-1} , ROE_{t-1} , ROS_{t-1}) are used to control for companies past performances. Past performances are important indicators to gauge CEO ability to improve firms' performance. To avoid biasness in firms' performance, past firm performance provide better interpretation over post performance measure after CEO appointment (Zhang et al, 2016, and Boyne at al., 2011). We used past performance measure in year 2013 one year prior to CEO succession. Finally, to control for firms' liabilities we use current ratio (Chen and Hambrick, 2012).

Table 1. List of Variables and Measurement of Variables

Variables	Acronym	Operationalization
<i>Dependent variables</i>		
Return on Assets	ROA	Percentage of net income to total assets
Return on Equity	ROE	Percentage of net income to shareholder's equity
Return on Sales	ROS	Percentage of net income to net sales
<i>Independent Variables</i>		
CEO Succession	SUCCESSION	1 if the firm has CEO succession and 0 if otherwise
CEO Origin	ORIGIN	1 if the firm CEO origin is outsider and 0 if otherwise
Succession Type	TYPE	1 if the firm CEO succession type is voluntary and 0 if otherwise
<i>Control Variables</i>		
Firm Size	FIRM	Natural log of total assets
Leverage	LEV	Percentage of total liabilities to total assets
Return on Asset prior to succession	ROA_{t-1}	Percentage of net income to total assets prior to succession
Return on Equity prior to succession	ROE_{t-1}	Percentage of net income to shareholder's equity prior to succession
Return on Sales prior to succession	ROS_{t-1}	Percentage of net income to net sales prior to succession
Current Ratio	CURRENT	Liquidity ratio measure by current assets over current liabilities

Sample Selection

The sample of the study includes 80 companies except for financial institutions listed in the main market of Bursa Malaysia. This study used balanced observation of 40 companies with CEO succession and another 40 companies within the same industries and size act as control firms. A match-pair process is adopted in the control group, with similar financial year end, size and sector to allow comparison to be made between the firms selected in this study. The CEO succession year is 2014, 7 years after global financial crisis in year 2007-2008, and considered as the year of financial stability in Malaysia with growth ranging from 4.5 to 5.5%. Following Ishak et al. (2013), the dependent variable which is the performance ratios are collected in year 2016, which is 2 years after CEO succession to adequately measure CEO effectiveness. In their study, Ishak et al. (2013) suggest that post performance measure improve after 2 years of CEO appointment in Malaysia. The 2 years is also based on the average number of years of contract renewal for CEOs appointments in Malaysia.

All variables used for this study are gathered from annual reports of the companies and Emerging Market Information System (EMIS) database. The CEO succession variables are collected from annual reports announcement on Bursa Malaysia and the financial ratios are collected from EMIS.

Results and Findings of The Study

Descriptive result

Table 2.0 depicts the descriptive statistics for all variables. The average percentage of return on asset (ROA) is -0.956%. The minimum and maximum percentage of ROA is -67.67% and 39.76% respectively. This reflect the diversity of the sample where some poor performance firms' ROA is linked to firms experiencing CEO succession. Previous studies suggest evidences of poor performance as one of the factors for CEO succession and most firms selected in this study have negative average ROA (Finkelstein & Hambrick, 1996; Parrino, 1997; Shen & Cannella, 2002; Lambertides, 2009).

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
ROA	-0.956	18.035	-67.670	39.760
ROE	-9.809	58.488	-246.700	73.550
ROS	2.113	39.634	-88.000	173.190
CEOTRN	0.5	0.5	0	1
CEOORG	0.45	0.503	-1	1
TURNTTP	0.625	0.490	-1	1
ROA(t-1)	-15.662	88.796	-554.38	11.34
ROE(t-1)	-4.231	93.637	-551.02	148.29
ROS(t-1)	-13.828	69.239	-407.45	23.88
FRMSZ	13.383	2.259	8.907	20.938
LEV	3.074	6.557	-1.69	42.22
CURRENT	1.827	1.295	0.04	6.09

Similarly, negative ROE is also observed with an average of -9.809%. The range of minimum and maximum percentage of ROE is from -246.7% to 73.55%. The minimum ROE suggests significant losses of the firms which justify for CEO succession either voluntary or forced. The final performance measure, ROS, has an average percentage of 2.113% whilst the minimum percentage is -88.00% and the maximum percentage is 173.19%. The large spread of ROS allows this study to further understand the effect of CEO succession on ROS.

The mean for CEO succession, is 0.5, followed by CEO origin whose mean statistics is 0.45 and CEO succession type mean statistics is 0.625. The average percentage of ROA_{t-1} is -15.66% whilst the maximum percentage is 11.34% and the minimum percentage is -554.38%. The average percentage of ROE_{t-1} is -4.23%, whilst the maximum and minimum percentage both stand at 148.29% and -551.02% respectively. As explained earlier, previous studies suggest lower performance as the main justification of CEO successions with minimum percentage of -551.02%, highlight the dire states of the firms. We also observed discouraging trends in return on sales, average ROS_{t-1} stands at -13.82% with maximum percentage of 23.88% and minimum percentage of -407.45%.

Table 3 shows the distribution of internal versus external CEO succession. From the table it can be summarized that 55% percent of the CEO were internally appointed and 45% were externally appointed CEO. The internal appointed CEO suggests firm's tendency to continue with firms' business strategy and avoid negative publicity from CEO resignation. Nonetheless, 45% of the firms appoint external CEO indicating shareholders' interest to urgently change the firm' business structure and gain shareholders' interest and trust. Further, based on the sample of this study, most CEOs resign voluntary to avoid negative news and reaction from the stock market. Nonetheless forced CEO succession accounts for 37% of CEO succession and signal firms' effort in gaining the trust of shareholders and improve the firm's overall strategy.

Table 3. Distribution of CEO Succession Observation based on Insider, Outsider, Voluntary and Forced CEO Succession

	CEO Succession	
	No. of Observation	Percentage (%)
Internal	22 of 40	55
External	18 of 40	45
Voluntary	25 of 40	63
Forced	15 of 40	37

Table 4 presents the distribution of performance between firms experiencing CEO succession and those without CEO succession. As predicted, average performance of the firms experiencing CEO succession is weak in comparison to those without CEO succession (Average ROA and ROE are only -0.96 percent and -9.81 percent respectively). Since the control firms of this study are selected based on similar financial year end, size and sector, most firms without CEO succession are also observed to experience moderate or low average ROE, ROA and ROS respectively.

Table 4. Distribution of Performance based on CEO succession

	Performance Ratios	
	CEO Succession	Without CEO Succession
Average ROA	-0.96	3.23
Average ROE	-9.81	30.13
Average ROS	2.11	2.78

Pearson Correlation Results

Table 5 depicts the Pearson correlation result. There is significant positive relationship between return on equity (ROE), firm size (FRMSZ) and current ratio at 1% significant level. It can be interpreted as most firms with good performance is linked to firms' size and their liquidity level.

Also, significant positive relationship at 1 percent level between return on assets lag one year (ROA t-1) and return on sales lag one year (ROS t-1) with coefficient value of 0.961 at 1 percent significant level is observed. Further, there is also 5% significant positive relationship between return on assets lag one year (ROA t-1) and leverage (LEV). In fact, significant negative relationship at 1% between return on equity lag one year (ROE t-1) and firm size (FRMSZ) is also observed. It can be summarized that past performance has an effect on future performance.

Further, as shown in Table 5, positive relationship at 5% significant level between return on sales lag one year (ROS t-1) and leverage (LEV) is also found. Finally, there is positive relationship at 1% significant level between firm size (FRMSZ) and current ratio (CURRENT). It indicates association between firms' size and liquidity ratio.

Table 5. Pearson Correlation Matrix

		ROA	ROE	ROS	CEOTR	ROA (t-1)	ROE (t-1)	ROS (t-1)	FRMSZ	LEV	CURRENT
ROA	Correlation	1.000									
	Sig. (2-tailed)										
ROE	Correlation	0.122	1.000								
	Sig. (2-tailed)	0.279									
ROS	Correlation	0.579**	0.082	1.000							
	Sig. (2-tailed)	0.00	0.471								
CEOTR	Correlation	-0.156	-0.152	-	1.000						
	Sig. (2-tailed)	0.167	0.178	0.010							
				0.931							
ROA (t-1)	Correlation	-0.140	0.010	-	-0.159	1.000					
	Sig. (2-tailed)	0.214	0.930	0.040	0.158						
				0.726							
ROE (t-1)	Correlation	-0.004	-0.050	-	-0.71	-0.123	1.000				
	Sig. (2-tailed)	0.969	0.661	0.004	0.354	0.278					
				0.969							
ROS (t-1)	Correlation	-0.020	0.024	-	-0.215	0.961**	-0.109	1.000			
	Sig. (2-tailed)	0.863	0.834	0.008	0.056	0.000	0.335				
				0.943							
FRMSZ	Correlation	0.009	0.432**	0.018	0.026	0.044	-	0.046	1.000		
	Sig. (2-tailed)	0.940	0.000	0.872	0.820	0.697	0.799**	0.684			
				0.000			0.000				
LEV	Correlation	0.061	0.003	0.153	0.103	0.268*	0.018	0.347**	0.044	1.000	
	Sig. (2-tailed)	0.591	0.977	0.175	0.363	0.016	0.877	0.002	0.698		
				0.994							
CURR ENT	Correlation	-0.036	0.883**	-	-0.190	0.025	-0.097	0.037	0.513**	-	1.000
	Sig. (2-tailed)	0.752	0.000	0.001	0.91	0.824	0.393	0.747	0.000	0.053	
				0.994						0.643	

Analysis of results

Model 1 (Table 6) presents the results of ROA with three independent variables which are CEO succession, CEO origin and succession type. All three independent variables show insignificant relationship with ROA. Therefore, we failed to support hypothesis 1 of this study H_1 : *CEO succession effects firm's post performance* when performance is measured by ROA.

Table 6. MODEL 1 CEO succession and firm's post performance

Dependent Variable – ROA	Coef.	S.E	Z	P> z
CEOTURN	0.5978	0.4649	1.28	0.2027
CEOORG	-0.1342	0.1777	-0.75	0.4527
TURNTTP	-0.3090	0.1941	-1.59	0.1159
ROA(T-1)	0.7371	0.4621	1.59	0.1152
ROE(T-1)	0.7870	0.3462	2.27	0.0261*
ROS(T-1)	-0.9513	0.4647	-2.04	0.0444*
FRMSZ	3.6633	4.4756	0.8185	0.4158
LEV	1.1235	0.5454	2.05	0.0431*
CURRENT	0.3244	0.4795	0.68	0.5009
CONS	-4.1480	3.7593	-1.10	0.2736

CEOTURN: Firm experiencing succession, CEOORG: Origin of CEO, TURNTTP: CEO succession type, ROA(t-1): return on assets prior to succession, ROE(t-1): return on equity prior to succession, ROS(t-1) : return on sales prior to succession, FRMSZ : firm size, LEV: leverage, CURRENT RATIO: Current ratio of the firm.* P-value is significant at when $p < 0.1$.

Model 2 (Table 7) shows negative significant results of ROE and succession types at 10 percent significant level. Therefore, our study supports H_3 *CEO succession types effects firms' firm performance* when performance is measured by ROE. This result shows that succession type influence firm's performance. It is observed that when succession is by forced the change in management improve firms' performance. This allows for drastic change on the management structure and process of an organization. Lastly in Model 3 (Table 8), ROS shows negative significant results with succession types at 10 percent significant level. Therefore, again similar to Model 2, our study supports H_3 : *CEO succession types effects firms' performance* when performance is measured by ROS.

Table 7. MODEL 2 CEO succession and firm's post performance

Dependent Variable – ROE	Coef.	S.E	Z	P> z
CEOTURN	0.8093	0.5388	1.50	0.1376
CEOORG	-0.2126	0.2060	-1.03	0.3056
TURNTTP	-0.3860	0.2250	-1.71	0.0907*
ROA(T-1)	0.2912	0.5357	0.54	0.5884
ROE(T-1)	0.7362	0.4013	1.83	0.0708*
ROS(T-1)	-0.5489	0.5387	-1.02	0.3117
FRMSZ	11.12	5.1876	2.14	0.0355*
LEV	0.6253	0.6322	0.98	0.3260
CURRENT	0.6731	0.5558	1.21	0.2299
CONS	-10.3510	4.3574	-2.37	0.0203

EOTURN: Firm experiencing succession, CEOORG: Origin of CEO, TURNTTP: CEO succession type, ROA(t-1): return on assets prior to succession, ROE(t-1): return on equity prior to succession, ROS(t-1): return on sales prior to succession, FRMSZ: firm size, LEV: leverage, CURRENT RATIO: Current ratio of the firm. * P-value is significant at when $p < 0.1$

Table 8. MODEL 3 CEO succession and firm's post performance

Dependent Variable – ROS	Coef.	S.E	z	P> z
CEOTURN	0.7754	0.5242	1.47	0.1436
CEOORG	-0.2125	0.2004	-1.06	0.2926
TURNTP	-0.3806	0.2189	-1.73	0.0865*
ROA(T-1)	0.3256	0.5212	0.62	0.5341
ROE(T-1)	0.9140	0.3905	2.34	0.0221*
ROS(T-1)	-0.7364	0.5241	-1.40	0.1644
FRMSZ	5.4858	5.0473	1.08	0.2802
LEV	1.455	0.6150	2.36	0.0207*
CURRENT	0.5479	0.5407	1.01	0.3144
CONS	-6.0154	4.2395	-1.41	0.1604

CEOTURN: Firm experiencing succession, CEOORG: Origin of CEO, TURNTP: CEO succession type, ROA(t-1): return on assets prior to succession, ROE(t-1): return on equity prior to succession, ROS(t-1) : return on sales prior to succession, FRMSZ : firm size, LEV: leverage, CURRENT RATIO: Current ratio of the firm.* P-value is significant at when $p < 0.1$

Nonetheless we failed to support our second hypothesis, *H2 Internal and external CEO succession types effects firms' post performance*. Factors that may contribute to this result may be due to the fact that firm's performance are the results of CEO expertise instead on their origin either internal or external appointed CEOs. In a situation where no qualified CEOs available internally the results may differ as certain industries may requires certain skills, experience, technological change in the business operation whereby no internally appointed candidates fit the roles (Parrino, 1997; Berns & Klarner, 2017).

Conclusion

The objective of this research is to investigate the effect of CEO succession on firms' performance. Based on the sample of 80 firms, our finding indicates that forced CEO turnover improve performance. One plausible explanation may be due to change in the work culture, business strategy and firm's objective after forced CEO turnover. Newly appointed CEO after forced CEO succession, may have the support and trust of shareholders that facilitates new management commitment in delivering better financial results.

Also, the effects of CEO technical expertise and shareholders' activism in reviving the firm's performance, is the core factor ensuring firms' ability to remain competitive in the market. Even though our study fails to associate any association between CEO origin either internal or external on firms' performance, we believe by segregating the study into technical versus non-technical industry may improve future study's findings. In a technical industry where CEOs expertise is lacking, the appointment of externally appointed CEOs may improve the findings of future studies. Aside from the technical expertise of the CEOs, future studies can also delve into cultural, ethnicity and political factors that may influence CEOs ability to improve firm's performance.

Our findings have several implications towards the growth in the studies surrounding CEOs succession. Firstly, CEOs succession requires a thorough transition period to allow for greater acceptance by the management in the leadership change. Secondly, shareholders' activism is essential to allow for immediate CEOs succession to proceed. Since our findings

indicate positive association between CEOs forced turnover and firms' performance, the roles of the new appointed CEOs lie in their ability to not solely improve financial figures but also the overall business strategy and staff morale.

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FACTOR INFLUENCING FARMERS TO PARTICIPATE WITH SUGARCANE LOADING STATION IN THAILAND

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Abstract: *The objective of this study to provide insights into farmers' influencing factor to have contract farming with sugarcane loading station and participation. Based on a characteristics factor were: age, education level, farm size, experience and farm income and 3 factors of sugarcane small farmers including social participate, economics constraints and individual goals. A set of influencing factors was obtained. Influencing factors classified (a) 6 categories of farmers' social participate (b) 4 categories of farmers' economics constraints and (c) 2 categories of farmers' individual goals.*

Keywords: *factor analysis, sugarcane, loading station, contact farming, farmer participation*

Introduction

Sugarcane is the economics crops that is important for industries and farmers. Especially in industrial part, sugarcane is considered the main raw material that is important to the sugar production industry in Thailand. Sugarcane farmers can earn income for USD 937.5 million per year and Thailand is the second largest sugar exporter of the world after Brazil. However, sugarcane can plant in any region of Thailand and there is a market to buy products that are certain. In Thailand, there are more than 45 per cent of total sugarcane farmers (192,328 families) are the smallholders who holding planted area less than 5.0 hectare. However, the 25 per cent (106,849 families) are the smallholders who holding planted area more than 5.0 hectares but not over 10.0 hectare in 2017. The rest of 30 per cent (128,218 families) are "the head of quota" or largest farmers who are holding planted area more than 10.0 hectare and have their own trucks and higher investment.

The traditional supply chain of Thailand's sugarcane showed that farmers will transport their harvested sugarcane and sales to the middle man then only the mills, due to their limited capacity of truckload. In that traditional system, middleman playing a significant role to collect the sugarcane production from the farmers and re-sell it to the mills. Usually this system will cause to the small farmer's lack of bargaining power in farm price and the mills have to paid more money to the middleman. In order to overcome the traditional supply chain, government implemented a loading station (LS) strategy to reduce the cost of transportation from field to the mill in 2003. In this new supply chain, the loading station is ownership by the sugar mills and was launched about 167 stations in Thailand. In order to reduce the smallholders' cost of transportation, the loading station is set up at the area which nearby to the sugarcane planted area. According to the Chetthamrongchai et al. (2001), the loading station was estimated to save the transportation cost in between 27.8 per cent to 40.9 per cent compare to the traditional supply chain system.

Even the loading station is implemented to save the farmers cost, not all farmers are selling their production with loading station. According to Thailand Department of Agricultural Economics (2017), the current sugarcane's farmers are contracted with loading station is only 67% and remain 33% (98,729 farmers) are still trading their production with middle man. Thus, this research will study on the factor that influencing sugarcane small farmers to join a contract farming with sugarcane loading station.

Literature Review

Innovation Adoption Concept

Rogers and Shoemaker (1971) suggested adopting innovation means making decisions to fully implement that innovation because innovation is a better and more useful way. Acceptance of innovation is a process that begins when a person or a community experiences it. The decide to accept or reject act on the decision and confirm it. The process can be slow or fast. This depends on the key factors - person community and innovation. In terms of composition that innovation Foster (1973) said it arises from the individual and the community that has learned by themselves and how much the innovation benefits the community. Economic necessity has a very much on the acceptance of innovation because most innovations require money, the budget to operate as the economy has a direct impact since the invention of innovation including try it and apply it. Especially innovation agricultural technology that has been used in the community more resulting in examples and imitations within various community groups causing more acceptance of innovation.

Besides that, supporting elements to the adoption of the innovation in terms of cultural factors, beliefs and that value must be compatible with innovation. In general, a person becomes accustomed to a life plan or practice the old way and feel that the original item is already good and don't want to change unless the new one is better. Society factor, the publisher may be opposed to adopted innovation and then making his social situation imbalanced. As for the benefit factor the innovation must benefit the publisher. The speed of innovation is recognized by the people of society. It depends on which innovation the recipient feels are more useful and compatible with social values it has a fast acceptance rate. The acceptance rate for this innovation will varies. According to the state of society although it is the same innovation. Modern social systems have an acceptance rate faster innovation than ancient social system. Therefore, the main characteristics of the innovation that affect the adoption of that is an innovation that is consistent with the social conditions will be recognized faster than the innovation that different from social conditions, Thongtiew (1983). In the same way, with Roeklai (1986) said that the adoption of technology occurs quickly if the technology exterior is compatibility with cultural structures such as beliefs, values, and experiences of the target audience benefit society as a whole and has been practiced effectively in other societies. To embrace innovation, feel, or think innovation can go hand in hand or match one's values, past experience, as well as one's needs. Then it will be accepted faster more than any other innovation, Rogers and Shoemaker (1971). Besides, it was also proposed an acceptance process and innovation is a process that can occur in five steps including awareness stage, interest stage, evaluation stage, experimental stage, and adoption. In which the adoption stage consists of a decision process. In this stage, an individual or community performs an activity that leads to a choice to accept or reject innovation. The decision to accept or not accept deciding is a very important step. Any choice of individuals or communities will also be a result of gaining knowledge and motivation including considering the nature of the innovation in accordance with the economic status follow by social status and traditions which will lead to the step of

implementation and confirmation is the final stage of the decision-making process to accept the innovation.

Agricultural Innovation and Technology Concept

Burton (1992) suggested that an agricultural technology is an applied science that brings the knowledge gained from scientific research to create agricultural machinery, processing and development of new animal species to be used to improve the production on the farm and improving processing, transportation and distribution of agricultural products. But because humans have known to use agricultural technology for a long time by starting use a local technology or villager technology before then development to new technology. Therefore, considering the factors of appropriate technology to use in the community can be considered based on appropriate technology that mean it is a technology that the community needs and developed to suit efficient saving directly to the circumstances direct to the environment and appropriate technology must be activities which use resources and fully local workers and to create inexpensive tools and suitable in local conditions whereby the community to cooperate and be accepted by the community both in social and culture. Rogers (1983) referred that the innovation is an idea, method, or practice that the individual perceives as a new thing or a new idea. It may not necessarily be new knowledge that some people may know but still not developing a good or bad attitude towards that knowledge and still has no attitude to accept or reject. Except for that knowledge can be used to improve and change the work efficiency better. So, agricultural innovation means ideas, knowledge, attitudes, intentions, decisions, accepting new things including new practices of the farmer. Some scholars of agricultural extension considered agricultural innovations, as well as agricultural technology that will be used to promote farmers and innovation is new things but when used, it becomes a technology.

Agricultural innovation and technology of the community that means include the concepts, knowledge, methods and tools. This is something new that the community has adopted to promote community agriculture and must be a suitable technology with the economic, social and biological conditions of farmers is compatible with culture, economic conditions and the environment is consistent with the previous used by the community. Responding to the use of local materials. Suitable for the local environment it can be operated and controlled by local people and the benefits arising from using the technology should be with the technology users.

Concept of Community Culture Economy and Community Participation for Sustainable Development

Thai economics consists of two economic system including the community economic and capitalist economic system. Thai society and culture are at the core of society and culture as a community. The community economy is the majority of Thai people make a living especially in the rural areas. The important characteristics of community economic are families and community as a production unit. The goals of production are existence survival of families and community to be able to support themselves and reproduced in families and community. Therefore, the production has the characteristics for household consumption and produce for sell to gain the money for family's expense more than aiming to produce for maximum profit. The member in families are the main labor in the production process. The production of smallholders is different to the production of capitalist economic system because in the production process of large holders need to invest a lot of budget, labor is hired labor and need a bigger area for production, Nardsupa (2007). The social or community participation is a social gathering both of individual and group participation, United Nation, 1981; Reeder, (1974).

Participation is the right of the people to make a decision in policy that allocation and utilization of raw material which is the people need to participate in planning for maintain the utility of production, service and public facilitation. Therefore, participation means people to get involved in decision-making at different levels to determine the needs of their communities follow by analyze, planning, operation and gain the benefits from community development including monitoring and evaluation of development which gives rise to the foundation of sustainability of development, Hongwiwat (1994).

Material and Methods

Research was conducted in North East of Thailand where sugarcane planted area were largest and lot of sugarcane small farmers (Office of Agricultural Economics,2017). The sample of 500 sugarcane small farmers were selected by cluster sampling (stratified sampling) from population of sugarcane small farmers. The instrument of the research was reviewed by for content validity by a panel of expert (Linder *et al.*,2001). In term of the reliability of the instrument was tasted by Cronbach's alpha coefficient for each variable (Cronbach, 1951). A reliability level of 0.80 or higher was considered acceptable (van den Ban, 1988). The survey of data collection has used the questionnaires to interview. The matrix correlation statistical test was employed to analyse. Age measured by year. Educational level was measured by schooling year. Farm size was measured by total areas owned. Experience was measured by total farming year. Farm income was measured by total farm income. Social participate, Individual goals and Economic constraints was measured by the total score of ranking.

Results and Discussion

Farmer characteristics influencing motivation

The correlation analysis was treated to identify the statistically relationship between the farmers motivation and farmers characteristics aspects. The correlation is presented in Table 1. The majority of sugarcane small farmers are older (51-60 years old) and to categorize them as influential farmers. Age factor indicated the negative relationship (table 2.), means that if the sugarcane farmers were younger, they were much easier adopting new innovation, such as loading station or contract farming, and they tended to be more motivated to request innovation than the elder farmer did. Educational level was varied. Most of the respondent was primary school graduated (64.8%). It was concluded that sugarcane farmer holds a lower educational level, and they tend to refuse adopting a new innovation. Thus, it mentioned that the higher educated farmer was more motivated to apply innovation than the lower educated farmer. Size of sugarcane farm referred to the sugarcane field that farmers owned. The majority of farm owned was 2.1-4.0 hectares (39.0%) follow by more than 6.0 hectares (26.8%), 4.1-6.0 hectares (18.8%) and less than 2.0 hectares (15.4%) respectively. Most of the farmers has experience in sugarcane farm was around 21-30 years and sugarcane are a full-time job. Traditionally, sugarcane farm is a family's business of farmers. Total income average was 5001-15000 USD per season, it was a circumstance that the farmers needed a higher profits or higher price. Therefore, the innovation of sugarcane loading station propose guidelines to increase income of farmers. The higher income farmer was almost high school graduated; therefore, they were really understood the procedure to apply contract with sugarcane loading station.

Table 1. Average of Farmer Characteristics (n=500)

Characteristics	Item
Age	51-60 -year-old
Educational level	Primary school
Farm size of sugarcane	2-4 hectares
Experience in sugarcane farm	21-30 years
Farm income	5000-15000 USD/season

Table.2 Estimated Logit model a sugarcane small farmers motivation to join with sugarcane loading station

Dependent: Motivation	Coefficient (B)	S.E.	Wald	df	Sig.	Exp(B)
Social participate	2.950***	0.331	79.458	1	0.000	19.112
Economic constraint	2.241***	0.285	61.835	1	0.000	9.398
Individual Goal	1.689***	0.249	46.211	1	0.000	5.417
Age	-0.033	0.039	0.698	1	0.404	0.968
Education level	0.121	0.257	0.219	1	0.639	1.128
farm size	0.035***	0.013	6.763	1	0.009	1.035
Constant	1.199	2.302	0.271	1	0.602	3.318

The other factors that influencing farmer to changed their mind to adoption the new innovation can classified as social participated, economics constraints and individual goals (Blake, Robert and Jane Moulton 1965). The results of this study mention in these three factors by details (table 3).

Table 3. Summary of Factor Analysis Results

Items	Factor loading		
	F1	F2	F3
Social participate			
If I involve in any business opportunities which provided by the loading station, I will join as a contract farmer with the sugarcane loading station.	0.831		
If the loading station can provide a channel share the updated information continuously with farmers then it will able to increase my motivation to be contract farmers.	0.830		
If the loading station let the farmers taking part in operating planning will be better.	0.795		
Have a joint meeting with the sugar cane loading will increase my intention to join as contract farmers.	0.752		
If farmers can negotiate the product price with loading station, it will motivate me to continue or join as a contract farmer with sugarcane loading station.	0.748		
Organize a workshop for contract farmers to develop their knowledge is important.	0.695		
Variance (% of explained)	34.264		
Economic constraints			
I willing to join as a contract farmer because loading station offer the lower rate loan.		0.852	
I will join as a contract farmer with sugar loading station because difficult to apply loan with commercial bank.		0.846	
I willing to join as a contract farmer due to the guarantee price offered by loading station.		0.817	
I will join as a contract farmer because of higher cost of production.		0.740	

Variance (% of explained)		30.208	
Individual goals			
I believe that join as a contract farming with sugarcane loading station will able to help me to expand my business.			0.855
I believe that the sugarcane loading station will able to increase my profit.			0.633
Variance (% of explained)			19.652
Total % of variance			84.124

The first factor (F1) can be identified as the social participate of sugarcane contract farmers on loading station. This factor explained about 34.264% of the data variance. It consists of six sub variables, where the highest factor loading is 0.831 with the variable If I involve in any business opportunities which provided by the loading station, I will join as a contract farmer with the sugarcane loading station. Follow by If the loading station can provide a channel share the updated information continuously with farmers then it will able to increase my motivation to be contract farmers (0.830), If the loading station let the farmers taking part in operating planning will be better (0.795), Have a joint meeting with the sugar cane loading will increase my intention to join as contract farmers (0.752), If farmers can negotiate the product price with loading station, it will motivate me to continue or join as a contract farmer with sugarcane loading station (0.748) and Organize a workshop for contract farmers to develop their knowledge is important (0.695). Hence, all question represents the motivation of sugarcane small farmers to participate with the loading station activities.

The second recognized factor (F2) is the economic constraints. The total variance accounted by this factor is 30.208%. There are four sub variables in this factor, which are the I willing to join as a contract farmer because loading station offer the lower rate loan (0.852). Follow by I will join as a contract farmer with sugar loading station because difficult to apply loan with commercial bank (0.846), I willing to join as a contract farmer due to the guarantee price offered by loading station (0.817) and I will join as a contract farmer because of higher cost of production (0.740). The economic constraints are factor that depend on respondent expectation to gain the profit from the loading station and effecting to stay and expand their sugarcane business.

The final factor (F3) is the Individual goals related based on respondent expected advantage from join with sugarcane loading station which contributes 19.652%. There are two sub variables under this factor, which are I believe that join as a contract farming with sugarcane loading station will able to help me to expand my business (0.855) and I believe that the sugarcane loading station will able to increase my profit (0.633). The Individual goals are factor that the requested from loading station and the results is satisfactory its lead to join with loading station.

Conclusion

The influencing factors that effecting on sugarcane small farmers' motivation including social participation, economic constraints, individual goals, education level, and farm size. All factors are affecting farmer's production plans to produce sugarcane because sugarcane production requires relatively high production costs. Therefore, it is important to consider the return of the farmer in order to get a return that is worth the investment. The decision to become a member of the sugarcane loading station in which farmers are expected to receive higher returns. Thus, making a confidence, stable and clear which also affects the decision to join as a member of the sugarcane loading station and increase the production size of farmers in order to increase

the farmers production of sugarcane in order to get more return as well. the above-mentioned components are considered together for investment decisions.

Acknowledgement

The authors would like to acknowledge and thank SEARCA (The Southeast Asian Regional Center for Graduate Study and Research in Agriculture) who are the main scholarships and research financial supported.

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ASSESSING QUESTIONNAIRES VALIDITY OF FISHERMEN VULNERABILITY: A PILOT STUDY IN KEDAH

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Abstract *In general, there are few specific studies that integrate food security aspect in measuring the vulnerability especially in Malaysia. The poverty rate does not depict the real situation of this vulnerable group, for instance basic necessities such as food. The vulnerability index in this study will re-measure the vulnerability by taking into account their food security aspect. Prior of constructing the vulnerability index, the assessment of questionnaires validity is important. Thus, this study chooses fishermen located around the coastal area of Kedah to do the pilot study. The vulnerability dimensions discussed in this study are demographic profile, income, consumption, saving, house/properties ownership, transportation, health and education. The government roles also one of the important determinants to influence fishermen wellbeing in terms of providing infrastructure, financial assistance, legal enforcement, knowledge and training, consultancy, and research development. Meanwhile, community roles being observed from the aspect of keeping the harmonious environment either in good or worst situation. Based on the result from Principal Component Analysis, number of questions were selected to represent related factors and model is adequate to explain the vulnerability situation among fishermen.*

Keywords: *Fishermen Vulnerability, Food Security, Vulnerability Index*

Introduction

In Malaysia, in 2017, there is 2.7 millions of household's income from B40 group which 40% lowest with income lower than RM3860 per month. The objective of 'Zero Hunger' in the current achievement of Sustainable Development Goal (SDG) 2 for Malaysia is below target and need to improvise. In view of food security among B40, this situation would create a threat towards people in rural area especially among fishermen whose income is only around RM1500 per month. Thus, the main question here is does this group who is actually produce food are being exposed to food security threat? In general, there is least number of studies that integrate food security aspect from the valuation of threat. There is 2.7 millions of household's income from B40 group which 40% lowest with income lower than RM3860 per month (Bernama, 2017). From that total, almost 40% B40 household lived in rural area. (Unit Perancang Ekonomi (EPU), 2016). In RMK10, Government has succeeded in forming an inclusive rural community that could reduce poverty rate from various programs such as Economic Transformation Programme (ETP), Government Transformation Programme (GTP). However, there are still many issues and challenges that need to be rectified in RMK11 focusing on B40 group in terms of reducing the socioeconomic gap especially the vulnerable group.

The B40 group defined as the vulnerability group due to the fact that they have less income and wealth asset and for the fishermen specifically, they are being exposed to multi stresses such as climate change, excessive trawlers, beach erosion and pollution that impacting their livelihoods (Malakar,2018).The unexpected adverse effects closely related to the fishing industry which involve fishermen and coastal communities whose depend solely on fishing industry. The strategies that being used by this group when facing such situation encompass 2 aspects which is strategy on food and strategy on expenditure and income.

Malaysia's current achievement for Zero Hunger in SDG2 is below par and need to be rectified. The main concern is towards B40 group from rural area especially fishermen whose income totally affected by nature force. In many developing nations, household that depends on fishing activities as a main source normally threaten by food security problem (Orencio & Fuji, 2013; Hyunh & Stringer, 2018). Hence questions raised does these food producers are also part of the vulnerability group in food security issue and what are their strategies to survive in meeting their necessities?

In general, there are few specific studies that integrate food security aspect in measuring the vulnerability especially in Malaysia. The poverty rate does not depict the real situation of this vulnerable group, for instance basic necessities such as food. The vulnerability index in this study will re-measure the vulnerability by taking into account their food security aspect. Currently, policies on food security ('Dasar Agromakanan Negara' (DAN), 2011-202 dan Dasar Keselamatan Makanan Kebangsaan) is aligning towards supplies that involve with availability and stability aspects. However, there is still no particular policy designed focusing on the aspect of accessibility and utilization. This index also important in managing the vulnerability threat that need an indicator especially involve with food security. With index, policymakers could make more proactive decision (Orencio & Fuji, 2013). The achievement in various food security indicator show the nation will not only benefited from better food access, but from the availability, utilization and stability from the food necessities. This food security assurance also vital since it becomes one of the benchmarks in developing a nation.

Research Objectives

- 1.To identify factors influence vulnerability of fishermen.
- 2.To evaluate food security status among the vulnerable group.
3. To produce vulnerability index integrate with food security concept.

Conceptual Framework

Most of the researches that study on vulnerability include factors such as geographical, environmental, economics, demographics, policies and capital (Below et al., 2012) ; (Chen & Lopez-Carr, 2015), (Ahsan & Warner, 2014) and (Allison & Ellis, 2001). In study by (Orencio & Fujii, 2013) the study integrate food security nevertheless do not embed the whole food security dimension consist of stability, availability, accessibility and utilization. This study attempted to integrate food security concept in the existence framework. Factors were adapted from indicator factors framework that influence the communities' vulnerability (Buckel et al., 2001). As indicated in Figure 1, generally, this conceptual framework integrates seven (7) main factors which consist of demographic, capital, geographical, natural endowment, policies, economy and food security.

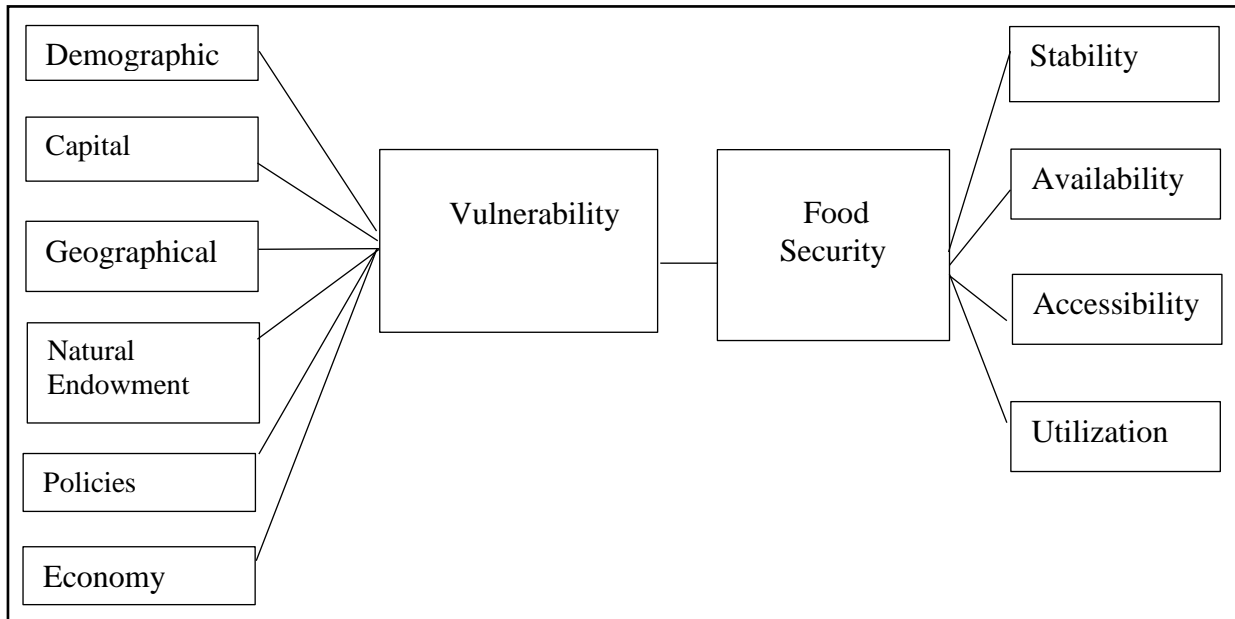


Figure 1: Conceptual Framework

Methodology

Questionnaires Design

In order to construct the questionnaires, researcher reviewed number of studies to attain related factors in fishermen vulnerability thematic area. The literature covers mostly the time between 2014 to 2020. This study utilized academic search engines and databases such as Scopus, Web of Science and Google Scholar to discover the range of literature. Key terms used were fishermen/farmers vulnerability, vulnerability index and household food security.

Operational Definition

Vulnerability

The vulnerability context defined as external factors that influence human living and could not be controlled, for instance, factors like shock, trend and season. Shock could be referred as diseases, natural disaster, economic conflicts and well growth of livestock and crops. Meanwhile, trend encompasses population, causes of trend (including conflicts), world and nation economics, government (political) and technology. Season include prices, production, health and job opportunities. The vulnerability factors are factors that directly influence asset ownership and ability to fulfil their basic needs.

Moser (1998), also explained the vulnerability concept and poverty are the same concept but using different approaches. At fundamental, poverty is a static concept and been measured in specific duration. Meanwhile, vulnerability is a dynamic concept include various multidimensional aspect dealing with socioeconomic status changes involve with individuals entry and exit from this concept.

Demographic

The vulnerability level could be measured from the adaptive capacity.(Hahn, Riederer, & Foster, 2009) stated adaptive capacity is quantified by the demographic profile of a district such as percent of female-headed households, the types of livelihood strategies employed and etc.

Capital

Capital in this study measures from the sub-indicators consist of human, social, physical, financial and natural.

Human capital is measured as the household health situation, education level and knowledge in fishing activities which determines his capacity to work. Assets and human capital positively contribute to higher levels of calorie consumption. In particular, education (an asset from an economic perspective), and the number of rooms in a house (an approximation of household wealth), have the largest positive correlation with the level of food consumption (Capaldo, Karfakis, Knowles, & Smulders, 2010)

Social capital implies the membership of citizens associations and relationships of trust that facilitate co-operation. (Amir Zal, 2016), stated the social capital consist of bonding and linking which depend on the capacity of the communities to develop the networking. Nevertheless it is also subject to fragility. From the social dimension, (Shaffril, Abu Samah, & D'Silva, 2017) found the level of adaptation in responds of climate change among Malaysia fishermen is far from satisfactory.

Physical capital denotes the basic infrastructure and tools that farmers have such boats and fishing equipment, housing, livestock, food storage and valuable things (private ownership) and public facilities such as jetty, roads and etc. (Färe, Grosskopf, & Walden, 2017) in their study stated measuring the capital value of fishing vessels and fleets is important to track investment and disinvestment in fisheries, and to provide information on capital consumption in economic models.

Meanwhile, financial capital is referred as savings at home or in the bank that the household owes or acquires. Sole providers of household income exhibited lower financial security than those with shared responsibility, which suggests restricted ability to make changes in livelihood (Lohmann, 2016).

Natural capital implies the resources that farmers can acquire from nature such as land, soil and water.

Geographical

Geographical in this study measures the sub indicators such as climatic change, change in environmental and level of security in the community. (Mohamed Shaffril, D'Silva, Kamaruddin, Omar, & Bolong, 2015) found the coastal community are shown to record a high mean score on their awareness toward changes relating to the sea, temperatures and the coast. (Malakar, Mishra, & Patwardhan, 2018) emphasize on multiple stresses, that is, increasing pollution, excessive trawlers, decreasing mangroves and climate change will contribute towards fishermen's' vulnerability. In terms of conflict, most fishermen believe that harmony within groups of fishermen is very important (Liao, Huang, & Lu, 2019)

Natural endowment

Farmers or fishermen depend exclusively on natural resources for their livelihoods. Instead of dependency in agricultural activities, the collection of forest produce are also the major means of livelihood. (Singh et al., 2017). This study assessing the importance of natural endowment such as beach for recreational and collecting items for handicrafts and collection of items such as wood and herbal from forest to generate some income.

Institutional policies

Increasing of trawlers, illegal equipment, ghost fishing, marine debris and marine pollution contribute to the decrease of resource pool that need close monitoring from the authorities. (Liao et al., 2019) in obtaining the general comments on fishery management at coastal of

Taiwan, more than half of fishermen expressed dissatisfaction about poor communication with policymakers. Owners of small fishing boats believed that their voices were not counted in the industry, often resulting negative nature of their participation in the relevant meetings. They are also expect the government to regulate the source of the dispute in order to avoid conflict between the different fishery group themselves.

Economy

Most studies of small-scale fisheries in developing countries in the last 25 years have tended to emphasise small-scale fisherfolks' resource dependence and the open-access nature of fisheries that together lead to resource degradation, poverty and marginalisation. (Allison & Ellis, 2001). In view of this, government has initiated financial incentive and if all subsidies such as fuel subsidy, catch incentives and livelihood subsidy is not provided to fishers, fishing boat A-Class most affected because without the subsidies, their monthly income is just RM212 a month compared to boat B-Class RM1945 and boat C-Class as much as RM10,676 a month.(Ali et al., 2017)

Food security

Food security can be measured at the national level by estimating the availability and distribution of food within a country or at the individual (or household) level by asking people directly about their experiences of obtaining enough food. (Department of Agriculture et al., 2019. As cited in (Carletto, Zezza, & Banerjee, 2013), ‘‘Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.’’ This widely accepted definition agreed upon at the 1996 World Food Summit (FAO, 1996) points to the four key dimensions of food security:

1. Food availability: The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid).
2. Food access: The access to adequate resources (entitlements) to acquire appropriate foods for a nutritious diet. Entitlements are defined here as the set of all commodity bundles over which a person can establish command, given the legal, political, economic and social arrangements of the community in which he or she lives (including traditional rights such as access to common resources).
3. Food utilization: The utilization of food through adequate diet, clean water, sanitation, and health care, to reach a state of nutritional well-being in which all physiological needs are met. This highlights the importance of non-food inputs in food security. For example, it is insufficient for an individual to receive an adequate quantity of food, if he or she is unable to make use of the food due to illnesses resulting from inadequate sanitation or poor sanitary practices.
4. Food stability: The stability of access to adequate food at all times, independent of shocks (such as economic or climate- related crises) or cyclical patterns. This includes issues of seasonal food insecurity, such as the agricultural period before harvest known as ‘the hunger season’.

Sampling - Participants and Criteria

This study focusing on registered fishermen under Lembaga Kemajuan Ikan Malaysia (LKIM) holding an income less than RM3860.00. The respondent is basically the household leader who totally depend in the fisheries activities for their main income source. They are also coastal fishermen from ‘‘A-Class’’ group. The ‘‘A- Class’’ group is defined as those who are using the traditional vessel (small boat with less than 40 GRT (Gross Registered Tonnage)) and access

distance from 0-5 nautica miles (for Kedah area the authority has rezoned the distance increase up to 8 nautica miles). For this pilot study, researcher used the minimum sample (N=30) that is recommended by Browne (1995) as cited in his study to estimate the sample size for the pilot trial, the simplest methods to apply are sample size rules of thumb.

Sampling Method

Based on the information from LKIM, the population distribution of coastal fishermen (A-Class) in Kedah are as follows:

Areas	Normal Worker	Vessel Owner	Total	Percentage (%)
PNK Kuala Kedah	293	438	731	28
PNK Kuala Muda	112	174	286	11
PNK Langkawi	197	462	659	26
PNK Tanjung Dawai	339	340	679	26
PNK Yan	82	141	223	9
Total	1023	1555	2578	100

PNK – *Persatuan Nelayan Kawasan*

This study use random sampling technique and respondents were interviewed face to face. The background information (location distribution) of the respondents were gathered from *Persatuan Nelayan Kawasan* (Fishermen Association) and to get further details researcher contacted the local leader who in charge particular area to get more information as to meet the sample criteria requirement.

Analysis Procedure

The questionnaires are based on descriptive and Likert-scale form. This study uses the Cronbach Analysis, Principal Component Analysis (PCA), Cross tabulation, Correlation test and Ordinal Regression to test the reliability of proposed model. Result will be based on the information from model fitting, goodness of fit and Pseudo R-square.

Result and Discussion

Descriptive Statistic

For this pilot study, researcher only covered Kuala Kedah, Tanjung Dawai and Yan which consist of 56.7%, 23.3% and 20% each from the total sample (N=30). Table 1(a) shows the descriptive statistics of the respondents. 46.70% of the respondent attained proper education until high school, however only 40% of them are able to own a property. Respondents able to access the electricity and water supply at home. They do have certain area to do any gardening activities, however most of them (75%) do not involve in farming activities either for self-consumption or for commercial. There is only 20% of them who engage with second economic activities. The minimum working experience in this sample is 5 years while maximum is 55 years of working. While number of members in one household are ranged from 1 to 15 persons. 100% of the respondents do have means of transportation, communication and media link platform (television) and basic equipment for food preparation such as kitchen and fridge.

Table 1 (a): Descriptive Statistic (Demographic)

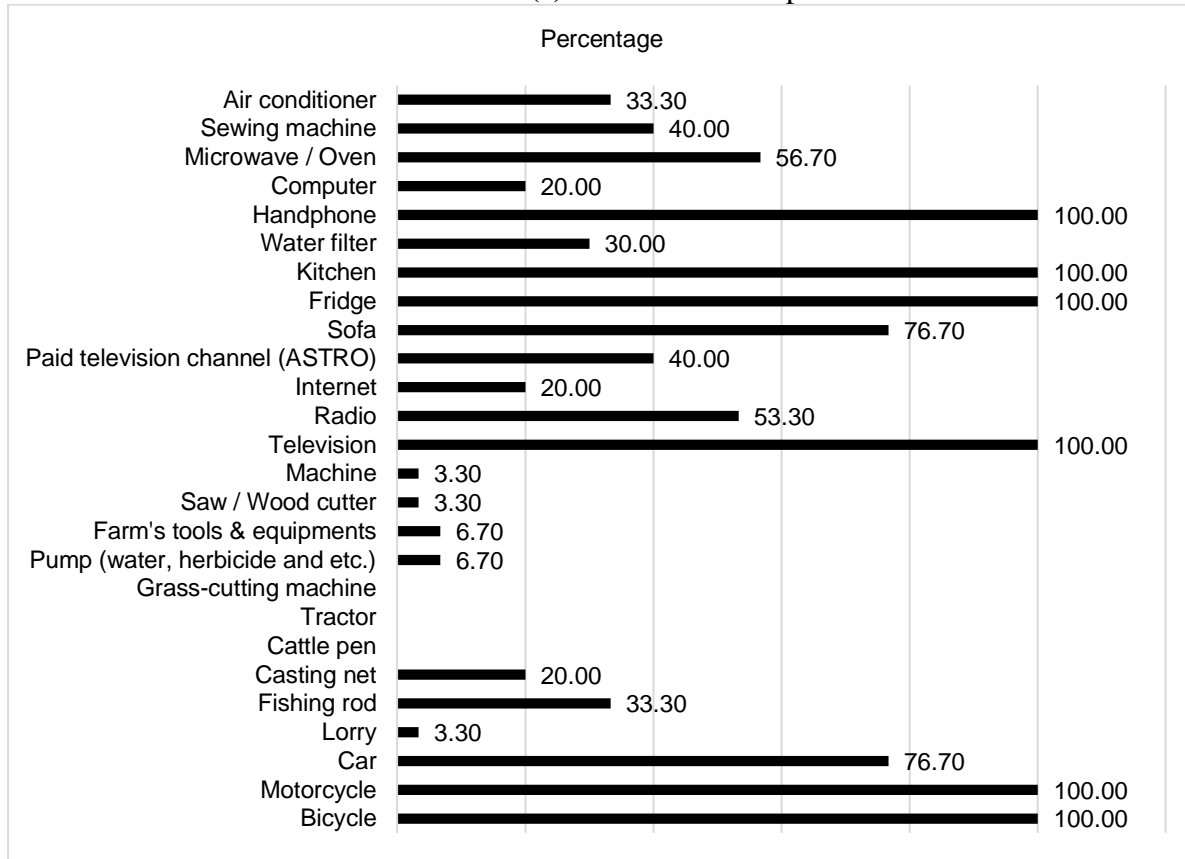
Items	Frequency	Percentage
Gender	Male	100.00
Race	Malay	90.00
	Chinese	3.30
	Others	3.30
Religion	Muslim	93.33
	Buddhist	6.67
Marriage Status	Married	76.70
	Widow	13.30
	Single	10.00
Education Level	MCE/SPM	46.70
	LCE/SRP/PMR	40.00
	Primary School	13.30
House ownership	Owned	40.00
	Rental	36.70
	Rent & Purchase	23.30
House Type	Bricks	83.30
	Bricks & Woods	16.70
Electricity supply	Provided	100.00
Water supply	Provided	100.00
Toilet	Flushed	100.00
Area for gardening/farming	Yes	66.70
Land ownership	Own	35.00
	Rental House Landlord	60.00
	Rental	5.00
Land activities	Paddy	5.00
	Fruits orchard	10.00
	Vegetables	10.00
	None	75.00
Second economic activities involvement	None	80.2
	Paddy farmer	6.6
	Sell marine products	3.3
	House contractor	3.3
	Mechanic (motorcycle)	3.3
	Part time security guard	3.3

Items	Min	Max	Mean	Std. Deviation
Years of Working	5	55	23	13.98
Household Member	1	15	4.5	2.57

Table 1 (b): Descriptive Statistic (Physical Capital)

Items	Min	Max	Mean	Std. Deviation
Fishing net size (feet)	30	840	350.4	178.80
Number of boat	1	2	1.15	0.38

Table 1 (c): Asset Ownership



Internal Consistency

From Table 2, the value from Cronbach’s Alpha (1) shows the original number of items been used. In the process of selecting items to represent each indicator, Principal Component Analysis (PCA) has been used (Table 3). The value of Cronbach Alpha (2) was produced based on the result from the PCA and the number of questionnaires items reduced as in Table 2. The value of Cronbach alpha has improve after the elimination of certain question except for food availability factor (less than 0.5).

Table 2: Cronbach alpha

Variables	Cronbach's Alpha (1)		Cronbach's Alpha (2)	
	Value	Items	Value	Items
Vulnerability (V)	0.488	7	0.656	4
Capital (K)	0.741	24	0.838	11
Geographical (G)	0.397	12	0.829	6
Institutional Policy (P)	0.848	8	0.917	6
Economy (E)	0.537	6	0.471	4
Natural Endowment (N)	0.442	6	0.567	4
Food Stability (FS)	0.858	9	0.863	8
Food Availability (FA)	0.448	11	0.222	8
Food Access (FAC)	0.624	11	0.771	7
Food Utilization (FU)	0.92	8	0.92	8

Principal Component Analysis

Table 3 shows the related questions that applicable in this study. Questions has been arranged according to the highest value of factor loading to represent the rank of the important question for each factor. Based on the PCA, those factors result in 14 factors with eigenvalues greater than 1. The 14 factors are able to explain a total variance of 90.238%.

Table 3: Principal Component Analysis (PCA) results: factor loading above 0.5, communalities and explained variance.

Variables	Indicators	Factor Loading	References
Vulnerability	(V5) Income affected due to landslides, pollution, sea-mining.	0.79	(Chen & Lopez-Carr, 2015)
	(V7) Income affected due to overfishing.	0.77	
	(V4) Income affected due to large scale fishermen.	0.72	
	(V3) Income affected due to seasonal/climatic changes (unpredicted)	0.64	
Capital	(K7) Good vehicle.	0.86	1. (Abdelhak Senadjki, Jamalludin Sulaiman, Saidatulakmal Mohd, 2015)
	(K8) Complete household appliances.	0.78	
	(K20) Public health services deliver good service.	0.76	
	(K15) Have an asset (land, vehicles, properties) to be sold/mortgage.	0.64	2. (Ahsan & Warner, 2014)
	(K16) Have golds/jewelleries to be sold/mortgage.	0.64	
	(K21) Good and sufficient knowledge and skills in current job.	0.63	3. (Orencio & Fujii, 2013)
	(K9) Good & sufficient equipment for fisheries activities.	0.53	
	(K14) Sufficient fund in bank.	0.53	4. (Huynh & Stringer, 2018)
	(K6) LKIM, PNK ensuring the good life of fishermen.	0.53	
(K18) Good infrastructures.	0.52		
Geographical	(K19) Household leader is healthy and fit.	0.51	
	(G1) Monsoon (heavy rain) at fishermen's area.	0.83	1.(Chen & Lopez-Carr, 2015)
	(G2) Heavy storm at fishermen's area.	0.81	
	(G7) Access conflict i.e. (pencerobohan nelayan asing).	0.79	2. (Malakar et al., 2018)
	(G6) Environmental destruction (landslides, penambakan laut).	0.75	
(G11) Peaceful are at fishermen's area.	0.65	3. (Liao et al., 2019)	
(G10) Social crime.	0.51		
Institutional Policy	(P6) Legal awareness and rules obligation.	0.92	1. (Liao et al., 2019)
	(P7) Registered licensed fishermen.	0.91	
	(P1) Support government/associations/NGO activities.	0.86	
	(P2) Actively contribute mental and physical in communities activities.	0.82	
	(P3) Environmental awareness.	0.79	
Economy	(P5) Protected marine area awareness.	0.78	
	(E2) Income depends on marine based food products.	0.86	1. (Lohmann, 2016)

	(E4) Satisfaction with current income.	0.82	
	(E6) The benefits of government allowances and subsidies	0.75	2. (Orencio & Fujii, 2013)
	(E1) Income 100% totally depend on fisheries activities.	-0.5	
Natural Endowment	(N4) The importance of beach (handcrafts product) to individual's economy.	0.9	
	(N5) The importance of forest (herbal plants) to individual's economy.	0.9	1. (Orencio & Fujii, 2013)
	(N3) The importance of beach (recreational) to individual's economy.	0.55	2. (Singh et al., 2017)
	(N2) The importance of mangrove area to individual's economy.	0.55	
Food Stability	(FS3) Ever cut the size of your meals or skip meals because there wasn't enough money/source for food.	0.9	
	(FS6) Ever hungry but didn't eat because there wasn't enough money/source for food?	0.9	
	(FS4) eat less than individual should because worrying there'll be not enough money/source for food.	0.8	1. U.S. Household Food Security Survey Module (2012).
	(FS5) there is no food at all at my house because there wasn't enough money/source for food.	0.7	2. FAO (2013).
	(FS7) Going out for work and have no meal because there wasn't enough money/source for food.	0.7	3. Edward et. Al (1997),
	(FS8) Always sleep while feeling hungry	0.7	
	(FS9) Prioritize children and senior citizen to have the meal first.	0.6	
	(FS1) Worry food stock will runout because there wasn't enough money/source for food.	0.5	
Food Availability	(FA5) Source of food are from fisheries and farming activities only.	-0.74	
	(FA6) There are food sources from wet market, hypermarket and groceries shop.	0.69	
	(FA1) Part of source of food comes from fisheries activities.	0.67	
	(FA3) Source of food comes from individual's fisheries activities and sales of marine products only.	-0.62	FAO (2013)
	(FA8) There are food sources from restaurants.	0.62	
	(FA7) The foods sources from wet market, hypermarket and groceries shop are sufficient.	0.59	
	(FA2) Source of food 100% comes from fisheries activities.	-0.57	
	(FA4) Source of food are from fisheries activities and marine food products only.	-0.53	
Food Access	(FAC7) Doing non-paid job but treat with food instead.	0.82	
	(FAC9) Wandering around looking for foods.	0.81	FAO (2013)
	(FAC4) When there is monsoon, it is difficult to go to market/groceries shop to by food.	0.69	
	(FAC6) Exchange valuable things for food.	0.67	

	(FAC5) Borrowing food ingredients such as rice, flour, sugar from neighbours.	0.61	
	(FAC8) Receiving food aids from relatives, friends and neighbours.	0.61	
	(FAC10) Receiving food aids from government, NGO.	0.53	
Food Utilization	(FU5) The house has proper sewage system.	1	FAO (2013)
	(FU3) Drinking clean water (boiled/filter)	0.9	
	(FU4) Making sure the food is properly cooked.	0.9	
	(FU2) Making sure the quality of food (clean, not expired, not rotten)	0.9	
	(FU1) Wash hand before meal.	0.8	
	(FU6) Making sure the environment around the house is clean.	0.8	
	(FU7) Getting immediate treatment if fell sick.	0.6	
	(FU8) Able to reach clinic immediately.	0.5	

Cross tabulation

Below table shows the cross tabulation between vulnerability and demographic factors. 80% respondents agreed (from 4 to 5 Likert-scale) they are exposed to the vulnerability. Among conditions level that could influence the severity of their vulnerability such as they were married, more than 3 persons in the household depend on them, children are still in learning institution, children are unemployed, working as a fishermen as well and working in low paid jobs, household possess income level less than RM1500, no fixed saving, jewelleryes and financial loan.

Table 4: Cross tabulation.

Items	80% respondents stated degree level from agree to strongly agree
Marital status	- 75% married - 12.% single - 12.5% single parent
Education level	- 4.58% SPM - 4.58% PMR - 0.08% primary school
Household member dependencies	- more than 3 persons
Children background information (in institution/occupation)	- children still in school/learning institution - unemployed - fishermen - low paid occupation
Second economic activities	- 71% second income - 29% have second income (foreman, shrimp paste producer, house contractor)
Income level	- Less than RM1500
Health status	- Group in good health has equal percentage with group in poor health.
Saving current	- 37.5% no saving - 62.5% have saving
Saving (fixed)	- 75% - no fixed saving - 25% - have fixed saving

Jewelleries	- 79% no
	- 21% yes
Loan	- 62.5% no
	- 37.5% yes

Inter correlation

Inter correlation information could provide necessary information in indicating relationship among factors. The result below based on the value of Spearman correlation. Even though there are low relationship between factors, these factors were selected based on significant value ($p < 0.05$).

From the inter-item correlation analysis, geographical, political and food accessibility has positive correlation with vulnerability. Any negative outcome such as the more adverse effect from geographical and institutional policy will increase the vulnerability. Meanwhile, the more vulnerability exist, the access to food will be decrease. This appears to represent the vulnerability such as event of landslides, pollution, sea-mining, overfishing and exploitation of large scale fishermen. In order to construct the vulnerability index in the future these three (3) factors will be assigned a high weightage.

Vulnerability \longleftrightarrow Geographical ($r = 0.447, p = 0.013$)
 Vulnerability \longleftrightarrow Institutional policy ($r = 0.617, p = 0.000$)
 Vulnerability \longleftrightarrow Food accessibility ($r = -0.571, p = 0.001$)

Capital on the other hand associates best with food stability indicates the vital role of capital in maintaining the food stability. The less capital the household possess, there will be more instability in food system. Based on the descriptive analysis, in explaining the capital, the fishermen has a good kind of transportation, complete household appliances and agree that they receive good quality of public health service. However in terms of other valuable capital they are not able to poses capital such as the land asset, properties, golds and savings in financial institution.

Capital \longleftrightarrow Food stability ($r = -0.335, p = 0.07$)

Geographical factors such as climate, access to resources pool and social peace associate with many factors in ensuring the better outcome from below mentioned factors.

Geographical \longleftrightarrow Vulnerability ($r = 0.447, p = 0.013$)
 Geographical \longleftrightarrow Institutional policy ($r = 0.617, p = 0.000$)
 Geographical \longleftrightarrow Natural endowment ($r = -0.484, p = 0.007$)
 Geographical \longleftrightarrow Food accessibility ($r = -0.488, p = 0.06$)
 Geographical \longleftrightarrow Food stability ($r = -0.499, p = 0.005$)
 Geographical \longleftrightarrow Food utilization ($r = -0.325, p = 0.08$)
 Geographical \longleftrightarrow Food availability ($r = 0.510, p = 0.004$)

Institutional policy correlates with mentioned factors indicates the roles of authority and fishermen communities in dealing with vulnerability, geographical threats, maintaining the natural endowment and ensuring the accessibility and stability of the food resources.

Institutional policy \longleftrightarrow Vulnerability ($r = 0.617, p = 0.000$)
 Institutional policy \longleftrightarrow Geographical ($r = 0.561, p = 0.001$)

Institutional policy ↔ Natural endowment (r = -0.432, p = 0.007)
 Institutional policy ↔ Food accessibility (r = -0.445, p = 0.008)
 Institutional policy ↔ Food stability (r = -0.422, p = 0.007)

Economy factor associates with food stability indicating the fishermen's income is vital to stabilize the food security compare to other factors. The less income/financial earned, the more instability exist in the food system.

Economy ↔ Food stability (r = -0.375, p = 0.041)

Natural endowment has significant important with geographical factor, institutional policy, food stability, availability and utilization.

Natural endowment ↔ Geographical (r = -0.484, p = 0.007)
 Natural endowment ↔ Institutional policy (r = -0.432, p = 0.007)
 Natural endowment ↔ Food stability (r = 0.476, p = 0.008)
 Natural endowment ↔ Food utilization (r = 0.343, p = 0.064)
 Natural endowment ↔ Food availability (r = -0.517, p = 0.002)

In terms of food stability, all mentioned factors have negative relationship with food stability indicating decrease in capital, threat from geographical elements, poor institutional policy and decrease in income will increase the instability in food system.

Food stability ↔ Capital (r = -0.335, p = 0.07)
 Food stability ↔ Geographical (r = -0.499, p = 0.005)
 Food stability ↔ Natural endowment (r = 0.476, p = 0.008)
 Food stability ↔ Institutional policy (r = -0.422, p = 0.007)
 Food stability ↔ Economy (r = -0.375, p = 0.041)

Geographical and natural endowment are the best factors in explaining the food availability status.

Food availability ↔ Geographical (r = 0.510, p = 0.004)
 Food availability ↔ Natural endowment (r = -0.517, p = 0.002)

The impact of climate change on food accessibility often depends on distinct factors such as the functionality of food markets, the affected geographical environment (Hertel & Rosch, 2010) and differences in socioeconomic factors (Reidsma, Ewert, Lansink, & Leemans, 2010). The more vulnerability exist, the more adverse from geographical elements and the poorer the institutional policy will decrease the access for food sources. Meanwhile, the less access to food means the less stability in the food system.

Food accessibility ↔ Vulnerability (r = -0.571, p = 0.001)
 Food accessibility ↔ Geographical (r = -0.488, p = 0.06)
 Food accessibility ↔ Institutional policy (r = -0.445, p = 0.008)
 Food accessibility ↔ Food stability (r = 0.394, p = 0.031)

The more adverse effect from geographical elements will decrease the food utilization and the more natural endowment the community poses the better food utilization.

Food utilization ↔ Geographical ($r = -0.325, p = 0.08$)
 Food utilization ↔ Natural endowment ($r = 0.343, p = 0.064$)

Ordinal logistic regression analysis

Logit link function is used in the analysis because it is evenly distributed categories and is reasonable choices when the changes in the cumulative probabilities are gradual and logit involves all levels of the response and dichotomizes the response scale.

Model fitting regression

Vulnerability = f (Capital, Institutional Policy, Economy, Natural Endowment, Geographical, Food Security)

The significant chi-square statistic (Table 4) indicates that the model gives a significant improvement over the baseline intercept-only model. This means that the model give better predictions than if somebody just guessed based on the marginal probabilities for the outcome categories. Refer to below table the significance value less than 0.05 indicates the data fits the model.

Table 5: Model fitting information (link function: logit)

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	89.816			
Final	62.924	26.892	9	.001

Goodness-of-fit: These statistics (Model Fitting Information and Goodness-of-fit) can be very useful for models with a small number of categorical predictors and there is no number of empty cells. Refer below table, the significance value fails to reject null hypothesis indicates the model is adequate.

Table 6: Goodness-of-fit (link function: logit)

	Chi-Square	df	Sig.
Pearson	96.035	121	.954
Deviance	60.151	121	1.000

For logistic and ordinal regression models, it is not possible to compute the same R^2 statistic as in linear regression so three approximations are computed instead. The pseudo R-squares were used to assess the overall goodness of fit of the model. These measures attempt to serve the same function as the coefficient of determination in linear regression models namely to summarise the proportion of variance in the dependent variable associated with the predictor (independent) variables. For ordinal regression models, these measures are based on likelihood ratios rather than raw residuals. Three different methods are used to estimate the coefficient of determination. Based on the attained value of Pseudo R-Square, the constructs of variables give sufficient predictions of vulnerability as the value from Nagelkerke = 0.62% indicates that there is medium proportion of the variation in explaining the vulnerability.

Table 7: Pseudo R-square (link function: logit)

Cox and Snell	.592
Nagelkerke	.620
McFadden	.290

Test of parallel lines: For location-only models, the test of parallel lines can help assessing whether the assumption that the parameters are the same for all categories is reasonable. Refer to below result the value of is more than 0.05 indicates the test fail to reject the null hypothesis indicates location parameters (slope coefficients) are the same across response categories.

Table 8: Test of parallel lines (link function logit)

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	62.924			
General	52.818 ^b	10.106 ^c	36	1.000

Conclusion

This preliminary study has provided an insight on which issue this study should aim for in constructing the vulnerability index and this study able to see the cause and effect from each dimension. Result suggest the questions and model is adequate to assess the vulnerability situation among coastal fishermen in Malaysia.

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THE INFLUENCE OF ATTITUDE TOWARDS TAX COMPLIANCE BEHAVIOUR AMONG CIVIL SERVANTS IN SELANGOR

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Abstract: (TNR, 12, italic, justify, single spacing) - Tax compliance has not been easy for any government across the globe. Numbers of eligible taxpayers did not comply with their tax obligations annually. There are a numbers of past research proves the association of attitude towards tax compliance behaviour. Having said that, this study interested to examines the influence of taxpayers attitudes towards their tax compliance behaviour. This quantitative research uses self-administered questionnaire as its medium of data collection. There are 120 civil servants in Selangor participated as respondents. The findings of the data revealed a moderate relationship between attitude and tax compliance behaviour.

Keywords: attitude, tax compliance, civil servants

Introduction

Tax compliance, or lack of, taxes has been a common topic of public policy throughout history. While being a global issue and a phenomenon that has existed for decades, there is relatively recent attention to the subject as a research area for both tax non-compliance and tax evasion. Although a large amount of information about tax compliance actions has been acquired in a short time, there is still more to be learned on the subject, as the tax non-compliance problem is deteriorating rather than improving. Historically, tax policy literature focused on the effect of economic conditions on taxpayer behaviour. The belief that people are going to behave in their own best interests is the foundation of the utility model they expect. Allingham and Sandmo (1972) proposed this model as an explanation for conduct about tax compliance behaviour.

Worldwide studies have pointed out that tax compliance rates are low in high-income countries and lower even in medium- and low-income countries. Survey of compliance behaviour have been conducted about fairness perceptions and compliance behaviour: taxpayers' judgments in self-assessment environments (Saad, 2011).

In Malaysian context, 56% of the total federal government revenue came from taxes, in which 40.3% came from income tax. As from the whole tax cake portion, income taxes is the highest contributor followed by companies taxes and petroleum taxes (Refer Figure 1.1). Realizing the importance of tax as a vital source of income, the Government through the Inland Revenue Board (IRB) continuously intensified their efforts to accomplish high tax collection. The amount proves succeeded when the amount of income tax collection showed a gradual increment as indicated. It increases in difference at 7.76% in 2016-2017 from 4.69% in 2015-2016 (Inland Revenue Board of Malaysia, 2019).

It is important to note that from the number of taxpayer recorded, there are large number of cases finalized following the tax investigation conducted by IRB which signal that, this could

be an indicator of the efficiency of the IRB in conducting the tax audit at the same time it could also reflect the number of non-compliant tax payer in Malaysia. To better comprehend the Malaysian tax scenario, it is worthwhile to compare it with other neighbouring countries as well OECD average. Figure 1.2 illustrated tax to GDP ratios among Asia countries. Although Malaysia remarks a better position from Indonesia and Singapore, but Malaysia's point below Japan and Korea as well as OECD average. Compared to Philippines and Singapore who experienced increased in their tax to GDP ratio between 2013 and 2014, Malaysia experienced decreases (OECD Data, 2018). This scenario continues until 2015, where tax to GDP ratio noted reductions.

Figure 1.1: Comparison of Direct Tax Collection by Component

Direct Tax Component	2017 (RM Million)	2016 (RM Million)	Difference (%)
Individuals	31,901.57	29,603.47	7.76
Companies	68,801.94	65,974.74	4.29
Stamp Duty	5,670.32	5,674.04	(0.07)
Withholding Tax	3,266.38	2,549.36	28.13
RPGT	1,697.98	1,491.67	13.83
Cooperatives	74.48	89.71	(16.98)
Other Taxes	86.69	90.09	(3.77)
Other IT - Sec 124	51.23	46.18	10.94
Petroleum	11,760.92	8,425.76	39.58
Gross Collection	123,311.51	113,945.02	8.22

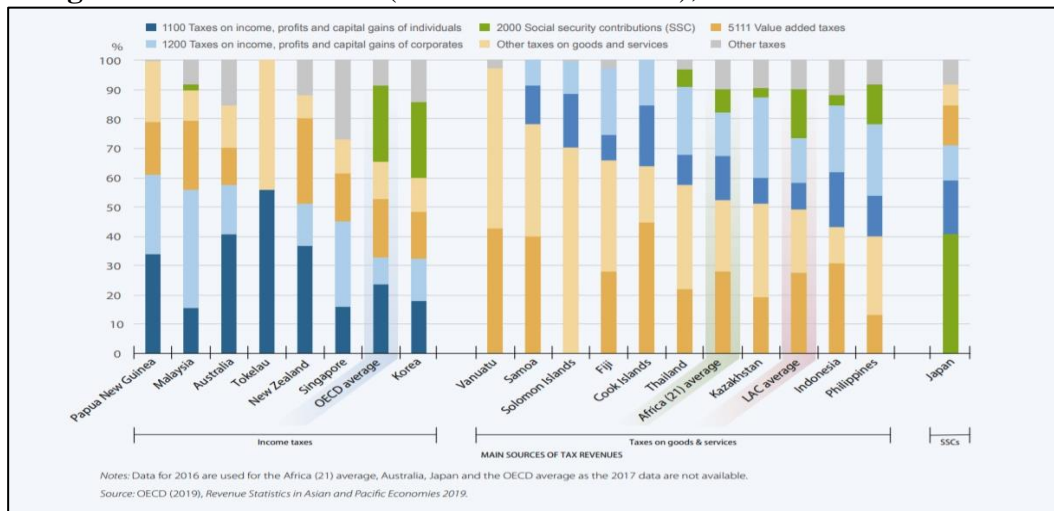
*Other taxes include Labuan tax and non-tax revenues

Source: Lembaga Hasil Dalam Negeri (2017)

In Malaysian context, tax evasion is a severe offence chargeable under Section 114 of the Income Tax Act which includes offences like (a) omits from a return made under the Act any income which should be included, (b) make a false statement in a return, (c) gives a false answer (orally or in writing) to a question asked or request for information made in pursuance of the Act, (d) prepares or maintains or authorizes the preparation or maintenance of false books of account or other false records, (e) falsifies or authorizes the falsification of books of account or other records; or (f) makes use or authorizes the use of any fraud, art or contrivance. Therefore, it can be concluded here that, tax compliance is an act of complying with rules and regulations as specified in the Income Tax Act 1967 (with amendment). This includes, filing tax return, reporting all income and expenses accurately, paying all amount of taxes owed and fulfilling all the deadlines provided by the tax authority.

Therefore, with the rising trend of non-compliance among the taxpayers, the present study aims to explore the factors which could influence people to comply with the tax law in order to better understand the behavior of the taxpayers. Appropriate mechanism could be used to increase the level of voluntary compliance especially among the civil servants who served as the backbone of the government.

Figure 1.2: Tax structures (% of total tax revenue), 2017 in Asian Pacific



Source: OECD (2017)

Literature Review

Tax Compliance Behaviour

Tax compliance behaviour is a complex subject (James and Alley, 2002). It is not possible to understand this behaviour through a single factor (McKerchar, 2010). A number of previous research for example Saad (2011) and Abdul Hamid (2014) was undertaken to understand the compliance behaviour through Theory of Planned Behaviour (Ajzen, 1991) framework. This study aims to follow the same path by focusing on one of the Theory of Pland Behaviour (TPB) variable which is attitude. This variable is then tested to civil servants in Selangor in order to better understand the attitude of civil servants with respect to complying with the tax law.

Vast number of research have been devoted in understanding tax compliance behaviour cutting across various disciplines such as accounting, economics, political science, public administration and psychology. Various factors lead to tax compliance behaviour has been revealed from the research. For instance, the Inland Revenue Service of US listed as many as 64 factors that affect taxpayers reporting decision (Alm, 1999). Some of the factors include, demographic factors (See for example, Aitken and Bonneville, 1980; Chan et al., 2000; Chen, 2006; Hamzah Sendut, 1991, Hasseldine and Hite, 2003; Hite, 1997; Jackson, 1986; Jeyapalan Kassipilai et al., 2003; Richardson, 2006; Song and Yarbrough, 1978), economics factors (See for example, Allingham and Sandmo, 1972; Alm and Jackson, 1992; Clotfelter, 1983; Davis et al., 2003; Friedland et al., 1978; Kirchler et al., 2008; Park and Hyun, 2003; Pommerehne and Weck-Hannemann, 1996; Srinivasan, 1973) and behavioural factors (Chan et al., 2000; Orviska and Hudson, 2003; Viswanath Umashanker Trivedi et al., 2003). Furthermore, Jackson, (1986) in their comprehensive review studies highlighted 14 variables that were most commonly examined in tax compliance literature. Richardson and Sawyer (2001) then updated this synthesis by adding up another five variables.

Generally, previous tax compliance studies debated the issues of tax compliance by using either economic approach or socio-psychological approach (Alm et al., 1995; Andreoni et al., 1998; James and Alley, 2002). While economic approach focuses on tax gap, psychological approach on the other hand, stresses on the importance of voluntary compliance. The concentration of economic approach is only on the trade-off between benefits of evading and the risk of detection. This is in contrast from the psychological approach which in the premise that compliance behaviour is constructed by various factors and not focuses on

economic factor solely. The characteristics between the two approaches are illustrated in the following Table 1.3

Table 1.3 Economic verses Psychology Approaches in Tax Compliance Studies

Tax Compliance	Economic Approach	Psychology Approach
Concept	Tax Gap 100% compliance less actual revenue	Voluntary. Willingness to act in accordance with the spirit as well as the letter of the law
Tax compliance Definition	Economic Rationality Narrower	Behavioural cooperation Wider
Exemplified by	Trade Off: 1. Expected benefits of evading 2. Risk of detection and application of penalties 3. Maximize personal wealth	Individuals are not simply independent, selfish utility maximizers. They interact according to differing attitudes, beliefs, norms and roles. Success depends on co-operation
Issues of	Efficiency in resource allocation	Equity, fairness and incidence
Taxpayer seen as	Selfish calculator of pecuniary gains and losses	“ Good citizen”
Can be termed the	Economic Approach	Behavioural Approach

Source: James and Alley, 2002 (pg 33)

Theory of Planned Behaviour (TPB)

Socio-Psychological proponents argued that the understanding on compliance goes beyond the deterrence factor as described in the economic model. As posited by Feld and Frey (2007), tax compliance is a psychological tax contract that goes beyond traditional deterrence and explains tax morale as a complicated interaction between taxpayers and the government. The past decade has observed the rapid development on the study on socio-psychological factors in understanding tax compliance behaviour as discussed in the previous section. Psychological aspects like knowledge (Andreas Enni Savitri, 2015; Mei L. et al. 2012; Natrah Saad, 2014), fairness (Abdulhadi Khasawneh et al. 2008; Natrah Saad, 2011), social norms (Bobek and Hageman, 2015), religion (Raihana Mohd Ali, 2013) and many other factors were examined against tax compliance behaviour. Apart from all these factors, there are also some researcher who tested behavioural theories such as TPB (Ajzen, 1991), Goal-Framing Theory (Lindenberg, 2001) and Equity Theory (Adams, 1963) in predicting taxpayers compliance behaviour. But, the most influential behavioural theories used in tax compliance research is TPB.

Number of few studies had attempted to test TPB in the context of tax compliance. For example in Bobek and Hageman (2015) and Viswanath Umashanker Trivedi, Mohamed Shehata and Mestelman (2004) it is confirmed that the TPB is effective in explaining compliance behaviour. The measure of compliance is found to have a high correlation with actual tax evasion behaviour. The TPB also has been used to analyze the compliance behaviour of the Malaysian’s taxpayers (For example, Natrah Saad, 2010) and Malaysian tax agents (For example, Suhaila Abdul Hamid, 2014). It is proven that TPB is capable in explaining the tax compliance behaviour in Malaysia where two of its components are found to be highly influential to tax compliance behaviour.

Despite of being widely used, the TPB has some limitations. First, behaviour is a complex issue. To understand behaviour only by looking at attitudes, subjective norms and perceived behavioural control is not sufficient. There are some other determinants that might influence behaviour. Second, there may be a substantial gap of time between assessment of behaviour intention and the actual behaviour being assessed (Werner, 2005). During the time gap, the intention of an individual might change.

The Influence of Attitude towards Tax Compliance

One of the important element in TPB framework is attitude. Attitude is directly related to behaviour to the degree it is influenced by the intention (Armitage & Christian, 2003). In many tax compliance studies, Kirchler (2007) found, that while the relationships between attitude towards tax compliance and behaviour indicate weak relationships, these are significant.

In understanding the influence of attitude towards tax compliance, number of studies have analyse its relationship, for example in Eriksen and Fallan (1996) examine two different groups of students from marketing and law. They suggest that tax attitude is important in determining tax compliance behaviour and this tax attitude is influenced by the specific tax knowledge that the students possess. This is consistent with Hanno & Violette, (1996) who experientially prove the positive link between attitude towards tax compliance and compliance behaviour. Using the TRA the authors handled an experimental design among 73 College students who have experience in filing tax returns. In another study of Trivedi, Shehata and Mestelman (2005) which utilize the TPB model to better understand tax compliance behaviour, employs both survey and experimental design among the University students and it was found out that, attitude has significant impact to taxpayers' decision making. The attitude of taxpayers is also studied by Chan et al. (2000) comparing US and Hong Kong taxpayers. The study suggest that the attitude of taxpayers is dependant on the degree of moral reasoning that the taxpayers have. US taxpayers is said to have higher moral reasoning which indicates better attitude towards complying with the tax law.

Zooming into Malaysian context, Kassipilai and Jabbar (2003) prove that, attitude towards tax compliance was empirically significant. In a study by Saad (2011) using individual taxpayers in Malaysia and New Zealand, her findings suggest that taxpayers in both countries considered attitude as an important factor in complying with the tax law. This is consistent with the findings of Abdul Hamid (2013) who analyse attitude towards tax compliance among the tax agents, found out that, attitude is a significant variable towards understanding the tax agents compliance behaviour.

Methodology

The present study used quantitative approach as its methodology. As define by Cohen et al., (2007), quantitative research is well-defined as social research that make use of empirical methods and empirical statements. He then furthers states that empirical statement is based on a descriptive statement regarding what is the real world is rather than what real world is ought to. The existing study adopted quantitative as its research methodology because quantitative method is the finest method that can be used in explaining a phenomenon. It is a terrific method to further describe what create a phenomenon, what are the factors that lead to a phenomenon. As the current research interested in understanding a tax compliance phenomenon, and the researcher target to inquire into whether attitude does have influences towards tax compliance behaviour. Therefore, quantitative design is the best as it suits the purpose.

This study involves understanding on the tax compliance among the civil servants. Civil servant can be defined as Public Service formerly known as the Civil Service has assumed a significant key role in the economic and social development of the country. According to

Federal Constitution Act 132 (1) civil servant are among the (a)armed forces, (b)judicial and legal service, (c)general public service of the Federation, (d)police force, public service of each state, education service, (f)joint services. Person who is a member of any of the services mentioned in paragraphs (a), (b), (c), (d), (f) and € of Clause (1) holds office during the pleasure of the Yang di-Pertuan Agong, and, except as expressly provided by the Constitution of the State, every person who is a member of the public service of a State holds office during the pleasure of the Ruler or Yang di-Pertua Negeri (Attorney General's Chambers of Malaysia, 2019). Which means, civil servant needs to practice good ethics in perform their task and follow the rule and regulation that been set by government. For example, civil servant needs practice trust, integrity, responsibility, excellence, loyalty, commitment, dedication, discipline, diligence and professionalism (Prime Minister's Office of Malaysia, 2019).

The population of this study is derive from the database developed by the researcher where Table 1.3 shown that active employers in Negeri Selangor have active employees approximately around 1,921,904 in 2018. So, this study will be targeted Selangor civil servants as respondent. This is because it shown Selangor state have the largest amount number of active employees compares to W.P Kuala Lumpur. To determine sample size Krejcie and Morgan (1970) table of sample size is bring forth below. Based on the author, as the population increases at 170 N, the sample increase at diminishing rate and the sample size remain constant at slightly at 118 S. On the other hand, Sekaran and Bougie (2011) also suggested that the common sample size of many studies is within the range of 30 to 500 samples.

Table 1.3: Number of Active Employers and Active Employees 2014 - 2018 by State and Channel Environment

Negeri	Majikan Aktif					Pekerja Aktif				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Johor	53,101	55,347	57,302	58,394	59,507	652,185	684,897	699,318	734,183	764,537
Kedah	17,080	17,364	17,845	17,738	17,569	230,313	235,233	243,838	245,251	258,044
Kelantan	8,048	8,021	8,014	7,984	7,965	86,868	88,676	89,464	89,572	94,072
Melaka	12,726	12,907	13,212	13,213	13,243	164,100	172,707	192,361	199,199	189,285
Negeri Sembilan	12,602	12,794	13,169	13,250	13,427	153,115	158,080	159,718	164,629	174,982
Pahang	15,383	15,672	16,072	16,157	15,906	173,442	167,909	169,644	174,017	180,127
Perak	30,798	31,141	32,036	32,245	31,993	312,515	319,922	327,018	338,379	343,523
Perlis	1,900	1,928	2,015	1,962	1,931	21,494	21,555	21,663	20,222	21,578
Pulau Pinang	29,452	30,365	31,027	31,254	31,430	458,907	476,349	495,206	517,853	534,425
Sabah	29,752	29,892	30,274	30,114	29,600	332,096	342,542	344,529	348,265	361,803
Sarawak	34,208	35,570	36,860	37,278	37,359	446,746	464,678	470,694	484,114	494,825
Selangor	86,821	91,059	95,318	98,060	100,867	1,555,697	1,606,408	1,696,430	1,763,733	1,921,908
Terengganu	8,478	8,616	8,501	8,441	8,360	117,360	116,524	116,645	155,148	127,881
W.P Kuala Lumpur	61,690	63,588	66,045	67,633	67,903	1,493,819	1,521,504	1,571,330	1,609,383	1,610,441
Lingkungan gaji	Majikan Aktif					Pekerja Aktif				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Bawah/Below 100	393,970	406,448	419,059	424,997	427,771	3,190,715	3,402,791	3,382,734	3,491,553	3,597,441
100 - 199	4,496	4,642	4,762	4,853	5,093	616,518	637,231	656,023	688,016	702,226
200 - 299	1,371	1,400	1,494	1,498	1,662	330,280	338,436	361,634	371,739	403,406
300 - 399	674	701	767	734	802	231,822	241,263	264,313	252,700	276,519
400 - 499	404	376	408	427	464	179,464	167,374	182,218	190,192	206,790
500 - 599	255	269	266	270	290	138,809	146,962	145,658	153,411	157,924
600 - 699	163	166	188	181	181	104,528	107,419	121,414	116,482	117,080
700 - 799	120	105	137	135	127	89,442	78,100	102,497	105,811	95,290
800 - 899	86	99	76	88	79	72,610	84,638	64,025	74,216	66,806
900 - 999	63	57	74	75	74	59,231	54,195	69,820	70,987	69,947
1,000 dan lebih/and over	437	414	459	465	517	1,185,238	1,091,575	1,247,612	1,288,841	1,384,002

Source: PERKESO, Department of Statistics Malaysia

Findings

There were 118 questionnaires distributed and collected to respondent and the researcher received return feedback was 93 respondents. Therefore, our response rate was 78% considered as low response rate. This is because the situation of COVID 19 hit all over the world including Malaysia. Most of offices and public sector were closed. The researcher had the data collection phase by phase and it is quite difficult to reach the original sample. However, according to Shefali Pandya, 2019, it is preferable to get a high response rate (80% or higher) from a small,

random sample rather than a low response rate from a larger pool of potential respondents. This is consistent with the Australian Vice-chancellors' Committee & Graduate Careers Council of Australia (2001) regarded 'an overall institutional response rate for the Course Experience Questionnaire (CEQ) of at least 70% to be both desirable and achievable. This indicates that the response rate for the current study is thus acceptable.

The hypothesis of the study:

H₀ : There is no significant relationship between attitude and tax compliance behaviour

H₁ : There is a significant relationship between attitude and tax compliance behaviour

The findings of the study concluded that, there is a significant positive relationship between attitude and tax compliance behaviour ($r=0.561$, $p=0.000$). Therefore, H₁ is accepted and rejected H₀ where there is no relationship between attitude and tax compliance behaviour.

Conclusion

Based on the findings, the study has indicated that there are a significance and positive relationship between attitude and tax compliance behaviour. This is supported by other studies, for example in Cullis & Lewis (1997) who found out that attitudes is one of the most important aspect that can influence people to comply to pay tax compliance. They clearly state that compliance with the tax would be comparatively high when there is a favourable attitude towards compliance with the tax. Other than that, another study that supported it is by Hanno & Violette (1996). They experientially show a positive correlation between tax compliance attitudes and compliance behaviours. The findings also consistent with Trivedi, Shehata, & Mestelman, (2005) which also found attitude has significant impact to taxpayers' decision-making. In that study, the authors research the role of attitude in both compliance and non-compliance behaviour outcomes and results suggest that attitude is vital in both situations. Next, Elffers, Weigel, & Hessing, (1987) work also shows a positive relationship with one attitude towards compliance on either side intention to comply. In addition, Kasipillai & Jabbar, (2003) notes that the attitude towards compliance was statistically important in Malaysia in relation to income reporting behaviours.

As attitudes prove to be able to influence tax compliance, personal perception is important as it will lead to how the way that people will act. If an individual questions the attitude of another, people prefer to depend on the person-related views and emotions, an occurrence, a reality, and their behaviours. People's attitudes are the product of the different decisions they make about things, individuals, objects, circumstances, places, and other things. Based on their backgrounds, beliefs, and experiences these may be positive or negative.

As lot of studies have proven that attitude play a vital role in ensuring people to pay their taxes, the influence of incentives should be taken into consideration. One of the ways that can encourage and give knowledge to the people the importance of tax compliance is by doing a campaign. Everyone is responsible for their own respective taxes. By doing a campaign, awareness among all the citizens can be nurtured.

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CLLOUD SECURITY PRE-ASSESSMENT MODEL FOR CLLOUD SERVICE PROVIDER BASED ON ISO/IEC 27017:2015 ADDITIONAL CONTROL

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Abstract: *Development of cloud computing technology today has succeeded in attracting the interest of both academics and industries because of its ability to provide flexible, cost-effective and adaptable services according to the needs of an agency. The services offered to the cloud service subscriber (CSS) accessible based on the concept of on-demand self-service, thus leads to various security threats. While on behalf of the cloud service provider (CSP), issues such as data loss and no transparency on security incidents, that concern CSS. Hence, CSP is encouraged to practice good security practices such as information security management system (ISMS) together with ISO/IEC 27017: 2015. This study was conducted to identify the factors influencing the level of CSP readiness and develop a pre-assessment model of cloud security readiness. The study approach was a combination of qualitative methods through interviews for model verification with experts and quantitative methods to validate this study model through prototype testing. The findings of this study show that there are factors that influence the level of readiness of the CSP i.e. Technology, Organisation, Policy, Stakeholders, Culture, Knowledge and Environment. The contribution of this study was a Pre-Assessment Model for CSP based on ISO/IEC 27017:2015 which is suitable to be used as a guideline to provide a safer cloud computing environment.*

Keywords: *Cloud Computing, Cloud Security, Pre-Assessment and ISO/IEC 27017:2015*

Introduction

Cloud computing is a rapidly evolving technology and is one of the paradigms that attracts academics and industry players, where it has great potential to innovate the IT operations of various organisations and can meet common needs, such as scale, agility, cost effectiveness and availability computing infrastructure to suppliers (Abbas & Khan 2014). However, there are concerns regarding the loss of control over data stored in cloud computing and governance compliance caused by the lack of transparency by the CSP, leads to the mistrust of technological growth in cloud computing (Ali et al. 2017; Nur Ilyani Ahmad et al. 2019).

Information security is also one of the important elements in supporting organisational activities in various aspects of cloud computing. Therefore, issues such as cloud security transparency, privacy governance and related matters that lead to information security risks are mainly concerns to CSS (Pauley 2010). Indulge the trust from CSS can only be realised by CSP

through the compliance with information security standards such as ISO/IEC 27001: 2013 (Giulio et al. 2017). To ensure all controls under ISO/IEC 27001: 2013 are complied with, guidance of compliance elaborate by the ISO/IEC 27002: 2013 which is equipped with best practice proposal for an implementation of Information Security Management System (ISMS). While ISO/IEC 27017: 2015 is an additional reference through the ISO/IEC27001:2013, by elaborating the additional controls for security implementation in focusing on cloud computing.

Existing studies focusing on developing a readiness model based on ISO/IEC 27001: 2013 with generic compliance in nature and does not take into account cloud-specific control as one of the elements in cloud security assessment (Susanto, Almunawar & Tuan 2012). Studies on cloud computing readiness models that have been conducted are limited to 37 cloud-specific security controls excluding additional controls in Annex A ISO/IEC 27017: 2015 (Nur Ilyani Ahmad et al. 2019). When this study was conducted, it did not find a readiness model for CSP which also included seven (7) additional controls as follows:

- i. Shared roles and responsibilities within a cloud computing environment;
- ii. Removal of CSS assets;
- iii. Segregation in virtual computing environments;
- iv. Virtual machine hardening;
- v. Administrator's operational security;
- vi. Monitoring of cloud services; and
- vii. Alignment of security management for virtual and physical networks.

Therefore, the rationale for conducting this study is based on the need to include seven (7) additional controls defined by the ISO/IEC27017:2015 in the development of pre-assessment model for CSP readiness level in helping CSP to evaluate the level of readiness based on cloud security standards and identify any weaknesses that can be overcome before facing the actual audit process by the relevant certification body.

Literature Review

Cloud Computing History in Malaysia

Cloud computing is an emerging phenomenon and has been a major agenda in the field of computing for the past decade. In Malaysia, the cloud computing initiative began in 2010 through an implementation of Government Cloud (G-Cloud) by the Government sector led by the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU). Through the use of cloud computing technology, resources were used comprehensively and in turn able to increase productivity and cost savings to the Government (Nurul Elliza Jasmin & Mohammad Khatim Hasan 2018).

Benefits of Cloud Computing

There are many other benefits that can be gained when using cloud computing services apart from cost savings and increased productivity. Among those benefits are self-service; facilities to be accessed from various locations and types of ICT equipment; fast elasticity; extensive network access as well as the ability to adjust resources as needed (Shahzad 2014; Tweneboah-Koduah, Endicott-Popovsky & Tsetse 2014).

Challenges/ Issues in Cloud Computing

Cloud computing is growing and being widely used nowadays is exposed to security risks that raise a concern from both CSP and CSS (Latif et al. 2014). Security risks regarding data security, privacy and control; diversity of frameworks, guidelines, legislation, compliance and audits; virtual environment risk; identity management, authentication and access control; data

availability and business continuity; application development; the availability of cloud services and data locations and data centres; vulnerability attacks; limited user access; as well as unclear service level agreements (Abolfazli et al. 2015; Benslimane, Yang & Bahli 2015; Hashizume et al. 2013; Latif et al. 2014; Xiang, Shahpasand & Jarno 2019).

Information Security Management System (ISMS)

ISMS is a comprehensive assessment and improvement of information quality that is not only able to provide accurate indications related to the level of information quality but also able to assist in identifying aspects of information quality that need improvement involves directly with the vision, mission and direction of the organisation (C.N.I.I. 2020). ISMS compliance involves various types of laws and regulations related to security and privacy in the context of cloud computing (Jansen & Grance 2011). While ISMS auditing is to provide the organisation or CSS on the aspects of IT security assurance related to information security by adopting certain standards or standards (Rasheed 2014). The auditing process would be able to increase the integrity and confidence of customers as well as be a benchmark for the level of information security system management of an organisation (C.S.M. 2013).

Security Standards related to Cloud Computing

Cloud Security Alliance (CSA) Open Certification Framework (OCF) and Security, Trust and Security Registration (STAR)

CSA OCF is evaluated using a CSA STAR mechanism. The CSA STAR is an independent third-party evaluation process for the security of cloud services provided by CSP. This certification uses the control of the ISO / IEC 27001: 2013 management system together with the CSA Cloud Control Matrix (CCM) (Catteddu et al. 2018). However, assessments in CSA STAR are self-executed assessments and there will be a tendency to evaluate non-transparently. In regard with this, there is a crucial need for special mechanisms to ensure that the assessment performed is reliable.

Service Organisation Control (SOC)

SOC is a report and being administered by a third party consist of a certified public accountant (CPA). Through the SOC reports, organisations are able to gain consumer trust and confidence in the process and control of service delivery offered (Shackleford 2012). The SOC report is able to generate an audit report based on cyber security elements used for cloud services offered by CSP. However, it is less appropriate because it leads to control in the organisation of financial reporting related services.

Payment Card Industry - Data Security Control (PCI - DSS)

PIC DSS is a control that focuses on data security in payment cards and is widely used in business transactions today. Security threats associated with payment card information leakage lead to the need to standardise data protection on any information(P.C.I Security Standards Council 2018).

ISO/IEC 27001:2013, ISO/IEC 27002:2013 dan ISO/IEC 27017:2015

ISO/IEC 27001:2013 is the main guide for information technology security and ISO/IEC 27002:2013 is a complement to ISO/IEC 27001:2013 in implementing alternative security controls appropriate to the organisation. While the ISO/IEC 27017:2015 cloud computing standard is a code of practice for information security control based on ISO / IEC 27002: 2013 with a focus on cloud computing security control. As of 2018, 31,910 certificates are valid for

59,934 ISO/IEC 27001:2013 locations worldwide (I.S.O./I.E.C. 2018). Therefore, this standard is an appropriate instrument to be use as an instrument for cloud security compliance review.

Comparison of Existing Cloud Security Readiness Models

Six (6) Domain Framework

This framework consists of six (6) domains namely Organisation (O), Stakeholders (S), Tools and Technology (T), Policy (P), Culture (C) and Knowledge (K) is used as a basic element in assessing the level of organisational readiness in the implementation of ISMS certification (Susanto, Almunawar & Tuan 2012). This framework uses 21 important security controls taken from the information security management standard in ISO/IEC 27001.

Cloud Readiness Assessment Framework

This framework is built based on a combination of Technology-Organisation-Environment (TOE) and Diffusion on Innovation (DOI) as well as the Technology Acceptance Model (TAM) (Alemeye & Getahun 2015). The results of this combination produce 12 readiness factors to determine the cloud readiness namely Perceived Usefulness (PU), Perceived Ease of Use (PE), and Relative Advantage (RA), Trial- Ability Observable Result (TO), Compatibility with Existing Values and Practices (CE), Executive Support (ES), Business Case and Budget (BB), Technological Readiness Number of Servers (TRNS), Technological Readiness Server Age (TRSA), Technological Readiness Virtualization (TRVI), Network Connectivity (CO) and Competitive Edge (CA).

Readiness Model for ICS and Cloud (RMfIC)

This model consists of four (4) stages starting from the description and purpose of RMfIC; implementation of component 1 i.e. analysing the suitability of the organisation; component 2 for testing organisational readiness value instruments (INKO); as well as component 3 for the calculation of INKO and determining the level of readiness of the organisation (SPKO) (Asma Zubaida M Ibrahim, Jamaiah H Yahaya & Aziz Deraman 2018).

Hexagonal Cloud Security Model

This model consists of six (6) basic elements and two (2) additional elements of durability, availability, validity, confidentiality, utility, ownership, integrity and security (Bhatia & Malhotra 2018). This model helps the CSP to make a risk assessment based on possible threats.

Domain Selection Criteria Contribute to Cloud Security

Based on the literature review, seven (7) domains were selected for the proposed development of the initial model for this study based on existing framework and model. The selection of these domains is based on a previous study of the CSR model (Nur Ilyani Ahmad et al. 2019)[30]. By mapping the controls in ISO/IEC 27017:2015 with these seven (7) domains, the model proposed will be able to assist CSP in understanding security controls according to the selected domains as in Table 1.

Table 1: Domain Definition

Domain	Definition based on Previous Studies
Tools and Technology	Service/ industry based on the technology field include applications or inventions that result in the production, use of goods or services.
Organisation	Human beings as a social unit, managed systematically and structured and produce an achievement based on organisational objectives.
Policy	Principles or rules that must be followed in making a decision and then be able to achieve optimal results in service in an industry.
Stakeholder	Individual, group or organisation that has a direct or indirect interest in an organisation which can influence or affect management in making any changes based on the objectives and policies of the organisation.
Culture	Something that is acceptable or not; right or wrong nature; things that can be done or not. In the organisational context, culture is the values and behaviours that contribute to the unique social and psychological environment in an organisation.
Knowledge	Level of competence and intelligence possessed by human beings and recognised as factors in increasing productivity.
Environment	Factors exist around the setting whether internal or external of an organisation or industry including competition within industry, economic structure and threats such as natural disasters or human actions.

Source: Susanto, Almunawar dan Tuan (2012) and (Borgman et al. 2013)

Domain Mapping on Cloud Security Control

Identified domain will be mapped to cloud security control based on additional controls in the Annex A, ISO/IEC 27017:2015. The additional controls are used as a research instrument. A total of 37 controls and seven (7) additional controls will be mapped to the seven (7) domains in the process to proposed initial model for this study.

Development of Preliminary Model

The preliminary model proposal for this study is based on the information technology framework, TOE framework (Hasimi Sallehudin et al. 2019); ISMS readiness model, Six (6) Domains Framework (Susanto, Almunawar & Tuan 2012); and pre-readiness model, Cloud Service Readiness Model (CSR) (Nur Ilyani Ahmad et al. 2019). There is a gap in the framework of six (6) domains which is environmental elements and it has been improved by producing a CSR model. This model consists of seven (7) domains by improving 6 domain framework and adding the environment (E) domain from the TOE framework. TOE framework is a technology application model that forms a basis for many information system investigations for an organisation (Hasimi Sallehudin et al. 2019). However, the CSR model does not include additional cloud service controls found in Annex A, ISO/IEC 27017:2015. Therefore, the preliminary model proposed for this study is to combine TOE framework, 6 domain framework, CSR model and additional cloud services control taken from ISO/IEC 27017:2015 as shown in Figure 1.

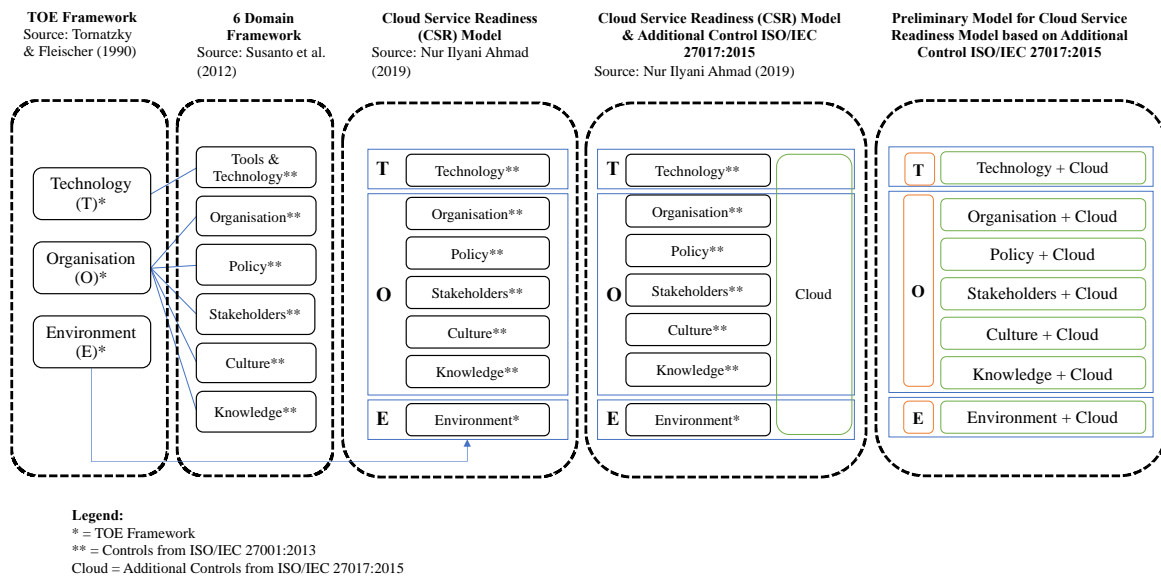


Figure 1: Preliminary Model

Methodology

This study was conducted using sampling technique involving respondents from cloud computing practitioners. The approach is a combination both qualitative and quantitative methods which being divided into three (3) phases, development preliminary model, verification of preliminary model; and validation of final model.

Preliminary Model Development

The preliminary model constructed from literature review source consisting of standards related to information security systems, cloud security and cloud readiness models. This preliminary model is a combination of the TOE framework, the six (6) domain framework, the cloud service readiness (CSR) model and additional control from ISO/IEC 27017:2015.

Verification of Preliminary Model

Verification of the preliminary model involves two (2) processes which are collection and analysis. The research method used is a qualitative through interviews with the two (2) experts in the field of information security management and cloud computing. Through the experts findings, the preliminary model will be improved towards constructing a final model.

Validation of Final Model

The validation of final model through prototype testing and evaluation form questionnaire. The prototype was built using Microsoft Excel 365 while the questionnaire was developed using Google Form. The validation will be carried out by respondents consisting of practitioners in the field of information security and cloud computing amounting more than 10 people. These practitioners are selected based on agencies that have obtained ISMS certification and are in the process of obtaining ISMS certification specifically for cloud services. The prototype built with instrument consists of 44 controls and 94 checklists mapped into seven (7) study domains. The level of readiness is measured by a scale of Yes with a value of 1 or No with a value of 0. The total marks obtained for the domains are calculated using the formula as follows:

$$m = \frac{y}{d} \times 4 \tag{1}$$

Where; m = total score of domains; y = total answer of “Yes”; d = total question in each domain; and 4 = consists of 4 types assessment level (Not ready/ Low/ Intermediate/ High).

The overall average, p, each domain will be calculated using the following formula:

$$p = \sum_{i=1}^7 \frac{mi}{7} \tag{2}$$

Where; m = total score each domain

The overall score obtained, p, will show the level of readiness of an agency with the scale of readiness level assessment as in Table 2.

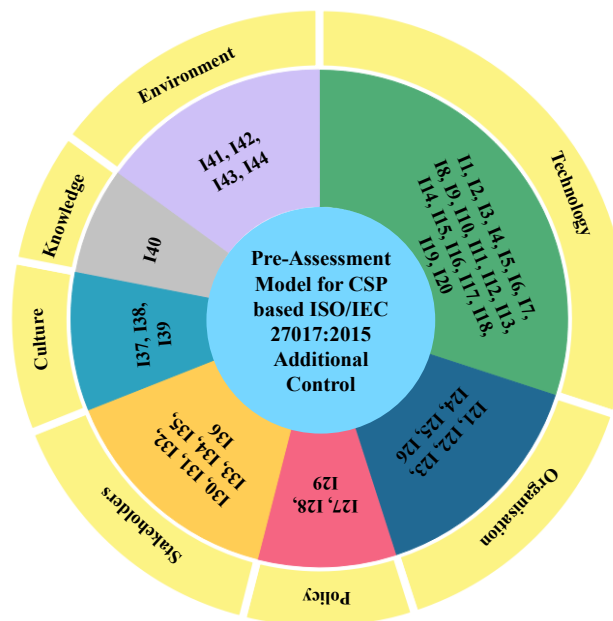
Table 2: Level of Readiness

Total score, p	Level of Readiness
0 ≤ p ≤ 1	Not Ready
1 < p ≤ 2	Low
2 < p ≤ 3	Intermediate
3 < p ≤ 4	High

Analysis

Expert Verification Analysis

Verification by experts involves the process of obtaining verification of the preliminary model. The experts had agreed to the seven (7) proposed domains along with 44 cloud security controls. However, experts recommend improvements to the existing checklists in the control subsections namely 5.1.1; 6.1.1; 7.2.2; 8.1.1; 8.2.2; 10.1.1; 11.2.7; 12.1.5; 12.4.3; 14.1.1; 14.2.1; 15.1.1 and 16.1.1 which can be referred to Figure 2.



11	6.3.1 Shared roles and responsibilities within a cloud computing environment	123	9.5.2 Virtual machine hardening
12	8.1.1 Inventory of assets	124	15.1.1 Information security policy for supplier relationship
13	8.2.2 Labelling of information	125	15.1.2 Addressing security within supplier agreement
14	9.1.2 Access to networks and network services	126	15.1.3 Information and communication technology supply chain
15	9.2.1 User registration and deregistration	127	5.1.1 Policies for information security
16	9.2.2 User access provisioning	128	8.1.5 Removal of cloud service customer assets
17	9.2.3 Management of privileged access right	129	13.1.4 Alignment of security management for virtual and physical networks
18	9.2.4 Management of secret authentication information of users	130	12.1.5 Administrator's operational security
19	9.4.1 Information access restriction	131	12.4.5 Monitoring of cloud services
110	9.4.4 Use of privileged utility programs	132	18.1.1 Identification of applicable legislation and contractual requirements
111	10.1.1 Policy on the use of cryptographic control	133	18.1.2 Intellectual property rights
112	10.1.2 Key Management	134	18.1.3 Protection of records
113	12.1.2 Change management	135	18.1.5 Regulation of cryptographic controls
114	12.1.3 Capacity management	136	18.2.1 Independent review of information security
115	12.3.1 Information backup	137	16.1.1 Responsibilities and procedure
116	12.4.1 Event logging	138	16.1.2 Reporting information security events
117	12.4.3 Administrator and operator logs	139	16.1.7 Collection of evidence
118	12.4.4 Clock synchronization	140	7.2.2 Information security awareness, education and training
119	12.6.1 Management of technical vulnerabilities	141	9.5.1 Segregation in virtual computing environments
120	13.1.3 Segregation in networks	142	11.2.7 Secure disposal or reuse of equipment
121	6.1.1 Information security roles and responsibilities	143	14.1.1 Information security requirements analysis and specification
122	6.1.3 Contact with authorities	144	14.2.1 Secure development policy

Figure 2: Verified Model by Experts

Final Model Validation Analysis

Validation by practitioners using prototypes and questionnaires. The validation based on testing the effectiveness and efficiency of developed prototype. The overall score for each domain obtained by agency represented in Table 3.

Table 3: Agency Overall Score

Respondent Code	Overall Score	Level of Readiness
R1	3.64	High
R2	2.95	Intermediate
R3	3.19	High
R4	3.19	High
R5	3.67	High
R6	3.19	High
R7	3.43	High
R8	3.66	High
R9	3.89	High
R10	4.00	High
R11	2.86	Intermediate

Based on these results, there are nine (9) practitioners namely R1, R3, R4, R5, R6, R7, R8, R9 and R10 have achieved a high level of readiness while the remaining two (2) practitioners, R2 and R11 indicates a intermediate level of readiness. In addition, out of the seven (7) domains listed, it was found that six (6) domains namely technology, organisation, policy, culture, knowledge and environment recorded a high level of readiness. Meanwhile stakeholders domain that is at intermediate moderate readiness level. The average score for each domain can be referenced in Table 4.

Table 4: Score according to Domain

Domain	Average Score	Level of Readiness
Technology	3.36	High
Organisation	3.26	High
Policy	3.74	High
Stakeholders	2.73	Intermediate
Culture	3.86	High
Knowledge	3.27	High
Environment	3.76	High

Among the seven (7) study domains, the stakeholders domain is positioned at the lowest radar between the domains since the domain obtain intermediate level of readiness as shown in Figure 3.

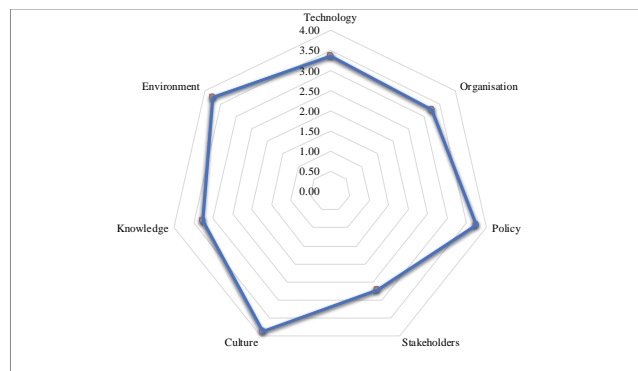


Figure 3: Radar Chart for Readiness Level

The results obtained from validation questions found that the prototype developed has successfully answered the research questions. 45.5% of practitioners strongly agree with the effectiveness of the prototype and the level of effectiveness can be referred in Figure 4.

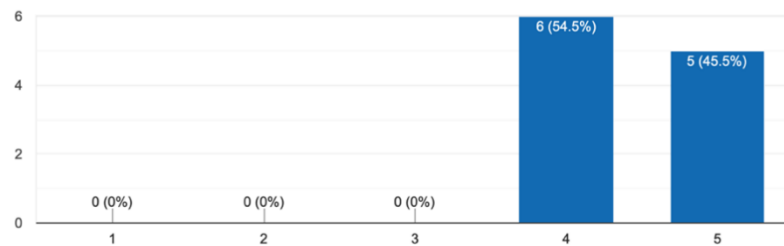


Figure 4: Achievement of Effectiveness Level

On the other hand, the results show there are 54.5% of practitioners strongly agree with the level of efficiency of this model and efficiency levels can be referred in Figure 5.

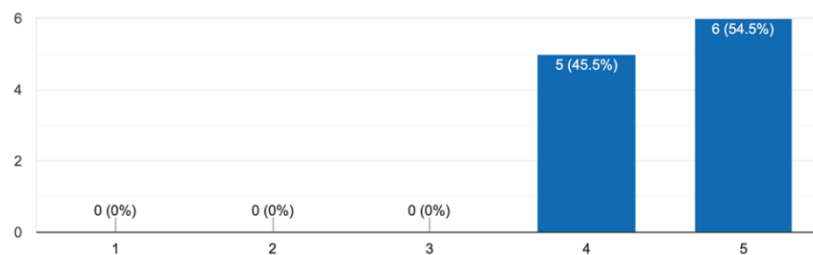


Figure 5: Achievement of Efficiency Level

In overall, the findings from the prototype validation showed that the model is able in helping agency in evaluating the cloud service security readiness level effectively and effortlessly done without wasting the agency resources.

Limitation and Future Work

The resulting pre-assessment model can be further developed with some security issues such as privacy policy on data and information; provisions of different laws and jurisdictions; as well as the development of experts in cloud computing management. The limitation found in this study is that it focuses on agencies that have been accredited and practice ISO/IEC 27001:2013. With the increasing of cyber security incidents, it is crucial to study the level of readiness of in the agency that has not been accredited and practice ISO/IEC 27001:2013.

Recommendation and Conclusion

The study conducted has successfully met the objectives of the study. Through this study, it has successfully identified the factors that affect the CSP pre-assessment readiness level on cloud computing security. Besides, it became the starting point in the development of the preliminary model consist of (7) domains and mapped into 44 controls based in ISO/IEC 27017:2015. Moreover, the develop preliminary model managed to link between ISO/IEC 27017:2015 control and additional control in Annex A ISO/IEC 27017:2015 through verification by experts. Through the prototype developed able to be used in assessing the cloud service security readiness level as well as can assisting agencies in pre-evaluating readiness level effectively and promoting agency awareness in cloud computing security. Ultimately the final model can serve as a guideline for public or private agencies in an effort to provide secure cloud computing services that can be accredited by a worldwide recognised certification body.

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HOUSING FINANCIAL AFFORDABILITY OF B40 TO OWN A HOUSE IN JOHOR BAHRU

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Abstract: *The ability to get housing loan approvals is an important element of determining whether an individual is able to own a house. various measures and conditions set by governments, banks and other financial institutions to qualify individuals applying for housing financing approval. However, till now the B40's ability to obtain housing financing approval was very low and most of them failed to meet their loan requirements due to low monthly income compare to high price of house currently. Various government initiatives are implemented to help the population, especially for the B40 to have their own houses, but banks and others financial institution sets strict requirements on the applicant to reduce their risk if the applicant is unable to repay the loan within the stipulated period. Thus, this study is conducted to identify the level of housing financial affordability of B40 to get housing loan approvals in Johor Bahru, analyse the factors that influence failures to get housing loan approvals and analyse the relationship between the housing financial affordability and factors influenced. In this research, data and information have been collected through online questionnaires via google form due to limited movement during Covid19 and the data gathered then be analyzed by using descriptive analysis (frequency and mean score ranking), Cross Tabulation and Chi Square using SPSS software in order to get the final result. The findings show that B40 group can only afford a house below RM250,000 with monthly installments below RM1,200. The main factors that influenced the failures of B40 to get housing loan approvals are loan repayment history problem, high monthly expenses, high Base Lending Rate, documents attached problem and low monthly income. Factors that indicating a significant relationship are marital status, occupation sector and monthly expenses. To overcome this problems, government and banks need to develop and improve a housing financial policies in order to help B40s group to get housing loan approvals.*

Keywords: *Housing financing, financial affordability, B40 group*

Introduction

Housing financial is one of the main elements that need to be considered in home purchase decision among all groups of income earner including bottom (B40), middle (M40) and top (T20) income earners in Malaysia. According to Berita Harian 27 October 2019, based on the

record of Gross Domestic Product (GDP), over half household debt is obtained for housing purposes, especially buying affordable houses with 84 percent of loans provided by the bank. Besides, buying a house is one of a process that involving a large cost (Ismail, 2015). It shows that, the high prices of houses and the high cost of house purchase led the buyer to decide for applying housing loan as a main basis to buy a house as they not have enough money to pay cash for the purchases. But, the ability for B40 to get housing loan approvals is still at the crisis and low level. The problems of B40 group to obtain housing financial approval nowadays become a social conversation from the community. This is because of financial factors as the key factor of B40 failed to obtain the approval of house financing from the bank and they would not have the potential to own home. According to Ismail et al., (2015) there is almost 40 percent of B40 group especially Bumiputera fail to obtain housing loans from commercial banks.

By referring to REHDA, about 58 percent of loan application have been failed during second quarters of year 2015 for house price around RM250,000 to RM700,000. This is because the higher the market value of houses, the lower the financial ability of B40s to buy a house. The ability of homeownership is the financial capability of a person to pay the housing costs involved in the purchase of a house (Norazmawati,2007). The ability to buy a house is closely related to the income gained by an individual (ME Stone, 2006). B40 is a group which earn the lowest income about average RM3000 per month. This range of income transparently shows the lower financial ability to commit for housing loan repayment instead of high cost of living and others debt.

Definitions of Housing

Based on Maslow's hierarchy of Needs in (Einstein et al., 2016), shelter is one of the basic human needs which called as house. House is a place which is not just act as a shelter in physical aspect but also important for family members to feel secure in getting their own privacy, have productive activities, fulfilling lives and others. Besides, human also need house by understanding of how people move through the family life cycle, whilst predicting their behavior of life and associating to the most likely type of products consumed including houses at various stages of life especially when people getting married and also when the number of family members getting bigger.

According to (Siswono, 1991) and (Azmi et al., 2017), house is a basic necessities that serves as a place of residence to stay and a place of family coaching to ensure the welfare of life is always maintained. So, house is used for shelter from climate disruption and other living creatures, the home is a starting place of life development to ensure daily life can be passed on well and regularly. Apart of that, owning a house is considered an impetus towards integration among family members which a precise measure aspirant home owners can fulfill this life-long investment and also the need for shelter (Hashim, 2010). However, owning a house also is a symbol of quality of life either people are able to live with a good conditions or not and can defined that they are in high or low standard of life. Malek et al., 2017 stated that home is a basic facility that is a key indicator in assessing the level of capability and quality of life. Housing can be defined as the building area of a life. According to (Marcussen, 1990), a housing contains the concept of safety, love, peace, and freedom. Comfortable housing conditions will contribute to the improvement of living standards, health, safety, and well-being. Therefore, the mode of housing preparation will influence the impact of development goals such as wealth distribution and poverty eradication. Besides, Suparno and Endi Marlina, 2006), also stated, housing is a group of houses that serve as a residential environment or a dwelling environment equipped with infrastructure and environmental facilities such as the provision of drinking water, disposal of waste, availability of electricity, roads and allowing a residential environment to work properly.

Low Income Group

Low income group is a group of community that earn a lowest median monthly income compare to others income groups. In Indonesia, according to the Number 1 on Housing and Residential Law year 2011 have explained that lower income community called as 'Masyarakat Berpenghasilan Rendah (MBR)' is a community with have limited purchasing power and is under government support for homeownership. In article 126 of the Number 1 on Housing and Residential Law year 2011 mentioned that the local government provided financial facilities for development and acquisition of public and private houses for MBR's (Agustriana, 2018).

However according to the Malaysia's concept of low income earner which referring to the Malaysia's Budget Proposal 2019, Lower income earners (B40) group is one of the groups that have a hot topic to be focused on in term of home ownership. B40 is a group of earners that able to earn an average income about below RM3000 per month which is below the level of Poverty Line Income (PGK). Based on the (Department of Statistics', 2016) , Earners Income and Basic Amenities (HIS/BA) survey 2016, about 2.7 millions of people in Malaysia can be classified as a lower income earners and most of them have a problem to buy their own house.

Housing Financial

Housing financial is one of the important mechanisms to be considered by all groups to meet the needs of housing. In general, Housing financial can be defined as a legal agreement in which a person will make a money loan to purchase a property such as a house and repay the money in a particular period with a certain interest rate. In Indonesia, housing financial is a negotiated fund or charge that referring to an agreement between bank (creditor) and another party (debtor) that requires the debtor to repay the amount of money after a certain period of time with a certain amount of interest (Agustriana, 2018) . Based on Cholidah (2009), housing financial is one of the bank's main tasks, the provision of parties whose provide funding facilities to meet the needs of the parties who are deficit units.

Besides, the International Union for Housing Finance explained that housing financial is a financial combination of various sectors that are driven by local features such as environment, economy, law, politics and culture that are always fluctuated (Chiquier & Michael, 2009) .Apart of that, housing financial also refers to financial facilities that provided by financial institutions like banks and government agencies in providing financial loans for purchasing the residential property by the borrower (Tuccillo & Goodman, 1983). According to Boleat (1985), housing financial is to provide funds in terms of financial for house buyers to buy homes. The housing financial also defined as the money used for maintaining or build the real estate, and it has to be repaid in the form of rental, mortgage loan and cash repayment (Peter King, 2009).

However this research is focus on Malaysia's concept, in Malaysia, the financial system plays a role as a mechanism to channel some savings for productive investment purposes. According to Sebli & Bujang (2008), the financial system plays an important role in assisting the distribution of resources for property development, including housing which is the basic of human needs. Based on Said et al., (2014), housing financial can be determined as a long term housing loan with a certain period of repayment for the purchase of residential property. Besides, according to Mohd Khalil (2004) have said that housing financial is a form of financial facilities that required by the buyer to purchase a home. Furthermore, housing loans are also one of the incentives in lessen the burden of people to own a house (Mahamud, Hussein, 2002).

Financial institutions such as banks define financial loans as a total loan of a sum of money for a certain period of time with interest rates or interest on borrowings at a certain rate (Mohd Khalil, 2004). In accordance with The Bank Act 1973, Bank is the place for people to borrow for a certain amount of money. Bank Serves as a channel or instrument on supplying money, which conducting money-based business, providing financial facilities to consumers and provide capital resources to individuals based on their specific conditions and controlled by certain act. Funding and loans have a similar definition of the facility provided by a banks in which it able to meet the need of the borrower. In return, the borrower must repay the loan based on the agreed conditions. Therefore, it can be concluded that housing financial is a facility or loan provided by financial institutions whether government or private, to reduce the burden and allows all individuals to purchase for residential property.

Housing Financial Affordability

There are some elements that can be considered in identify the housing financial affordability for every single individual. Buy a house is a biggest expenses that will be made and need a long time decision making in order to choose the best decision in a whole life. So, before entering into any agreement in order to own a house, the applicants need to measures their level of affordability which is set their afford budget that they willing to pay such as identify the house price and monthly expenses for housing that they afford to pay. Basically, monthly commitment like housing loan repayment and cars do not exceed 1/3 of the income of the household. According to Quan and Hill (2009), loan repayment capability is one of the three elements of home financing capability. Two other elements are buying and earning capabilities. Apart of that, there are a few things that need to be consider in order to measure the housing financial affordability such as the amounts of savings, the amounts of the Employee Provident Funds (EPF) and Facility loans from financial institutions that they want to apply. (bankinginfo.com.my/,2003). The measurements that used to identify the level of housing financial affordability are the loan repayment capability and housing financing interest rates.

In order to identify the level of loan repayment capability, the financial institutions have set the calculations to estimate the amount of money that potential borrower need to be repay every month. This is because the determinant of housing purchases depends on the loan facility from financial institutions or through government loan to accommodate the financing. The housing financial for owning houses shall not exceed 1/3 of total monthly income and maximum rate of 30 percent of total household income must be dedicated to housing loan payment expenses for the certain period (Bujang, 2006; Ismail, 2015; Ismail 2020). Here's a formula to calculate the price of the house based on the financing repayment provision of 30 percent from gross annual income.

$$Hg = Y (X\%) \times \frac{1 - \left(\frac{1}{(1+i)^n}\right)}{i}$$

- Hg = Affordable house price (maximum)
- Y = Income of household per month
- $X\%$ = Percentage of expenditure for financing per year
- i = Interest rate per year
- n = Loan period

Based on the formula above by using a year's purchase (YP) or at present value of RM1.00 per annum, the borrower may determine their ability to make loan repayment at a certain amount of maximum house price that afford to buy and the range of monthly repayment installment need to be made. Based on the general criteria, if the applicants have a savings or

deposit, this can be used to support and increase the level of housing financial affordability to get housing loan approvals which will also be accounted by financial institutions in assessing loan eligibility. Financial institutions have different criteria in determining loan repayment ability. For floating interest rate loans, the applicant should also be aware which the monthly payment will be increases significantly when rates interest increases. For example, if the Base Lending Rates (BLR) increase, the interest rates of the loan will also increase and it will also affect the amount of monthly loan installment will be increased too.

The interest rate is an additional percentage of money (premium) paid at a certain period of time of the loan. According to Shahril (2014), in Malaysia, the interest rate is imposed on Base Lending Rate or is known as BLR. The BLR can be defined as a reference interest rate that used by banks to decide how much to charge for various products they offer. It is a rate that takes into account banks' cost of operations, and is typically similar among the major banks. In Malaysia, home loans are normally quoted as a percentage above or below the BLR. This means, if the BLR increases or decreases by a certain amount, the interest rates charged on floating rate home loans also increase or decrease by the same amount.

Banks normally charge whether a fixed interest rate or unfixed interest rate on a housing loan. Most housing loans in Malaysia charge for unfixed interest rate loans, and interest rates are tied to the Base Lending Rate (BLR). There are several factors that could influence the interest rate on home loan. Some are external factors which influenced by the condition of the current economy, while others like credit score, loan terms, location of house and others may have some influence over too. The interest rate is governed by Bank Negara Malaysia and its implementation to the bank itself. Interest payable by the borrower is deemed to be as a fund cost of loan based on the concept of the present value of money at the value of RM1 which this year is higher than the value of RM1 on the next year.

The determination of loan term is really important to identify the financing capabilities of every individual. This is because; loan repayment is dependent on the loan term that applied by the buyer and in accordance with the prescribed conditions by a financial institution or banking. The loan term can be set for any duration as long as it is not more than 30 years or so The borrower is 65 years old (or any other age determined by financial institutions), whichever comes first. The maximum repayment period of 40 years for the housing loan stipulated by Bank Negara Malaysia where the borrower clarifies the housing loan by their retirement age. For example, if a housing loan is offered to the borrower at the age of 25 years old, the financing tenure of 40 years is up to the retirement age of 65 years (Bank Negara Malaysia, 20/09/2016) . However, the longer the extension of repayment period will increase the total financing costs without any significant increase in the ability of the person to pay the monthly installments. The longer the payment period, the lower the interest rate will be charged.

Housing Policy In Malaysia

The government have established a housing policy in order to help and giving a chance to all people from different groups to own a house. The purpose of the housing policy is to provide house which complete with all the facilities and also can afford by any group of people to buy (Ismail Omar, 2000 and REHDA, 2014). The main aim of housing policy is to create a condition where everyone is able to have a comfort house according to the level that suits their current life (Hanif, 2010). In addition to the Loo (2003), through the housing policy, the gap between race and social will be reduced as it was implemented in Singapore and even France before. The table 1 below shows the Housing Policy in Malaysia that introduced by Malaysia Government since the colonial era.

Table 1: Housing Policy in Malaysia

Year	Policy	Approaches
Before 1957	During Colonial	Housing Trust and quarters
1961-1965	2 nd Malaysia Plan (RMK2)	Democratic home ownership and quarters
1966-1971	1 st Malaysia Plan (RMK1)	Low-cost houses and public housing
1971-1975	2 nd Malaysia Plan (RMK2)	Involvement of public and private sector in provide housing to citizen.
1976-1981	3 rd Malaysia Plan (RMK3)	National housing, low-cost housing, and Quarters
1981-1985	4 th Malaysia Plan (RMK4)	-Adequate home development is low, medium and high cost for people.
1986-1991	5 th Malaysia Plan (RMK5)	-To restructure the population, preparation facilities and infrastructure to communities
1991-1995	6 th Malaysia Plan (RMK6)	-Convert construction of low-cost houses to private developers.
1996-2001	7 th Malaysia Plan (RMK7)	-Creating a few housing companies owned by the government, such as CIDB
2001-2005	8 th Malaysia Plan (RMK8)	-National Housing Policy: 1. Government: Construction of low-cost houses. 2. Private: Construction of medium and high cost houses -Target to reach: zero squatters.
2006-2011	9 th Malaysia Plan (RMK9)	-Providing capital to build more low-cost housing for low-income group.
2011-2015	10 th Malaysia Plan (RMK10)	-Housing for the Y generation. implementation for My first home Program.

Sources: (Ezeanya, A. C., 2004, June)

According to the Economic report of the Ministry of Finance 2010/2011, the construction sector is expected to contribute 4.9 percent of the total gross domestic product (GDP) in 2010. Therefore, the Government have introduced for National Housing Policy during the 8th Malaysia Plan (RMK8) on year 2001 which mentioned in table above. Through this policy, the government aim to continue emphasize on adequate, quality and affordable housing development needs, especially to meet the needs of the targeted people. Emphasis will be on the suitability of the location as well as a conducive shelter environment in line with the fourth strategy, the 10th Malaysia Plan (RMK10) to ensure an access to quality and affordable housing. In 10th Malaysia Plan, the Government has targeted the construction of 78,000 units of affordable houses to meet the needs of the lower income groups and for the resettlement of squatters. The total of 38,950 units under the People's Housing Programme (PPR) and 39,050 units under the program relating to the Ministry of Rural and Regional development (KPKT, 2011).

In addition, a fund of RM500 million will be allocated under the 10th Malaysia Plan for the purpose of funding the overhaul and maintenance of public and private-owned houses. The fund will be distributed through a matching grant method, in which half of the cost will be contributed by the Government, and the other half contributed by the management or association of the residents concerned. Under the Government Transformation Programme (GTP), the National Key results field (NKRA) is "improving the standard of life of low- income households" and "improving the basic infrastructure of the rural". The government has decided several drastic measures that were taken to overcome housing problems, particularly for the

low-income households. Based on KPKT (2011) have been explained about a few measures that were taken in order to overcome housing problems for B40 as follows:

- i) Provide assistance to increase homeownership by offering 44,000 units of low-cost houses for sale and rent through Kuala Lumpur City Hall (DBKL) and National Housing Department (JPN);
- ii) To prepare 50,000 new housing units and to be refurbished for the poor and hardcore rural poor by 2012, two-thirds of them in Sabah and Sarawak;
- iii) Ensuring that the eligible recipients only receive housing assistance. Prospective recipients for the housing programme are identified by district and state level agencies as well as through e-Kasih portal, national databases on lower income households; and
- iv) offering financial assistance for the downpayment, legal fees and borrowings with low interest rates for the low income households which are not the receiver or buyers of low-cost houses provided by the government.

On 28 January 2019, the Government launched a new policy called the National Affordable Housing Policy (DRMM) which this policy is sub-policy under the National Housing policy of 2.0 (2018-2025). With the ownership rate of Malaysia's house around 44percent in the first quarter of 2018, which means 56percent of them did not own home. Therefore, this policy will have a positive impact on the homeownership rate in the country. Minister of Housing and Local government, Zuraida Kamaruddin said, the National Housing policy of 2.0 focused on home quality, accessibility, improvement in housing financing scheme, provision of perfect facilities and development Data management for future reference.

Sub-policy, National Affordable Housing Policy (DRMM) is dedicated to focus on first homeownership for the earner groups of B40 and M40 to have the comfortable home. In addition, cooperation with the State Government to build more affordable houses and to ensure the minimal construction cost is to be focused. The affordable houses must have a standard of house size, which must be 900 square feet above with a price of as low as RM150, 000 below. In addition, the effort to implement the rationalisation of the housing entity, 1Malaysia People's Housing Programme (PR1MA), 1Malaysia Civil Servant Housing Programme (PPA1M), Rumah Mesra Rakyat 1Malaysia (RMR1M), Perumahan Negara Berhad (SPNB) and the People's Housing Project (PPR) MyHome, Federal Territory Affordable Housing Policy (RUMAWIP) and etc are placed under the the Ministry of Housing and Local Government (KPKT) (Hafidzi, N. A., Tarmidi, Z., Maimun, N. A., Hassan, N., Noor, N. M., Ariffin, A., & Norasma, C. Y. N., 2019).

Factors Affects the Failure of Housing Financial Applications

Housing financial is directly related to the homeownership affordability. By referring to Norazmawati (2007), the ability of homeownership is the financial capability of a person to pay the housing costs involved in the purchase of a house. The higher the ability of buyer to get the housing financial, the higher the opportunity of buyer to own a house. Some researchers explained that the ability to own houses in the city have a direct relationship with income earned, earners income as well as the cost of earners expenditure (Jonathan, 2014; Nor Rasidah, 2014; Wenjie Cai & Xinhai Lu, 2015a). There are a lot of factors that affecting the failure of housing financial applications which are divided into macro factors and micro factors. Macro factors are like house price, location, financial loan facility, housing loan interest rate, Monthly instalment repayment and house purchases deposit. Factors Micro is like monthly income, job type, age, monthly expenses, amount of liabilities, savings on monthly surpluses and so on (Wheaton, 1996).

Income is a main factor that can influence a person's ability to get a housing loan approval (Ismail,2015). A household monthly income is depending on the employment's job types, the period of works and ranks in work. In general, type of employment can be categorized into permanent employment and part-time job. Instead of full time working, a person may earn income from other sources as a side income like part time business either online or offline, return of investment like home rentals and so on.

Income is the most important element in order to determine the type of house that affordable by every individual. The housing financial provisions for owning houses shall not exceed 1/3 of total monthly income and maximum rate of 30 percent of total household income must be dedicated to housing loan payment expenses for the certain period (single, 2006). Apart, Whitehead (1991) also explained that, the buyers able to get a housing loan approval when there is still a balance of income to cover for living cost and other expenses after deducted to the amount of house monthly instalment and vice versa.

The purchase of houses involves substantial capital as the price per unit of the house is relatively expensive compared to other unit of purchase. For some group of income earner, it may be the largest personal investment. Table 2 shows a household group according to the level of household income and financial provision for housing.

Table 2: Household Group According to The Level of Household Income

HOUSEHOLD GROUP BASED ON MONTHLY MEDIAN INCOME		
Income Group	Monthly Median Income (RM)	Maximum monthly housing expenditure (RM)
B40	RM3000	RM1000
M40	RM6275	RM2092
T20	RM13,148	RM4383

Source: (Department of Statistics', 2016)

Based on the table 1.2 above shows that the B40 group have the least amount of monthly median income as it can be said as their capability to own a house is low. Nowadays, the increases of house price not parallel to the increases of monthly income. Eventhough, the price of affordable houses is at a high level that cannot afford to own buy a B40 if comparing to their median monthly income is about RM3000 that mentioned in table above. Most Malaysian from B40s cannot afford to buy a house because the maximum affordable house price nationwide was at RM282,000 which is really high due to the income of the households (Bank Negara Malaysia 24/10/2019).

Apart of that, the failure of housing loan application is mostly regarding to the unstable of buyers' financial statement and the cash flow. Based on (Ismail, A. K., 2015) , most of the buyers have a low level of awareness towards the important things that need to be consider in their financial requirement. They have not been adviced on how to improve their financial to be pass on bank loan application. Most of the people have a good range of monthly income supported by the other side income and others but they still have a high monthly commitment like car loan, personal loan, PTPTN and others that lowering their eligibility to apply for housing loan instead of has a bad record of pass loan repayment of whether CTOS and CCRIS. This situation can affect the housing loan applications to be failed.

Instead of household income, the monthly expenses or commitment of the individual also will affect the loan application either to be approved or failed. The monthly expenses are including the number of households, lifestyle and hobbies, living costs, investments or other funding involved and so on. By referring to the pattern of expenses for each people, the amount of financial that can afford to be spent in housing aspects can be determined. Thus, this can

affect to the ability of that person to own a house. In year 2016, The mean monthly household consumption expenditure for Malaysia is RM4,033 which increased from RM3,578 in 2014 by grew at 6.0 per cent per annum at nominal value (Department of Statistics', 2016).

For households who live in the city, the mean monthly household consumption expenditure in year 2016 showed RM4,402 which is more higher compared to rural at RM2,725. This is due to the high cost of living in the city, including high expenses for housing, whether to pay rent or loan instalments bank (Department of Statistics' (DOSM), , 2016) . Table 3 shows Composition of Monthly Household Consumption Expenditure in year 2016

Table 3: Composition of Monthly Household Consumption Expenditure in year 2016

Composition of Monthly Household Consumption Expenditure in year 2016		
Consumption Expenditure	Percentage (percent)	RM
Food and non-alcoholic beverages	18.0	726
Transport	13.7	553
Housing, Electricity, water, gas and other fuels	24.0	968
Restaurant and hotels	13.4	540
Alcohol beverages and tobacco	2.4	97
Clothing and footwear	3.4	137
Furnishing, Household equipment & routine household maintenance	4.2	169
Health	1.9	77
Communication	5.0	202
Recreation services and culture	5.0	202
Education	13.0	524
Miscellaneous goods and services	7.7	311

Sources: (Department of Statistics', 2016)

Based on the data above in table 3 shows that there is a high amount of expenses that can be spent by household and it could lessen the affordability of the individual to get housing loan approvals by banks. As banks very strict on calculate the eligibility of potential borrowers after total monthly income minus expenses. The balance of their income will consider as the maximum amount that the individual affords to pay for housing monthly instalment.

In term of housing loan application, there are types of expenses that will considered by banks in calculating the eligibility of potential borrowers to get housing loan approvals such as living cost, CCRIS, CTOS and others. For living cost, bank will consider for an assumption of total for an individual could spent for a month by referring to their status either single or married, the distance between the work place and the house that they want to buy and others. Most of the banks will consider for RM1000 as a monthly living cost if the individual is still single and the work place is nearby to the house, but if the individual is married and the work place is far and out of house district, the monthly expenses will be considered as RM1200. Central Credit Reference Information System (CCRIS) is managed under Bank Negara.

Due to the low and moderate income, the banks and financial institutions find difficulties to provide loans for them (Ismail, 2015). Apart of that, the bad record of loan repayment history usually happens to applicants who failed to make repayment of monthly installments for a long period of time such as six (6) months and above. For example, car loans, credit cards, personal loans, PTPTN and others. When a person is found succumb on this list, and then his record will be red-marked for specific observations by Central Credit Reference Information System (CCRIS) managed by Bank Negara. Thus, commercial banks will refer to the record to identify whether a record of the borrower's payment is good or not.

Every application for housing loan, the bank will check the past record of the prospective buyer through CCRIS. The CCRIS report will reflect the history of repayment of borrowings over the last 12 months. This report includes any home loan or commercial property, car loan, credit card, as well as personal loans. If the loan repayment is not as orderly be paid and have a bad record, the chances of the loan application will be rejected. Below is the sample of bad record of loan repayment history:



Figure 1: The sample of bad record of loan repayment history

Sources: Bank Negara Malaysia (2017)

Based on the Figure 1.1 above shows that the sample of CCRIS record of the individual in PTPTN repayment cannot made with an order payment and good credit which the number of credit record is not '0'. This can give a bad image and perspective in term of the financial conditions of the individuals towards the banks. Besides, the applicant should know the Debt Service Ratio to income (DSR) to ensure the housing loan application can be approved. Usually, the DSR will be calculated based on the amount of monthly debt including individual commitments, other housing loans, personal loans, credit cards and others and are divided by net income after deducting some deductions elements such as periodic tax deductions, EPF and SOCSO contributions and so on. The Formula used by the bank is as follows:

$$\text{Total debt} \div \text{net income} * = \text{Debt ratio}$$

*Net income = Gross income – PTD– KWSP – SOCSO

The maximum debt ratio of obtaining bank approval is between 60 percent and 80 percent. The higher the amount of monthly debt with income, the higher the percentage of debt service ratio. Therefore, individuals are advised to increase their income or reduce the remaining debts if they wish to make a new loan application. The table 4 below shows the comparison of Debt Services Ratio with Income (DSR). The maximum DSR for each bank.

Table 4: Shows the comparison of Debt Services Ratio with Income (DSR).

BANK	BASIC (NET)	DSR MAX (percent)	BASIC (NET)	DSR MAX (percent)
MAYBANK	< RM3,500	40 percent	> RM3,500	70 percent
CIMB BANK	< RM3,000	65 percent	> RM3,000	75 percent
RHB BANK	< RM2,204	55 percent	> RM2,205	60 percent
BSN	< RM3,000	60 percent	> RM3,000	75 percent
HSBC	< RM3,000	60 percent	> RM3,000	70 percent
HONG LEONG BANK	< RM3,000	60 percent	> RM3,000	80 percent
	BASIC (GROSS)	DSR MAX (percent)	BASIC (GROSS)	DSR MAX (percent)
CIMB BANK	< RM3,000	50 percent	> RM3,000	70 percent
AFFIN BANK	< RM5,000	60 percent	> RM5,000	80 percent

Debt-Service Ratio which known as DSR can be defined as an eligible debt ratio which borne by the net salary. Salary or net income is the salary after minus EPF, SOCCO, Zakat and also income tax. Each bank uses a slightly different percentage of DSR to get an overview of the current financial position. In general, the bank uses DSR 60 percent for the net wages below RM3000 and DSR 70-80 percent for net wages above RM3000. Data collected from and interactions with the bank since July indicates that the average of the new approved financing facility remains at a prudent level of less than 40 percent and supported by the valuation of income and debts more robust (Bank Negara Malaysia, 2013). The example way to calculate DSR, the basic salary is RM3500 per month. The total amount of deduction in payslip like EPF, Socso and tax each month are RM450. The net income after subtract that EPF, Socso and also tax is RM3050. Then, the total monthly commitments like cars, motorcycle mortgage, personal loan and others are RM1500. So, total deduction is RM450 + RM1500 is RM1950. Then, the debt-services ratio is a percentage of total deduction over total net income which $RM1950 / RM3050 \times 100$ percent is 64 percent. So, based on the Debt Services Ratio of 64 percent is suitable for apply a housing loan in all banks except RHB Bank as this bank offered for 60 percent as a maximum percentage of DSR.

In carrying out the housing financing application process, the bank will require the borrower to provide a listing of important documents and must be properly attached to them. If they fail to attach such documents, it will cause the application process not to be carried out properly and eventually the bank will reject the application. On occasion, it may pose a prejudice that the attached documents are false and produced by a third party or a false document syndicate. This situation will not only cause the application to be rejected, but they may be accused of the court for attaching false documents and eventually imprisoned. There are listing of important documents that need to be prepared by potential borrowers as following:

Documents needed for Malaysia worker:

1. Photocopy Identification Card
2. Payslip (Latest 3@6 months)
3. Bank Statement (Latest 3@6 months)
4. Employer Confirmation Letter
5. EPF statement.
6. EA/J Form

Documents needed for Singapore workers:

1. Photocopy Identification Card
2. Payslip (Latest 3@6 months)
3. Bank Statement (Latest 3@6 months)
4. Employer Confirmation Letter
5. Permit Worker

Prepare for complete documents based on the above listings is an another term that need to be considered by all potential buyers. All banks are really strict about the documents that need to be prepared by buyers to process the loan applications. If people ease their job, the bankers will help buyers to get housing loan approvals. Addition,an another term that need to be considered by the bank is most of the buyer did not able to prepare for a complete documents that required for housing loan process. Financial or banking institutions only provide loans if complete documents are provided by the potential borrowers. If one of the documents cannot be available, then the financing application will not be approved (Mohamed Shahril, 2014). Based on this statement proved that Malaysians are really suffering to get a bank loan approval.

Methodology

The objective of this study is to identify the level of housing affordability of B40 to get housing loan approvals. In achieving this objective, two types of data will be used namely primary and secondary data. A field survey is to be carried out to collect primary data. The instrument used to collect primary data is by set of questionnaires. The questions on the questionnaires are close ended. The data are informed of quantitative. In order to collect the data, an online questionnaires survey through google form have been distributed randomly through online platform like social media to meets the target samples due to limited movement of Covid19. Apart from the survey, secondary data is also required in this paper, especially for the literature reviews. The secondary data are acquired from references such as journals and seminar papers. The population in this study is B40 group that live in Johor Bahru, with the age between 20 years to 55 years old. Based on reports and research done before, the calculation formula of Taro Yamane to determine the sample size is as follow:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size required

N = number of people in the population

e = allowable error (percent)

Thus, the sample size of this study when using Taro Yamane formula with 90 percent confidence level is:

$$\begin{aligned} n &= \frac{N}{1+N(e)^2} \\ n &= \frac{232,500}{1+232,500(0.1)^2} \\ n &= \frac{232,500}{1+232,500(0.01)} \\ n &= 99.957 \\ n &= 100 \end{aligned}$$

However, after calculated the sample size by substituting the number of population into the formula and the number of sample is 99.957 persons and in order to obtain reliable of data, the researcher has increased sample size to 100 persons. From the above discussion, this research targets to gather more than 100 samples or the closest to it. Data and information were collected through a set of online questionnaires through google form distribution, and the data gathered will then later be analysed by using descriptive analysis (frequency and mean score ranking) and Cross Tabulation Analysis using SPSS (Statistical Package for the Social Sciences) software in order to get the final result.

Findings

The objective of this study is to identify the level of housing financial affordability of B40 to get housing loan approvals. In order to achieve this objective, some intensive review of relevant literatures secondary resources which including academic journals, reports, news and thesis and also the online questionnaires have been accomplished and distributed. The level of housing financial affordability has been served as the input as follows:

Table 5: The level of housing financial affordability

Findings	Description
Monthly income of below RM3,000 can afford to own the purchase price of house below RM250,000	Even though most respondents afford to own house price below RM250,000, but they are still not manage to own a house as even the house price of affordable house is at range at least RM282,000 which exceed their affordability.
Monthly income of below RM3,000 can afford to own the single storey terrace house	Most of respondents able to own a single storey terrace house, but most of them paid at the time when the house price is still low. Currently, the price of single storey terrace house is getting much higher and cannot afford to buy by B40 income earner.
Monthly income of below RM3,000 can afford to pay monthly installment below RM1,200	Most of the respondents able to pay at below RM1,200 for housing expenses if there are not have others monthly commitment like CTOS and CCRIS. This is because, instead of these expenses, they also need to consider for a living cost to survive per month at least for RM1000.
Monthly income of below RM3,000 afford to own Bumiputera Lot	Most respondents have a home with a bumiputera lot and this indirectly indicates that B40s are still interested and focusing on bumiputera lot to enjoy the privilege a 15 percent deduction from the developer's fixed price.

The second objective of this study is set to answer the research question regarding the factors that influence the failures of B40 to get housing loan approvals. After completed the survey tools which are the online questionnaires survey, it will be distributed to the targeted respondents. After gained the data collection from 100 respondents, researcher run the analysis using SPSS software to calculate the frequency, mean score ranking and the cross tabulation analysis. From the findings, researcher had analysed and ranked the factors according to the level of influenced are shown below:

Table 6: Ranks of the factors that influence to the failures of B40 to get housing

Factor	Total Mean	Average Mean	Rank
Loan Repayment History	8.1	4.05	1
Monthly expenses Problems	11.93	3.98	2
Base Lending Rate	11.51	3.84	3
Documents Attached	7.58	3.79	4
Monthly Income	15	3.75	5

Most of the respondents agreed that loan repayment history is a main factor that influence the failures of B40 to get housing loan approvals. This is usually the case for applicants who fail to make monthly installment repayments for a period of six (6) months or more. For example, car loans, credit cards, personal loans, education loans and more. When a person is found on the list, his or her record will be red marked for special observation by the Central Credit Reference Information System (CCRIS) maintained by Bank Negara. Therefore, commercial banks will refer to these records to determine whether the borrower's payment record is good or not. Usually credit score is an indication of whether the applicants manage their money wisely or not. Credit scores analyse individual repayment behavior based on CCRIS. In the case that applicants are having trouble resolving their current debt, it is not possible to get approval for a housing loan application.

The second rank of factor is monthly expenses problem at 3.98 average mean. Instead of B40 is recognized as group with a lowest income earner which below RM3000 per month, they also have to bear the high cost of living cost, large households cost, CTOS or CCRIS and

house prices in the current market which affect the ability to earn housing loan approvals is low.

After that, respondent choose base lending rate factor as a third rank. Short term financing also affects B40 to get housing financial approvals. Previously the financing period set between 35 and 40 years. However, in 2013, the Bank has announced a shortened funding period of maximum 35 years or until the borrower's age is at 65 years. However, if the borrower is at age 40 years old and want to apply for a housing loan, then the period for loan repayment is only valid a range between 20 to 25 years. At a high cost of living currently, this short term of financing period can cause the amount of monthly installment that need to be paid monthly is high and this can make them difficult to get housing loan approvals.

Besides that, documents attached problems have been chosen by respondents at a fourth rank. In order to qualify a person to get housing loan approvals, it is really necessary to meet the requirements set by the bank such as preparing the financial statements EPF, three months salary statement, employer confirmation and so on. These conditions indirectly make it difficult for the B40 who are self-employed to prepare all the documents completely to get housing loan approvals. But from the analysis, this factor did not give a high influence for the respondents because most of them are from private and public sector and just a few respondents is a self-employed workers.

Last but not least, the last rank is monthly income at the lowest average mean, 3.75. The results of the study by Bujang (2010), which outlined individual capabilities of buying a house is very closely related to the income level of each month. Low income factors and high expenses cost does not prove that it is not only difficult to obtain financing, it is also indicates that the B40's housing financial ability is at a low level. But, based on the analysis shown that most of the respondents not chose this income factor as a major factors that influence the failure to get housing loan approvals as they think that most of them can gain their monthly income by doing part time job instead of full time job. So monthly income has a flexible factor that can change from time to time.

The third objective of this study is set to answer the research question regarding the relationship between housing financial affordability of B40 and the factors that influence the failures to get housing loan approvals. By using the analysis data from objectives 1 and 2, researcher run the chi square cross tabulation analysis using SPSS software to identify the significance relationship between the factors and level of income. The findings can be shown as the table below:

Table 7: Relationship between income and socioeconomic factors

Socioeconomic Factor	Significant Value
Marital Status	0.007
Occupation Sector	0.014
Monthly Expenses	0.018

Table 7 shows the significant relationship between income and socioeconomic factors. Based on the table 7 above shows that, there are 3 factors that have a significant relationship with the level of income which are marital status at 0.007, occupation sector at 0.014 and monthly expenses at 0.018. This indirectly proved that the socioeconomic situation has a strong influence on individuals to own a house. However, the others factors which are gender, age, number of households and education level show no significant results, but these factors still have an affects on individuals to obtain financing to own a house. This is because this study focused on the B40 which earns below RM3,000 as an income per monthly, so high monthly expenses especially when they were married is the most affect them to manage their

financial well. Education factor is not a problem for them to obtain housing loan approvals as long they have a stable occupation sector and income, they still can manage to get for financing.

Table 8: The significant relationship between income and others factors

Others Factor	Significant Value
unstable job type, lack of working experience and low ranks in work.	0.049
Unstable and low basic monthly income	0.019
high monthly expenses / debt (living cost, CCRIS, CTOS)	0.043
balance <30percent of net income for housing expenses allocation.	0.010
Bad CCRIS / CTOS record and high credit score (monthly installment are paid irregular)	0.024
The applicant's DSR is high and risky for bank to approve the housing loan applications.	0.018

Based on table 8 above shows the significant relationship between income and others factors that influence the B40 to get housing loan approvals. The factors that show a significant relationship with income are 'unstable job type, lack of working experience and low ranks in work', 'unstable and low basic monthly income', 'high monthly expenses/debt', balance <30percent of net income for housing expenses allocation', 'bad CCRIS/CTOS record and high credit score and 'the applicants' DSR is high and risky for bank to approve the housing loan application'. In term of income factors, 'not earn from part time job and has unstable financial statements' not have a significant relationship with income. This is because most of the respondents thinks that the stability of job working and basic income more important for banks to analyse their financial affordability. But this part time job actually is really an efficient initiative for an individual to increase their financial affordability indirectly as well as when the part time job commission make a good cash flow in financial statement.

Apart of that, when analyse to the expenses factors, 'high cost allocated when they were married, the house far from work place and located in city' has no significant relationship with income as most of respondents think that these factor no big affect on affordability to get housing loan approvals. As they more consider on comfortability to stay at a house that located far from busy traffic jammed of their work place and they also can save for transportation cost by using motorcycle or car pool to go work everyday.

Besides, in term of loan repayment history factor, blacklisted applicant has no significant relationship with income because eventhough the applicants have a high monthly income, once they marked as a blacklisted applicants, there are still cant manage to get housing loan approvals by bank and government. The latest 6 to 12 months before the time of apply for housing loan, the most important is they need to make sure they loan repayment history is in good record and good credit score which need to be analysed by banks.

Lastly, the documents attached has no significant relationship with income as the respondents think that either low and higher income earner can manage to prepare for complete documents that required by banks or government. But, for applicants who are from a self-employed worker have some difficulties to prepare for a required documents as they have no official EPF statement and payslip that can be recognized. But this is a minor case which just a few respondents from this survey are from self-employed workers and most of them are from private or public sector. So, documents attached did not give a high impact on housing loan approvals.

Conclusion

From the analysis and the research conducted, it can be conclude that the B40's housing financial affordability to own a house is still at low range. Even there are a lot of subsidies provided by government and banks, the high price of house and the low monthly income problem are still make the big problems for them to own a house. The house prices in the current market are higher than the levels of financial affordability and has no parallel relationship with the level of income. This funding problem can be overcome by the awareness of all parties. In addition, information disclosure and knowledge of B40 privileges as well as bank financing more transparency can help the B40 group to get the financing to own a house.

Acknowledgements

This work was supported by Universiti Teknologi Malaysia under the GUP Grant Tier 2 Vot.16J74.

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CURRENT PRACTICE TOWARDS PLANNING AND CONTROLLING OF SERVICED APARTMENT DEVELOPMENT IN MALAYSIA

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Abstract: *Serviced apartment is a modern-day accommodation concept that has gained significant popularity across the world. It is a hybrid of the residential apartment subsector and the hotel market. The development of serviced apartments has increased throughout the years in Malaysia yet received limited research attention despite their growing growth. The lacks of knowledge relate to the weakness of the implementation of mechanisms in the planning system causes several issues including oversupply. This paper are aim to examine the current practice on planning and controlling system of service apartment development in Malaysia. The methodology approach of this study analyses published literatures on the planning practice in Hong Kong to unveil comparable concept and view of serviced apartment developments. The paper attempts to provide brief information to encourage public policy makers and local authorities to undertake a more active role in planning and controlling serviced apartment development.*

Keywords: *Serviced apartment, oversupply, planning system*

Introduction

Akin to recent advancements of building technology, developers are able to construct buildings that serve multiple purpose and elements. The developers offer variety of types in the market to attract more prospective buyers. The real estate industry is not only built on land that is categorized as housing but has grown on commercial land with various functions for each type of building. Among them are SOHOs, which are units that mix workspace with homes and are of small size. The unit consist of bedroom, fully equipped toilet and living room. Meanwhile, SOFO offers a unit without partition to the owner in determining the unit space for either the home, office or both. Also, service apartment that does the same with condominiums and apartments but provide services such as hotel. Serviced apartments can be considered as a hybrid between the rental apartment and the standard hotel. This type of accommodation is expanding in demand amongst business travellers due to their offering bigger living spaces, self-catering facilities and hotel-like services (Downey, 1991).

The abrupt increase in units of unsold serviced apartments is bothering the local real estate market. Across Malaysia, a glut of 32,936 units worth RM19.96 billion of residential properties is estimated in 2019 according to NAPIC. The second-largest contributor to the number is serviced apartments with 13,013 units valued at RM10.18 billion. The issue of property oversupply has sparked stimulating discussions. Among major factors affecting the

issue comprise the process of speculative demand and supply by private developers and loopholes in the planning system (Asiah, 1999). Hence, a number of steps need to be taken to tackle the oversupply so the issue of excessiveness of this type of property can be avoided.

Overview Of Serviced Apartment

The concept of serviced apartments originated from US as a form of rented accommodations serving as an alternative to hotels for business or leisure travellers and subsequently expanded into Europe and Asia. Foxley (2002) describe that serviced apartments as a mix of the residential apartment subsector and the hotel market where their purpose is to fill the gap between a short hotel stay and longer-term rental accommodation. Serviced apartment often located in capital cities and major business centres engaging global organizations and enterprises to attract mobile expatriate and professional populations (Henderson and Smith, 2012).

Generally, a serviced apartment is considered as fully furnished, short term, self-contained accommodation, and to provide additional services where usually a small kitchen is included.

Serviced Apartment Operating Model

According to Colliers International (2014), the serviced apartments business model has similarities with both the hotel and residential business models. The key differentiating features between the three operating models is shown below.

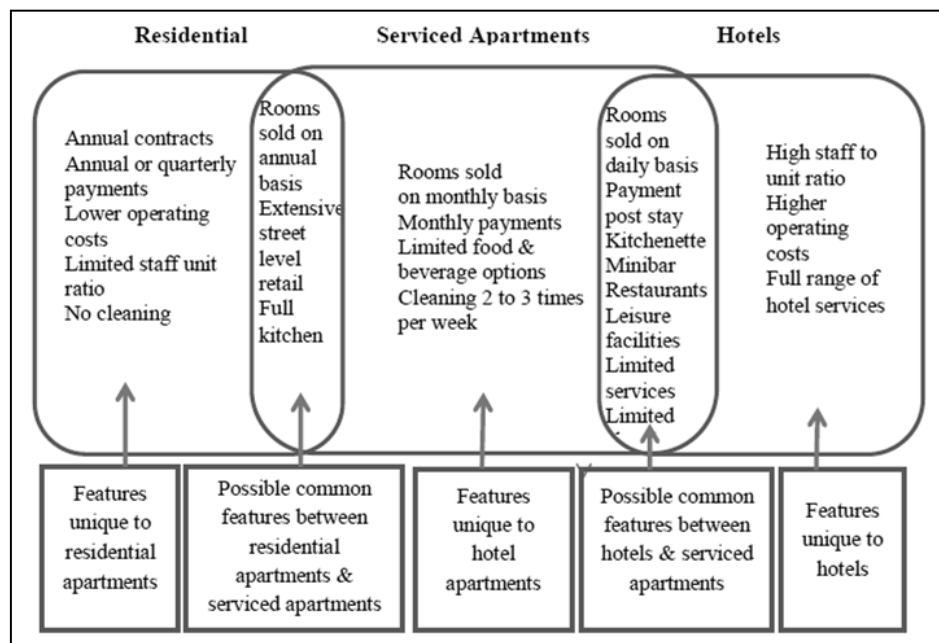


Figure 1: Differentiating Between the Three Operating Models

Source: Colliers International, 2014

Serviced Apartment In Hong Kong

Serviced apartments were introduced to Hong Kong in early 80s when the economy prospered. The rise of incoming expatriates, together with the advancement of standard of living of local people resulted to this kind of development. New World Apartments situated in Tsimshatsui was the first serviced apartment project was introduced to Hong Kong by the New World Development Company in 1980, (Poon, 2005).

Due to regulatory change by Hong Kong Land Departments in 1999 which allowed the strata-title sale of serviced apartments, developers were enabled to secure a significantly higher non-domestic plot ratio through the submission of an application for serviced apartments where the sites were zoned either as Comprehensive Development Area or Commercial. This development planning decision was believed to be biased since developers could sell serviced apartments on a strata-title basis securing a higher plot ratio than normal residential projects and raising concerns that such multiple-owned serviced flats would be used as long-term homes encountering technical difficulties for Lands Department in drafting a lease of strata-title sale for serviced apartments, (Woo. R., 2000).

Hence, in in June 2000, Hong Kong Town Planning Board deleted the category of serviced apartments from the Notes of all statutory plans, Town Planning Board (2000). As a result, developers can no more apply to build such properties under Section 16 of Town Planning Ordinance. However, they can incorporate serviced suite into hotel or residential projects.

In the event where the serviced apartment units are to be developed as part of hotel establishment, it will be considered as 'hotel' and so the provision for 'hotel' use under the Notes of the relevant Outline Zoning Plan is needed for the development of serviced apartments. In the event where the serviced apartment units are to be developed as conventional residential flats with services provided as a marketing tool, they will be regarded as a kind of residential development. Such development will be subject to the provision for 'flat' use under the Notes of the relevant statutory plans. There will only be residential leases which allow strata-title sale of the finished properties, or hotel leases which the finished products have to be sold as a whole.

Serviced Apartment Development In Malaysia

Serviced apartments popularity rises around late 1980s in Malaysia. Due to rapid growth of economic activities in 1988, a boom of tourists coming into the country occurred where serviced apartments were introduced to accommodate their rising numbers, (Marzukhi, 2019). Serviced apartments were only utilized for temporary stay mainly as tourism attractions in that phase. Investors or owners will buy the property and fully furnish the rooms to let out to expatriates or tourists where the concept is similar to hotel. Serviced apartments are much preferred as it is considered cheaper than staying in a hotel. The first serviced apartment in Malaysia was UBN Park in Kuala Lumpur where it functioned as quintessential serviced apartments around the world. Due to its success, serviced apartments begin to grow in concentrated areas with dense economic movements. Industry players assume that large-scale construction projects by the Government has driven the growth of serviced apartments including the Tun Razak Exchange and the My Rapid Transport (MRT), (Hassan, 2015). The last few years have correspondingly noticed a growth in tourism, meaning that long term staying guests are increasing year after year.

However, the property crisis in 2008 and the rise of housing selling price led to majority of the low to medium income group to opt purchasing a smaller and cheaper property which in this case one of the choices being serviced apartments. Therefore, serviced apartments were purchased for them to live in as residential units. (Marzukhi, 2019). The recent developments indicate the approach and operation of service apartments is changing where most of these service apartment premises are occupied by owners or tenants as permanent residences. The popularity of the service apartments expands the demand for this property. Hence, the developers begin to develop more serviced apartments over time.

A very few research studies have been pursued in the Malaysian serviced apartment sector despite its growing advancement. According to Manual Garis Panduan dan Piawaian Perancangan Negeri Selangor, Serviced Apartment is defined as:

“a concept of commercial development that embodies features of residential furnished with designated facilities packages for each unit”

In Malaysia, there are still an abundance of conventional serviced apartments that function similarly to a hotel but with personal service offerings like broadband internet access, daily housekeeping service, a fully-equipped kitchen and entertainment systems. Initially serviced apartments fall under the hospitality sector as a form of an alternative to hotels where they are fully furnished including a kitchen and equipped with personal services like daily housekeeping and laundry services to accommodate foreign travellers that required an alternative for short or long-term stays.

However, strict regulations combined with economic and lifestyle progression have caused new sub-categories to emerge, crossing into the housing sector where the serviced apartments are residences with commercial status in their land titles. (Marzukhi, 2019). These ‘serviced apartments’ have started gaining popularity among home buyers due to its convenience and lifestyle appeal. Not only that, a lot of serviced apartments in Malaysia have evolved into mixed use where developers combine residential and commercial lots to fulfil land title requirements and to get better values. These mixed-use apartments can come in many different names such as ‘SOHO’, ‘SOVO’, ‘SOFO’, ‘serviced residence’ and others.

The Development Planning Control Of Serviced Apartment In Malaysia

Serviced apartments and residential apartments are often mistakenly correlated with each other. Hence, the difference between these two types of apartments can be distinguish by comparing the development control process.

Table 1: Development planning control between residential apartment and serviced apartment

Development Aspects	Content	Type of Apartments	
		Residential	Commercial
Legal matters	Expressed condition or implied condition for building use	Residential use	Commercial or serviced apartment use
Development requirement	Land use zone	Residential	Commercial
	Development form	Developed as residential units only and the required facilities for the residents	Developed as a part of mixed development, free standing building, or within a shopping complex
	Height control	Determined by population density	Determined by plot ratio
	Plinth Area	60%	60%
	Profits	More	Less
	Serviced Road Width	66’	55’
	Ingress and Egress Road Width	50’	Not Specified

	Requirement Setbacks	Consist One building per site or connected by podium at ground floor level	Separate building or blocks within one site
	Building standards	Follow the requirements for 'apartment' in general	No specification
	Assessment rates	Lower	Higher
	Utility bills	Lower	Higher
	Procedures of submission to obtain planning permission and building plan approval	Submission procedure OSC 3.0	
Legal matter		Affected by the implementation of Strata Management Act and amendment of Housing Development (Control and Licensing) Act in July 2015 where the developers must issue Strata Title together with the handover of Vacant Possession together with the issuance of Certificate of Completion and Compliance (CCC) and signing of Sale and Purchase. Bound to the Housing Development (Control and Licensing) Act and require Advertising Permit and Developers License.	

Source: Marzukhi, 2019

Comparative Impact of The Planning and Controlling Practice Towards the Development of Serviced Apartments

Serviced apartments in Hong Kong can only be built on land under residential or hotel leases which minimize developers' interest in building serviced apartments. This is due to the lower plot ratio in developing serviced apartments under residential leases. Meanwhile, development of serviced apartment built under hotel leases provide higher commercial land-use plot ratios than residential-use lots. However, hotel developments involved more restrictions other than incurring a higher building cost than serviced-apartment projects. These factors contribute a result in reduction of the future supply of serviced apartments.

In the meantime, certain arguments arise in the planning, development and operation stages of service apartment development in Malaysia. The ambiguity of category, terms and use of land and buildings in serviced apartment development reflects the occurrence of abuses or violations of authorized activities based on the provisions of the land legislation and current planning. Thus, lead to difficulties in determining the actual concept and operation of the development either as a hotel or as a permanent residence. It is discovered that the development of serviced apartment in Malaysia is more beneficial to the developers as they are able to avoid stringent development requirements for housing development for example the minimum floor area and density calculation usage.

The developers are able to construct more units and at the same time benefit more from the construction of mixed development. Moreover, due to the required location for commercial apartments which happens to be near the central business district area or public transportation enable developers to sell the properties for higher price. Contrarily, the commercial apartment burdened the residents through higher assessment rates and utility charges.

Conclusion

This paper has briefly explained the planning and controlling practice in the development of serviced apartment. By applying qualitative method of analysis using the perception analysis, the aim of this study is achieved. The lack of knowledge on serviced apartments in Malaysia advantage benefits to the developers where in contrast has burdens residents and buyers.

Nevertheless, it is relevant for the government to review and revise the Acts, rules, and requirements as well as adapt and incorporate adaptable foreign planning strategy that function more effectively. This study can generally benefit public policy makers and local authorities to assist decision making and improve on the planning and controlling of serviced apartment development in Malaysia.

Acknowledgements

This work was supported by Universiti Teknologi Malaysia under the GUP Grant Tier 2 Vot.16J74.

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A STUDY ON DETERMINANTS THAT AFFECT THE RETURN ON ASSET OF ISLAMIC BANKS IN MALAYSIA

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Abstract: *Islamic banking institutions need to strengthen their business performance in facing the strong competition from domestic and foreign banks. Banks need to strengthen the stability of the banking system to achieve a healthy and sustainable profit. Therefore, a study is conducted to determine the determinants that affect return on asset in Islamic banks that cover quarterly data from 2013 until 2018. The data has been analysed to determine internal and external factors that affect the return on asset of Islamic banks. Meanwhile, to identify the factors that is significant Multiple Linear Regression model has been used. Based on the findings, Gross Domestic Premium (GDP), Total Equity to Total Asset and Total Deposit to Total Asset (TETA) are significant and affect the Islamic banks' return on asset. Meanwhile, Total Debt to Total Asset (TDeTA) and Total Loan to Total Asset (TLTA) inflation and interest are not significant to Islamic banks' return on asset. Hence, this study is carried out to identify the best model for forecasting the common significant determinant Islamic banks in Malaysia. Based on the findings, Single Exponential Smoothing (SES) method, Holt's method and Autoregressive Integrated Moving Average (ARIMA) method are used to find the best method in order to forecast the common significant determinants of Islamic banks in Malaysia for the next five periods by using the best model.*

Keywords: *Islamic Banks; Return on Asset; SE; Holt method; ARIMA.*

Introduction

Today, Islamic banking operations will begin to face challenges due to the globalization environment. Thus, Islamic banking institutions need to strengthen their business performance in facing the strong competition from domestic and foreign banks. Banks need to strengthen the stability of the banking system to achieve a healthy and sustainable profit [1].

Profitability analysis of each country's banking system was focused on the first study group. Various factors affecting profitability can be attributed to the performance of these banks. Based on all European banks and banking sectors found in previous studies, studies have found that there are various levels of efficiency achieved by these banks. Operational activities and bank profits are also influenced by internal determinants resulting from bank management decisions and policies. In addition, a strong and profitable banking sector can face

problems such as negative shocks and strengthen the financial system itself. Therefore, the factors that influence the profitability of the firms need to be known by an Islamic banking institution to perform the best and compete globally [1].

Studies on the determinants of Islamic banking institutions have not been developed yet. To show whether their indicators are significant or not with Islamic banking's profitability, the study will cover the quarterly periods on a year which cover from year 2013 until 2018 in order to determine the profit performance indicators of Islamic banking institutions. The determinants of bank profitability can be divided into internal and external measure [1].

Areas of bank management that the officers and staff of the bank have under their immediate control is internal factor while external factors are environmental aspects of the bank's market over which management has no direct control [2].

For this study, the internal factor which are total equity, total deposit, total loan and total debt and which are external factor gross domestic product, inflation rate and interest rate that will affect the profitability performance of Islamic banking using return of asset based.

Literature Review

This literature review will support in finding the best determinant that affect the profitability performance of Islamic banks in Malaysia. The profitability performance of Islamic banks in Malaysia can be determined using ROA that play as dependent variable.

Some factors that can affect the profitability performance of Islamic banks in Malaysia are divided into two parts, external factor and internal factor. External factor that are used in this project are Gross Domestic Product (GDP) growth rate, inflation rate and interest rate. Meanwhile, internal factor that used to determine the profitability performance in Islamic banks are Total Equity to Total Asset (TETA), Total Deposit to Total Asset (TDTA), Total Debt to Total Asset (TDeTA) and Total Loan to Total Asset (TLTA). Regression analysis is use to find the best determinant that affect the bank profitability performance.

Studies on External Factors

Gross Domestic Product is a measurement of the total output that produced in a particular country. GDP growth also reflects the economic cycle. Many have studied the result of the economic process on banks' profit. For instance, [2] found that GDP is statistically significant and positively related to both domestic and foreign bank. This further confirms the findings of [3] in which they found a positive relationship by explaining high GDP growth results improvement in credit quality and increase banks' profitability.

Inflation is described as an increase in the price of consumer goods and cost of living. Based on country economic condition, inflation has a positive and negative impact. [4] performed a study to analyse the determinants of profitability of Islamic banks operating in Malaysia for the period from 2007 to 2013. Return on Asset (ROA) is the performance indicator for profitability measure on eleven Islamic banks in Malaysia. One of the macroeconomic factors that include specifically is inflation rate. This study shows that inflation have a significant positive relationship with ROA.

[5] stated that interest rate money is a major cause of fluctuations and obstacles in economic development. The economic sector will be affected by the existence of interest rate and negatively affecting the banking sector whereby the banking sector is a sector that directly deals with money. A study conducted by [6] found that increase in interest will affect finance in the banking sector. Interest rates for savings and interest on loans are important in improving the bank's trading performance.

Studies on Internal Factors

In this study, TETA is one of the determinants of profitability for the banking industry. The study mentioned that high capital ratio can reduce the risk and ensure the bank security when using TETA as the profitability determinants. There is a significant positive relationship between capital ratio and ROA. [7] investigated the performance evaluation of Islamic mutual fund in Malaysia. They used equity as independent variable to perform the study between 2001 until 2010. Equity showed positive return and outperformance throughout the period of study.

Deposit funds are placed into an account at a depository institution to increase the credit balance of the account. Among the key components in the economic aggregate financing structure are deposits. In theory of bank funding, deposit finance act as a relatively small role where it is usually simply treated as another form of debt [8]. [9] examined the determinants of Islamic Banking industry's profitability in Pakistan for period 2004 until 2012. The study analyses the determinants of Islamic banking industry's profitability of five full-fledged Islamic banks. It showed that TDTA gave positive impact over profitability.

The role of debt in explaining the profitability of companies is one of the main concerns of various researches. Researchers, in fact, analyse TDeTA and try to determine the optimal debt ratio exists. The study on the effects of TDeTA on profitability will help us to understand potential performance problems and TDeTA problems. Based on [10], a large literature reviewed the relationship between TDeTA and firm performance. Some found a negative relationship, while other studies found a positive relationship between the TDeTA and the performance of the company.

Liquidity measurement is the TLTA. This ratio measures the percentage of total bank assets set in the loan (or financing). When the ratio becomes high, then the liquidity of the bank is decreasing. Highly liquid banks are determined by lower TLTA than higher TLTA. The higher the potential of profitability is attributed to high TLTA, so risk of the profitability also high [11]. [12] explained that the liquidity of bank assets measured by TLTA and related to the loans. If the liquidity of the bank is lower, TLTA will become higher. Islamic banks have non-interest-bearing loans that affect the operation of either profit or loss, but bank operations are supported on loans. TLTA and profits have positive relationships in conventional bank studies.

Research Methodology

This study analyzes by using secondary data such as internet and other available information. The financial data include Return on Asset (ROA), Gross Domestic Product (GDP), interest rate, inflation rate, Total Equity to Total Asset (TETA), Total Deposit to Total Asset (TDTA), Total Debt to Total Asset (TDeTA) and Total Loans to Total Asset (TLTA). This set of data will be used to evaluate and to highlight the profitability Islamic Banks (Bank Rakyat, Bank Muamalat and Bank Islam).

Data Description

The data used in this research is secondary data which is obtained from The World Bank Data, International Monetary Fund, World Economic Outlook Database and Thomson Reuters Eikon UiTM Library. The data involve period of involves the quarterly periods on a year which cover from year 2013 until 2018 and there is four internal and three external factors that include in to determine the best determinants that affect the profitability performance of Islamic banks in Malaysia. The variables that have been included are:

- i. External factor; GDP, inflation rate and interest rate.
- ii. Internal factor; TETA, TDTA, TDeTA and TLTA

Multiple Linear Regression

In order to examine the internal and external factors that affect the ROA in preferred banks, the following model has been developed:

$$y_t = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_m x_m + \varepsilon \quad (1)$$

where,

- y is the ROA of Islamic Banks
- x_j is the j th independent variable; GDP, inflation rate, interest rate, TETA, TDTA, TDeTA and TLTA, for $j = 1, 2, \dots, m$
- ε is the error term and is assumed identically, independently and normally distributed with mean = 0, variance = σ^2 , covariance = 0 and $\beta_0 + \beta_j$ for $j = 1, 2, \dots, m$ are unknown parameters to be estimated.

Single Exponential Smoothing

The SES techniques consider a set of time series data, taken over a period of 1 till T. SES is the simplest form of model within the family of the exponential smoothing techniques. The model requires only one parameter which is the smoothing constant, α , to generate the fitted values and hence forecast. The general equation for single exponential smoothed statistics is given as,

$$F_{t+m} = \alpha y_t + (1 - \alpha)F_t \quad (2)$$

where,

- F_{t+m} is the single exponentially smoothed value in period (this also defined as forecast value when generated out-of-sample), for $m = 1, 2, 3, \dots$
- y_t is the actual value in time period t
- α is the unknown smoothing constant to be determined with value lying between 0 to 1, i.e. (0), selected by the forecaster or alternatively determined by the data
- F_t is the forecast or smoothed value for period t

Double Exponential Smoothing

This technique is also known as Brown's method. It is useful for series that exhibits a linear trend characteristic.

$$S_t = \alpha y_t + (1 - \alpha)S_{t-1} \quad (3)$$

where,

- S_t be the exponentially smoothed value of y_t at time t
- S_{t-1} be the exponentially smoothed value of y_t at time $t - 1$
- y_t be the actual value in time period t
- α be the unknown smoothing constant to be determined with value lying between 0 to 1, i.e. (0), selected by the forecaster or alternatively determined by the data

Holt's Method

Holt's method not only smooth the trend and the slope directly by using different smoothing constants but also provides more flexibility in selecting the rates at which the trend and slopes are tracked.

$$F_{t+m} = S_t + T_t \times m \quad (4)$$

where,

F_{t+m} is the single exponentially smoothed value in period (this also defined as forecast value when generated out-of-sample), for $m = 1, 2, 3, \dots$
 S_t be the exponentially smoothed value of y_t at time t
 T_t be the trend estimate

ARIMA

ARIMA models are, in theory the most general class of models for forecasting a time series which can be stationeries by transformation such as differencing and logging

$$Y_t = -(\Delta^d Y_t - Y_t) + \phi_0 + \sum_{i=1}^p \phi_i \Delta^d Y_{t-i} - \sum_{i=1}^q \theta_i \varepsilon_{t-i} - \varepsilon_t \quad (5)$$

where,

- Y_t is an observed value
- d is a differences required for convergence
- ϕ are autoregressive parameters
- θ is a moving averages parameters
- ϕ_0 is a model constant is assumed different from zero
- ε_t is an error term

Data Analysis

Significant Variables

To determine the significant variables that affect the ROA of preferred banks, we look into the results. If the p-value less than 0.05, the variables are significant. Table 1 shows the p-value for external factors among preferred banks.

Table 1: p-value For External Factors

p-value	Bank Rakyat	Bank Muamalat	Bank Islam
GDP	0.0140	0.6588	0.0016
Inflation rate	0.4878	0.4717	0.0247
Interest rate	0.0167	0.5859	0.0613

Based on the table above, GDP and interest are significant variables for Bank Rakyat with the p-value 0.014 and 0.0167 respectively. Bank Muamalat does not have any significant variables since all the p-value is more than 0.05. Bank Islam has two significant variables; GDP and inflation rate.

Table 2 shows the result of significant variables for internal factors.

Table 2: p-value For Internal Factors

p-value	Bank Rakyat	Bank Muamalat	Bank Islam
TETA	0.0449	0.0057	0.0008
TDTA	0.3040	0.0305	0.0007
TDeTA	0.5289	0.7245	0.1212

The result in Table 2 indicates that at 5% significant level, TETA is significant for the three banks. TDTA is a common factor among two Islamic banks which are Bank Islam and Bank Muamalat. TDeTA and TLTA are insignificant towards the ROA.

The method of SES, DES, Holts Exponential and ARIMA are used to run the common significant among Islamic bank. Then, choose the lowest error using RMSE among SES, DES, Holts Exponential and ARIMA. The common factor among Bank Islam, Bank Muamalat and Bank Rakyat is TETA.

Best Model

Based on the results that obtained from the first objective, we divided the result into two groups. The first group is the common factor among three Islamic banks. Table 3 shows the result of RMSE for TETA using SES, DES, Holt's and ARIMA.

Table 3: Comparison of RMSE for TETA in Preferred Banks

RMSE for TETA	Bank Rakyat	Bank Muamalat	Bank Islam
SES	0.0030604	0.0035323	0.1364954
DES	0.0032764	0.0041763	0.1520559
Holt's	0.0025597	0.0041769	0.4238995
ARIMA	0.0030605	0.0035334	0.1364946

Lowest RMSE for Bank Rakyat is from Holt's method. Therefore, Holt's method is the best model to predict TETA in Bank Rakyat. Moreover, the best model to predict TETA for Bank Muamalat is by using SES method because it has the lowest RMSE among the other method. Besides, Holt's method is the most suitable method to forecast the future value of TETA for Bank Rakyat.

Table 4 indicates the result of RMSE for GDP for Bank Islam and Bank Rakyat.

Table 4: Comparison of RMSE for GDP in Bank Islam and Bank Rakyat

RMSE for GDP	Bank Rakyat	Bank Islam
SES	0.005787972	0.005787972
DES	1.786374315	1.786374315
Holt's	0.006121414	0.006121414
ARIMA	0.005430602	0.005430602

GDP is the common factor among two Islamic Banks. Bank Islam and Bank Rakyat can use ARIMA method to predict and forecast the future value of GDP.

Table 5: Comparison of RMSE for TDTA in Bank Islam and Bank Muamalat

RMSE for GDP	Bank Muamalat	Bank Islam
SES	0.0258361	1.586865
DES	0.0435203	1.786374
Holt's	0.0254069	1.591551
ARIMA	0.0216833	1.586856

The last common factor is TDTA. Based on the result above, the best method can be used by Bank Muamalat and Bank Rakyat is ARIMA. ARIMA has the lowest RMSE which is 0.0216833 for Bank Muamalat and 1.586856 for Bank Rakyat compared to the others method.

Conclusion

According to [11], the research shows that the Multiple Linear regression method is used to determine the effect of the bank factors and determine the significance of each variable. From the results, the significant determinants for Bank Muamalat are TDTA and TETA. Meanwhile, the significant determinants for Bank Islam are GDP, inflation rate, TDTA and TETA and Bank akyat are GDP, interest rate and TETA. The most common significant determinant among those banks is TETA.

To summarize for the best model, the most accurate method that is found in this analysis is ARIMA. [12] found that ARIMA method is the best approach and reliable method because it gives more accurate results. The model that is quite accurate to be used for estimating is SES and least accurate is Holt's method.

Based on the result from the study, TETA, TDTA and GDP come out to be significant determinants for the ROA. If the forecasting of TETA shows the high beneficial to the investors, there is tendency for the investors to invest in the company. Meanwhile TDTA shows the varying of amount of customers' deposit to the banks' asset. The low value of forecasting in TDTA may due to economy crisis since the customer tend to withdraw the money from the banks. The GDP enables policymakers and central banks to judge whether the economy is contracting or expanding. By predicting the future value of GDP, the bankers can monitor the trend of GDP.

Recommendation

For the further research, it is highly recommended to use the latest method that is used by the researchers in the latest journal. This is because the methods that are been used in this study might not the best methods to reflect the outcomes that this study wishes to achieve. The example of the model that could be used is GARCH model which is Generalized Autoregressive Conditional Heteroskedasticity model. The GARCH method might be same as the ARIMA method. For the chosen data, it is advisable to take a greater number of data to make sure that the forecasting process is more accurate and the fitted value can be almost the same as the actual value. The data can also be varying from the data that has been used in this study such as ROE and NIM.

Next, for the further research, it is advisable to improve the knowledge in the banking by doing an interview with the bankers. It is recommended to make an early appointment with the bankers to avoid the last-minute work. The future researchers must be reminded that the research on the journal only will not enough. The further study research should be carrying out to investigate the causes and the benefits of the forecasting process to the investors and thus increase the profits of the chosen banks.

Finally, for the further research, it is highly recommended to study on the half Islamic and half conventional banking and conventional banking. Since this study is only focused on the Islamic banking, it is might interesting to know the effect of the determinants on the profitability performance.

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ANALYZING THE SURVIVAL RATE OF PENSIONERS IN MALAYSIA

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Abstract: Pension scheme in every country helps the pensioners to sustain for their old age including their healthcare expenses and other necessities. Other than the pensioners' own saving, sufficient pension benefit also help them to survive after their retirement. The thing that becomes curiosity is whether more benefit provides longer survival time or not. However, the paper is focusing on Malaysia pension scheme. This population based study was carried out to fulfill the primary aim of determining the survival rates of Malaysian pensioners based on the amount of benefit received. Data of pensioners were obtained from Jabatan Perkhidmatan Awam (JPA) from year 2017 to 2019. The amount of benefit is calculated first using Entry Age Normal Cost Method and is divided into two groups by their average. Kaplan-Meier analyses were conducted to identify the overall survival rates, mean and median survival time. Differences in survival among different amount of benefit group were compared using the log-rank test. A total of 2266 pensioners were included. The overall mean survival time for pensioners in this study was 63.317 years while median survival time was 43 years. The log-rank test finding also showed that there were significant differences in the 20-year survival rates between the two groups of pensioners. Group 1 had the lowest survival rate of 91.7% followed by Group 2 (99.1%). This shows that the pensioners with more benefit have higher survival rate compared to those with less benefit.

Keywords: Pension, Survival Analysis, Kaplan-Meier, Log-Rank Test

Introduction

The pension scheme was first introduced in Malaysia in 1951 even before the independence from United Kingdom in 1957. The pensions Ordinance was eventually replaced by The Pensions Act (1980), which continues to be the main legislation governing the pension system today. The pension benefit is paid to covered workers only when they have substantially retired from covered employment (Myers, 1954).

According to Tyhurst et al, retirement is generally looked upon with distaste. It is frequently equated with illness, declining abilities, and other characteristics of degeneration. Among some people, retirement is looked upon as the result of these characteristics. They conclude that people who retire show deterioration in health and die shortly after retirement. The amount of money that people get for retirement can determine the survival rate of individual or population. It is also stated by Cohut. M in his paper, that the people are expect to live longer when they are wealthy because they will have easier access to appropriate health

care. A research has been done in German on the significant between rich and poor in life expectancy. They found that on average, men with very low retirement pay die five years earlier as compare to those who have better pay (Wenau et al, 2019). He also said “65-year old men with very high retirement benefits can expect on average to live for another 19 years, while men in the lowest of five income groups will on average not live to see their 80th birthday.”

Pension scheme in every country including Malaysia help the pensioners to sustain for their old age including their health care expenses and other necessities. Other than the pensioners’ own saving, sufficient pension benefit also help them in survive after their retirement. We noticed that there are some questionable issues related to the survival rates of pensioners after they have retired. Does the pension scheme really help the pensioners to live a normal life as if it’s the same as before they retire? The thing that becomes curiosity is whether more benefit provides longer survival time or not. This population based study was carried out to fulfill the primary aim of determining the survival rates of Malaysian pensioners with smaller and larger amount of benefit. The purpose of this paper is to discuss the sustainability of pension for the pensioners on a daily basis in the context of the current structure of the Government pension scheme. Taking into account of the factors affecting the value of benefits such as non-fixed income and other extra expenditures, suggestions for reforms and solutions are then made in the concluding remarks.

Literature Review

According to Zahid in his paper ‘Survival Analysis’, survival analysis is a set of method used to approximate the lifetime of a particular population under study. Since the objective is to predict the time which is the duration between birth and death events for an individual or a group of individuals to undergo an event of interest (death, churn, etc), it is often called as ‘Time to Event’ Analysis. In survival analysis, a subject can enter at any time in the study since we do not require the exact starting and ending points.

There is one thing that we need to understand, not every member of population will undergo the Event of Interest during the study period. However, for some cases we do not know when they will undergo the event of interest. All we know is that they have not undergo it yet. These survival times are called as ‘Censored’. Censorship entitles you to compute the lifespan of the population who have not undergo the event of interest yet.

There are few types of Censorship in Survival Analysis. First, Right Censoring that happens when the subject enters at the start of the study ($t=0$) and stops before the event of interest happens. Second, Left Censoring that happens when the event of birth was not observed. Third, Interval Censoring that happens when the time between observations is not continuous. Lastly, Left Truncation that referred to late entry. But it is possible for the subjects to undergo event of interest before taking part in the study. The main function of Survival Analysis is to solve the problem of right-censoring.

According to Alex in his paper, there are three options of modeling the survival function in Survival Analysis. First is non-parametric survival analysis. It is non-negative regression and density estimation for a single random variable in the existence of censoring. Examples of non-parametric analysis include Kaplan-Meier Estimate, Nelson Aalen Fitter and Survival Regression. It is very flexible and its complexity that grows with the number of observations make this type of survival analysis advantageous. However, it is not simple to incorporate covariates. In the other word, it is hard to describe how individuals vary in their survival functions. The way to do it is to fit a different model on two subpopulations and make comparison. The other disadvantage of non-parametric analysis is that here is no smoothness in the survival functions. If no death occur in the interval $[0,t)$, then the survival probabilities will be assign as 1 to that period. However, there are ways to smooth the survival functions,

we called it as kernel smoothing. Only that the interpretation of the smoothing can be a bit risky.

The second option to model the survival function is parametric survival analysis. This is where the survival functions follows a parametric distribution include exponential, Weibull, gamma and lognormal distributions (Wheatley, 2012). Unlike non-parametric analysis, the advantage of parametric analysis is on the smoothness in survival functions and we tend to have good feeling on their behavior. While for the disadvantage, one needs the parametric model to actually be a good description of your data. This requires either by formal hypothesis testing or visualization procedures to test it (Alex, 2018).

Lastly, it is called semi-parametric survival analysis where the hazard function is estimated from the data. It is called as semi-parametric because while the hazard function is estimated non-parametrically, the functional form of the covariates is parametric. Hence, the problem of incorporating covariates is occurring.

$$\lambda_n(t) = \lambda_0(t) \exp(\beta^T z_n)$$

“It decomposes the hazard or instantaneous risk into a non-parametric baseline, shared across all patients, and a relative risk, which describes how individual covariates affect risk”, (Alex, 2018). A time-varying baseline risk is allowed while allowing patients to have vary survival functions within the same fitted model. Since the survival function is not smooth, we have to satisfy two assumptions, linearity between covariates and log hazard and proportional hazards for speculations to be correct and the estimations to be good.

Kaplan-Meier Estimator

As stated in journal by Lukas et al, a manuscript that illustrates an advance statistical method was published by Edward L Kaplan and Paul Meier in June 1958 to estimate survival rates when there is insufficient survival observations included in the data base. For the last four decades, a Kaplan–Meier ‘staircase’ survival curve (as shown in Fig.1) was presented once the survival rate $S(t)$ at time t has been predominately calculated by the Kaplan–Meier product–limit method

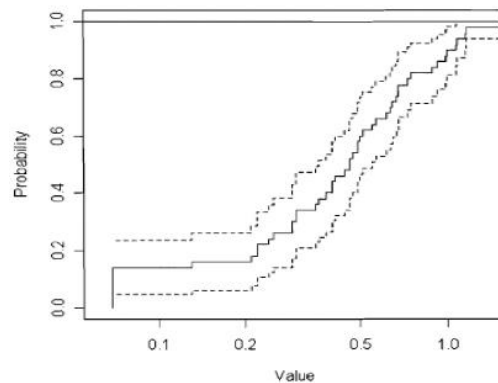


Figure 1: Kaplan-Meier ‘Staircase’ Survival Curve

According to Wormuth in his paper, ‘Actuarial and Kaplan-Meier Survival Analysis: There is a Difference’, Kaplan-Meier analysis is used when the actual date of the end point is known. Dudley et al also mentioned in his paper, Kaplan-Meier can calculate how long after starting a particular treatment that the studied event (e.g., death, disease progression, etc.) occurred for individuals who were not otherwise lost to the sample or until the study has ended.

Stalpers and Kaplan had said that three pieces of information for each patient are collected for most of the work for the clinical researcher. Firstly, the first date of observation. Secondly, the last date of observation. Lastly, the status on that last date whether that is an event or a censored observation. With the technology advancement, every physician or basic scientist nowadays uses one of many statistical software packages such as SAS, SPSS, Stata, GraphPad Prism or R to calculate Kaplan–Meier survival curves (Lukas et al, 2018).

Maximum Likelihood Estimator

In this study, we will be using non-parametric maximum likelihood estimator because it is claimed by Rodriguez, G. to be a better interpretation for the K-M estimator. We consider the contribution to the likelihood of cases that die or are censored at time t . If a subject is censored at t , its contribution to the likelihood is $S(t)$. In order to maximize the likelihood, we would like to make this as large as possible because a survival function must be non-increasing. The best we can do is to keep it constant at t . In other words, the estimated survival function does not change at censoring times. If a subject dies at t , then this is one of the distinct times of death that we introduced before. Say it is $t(i)$. We need to make the survival function just before $t(i)$ as large as possible. The largest it can be is the value at the previous time of death or 1, whichever is less. We also need to make the survival at $t(i)$ itself as small as possible. Thus, we need a discontinuity at $t(i)$.

Log Rank Test

The log rank test is similar to the Kaplan–Meier analysis and a popular test used to compare two or more groups. The test also can be thought of as a test of whether the survival curves are overlapping or not. The process can be done by estimated the survival curves separately for each group by using the Kaplan-Meier method and used the log rank test to compare statistically (Wayne, 2016). According to Stephanie in her paper, this test will tell you whether there is a difference but it would not give you information about the size of the difference or give you an interval of confidence. She also claimed that there are three assumptions for the log rank test. Censoring must be unrelated to prognosis. Survival probabilities are equal for subjects recruited at any time in the study The events happened at the specified time.

Apart from that, Stephanie also highlighted on the types of log-rank test which are weighted log-rank test and stratified log-rank test. The weighted log-rank test is used if your purpose is to compare groups but want to give more weight to certain events. It is often used in clinical trials when it is more appropriate than others for a given time or periods. The test make allowance which is more or less necessary for different times. This makes it a very useful measure for when risks are not proportional. For example, the chances of survival are much higher at the beginning of time but fade off at the end of time. The next type of log-rank test is stratified log-rank test. The test is used when you want demographic factors like age, sex, weight or some other variable to regulate. The relative survival distribution for two samples can be find by log-rank test, but it does not allow us to adapt to any special factors that might affect it in its original form. When you want to evaluate the distribution of survival of two samples separated into two or more classes based on specific criteria affecting the outcome, the stratified log-rank test is the method to be use.

Methodology

The data collected is a secondary data from “Jabatan Perkhidmatan Awam” (JPA) which consist of 5000 dead pensioners. The range of year of the acquired data is from 2017 to 2019. The variables are categorized by date of birth, date of entry, final salary, age and date of retirement, date of death and number of dependents. However, the data are filtered and sorted

only to the pensioners' who die after their retirement age of 55 years old. Of these, 2266 pensioners are included in the study. The survival rate of the pensioners is analyzed for 20 years since the life expectancy of Malaysian are between 70 to 80 years old.

The data is used for benefit calculation and developing life table by using Microsoft Excel. The data is divided into two groups of more and less than the average total actuarial liabilities calculated.

Kaplan-Meier product limit estimator is widely used in most research for non parametric maximum likelihood estimators. Therefore, we used it in our study as our baseline estimator of the distribution survival function from lifetime data to find the survival function and construct survival curve of pensioners according to the divided groups. Statistical analysis were performed using SPSS. Descriptive statistics were presented for pensioners characteristics. We then used the Kaplan-Meier Survival Analysis in SPSS to analyze the survival table, the mean and the median of survival time. Differences in survival among different benefit groups were compared by using Log-rank test. Chi-square statistic test with p-value of less than 0.05 was considered as statistically significant.

Results

The Kaplan-Meier product limit estimator is performed using SPSS software. The survival table obtained is used to plot the survival curve and do statistical analysis like mean, median, survival function, hazard function and the overall comparison.

Table 1: Case Processing Summary

Case Processing Summary				
Group	Total N	N of Events	Censored	
			N	Percent
1	1039	724	315	30.3%
2	737	554	183	24.8%
Overall	1776	1278	498	28.0%

Table 2: Survival Table

Survival Table							
Group	Time	Status	Cumulative Proportion Surviving at the Time		N of Cumulative Events	N of Remaining Cases	
			Estimate	Std. Error			
1	1	.000	1	.999	.001	1	1038
	2	1.000	1	.	.	2	1037
	3	1.000	1	.997	.002	3	1036
	4	1.000	0	.	.	3	1035
	5	2.000	1	.996	.002	4	1034
	6	2.000	0	.	.	4	1033
	7	3.000	1	.	.	5	1032
	8	3.000	1	.994	.002	6	1031
	9	4.000	1	.	.	7	1030
	10	4.000	1	.	.	8	1029
	11	4.000	1	.991	.003	9	1028
	12	5.000	1	.	.	10	1027
	13	5.000	1	.	.	11	1026
	14	5.000	1	.988	.003	12	1025
	15	7.000	1	.	.	13	1024
	16	7.000	1	.987	.004	14	1023
	17	8.000	1	.	.	15	1022
	18	8.000	1	.	.	16	1021
	19	8.000	1	.984	.004	17	1020
	20	9.000	1	.	.	18	1019
	21	9.000	1	.982	.004	19	1018
	22	10.000	1	.	.	20	1017
	23	10.000	1	.	.	21	1016
	24	10.000	1	.979	.004	22	1015
	25	11.000	1	.	.	23	1014
	26	11.000	1	.977	.005	24	1013
	27	12.000	1	.	.	25	1012
	28	12.000	1	.	.	26	1011
	29	12.000	1	.	.	27	1010
	30	12.000	1	.	.	28	1009

Table 3: Means and Medians for Survival Time

Means and Medians for Survival Time								
Group	Mean ^a				Median			
	Estimate	Std. Error	95% Confidence Interval		Estimate	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound			Lower Bound	Upper Bound
1	62.130	1.548	59.095	65.165	41.000	.745	39.541	42.459
2	65.113	1.632	61.913	68.312	46.000	.778	44.475	47.525
Overall	63.317	1.146	61.071	65.564	43.000	.558	41.907	44.093

a. Estimation is limited to the largest survival time if it is censored.

Table 4: Overall Comparisons

Overall Comparisons			
	Chi-Square	df	Sig.
Log Rank (Mantel-Cox)	10.119	1	.001
Breslow (Generalized Wilcoxon)	44.152	1	.000
Tarone-Ware	26.311	1	.000

Test of equality of survival distributions for the different levels of Group.

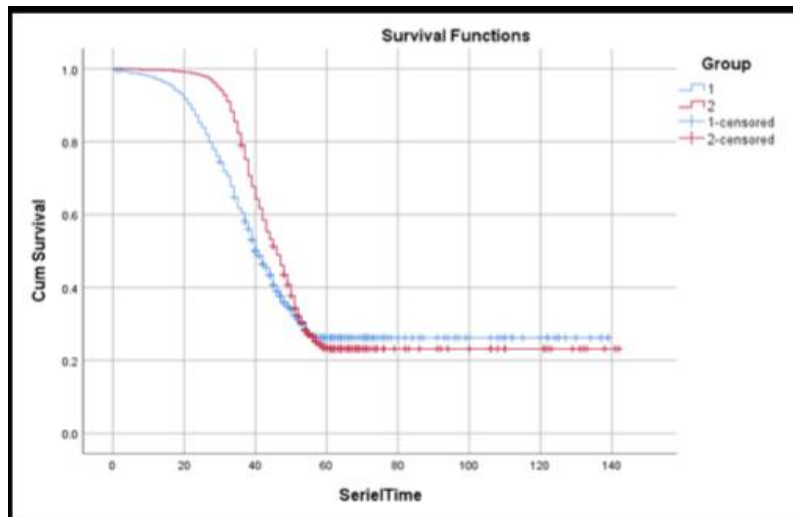


Figure 2: Survival Functions

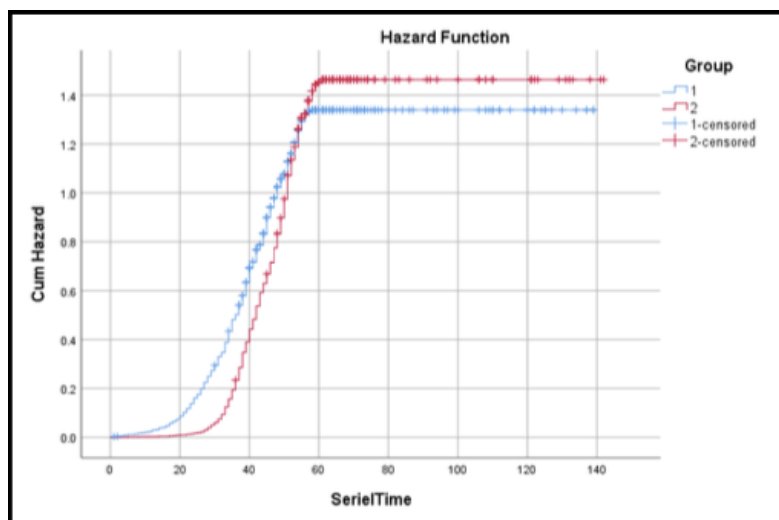


Figure 3: Hazard Functions

From the figures and tables above, out of the 1039 pensioners in group 1 ($AL \leq 5000$), 724 experienced the terminal event and 315 did not. For group 2 ($AL > 5000$), the corresponding

numbers are 554 and 183 respectively. The event of death in the duration of the study period is defined as “1” while cases that are being censored is automatically defined as “0”. The number of pensioners died in a particular year during the 20 years of observation can be referred to the ‘status’ column in survival table, a continuous process starting from time 0 until time 142. The survival estimate is said to be reliable enough when there is low standard error.

The estimated mean time until death is 62.130 years old for Group 1 and 65.113 years old for Group 2. It shows that the pensioners who receive less benefit have shorter average length of survival time compared to those who receive more benefit. 95% of the estimated mean should fall between 59.095 and 65.165 for Group 1 while Group 2 lies between 61.913. Group 2 has less accuracy in presentation compared to Group 1 as the standard error of Group 1 is 1.548 which is smaller than standard error of Group 2 which is 1.632. The estimated median shows that half of pensioners in Group 1 is expected to live until age 41 while half of pensioners in Group 2 is expected to live until age 46.

The survival rate of the two different groups stated are significantly tested with p-value of less than 0.05. Since the p-value = 0.001 which is less than 0.05, we have a statistically significant result. Which means that there is a difference in the survival distribution between group 1 and group 2.

Conclusion

The results of the survival time show that the pensioners with less benefit received have a shorter average length of survival time compared to those who received more benefit. However, the overall average length of time (mean) that both groups can survive is below 65 years old. As 50 for the median of the survival time, we can conclude that half of the pensioners in the group with more benefit are expected to live longer than those with lesser benefit. The Log-Rank Test of Kaplan-Meier enabled us to analyze the survival rate of pensioners after their retirement until the moment of their death based on the amount of benefit they received. For this study, the Log-Rank Test shows that there are significant differences between survival distributions for group 1 ($AL \leq 5000$) and group 2 ($AL > 5000$). The test enables us to differentiate the survival rate for both groups. Therefore, by comparing the survival probability and the survival curves of both groups, the survival functions show that Group 2 has higher survival probability and survival curve than the pensioners in Group 1.

In conclusion, all the results in our study show that pensioners who receive the larger amount of benefit have a higher survival rate than the pensioners who receive a lesser amount of benefit. The amount of benefit received is crucial to support them especially on daily expenses and medical expenses. It is also stated that the people are expected to live longer when they are wealthy because they will have easier access to appropriate healthcare (Cohut, 2018). A research has been done in Germany on the significance between rich and poor in life expectancy. They found that on average, men with very low retirement pay die five years earlier as compared to those who have better pay (Wenau, 2019). The research also stated that “65-year old men with very high retirement benefits can expect on average to live for another 19 years, while men in the lowest of five income groups will on average not live to see their 80th birthday”. This gives a better understanding of pension schemes to the researchers and the readers, significantly to the pensioners regarding the variability of benefits. They need to have proper savings in order to survive longer in their old age. With death uncertainty, this research also gives a future reassurance to both the pensioners and the dependents.

Besides, the findings of this project might help the government and policymakers in ensuring the reliability of current pension schemes. In order to avoid low pension and to secure income, it is suggested for Malaysia to raise the retirement age as many other countries (Hussein, nd). This is because retirement savings will secure and become stronger when the

time spent on working is longer. The other option is to provide a national basic pension which Malaysia is currently known to be lacked at. Such a pension does not need to be costly and will simply complement other sources of pension savings or financial assets. It is important to make a saving with KWSP or a civil service pension that represents half the current labor force. Such a pension should be raised to at least cover basic living expenses. Thus, help the government in securing the country's economic and financial position by making sure the right measure of pension scheme is being practiced.

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HOW MACROECONOMIC VARIABLES CHANGES AFFECT GOLD PRICE?: MALAYSIAN EVIDENCE

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Abstract: *Gold is one of the most popular and precious metals, which is not only sought after as jewelry but also as an investment. Despite gold has long been considered as a reliable store of value, the price of gold has historically been as volatile as other assets such as stock and bond. Investors should be aware that gold is not totally immune to market turmoil and economic crisis. Hence, gold could be as vulnerable as other traditional investment vehicles. This study focuses on examining the macroeconomic variables that affect gold price in Malaysia by using monthly data from the year 2014 to 2018. The study uses Pearson Correlation and Multiple Linear Regression to determine significant relationship and impact between the independent variables, namely interest rates, inflation rates, crude oil price and exchange rates with the dependent variable, namely gold price. The empirical results indicate that interest rate has a significant negative effect on gold price while inflation rate, crude oil price and exchange rate have a positive significant relationship with gold price in Malaysia, respectively. The findings provide valuable insight and information to policy makers, researchers and investors.*

Keywords: *gold price, interest rate, inflation rate, crude oil price, exchange rate, Malaysia.*

Introduction

Gold is very precious and one of the world leading commodities as the value of gold remains stable or rises normally regardless of the periods of economic, financial or political crises. In fact, gold has its own standard value that is not being easily affected by any crisis. According to Sukri, Zain, and Abidin (2015), gold is a good investment, which is neither short-term nor long-term and a great asset that can be easily converted into cash. However, over the years, the cost of gold has significantly increased due to high demand. It is very important to those who plan to buy gold to understand the nature of investing in gold before making any decision of taking gold as an investment. Thus, it will give the investors opportunity to benefit and profit from gold as an alternative asset. Even though gold price can be measured or forecasted, but its value is still affected by the economic crisis and the impact of the crisis on the gold price cannot be controlled.

The demand on gold has increased year by year particularly in the jewelry or business sector because of its importance and benefit as a store of value (Toraman and Bayramoglu, 2011). Among all precious metals, gold might be the most popular choice for investment. It has stood the test of time and performed well during economic turmoil such as market crash, currency failure, high inflation, war and so on. Gold is regarded as a good insurance against inflation as well as when there is a fall in value of other assets' price such as stocks, bonds and

foreign currencies. The benefit of gold as an inflation hedge simply implies that when general prices of goods are on the rise, gold price will also be on the rise so that the gold can be liquidated in order to finance general spending activity. In other words, gold plays important role in investment portfolio diversification.

Over the last decades, the demands and price of gold have been very high compared to other standard commodities due to the exclusiveness of the gold itself. Actually gold investment has been practiced by investors a long time ago. During the early stage of the economy, the price of gold was not determined by the supply and demand of gold but instead had been determined by its special features of exclusiveness. In the past, gold was used as money or currency and even today, it has the power of money and people seem to be using this as an option despite real estate has lately displaced the position of gold as the best investment option because of its higher rate of return. Gold is an asset that no-one else's liability unlike other investment which is dependent on other factors of market demands.

Nevertheless, in this new era, the value of gold is closely related to the economy all over the world, where the gold price may vary or change by day or even by hours. This condition will give bad effect to investors. Thus, it is essential for investors to have proper way or guidance to encounter this issue so that they can plan on this gold investment efficiently. Unfortunately, nowadays, the paper notes and coins that we call money, have no backing in gold. Great Britain and other major European countries came off the gold standard in the 1920s and 30's. Switzerland stopped backing each franc that it issued with gold in 1936. Three decades later, the United States finally cut the world supply of money free from gold when it stopped swapping Dollars for bullion at the Federal Reserve in 1971. Over the nine years that followed, namely in 1980s, the price of gold in Dollars rises more than 23 times over. The gold price sank for the next 20 years, falling lower as the world monetary system stabilized.

Therefore, this study aims to investigate the correlation and relational impact between gold price and macroeconomic variables based on the Malaysian evidence. It is hoped that the findings of this study will shed light on the economic factors that influence the gold price, which will be useful insight to the investors, policy makers and researchers. The remainder of this paper is arranged as follows; 2) literature review; 3) data and methodology; 4) results and discussion; and 5) conclusion and recommendation.

Literature Review

Many studies have been conducted to determine the factors that influence the price of gold. According to Sukri et al., (2015), gold is now an attractive investment option. This is due to the durability of the gold itself, and other attributes like homogeneous and fungible. Ibrahim et al., (2014) found that investors took advantage of gold price differences by buying at lower rates and selling at higher rates. This is happening among the investors community in Malaysia. There is a tendency among Malaysians to buy gold as a form of savings scheme because of its easily convertible nature to money considered as a form of liquid asset. It is also a symbol of one's personal wealth. Another study shows that gold prices are also influenced by inflation rate, exchange rate and real interest rate (Zakaria et al., 2015).

Tram (2014) found that there is a negative one-way relationship between gold prices and interest rates. It is concluded that when interest rates fall and gold prices rise and vice versa. It has also been evidenced by a study of Toraman et al., (2011), where they the similar results. The study further indicated that interest rates will lose its strong impact on gold prices as more inflation and physical demand emerge. Zakaria et al., (2015) showed that interest rates and gold prices are negatively related. The study concluded that downward and upward demand from investors for gold will also lead to its price changes. The finding is then supported by Laily et al., (2017). Beckmann et al., (2013) stated that when inflation rate is higher than nominal

interest rate, creditors will lose their money. As a result, they will turn to gold as a new investment because of its value-based nature even though it does not provide any current benefits or income. Jaraskunlanat et al., (2016) proved contradictory result, where they did not find any significant impact by interest rates on gold prices in Thailand despite of positive relationship between the two.

Purchasing power in the economy measured by the inflation rate is positively related to the gold price. San et al., (2012) stated that when inflation occurs, gold prices will generally rise. This shows that gold is the best asset for investment and also as an inflation hedge. This finding is supported by Sindhu (2013), who noted that this phenomenon caused gold prices to rise due to high demand from investors, who hold gold as an investment vehicle. A study in Malaysia by Zakaria et al., (2015) suggested that gold is the best asset as a hedge against rising prices in a sustained economy. Worthington et al., (2007) indicated the strong linkage between gold prices and inflation. They added that returns on gold were not able to hedge against inflation during the low-price adjustment regime in the US and Japan compared to the period during the high momentum regime. Nevertheless, there are few studies concluded that inflation and gold prices are negatively related such as Qian et al., (2019), Ibrahim et al., (2014) and Toraman et al., (2011). Tully (2007) and Blose (2010) stated that there is no significant positive relationship between the Consumer Price Index and gold prices.

Sindhu (2013) showed that inflation due to the increase in crude oil price will eventually lead to investment in gold. This is also driven by the falling buying power because of inflation, which prompted investors to shift their investment to gold due to its stable value. Gold and crude oil prices were found to be positively correlated based on a study by Shafiee et al., (2010). The study claimed that when oil prices rose due to the oil crisis as a result of declining crude oil production during the wars between Iran and Iraq, gold prices rose as well. Laily et al., (2017) indicated a significant impact between crude oil price and gold price. They proved that a USD1 rise in crude oil price results in USD 10,265 rise in gold prices. However, there are few studies that found negative relationships and insignificant impact of crude oil price on gold price like studies by Tram (2014) and Qian et al., (2019).

According to Ling (2011), most countries now adopt floating exchange rates for their respective currencies. This has been the case since the end of the Bretton Woods System and Gold Standard financial mechanisms. However, gold prices are still affected by the exchange rate of the US dollar as the majority of gold in the world is priced against the US Dollar. Ibrahim et al., (2014) and Zakaria et al., (2015) found negative relationship between exchange rate and gold price. They added that this can provide a hedge on the value of wealth and purchasing power to those who have gold reserves. Tsen (2014) and Laily et al., (2017) also concluded negative relationship between the exchange rate and gold price even though there is no evidence of significant impact between the two. However, there are studies that prove otherwise. Akar (2011) and Massimiliano (2015) found a positive relationship between gold and foreign exchange. Tram (2014) showed mixed results, where there is a positive relationship between exchange rate and gold price based on a week-long movement of change. But, this had changed to a negative relationship for five-week long before returning to positive.

Data and Methodology

The study employs monthly data for gold prices in Malaysia and macroeconomic variables for the period from 2014 to 2018, thus the sample consists of 60 observations for each variable. The data is collected from the database of Malaysian Statistics Department and Index Mundi website. Time series data analysis is applied to analyze the effect of macroeconomic variables on gold prices. Following equation is estimated to find such effect:

$$GP = \beta_0 + \beta_1 IR + \beta_2 INF + \beta_3 COP + \beta_4 EXC + \mathcal{E} \quad (1)$$

Where; *GP* represents gold price in Malaysia, *INF* is the inflation rates, *COP* presents the crude oil price, *EXC* is the exchange rates, *IR* is the interest rates and finally \mathcal{E} is the random error term. Table 1 shows the description of each variable.

Table 1: Description of Data

Name of variables	Symbol used	Proxy used
Gold Price	GP	MYR per troy ounce
Inflation Rate	INF	Consumer price index (CPI)
Crude Oil Price	COP	MYR per ton
Exchange Rate	EXC	MYR to USD
Interest Rate	IR	Base lending rate (BLR)

Based on the literatures reviewed, the hypotheses for this study have been developed as follows:

- H1: There is a positive significant effect of inflation rate on gold price.*
- H2: There is a positive significant effect of crude oil price on gold price.*
- H3: There is a negative significant effect of exchange rate on gold price.*
- H4: There is a negative significant effect of interest rate on gold price.*

The collected data was analyzed using EViews statistical software. We begin analyze the data using the unit root and multi-collinearity tests. Next, Pearson's correlation analysis was done in order to study the correlation among the variables. Finally, multiple regression analysis was applied to find the significance and effect of the selected macroeconomic variables on the gold prices.

Results and Discussion

Unit Root Test

The test used is based on the Augmented Dickey-Fuller (ADF). The data was standardized and transformed into percentage change.

Table 2: ADF Unit Root Test Results

Variable	Level		1 st Difference	
	No Trend	Trend	No Trend	Trend
GP	-1.514815	-1.628400	-7.204068	-6.221991
	0.5193	0.7697	0.0000	0.0000
IR	-3.921022	-3.948219	-9.053518	-8.993519
	0.0034	0.0159	0.0000	0.0000
INF	-1.255341	-2.376613	-6.728511	-6.751056
	0.6445	0.3876	0.0000	0.0000
COP	-2.326594	-2.157839	-4.897096	-4.940317
	0.1673	0.5034	0.0002	0.0009
EXC	-1.487072	-1.333523	-6.890108	-6.929981
	0.5332	0.8697	0.0000	0.0000

Table 2 shows the results from the unit root test for all variables of this study, namely gold price (GP), interest rate (IR), inflation (INF), crude oil price (COP) and exchange rate (EXC). Based on the results, the data for the gold price is found to have unit root problem or

not stationary at level, where the p-values are larger than 5% significance level. However, when we converted to the 1st difference, then only the data of gold price has become stationary. The data for interest rate shows that it is stationary at the 1st difference. It is supported by the result of the p-value for the interest rate that is below the significance level at 5% in the 1st difference for both trend and no trend. Besides, inflation rate is also found to be stationary based on the significant p-values at the 1st difference for both no trend and trend. Likewise, the ADF results for the other two variables, crude oil price and exchange rate are also stationary at the 1st difference for no trend and trend. In a nutshell, all the variables are stationary at the same order, namely at 1st difference.

Multi-Collinearity Test

Table 3: Result of Multi-Collinearity Test

Variance Inflation Factors			
Date: 12/15/19 Time: 22:35			
Sample: 2014M01 2018M12			
Included observations: 60			
Variable	Coefficient Variance	Uncentered VIF	Centered VIF
ZX1	26623.73	727.7807	1.413390
ZX2	234.2725	5273.678	3.381264
ZX3	1.262168	46.32189	3.637920
ZX4	28850.50	770.4537	7.441585
C	2129477.	3642.706	NA

ZY=GP; ZX1=IR; ZX2=INF; ZX3=COP; ZX4=EXC

The centered VIF was analyzed to identify the existence of multi-collinearity in the variables. According to the results in the table above, the centered VIF values for Interest Rate is 1.4134, inflation rate is 3.3813, crude oil price is 3.6379 and exchange rate is 7.4416. The benchmark value for multi-collinearity is 10 and close to 1. The results show that all the independent variables centered VIF are less than 10 and close to 1. This means that the data is good and indicates that none of the independent variable has serious collinearity problem.

Pearson Correlation Test

Table 4: Result of Correlation Test

Covariance Analysis: Ordinary
 Date: 12/15/19 Time: 22:44
 Sample: 2014M01 2018M12
 Included observations: 60

Covariance Correlation Probability	ZY	ZX1	ZX2	ZX3	ZX4
ZY	243941.8 1.000000 -----				
ZX1	-9.336548 -0.107306 0.4145	0.031034 1.000000 -----			
ZX2	1228.416 0.856247 0.0000	0.048365 0.094517 0.4726	8.437364 1.000000 -----		
ZX3	-11404.78 -0.562537 0.0000	1.461684 0.202134 0.1214	-51.44469 -0.431464 0.0006	1684.941 1.000000 -----	
ZX4	161.7276 0.843258 0.0000	0.010016 0.146411 0.2643	0.892477 0.791249 0.0000	-11.86368 -0.744297 0.0000	0.150786 1.000000 -----

Table 4 shows the results of correlations of each pair of dependent variable with the respective independent variable and among the independent variables as well. The gold price is found to have strong or high positive correlation with the inflation and exchange rates, respectively with the correlation coefficient (r) values are more than 0.80. This shows that when the inflation and exchange rate rises, it will affect the gold price to rise as well and vice versa. Meanwhile, the interest rate and crude oil price have shown negative correlation with the gold price, where interest rate indicate weak correlation and the crude oil price medium correlation at -0.56. This indicates that when interest rate and crude oil price increase, it will result in a decrease in gold price. In the term of significance at 5% level, the three independent variables, namely inflation rate, crude oil price and exchange rate are found to be significant variables towards the gold price, whereas interest rate is not. Among the independent variables, it is found that exchange rate has quite high correlation with crude oil price and inflation rate at r values more than 0.70 whilst it has low correlation with interest rate.

Multiple Regression Test

Table 5: Results of Multiple Regression

Dependent Variable: ZY
Method: Least Squares
Date: 11/30/19 Time: 12:16
Sample: 2014M01 2018M12
Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ZX1	-823.2886	163.1678	-5.045656	0.0000
ZX2	68.11471	15.30596	4.450208	0.0000
ZX3	2.519040	1.123463	2.242211	0.0290
ZX4	922.2843	169.8543	5.429854	0.0000
C	-3632.396	1459.273	-2.489182	0.0159
R-squared	0.868197	Mean dependent var		4871.582
Adjusted R-squared	0.858611	S.D. dependent var		498.0727
S.E. of regression	187.2837	Akaike info criterion		13.38278
Sum squared resid	1929136.	Schwarz criterion		13.55731
Log likelihood	-396.4835	Hannan-Quinn criter.		13.45105
F-statistic	90.57236	Durbin-Watson stat		0.850433
Prob(F-statistic)	0.000000			

Based on the regression results, all the four independent variables selected, namely interest rate, inflation rate, crude oil price and exchange rate are found to be significant macroeconomic variables towards the gold price. This is evidenced based on the p-values that are less than 5% significance level. In the term of relationship and impact of the independent variables on the gold price, interest rate poses negative relationship with or negative impact on the gold price. Meanwhile, the other three variables, namely inflation rate, crude oil price and exchange rate pose positive relationship or positive impact on the gold price. The findings imply that when there is a rise in interest rate, then the gold price would drop. This makes sense since when the interest rate increases, then investors will invest more in debt-based investments than gold investment. Another explanation for this finding is that, when interest rate rises, the cost of fund to invest in gold will be more expensive resulting less investors to borrow for the purpose of gold investment. These two scenarios will cause the demand for gold investment to fall that ultimately affects the price of to be affected, namely decline as well.

Meanwhile, the findings for inflation rate indicates that any rise in inflation rate will lead to increase in gold price, and vice versa. This is true as the gold acts as the store of value or hedge instrument or insurance in the event of there is a hike in general prices of goods. For those investors who have gold in their investment portfolio, it is a blessing since they could cover the increase in cost of goods and services by the increase in gold value. Likewise, the impact of rise in crude oil price pose positive impact on the gold price. As both commodities are the two mainly traded commodities in the world market, it is predictable that a rise in one commodity will cause a rise in another commodity. The rise is due to the increase in demand for both commodities specifically by business sectors. The appreciation in currency is also found to have positively affected the gold price. A country's currency appreciation in value reflects the country's economic growth in the world trade. This implies the demand for the

country's goods including the commodities such as gold for export has also risen. The factor has directly and positively impacted the gold price.

The result of F-test is 90.57236 while the probability value F-test is 0.0000. As the p value of F-test is below than 5%, it indicates and is concluded that all the four independent variables fit this study or do affect the gold price in Malaysia. The value of R^2 of this study is 0.8681, which indicates that almost 87% variation in the gold price is explained by the four independent variables. Meanwhile, the remaining of 13% is determined by other factors not tested in this study. The other results are summarized in Table 5 above.

Conclusion and Recommendation

This study attempted to investigate the relationship and impact of the macroeconomic variables on the gold price in Malaysia. Based on the monthly time series data from 2014 to 2018, the multiple linear regression test reveals that all the four selected variables, namely interest rate, inflation, crude oil price and exchange rate are significant variables towards the gold price in Malaysia. Out of the four, interest rate is found to have negatively affected the gold price. This current finding is in support of the previous findings by Toraman et al., (2011), Tram (2014), Zakaria et al., (2015) and Laily et al., (2017). Meanwhile, the other three variables pose positive effects on the gold price. The positive finding on the inflation is consistent with the findings by San et al., (2012) and Sindhu (2013). However, it is in contrast of Qian et al., (2019) and Ibrahim et al., (2014). This positive effect of crude oil price on the gold price is also consistent with Shafiee et al., (2010) and Laily et al., (2017) whilst it contradicts the findings by Tram., (2014) and Qian et al., (2019). Moreover, the current study evidences positive effect on the gold price by the exchange rate and this finding is in support of the studies by Akar (2011), D.N.Tram (2014), Massimiliano (2015) and Tsen (2014). However, the result is not consistent with Ibrahim et al., (2014) and Zakaria et al., (2015).

Conclusively, we could say that the findings are mixed depending on which countries' macroeconomic variables are tested. This opens for further researches in the future by taking into consideration other macroeconomic variables that could affect the gold price such as the GDP, GNP, industrial production index and other world commodities' prices. Other types of robustness tests could also be conducted by future researchers to obtain more enhanced results to support the conclusion. Apparently, the findings are providing useful insight and information to the investors and policy makers in planning, forecasting and decision making particularly related to gold and macroeconomic variables. This study also adds more updates on the current literature to the researchers and academicians.

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BUSINESS REPORTING ON THE INTERNET AND ITS USAGE: THE MALAYSIA CASE

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Abstract: *Business reporting on the internet is the communication process of financial and non-financial information between the corporate sector and stakeholders via the medium of internet. In this age of borderless business world, the significance of business reporting on the internet in presenting and disseminating corporate is indubitable. This study examines the usage of business reporting on the internet amongst different group of stakeholders in Malaysia. A questionnaire survey is distributed to a sample of one hundred stakeholders. Data is analysed by using descriptive statistical analysis. Result of the study revealed that business reporting on the internet usage items being examined are demanded and utilised used by the users with different levels of usage. The study contributes to the knowledge as it is among the earliest study conducted in Malaysia that examines the usage of business reporting on the internet by stakeholders.*

Keywords: *Business reporting on the internet, usage, stakeholders, Malaysia*

Introduction

Business reporting on the internet is the reporting of financial and non-financial information provided by companies through the medium of corporate websites (Kerckhoven, 2002). It includes information of either a financial or non-financial nature that is not normally incorporated in the printed form of companies' annual reports (Jones and Xiao, 2004). Business reporting on the internet is essential for the corporate sector in presenting and disseminating business information to the stakeholders. Among the advantages of Business Reporting on the Internet are innovative presentation of information (Jones and Xiao, 2004), dynamic multimedia formats (Debreceeny, Gray and Rahman, 2002), wider and easier access to information for larger groups of users without selection (Ettredge, Richardson and Scholtz, 2001), creating interest to potential investors and boosting corporate image (Pratt, 1996), providing timeliness and interactive information with unlimited space Joseph, 1995) as well as the faster and lower cost of information dissemination (Geerings, Bollen and Hassink, 2003)

Corporate sectors utilised significant amount of resources in setting, updating and upkeeping business reporting on the internet. The resources used consists of expertise, money and time spent. Due to this, corporations are expecting some benefits from their practice of business reporting on the internet, in terms of its usage among stakeholders and their satisfaction. Therefore, this study investigates the level of usage of business reporting on the internet among stakeholders

Literature Review

Among the earliest attempt to study the history of business reporting on the internet is done by Lymer (1999). Lymer (1999) mentioned several stages were involved in the continuation of this new type of reporting. Despite the age of the Internet, which exceeds thirty years, the chronological literature of business reporting on the internet started in 1994 with the process of re-examination of accountant's functions as well as other parties related to the accounting

profession. This literature arose from the dissatisfaction and concern about activities and regulations of business reporting. Simultaneously, this period documented basic reconsideration of the primary accounting foundation, demand for a truly global accounting standard and full international prominence by the International Accounting Standards Committee (IASC), and changes in the European Union's role relating to accounting regulation. Subsequently, the importance of information management, which was previously seen as a secondary task by business entities, has been recognized as a critical activity in ensuring business success. Consequently, the issues of information technology and its influence upon accounting activities started to evolve with the Internet as a computer-to-computer communication tool becoming one of the said elements. Only in 1995 did business entities start to pay serious attention to this technology following the development of the World Wide Web, or Web, as one of the Internet tools that has attracted increasing numbers of users around the world. As years pass, the purpose of the Internet for business entities has gone beyond advertising and electronic commerce activities to include reporting and dissemination of business information to users, resulting from the increasing demand for companies to be more responsible with regards to ethics and the environment.

Budisusetyo and Almilia (2008) examined the quality of internet financial reporting amongst banking sector listed on the Jakarta Stock Exchange. Using 23 listed banks as the sample, the quality of IFR was measured based on the attributes of Internet reporting index, which were grouped into content, timeliness, technology and user support. The result revealed that the majority of the banks (19 banks, 83%) have websites. The IFR scores of those websites ranged between 22% to 64.50% with an average score of 44.34%. With regards to the content, all websites were found to have financial reports in different forms, whereby more than half of the websites (13 websites, 68%) contained annual reports and quarterly reports. In terms of language used, all websites were presented by using the Indonesian language, thus, contrary to the study in Bangladesh by Dutta and Bose (2007) in which they prefer to use English instead of their local language. The category of timeliness revealed a high number of companies disclosing unaudited latest quarterly results and vision statement (18 companies, 95%) as well as press release (17 companies, 89%). As for technology, direct e-mail contact and mailing list were found to be commonly used with close to two thirds of websites (74%) having these attributes. In contrast, very few banks used presentation slides (3 banks, 16%) and downloadable files (1 bank, 5%). The use of audio or video files was completely non-existent. However, the study revealed an encouraging level of use for attributes of user support with very close to two thirds of banks in the sample (14 banks, 74%) providing frequently asked questions, site maps and site search on their websites. In conclusion, Budisusetyo and Almilia (2008) mentioned that the considerable variation of IFR disclosure across the sample banks was due to the different reasons that banks had in establishing Internet presence in their corporations. However, study found that listed Indonesian banks were not utilising the full technological advantage offered by the Internet in practising IFR.

Fekete, Tiron-Tudor and Mutiu (2009) investigated the the relationship between corporate governance factors, as well as company characteristics and the comprehensiveness of corporate Internet reporting (CIR) by focusing on 48 Romanian companies listed on the Bucharest Stock Exchange. The comprehensiveness of corporate Internet reporting was measured based on 35 items of disclosure index. The items were grouped into a format that represented the CIR quality index and content that represented the CIR quantity index. Furthermore, Fekete et al. (2009) categorised CIR quality index into general website items and specific investor relations. As for CIR quantity index, it was categorised into financial reporting aspects and corporate governance aspects. Company characteristics examined in the study were company size, international visibility, profitability, leverage and activity sector.

Pertaining to corporate governance factors, the variables investigated were auditor type, CEO role duality and ownership diffusion. The data of the study were analysed by using both univariate and multivariate analyses. The results of the univariate analysis revealed the positive significant effect of size, profitability, auditor type and directors' holdings and a negative significant effect for international visibility and CEO role duality on the CIR quality. In addition, the results indicated a significant positive relationship between size, profitability auditor type and CEO role duality and CIR quantity and a negative significant relationship between free float and CIR quantity. The univariate results for full CIR index show the positive significant impact of size, profitability and auditor type on CIR comprehensiveness. However, for the multivariate analysis, slight differences appeared in the result whereby besides size and profitability, leverage was found as positively significant in influencing CIR comprehensiveness. Corporate governance factors, however, did not appear to be significant in determining companies' CIR in terms of content and format.

Hossain Khan, Muzaffar and Mahmood (2006) made an attempt to look at the perspective of users of Internet reporting. In addition to only examining the current state of the Internet reporting in Bangladesh, Hossain Khan et al. (2006) also investigated the usage of Internet corporate reporting by Bangladeshi companies. This was done based on the attitudinal survey, which was aided by questionnaires and focus group discussion conducted with stakeholders. However, the details of the respondents were not explained in the study. The study found that the majority of the stakeholders examined (60%) regularly browsed company websites. When asked about their opinion regarding internet reporting usage, including the variables of graphics, hyperlinking, downloadable data, press releases, financial trend data, non-financial information and data updating, respondents were found to reveal that such variables were important. Therefore, Hossain Khan et al. (2006) concluded that the Internet can be considered as a flourishing means of corporate reporting by the stakeholders.

Research Methodology

The study uses questionnaire survey to collect data regarding the usage of business reporting on the internet by a total of one hundred stakeholders. The respondents consists of investment analysts, fund managers, institutional investors, auditors and bank loan officers.

Respondents are required to answer questions on demographic background, their extent of use of business reporting on the internet and the use of specific functionalities in the business reporting on the internet. Data was analysed by using the Statistical Package for Social Sciences (SPSS) software and Microsoft Excel software to analyse the data. The study conducted statistical test of descriptive statistics.

Findings of the study

Out of 100 respondents, 89 of the are users of business reporting on the internet while 11 of them are non-users. Study found that more than half of them (56 per cent) frequently and always use business reporting on the internet. In fact, the users under the category of 'frequently used' are found to be the largest (30 per cent). In contrast, only a small percentage of the users are found to use it very rarely and seldom (4.5 per cent and 11 per cent, respectively). With the significant percentage of high frequency of business reporting on the internet users, it might be deduced that business reporting on the internet provided by companies has been frequently utilized by the users.

Pertaining the business reporting on the internet usage item, the highest mean score (3.66) is shown by the financial statements download. The mean score is between seldom used and occasionally used, but it is more towards occasionally used. Five other business reporting on the internet usage items (financial documents download, annual report download, stock

price, press release and general news) also indicated by the mean scores between seldom used and occasionally used, but more towards seldom used. In other words, these items are practised between five and twelve times a year by the users. However, three usage items (download of non-financial documents, download of audio or video files of management presentation and download of other audio or video files) revealed lower mean scores of between very rarely used and seldom used. The mean score for non-financial document downloading (i.e., 2.62) is more towards seldom used, thus, indicating that business reporting on the internet is used to download non-financial documents 5 to 12 times a year. The lowest mean scores are shown by the CIR usage items of audio or video files downloading of management presentation and shareholders meetings (2.15) and other audio or video files downloading (i.e., 2.18). With both mean scores that are near to very rarely used, the results revealed that in using CIR, the downloading of audio video files was only being performed by users between 1 and 4 times a year.

Looking at the perspective of specific functionalities of business reporting on the internet, it is found that sitemap and internal search engines are the two functions that have been widely used by the users, thus, resulting in the highest number of users (79% and 74%, respectively). Furthermore, e-mail contact and additional website services have been used moderately by the users with slightly more than half of them found to use these items. However, e-mail alerts resulted in the lowest number of users with only a quarter of users actually having used them (25%).

Conclusion

Based on the results, the study concluded that all the business reporting on the internet usage items being examined are used by the users with different levels of usage. Specifically, financial statement download, which is occasionally used by the users, is the most frequent usage item used. This is followed by annual report download, other financial documents download, press release, stock price, general news and download of non-financial documents that are seldom used. Audio or video files download of management presentation and shareholders meeting and other audio or video files are found to be very rarely used, thus revealing the least frequent usage item used by the users. As for the website functionalities, the study found that sitemap and internal search engines are widely used by the users, followed by e-mail contact and additional websites services. In contrast, e-mail alerts are used by the lowest number of users.

The study is fruitful due to the contribution to the knowledge, as it is among the earliest study conducted in Malaysia that examines the usage of business reporting on the internet by stakeholders. By looking at the perspectives of users, the study contributes to the evidence that business reporting on the internet provided by the corporations are being demanded and utilised by the users.

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KAEDAH LANGSUNG DAN KAEDAH TAK LANGSUNG: STRATEGI KOMUNIKASI DALAM KARTUN *DIRECT METHOD AND INDIRECTNESS METHOD: COMMUNICATION STRATEGY IN CARTOON*

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Abstrak: *Kartun tidak hanya dilihat sebagai suatu saluran media untuk memberi hiburan kepada masyarakat. Ini kerana kartun memainkan peranan penting sebagai medium penyampai maklumat yang sangat berkesan kepada semua golongan. Mesej dalam kartun disampaikan sama ada melalui penggunaan bahasa dan ilustrasi atau ilustrasi semata-mata daripada seorang kartunis. Paparan ilustrasi dengan penggunaan bahasa dalam kartun di akhbar secara tidak langsung membawa isu semasa dalam pelbagai aspek. Malah melalui ilustrasi ini dapat membantu merangsang idea dan kematangan seseorang dalam menilai suatu mesej. Tujuan kajian ini adalah untuk meneliti penggunaan bahasa sebagai strategi komunikasi dalam kartun dan menghuraikan penggunaan kaedah langsung dan kaedah tak langsung dalam kartun. Hal yang demikian, penggunaan bahasa sebagai strategi komunikasi diteliti berdasarkan penggunaan bahasa yang digunakan dalam kartun iaitu penggunaan bahasa melalui kaedah langsung dan kaedah tak langsung. Kajian dijalankan secara kualitatif melalui pendekatan deskriptif. Data kajian diambil dan dikumpulkan daripada kartun yang diterbitkan dalam ruangan rencana oleh kartunis Maro yang memberi gambaran tentang situasi semasa politik negara di Mingguan Malaysia pada setiap hari Ahad untuk keluaran selama 2 bulan iaitu bulan Julai dan Ogos pada tahun 2019. Analisis data dilakukan melalui pendekatan yang dikemukakan oleh Asmah Hj Omar iaitu melalui penelitian terhadap penggunaan bahasa melalui kaedah tak langsung dan penggunaan bahasa melalui kaedah langsung. Hasil kajian ini dapat diperhatikan bahawa kartun dalam akhbar jelas menunjukkan terdapat penekanan dalam dua kaedah ini sebagai strategi komunikasi yang digunakan melalui penggunaan bahasa sebagai suatu cara untuk memastikan mesej yang disampaikan dapat difahami oleh semua pihak. Justeru, penggunaan bahasa melalui kaedah tak langsung ini menjadi pilihan utama dalam penyampaian penceritaan melalui kartun.*

Kata Kunci: *Kartun, Ilustrasi, Penggunaan Bahasa, Kaedah Langsung, Kaedah Tak Langsung*

Abstract: *Cartoons are not only seen as a media channel to provide entertainment to the community. This is because cartoons play an important role as a very effective medium of information delivery to all groups. The message in the cartoon is conveyed either through the language use and illustrations or mere illustrations from a cartoonist. The display of illustrations with the language use in cartoons in the press indirectly brings current issues in various aspects. Even through these illustrations can help stimulate one's ideas and maturity in evaluating a message. The purpose of this study is to examine the language use as a communication strategy in cartoons and describe the use of direct and indirectness methods in cartoons. As such, the use of language as a communication strategy is examined based on the language use used in cartoons, namely the language use through direct methods and indirectness methods. The study was conducted qualitatively through a descriptive approach. The study data was taken and collected from cartoons published in the article column by cartoonist Maro who give an overview of the current political situation in Malaysia in Malaysia Weekly every Sunday for 2 months release in July and August in 2019. Data analysis is done through an approach that presented by Asmah Hj Omar through research on the language use through indirectness methods and the language use through direct methods. The results of this study can be observed that the cartoon in the newspaper clearly shows that there is an emphasis in these two methods as a communication strategy used through the language use as a way to ensure that the message conveyed can be understood by all parties. Thus, the language use through this indirectness method is the main choice in the delivery of storytelling through cartoons.*

Keywords: *Cartoon, Illustration, Language Use, Direct Method, Indirectness Method*

Pengenalan

Perkembangan dalam dunia media sosial tidak menolak fungsi kartun sebagai salah satu wadah dalam perkongsian maklumat dan perasaan. Ilustrasi kartun boleh memberi mesej yang pelbagai. Ini kerana interpretasi seorang kartunis mungkin berbeza dengan interpretasi pembaca. Interpretasi pembaca terhadap ilustrasi seorang kartunis mungkin berbeza dengan maksud yang ingin disampaikan. Menurut Rohani Embong et al. (2016) tujuan kartun adalah untuk membawa penceritaan atau pengkisahan suatu penceritaan yang selalu disampaikan melalui kartun editorial. Kartun dihasilkan sebagai memberi penceritaan tentang suatu perkara sama ada lahir daripada kartunis sendiri atau dari persekitaran. Di samping kesungguhan seorang kartunis dalam menyampaikan mesej positif kepada masyarakat, peranan kartun menurut Mulyadi Mahamood (2012) perlu diperkukuhkan contohnya dalam membantu pembentukan masyarakat Asia agar saling menghormati dan saling memahami sebagai satu-satunya semangat budaya kesatuan dapat diwujudkan. Interpretasi makna dalam sesuatu ilustrasi secara eksplisit membuat penelitian terhadap unsur-unsur bahasa. Ini sudah pasti melibatkan pemahaman makna dalam ilustrasi tersebut melalui konteks tertentu. Bahkan implikatur kepada interpretasi makna ini dapat mengenal pasti tujuan komunikatif sesuatu ilustrasi dalam sesuatu peristiwa bahasa. Seiringan dengan itu seperti yang dinyatakan oleh Sato Hirobumi (1997) bahawa untuk menyatakan sesuatu fikiran dalam wacana, pihak penyampai maklumat dikehendaki menggunakan fungsi penyampaian maklumat dengan seberkesan mungkin supaya pihak penerimanya dapat memahami apakah yang sebenarnya dimaksudkan oleh penyampai itu, bukan sahaja dari segi struktur ayat tetapi juga dari segi konteks situasi ujaran. Maka ini memerlukan kepada tumpuan untuk membuat interpretasi makna bagi setiap ujaran yang disampaikan oleh pemeran dalam suatu ilustrasi untuk setiap kegiatan bahasa. Ini dapat diperhatikan bahawa bahasa dari segi bentuk dan fungsi dalam suatu

ilustrasi kartun menjadi komunikasi antara kartunis dan pembaca. Bahkan keberkesanan komunikasi ini mempunyai pertalian dengan komuniti wacana.

Sorotan Literatur

Walaupun penggunaan kartun sebagai bahan pengajaran dan pembelajaran penulisan karangan bahasa Melayu mampu mewujudkan suasana yang seronok dan boleh mempengaruhi emosi murid, namun menurut Abdul Rasid Jamian et al (2016) penggunaan bahan kartun masih lagi tidak popular dalam kalangan guru yang mengajar penulisan karangan sekolah rendah. Ini mungkin kerana masih kurang pendedahan sebagai bahan bantu mengajar. Manakala dalam kajian Norzaliza Ghazali et al (2018) mendapati bahawa aspek-aspek kepelbagaian kaum dan kemajmukan budaya menjadi latar dan intipati kepada karya kartun di Malaysia. Malah elemen-elemen kebudayaan dan warisan tradisi dan ceritera masyarakat di Malaysia dilakarkan dengan sempurna dalam karya kartun. Dengan elemen sedemikian dapat membantu dalam proses pembelajaran. Dalam kajian Fazlina Mohd Radzi & Azahar Harun (2019) pula dikatakan bahawa kartun-kartun dakwah Islam yang dimuat naik oleh para kartunis indie berada di tahap sindiran berbentuk satira, malah terdapat juga beberapa daripadanya mendapat sedikit suntikan sarkastik bagi menguatkan lagi penyampaian visual kartun dan komik masing-masing namun dihiasi dengan penilaian positif.

Kartun

Menurut Mulyadi Mahamood (2004) kartun di Tanah Melayu telah mula diterbitkan sebelum merdeka iaitu awal tahun 1930-an iaitu melalui penerbitan kartun editorial dalam akhbar-akhbar seperti Warta Jenaka, Majlis dan Utusan Zaman yang kebanyakannya adalah kiriman daripada pembaca berkisar tentang isu sosial dan politik negara pada masa tersebut. Berbeza dengan situasi pada hari ini kartun telah diterbitkan melalui pelbagai media seperti media sosial. Terdapat beberapa jenis kartun yang diterbitkan dalam media massa sama ada dalam majalah, suratkhbar atau media sosial. Berikut adalah dua jenis kartun iaitu;

1. Kartun humor (gag cartoon) adalah kartun yang membawa unsur humor yang telah difahami oleh masyarakat dan juga sebagai menyindir tentang isu-isu semasa.
2. Kartun politik (political cartoon) adalah kartun menggambarkan isu politik yang berlaku dalam suatu masyarakat dan negara iaitu dengan disampaikan secara humor atau serius.

Kaedah Langsung dan Kaedah Tak Langsung

Dalam kaedah langsung perkongsian maklumat disampaikan secara terus terang tanpa berselindung. Menurut Asmah Hj Omar (1984), terdapat 20 jenis kaedah langsung yang digunakan dalam iklan iaitu;

- i. Kaedah pernyataan
- ii. Kaedah perkaitan konsep
- iii. Kaedah peristiharan
- iv. Kaedah umpan
- v. Kaedah kealatan
- vi. Kaedah pemesraan
- vii. Kaedah kenal pasti
- viii. Kaedah peyakinan
- ix. Kaedah perbandingan
- x. Kaedah doa
- xi. Kaedah ulasan

- xii. Kaedah pertanyaan
- xiii. Kaedah peringatan
- xiv. Kaedah suruhan
- xv. Kaedah silaan atau pelawaan
- xvi. Kaedah gesaan
- xvii. Kaedah larangan
- xviii. Kaedah ajakan
- xix. Kaedah nasihat
- xx. Kaedah latar

Dalam kajian terhadap warkah Melayu lama, Ab. Razak Ab. Karim (2006) turut menggunakan beberapa pendekatan kaedah langsung ini seperti kaedah pernyataan, kaedah perbandingan, kaedah doa, dan kaedah latar (penceritaan semula) dalam meneliti strategi komunikasi yang digunakan dalam warkah Melayu lama. Begitu juga dalam kajian ini, kaedah langsung seperti kaedah pernyataan diteliti berdasarkan ungkapan bahasa yang diujarkan dalam ilustrasi tertentu sebagai strategi komunikasi yang digunakan oleh kartunis dalam menyampaikan mesej kepada pembaca.

Namun demikian, dalam kaedah tak langsung ujaran yang dipaparkan adalah secara berselindung sebagaimana menurut Ab. Razak Ab Karim (2006) kaedah ini adalah sebagai landasan untuk menyampaikan mesej atau penceritaan yang sebenar. Terdapat empat strategi komunikasi dalam kaedah tak langsung seperti yang dinyatakan oleh Asmah Haji Omar (1992) iaitu beating about the bush, imagery (kiasan), contradicting (hal yang sebaliknya), dan surrogate (orang perantara). Justeru, lakuan bahasa yang menjadi platform penting dalam memberi ketepatan kepada mesej yang disampaikan melalui kaedah tak langsung dapat mencapai komunikasi berkesan.

Metodologi

Metodologi kajian yang digunakan adalah kajian kualitatif melalui pendekatan deskriptif. Data kajian yang dikumpulkan merupakan data dari karya ilustrasi kartunis Maro yang diterbitkan dalam *Mingguan Malaysia* dalam ruangan rencana yang membawa tema *Malaysia Kita*. Terdapat 5 ilustrasi yang digunakan sebagai data dalam kajian ini, yang bertarikh seperti berikut;

1. Ilustrasi 1 - *Mingguan Malaysia*, 14 Julai 2019
2. Ilustrasi 2 - *Mingguan Malaysia*, 21 Julai 2019
3. Ilustrasi 3 - *Mingguan Malaysia*, 4 Ogos 2019
4. Ilustrasi 4 - *Mingguan Malaysia*, 18 Ogos 2019
5. Ilustrasi 5 - *Mingguan Malaysia*, 25 Ogos 2019

Dalam kajian ini data dari ilustrasi 1, 2 dan 3 berkisar kepada isu politik di Malaysia. Manakala ilustrasi 4 dan 5 berkaitan dengan isu sosial yang menceritakan tentang sikap masyarakat Malaysia. Analisis data dilakukan dengan mengenal pasti penggunaan bahasa melalui kaedah langsung dan kaedah tak langsung yang diungkapkan oleh Maro dalam menyampaikan penceritaannya melalui kartun. Berdasarkan penelitian terhadap penggunaan bahasa kartun dalam akhbar, dua kaedah ini dikenal pasti melalui ujaran yang diungkapkan dalam karakter kartun atau ilustrasi yang diberikan kepada karakter kartun tersebut. Pendekatan analisis dalam kajian ini adalah dengan menggunakan pendekatan oleh Asmah Haji Omar (1984 & 1992).

Kaedah Langsung dan Tak Langsung dalam Kartun

Penelitian terhadap kaedah langsung dan kaedah tak langsung dalam setiap ilustrasi kartun ini dilakukan dengan melihat kepada ujaran yang diungkapkan dalam menyampaikan suatu mesej tertentu. Perhatikan contoh ilustrasi berikut;



Ilustrasi 1: Mingguan Malaysia, 14 Julai 2019

Dalam ilustrasi 1 di atas, dapat diperhatikan wajah-wajah pemimpin parti-parti politik. Gambaran pemimpin parti yang berbeza ini diperjelaskan oleh kartunis mengikut warna pakaian yang dipakai sebagai mewakili parti yang di pimpin oleh para pemimpin parti iaitu warna biru, hijau, merah dan jingga (oren).

Penceritaan melalui ilustrasi ini dapat diperhatikan dari mesej yang ingin disampaikan daripada setiap pemimpin parti melalui ujaran yang diujarkan sebagai gambaran seorang pemimpin yang membawa impian atau objektif parti pimpinan mereka. Kartunis melalui penggunaan bahasa telah memberi gambaran bahawa setiap pemimpin parti telah mengujarkan kata-kata yang bersemangat iaitu dengan mensasarkan orang Melayu agar sama-sama bersatu. Namun terdapat pemimpin yang tidak tahu halu tuju yang perlu di bawa dalam mengetuai suatu parti yang telah di pilih oleh rakyat.



Ilustrasi 2: 21 Julai 2019

Dalam ilustrasi 2 di atas dapat diperhatikan kartunis memberi perkongsian tentang kedudukan Datuk Seri Anwar Ibrahim yang telah dijanjikan jawatan sebagai perdana Menteri untuk menggantikan Tun Dr Mahatir Muhammad setelah Tun bersedia melepaskan jawatan

tertinggi negara tersebut. Penyampaian kartunis dalam memberi sindiran tentang kedudukan Anwar Ibrahim yang masih samar setelah menunggu hampir 2 tahun.



Ilustrasi 3: 4 Ogos 2019

Berdasarkan pemerhatian terhadap ilustrasi 3 di atas, dalam latar fizikal yang digambarkan oleh kartunis di sebuah warung. Ini juga dapat dilihat dalam latar suasana tidak formal terdapat dua orang pemeran yang sedang minum di warung sambal berbual tentang isu semasa. Daripada ujaran dua orang pemeran ini jelas bahawa perbualan mereka adalah berkisar tentang kedudukan Perdana Menteri Malaysia sekarang iaitu Tun Dr Mahatir Muhamad. Dalam ujaran tersebut secara bersahaja pemeran menyatakan bahawa Tun M akan memegang jawatan Perdana Menteri untuk tempoh 5 tahun lagi walaupun dinyatakan hanya dalam tempoh dua – tiga tahun lagi.



Ilustrasi 4: 18 Ogos 2019

Berdasarkan ilustrasi 4 di atas, dapat diperhatikan tentang gambaran sinis yang diberikan terhadap sikap masyarakat yang tidak sensitif terhadap suatu perkara seperti perlembagaan negara. Individu sedemikian amat mudah dan bebas dalam menghina perkara

yang telah termaktub dalam perlembagaan. Malah isu sedemikian menjadi satu medium untuk mereka meraih glamor dari masyarakat.

Namun demikian, atas keprihatian pihak tertentu terhadap penghinaan yang diujarkan oleh individu tersebut seperti berkaitan tentang orang Melayu, agama Islam, kedudukan Raja-Raja Melayu dan sebagainya maka laporan polis dilakukan. Individu berkenaan dengan mudah hanya memohon maaf.



Ilustrasi 5: 25 Ogos 2019

Berdasarkan ilustrasi 5 di atas pula, dapat diperhatikan dalam latar suasana untuk meraikan hari kemerdekaan masyarakat berbilang bangsa masing-masing sibuk untuk sama-sama mengibarkan bendera Malaysia. Semua bangsa meletakkan kedudukan mereka di bawah satu bendera Jalur Gemilang. Namun demikian berdasarkan ilustrasi ini dapat dilihat ada sindiran yang ingin disampaikan kepada individu dan pihak tertentu yang secara sengaja memperlekehkan kedudukan bendera kita. Malah ada pihak tertentu telah dengan sengaja memasang bendera secara terbalik. Ini dapat dijelaskan dari ujaran dalam ilustrasi 5 iaitu “Takpeleh sebut terbelit, janji jangan pasang terbalik”. Ujaran ini adalah satu bentuk sindiran kepada pihak yang dituju yang disampaikan melalui medium perantaraan.

Kesimpulan

Ilustrasi kartun oleh seorang kartunis mempunyai strategi komunikasi demi memastikan mesej yang ingin disampaikan dapat difaham oleh pembaca. Dalam kajian ini dapat diperhatikan bahawa kartunis menggunakan kaedah langsung dan kaedah tak langsung. Justeru, penggunaan bahasa melalui dua kaedah ini adalah merupakan suatu strategi komunikasi dalam suatu peristiwa bahasa seperti kartun yang memerlukan penelitian yang mendalam dalam memahami maksud yang ingin disampaikan oleh seorang kartunis. Ini kerana terdapat ilustrasi yang menyampaikan penceritaan secara terus terang dan ada juga sebaliknya. Berdasarkan ilustrasi yang telah diteliti didapati penggunaan bahasa secara sindiran melalui medium perantaraan ini kerap digunakan oleh kartunis sebagai perkongsian maklumat atau penceritaan. Malah menurut Asmah Hj Omar (1984), kaedah tak langsung juga merupakan suatu peraturan interaksi dalam budaya masyarakat di Malaysia terutamanya orang Melayu.

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ALTERNATIF PENYELESAIAN TERHADAP PENCEROBOHAN TANAH MILIK KERAJAAN DI NEGERI PERAK

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Abstrak: Pencerobohan tanah milik kerajaan merupakan isu yang dihadapi oleh pihak kerajaan negeri Perak. Masalah pencerobohan tanah ini telah menyebabkan kerugian kepada kerajaan negeri dari segi hasil pendapatan. Pelbagai langkah penyelesaian telah dilaksanakan oleh pihak kerajaan Perak untuk menangani isu pencerobohan tanah milik kerajaan ini tetapi isu pencerobohan masih berlaku hingga kini. Oleh itu, kajian ini dilakukan bertujuan untuk mengenalpasti punca-punca yang menyebabkan penyelesaian sedia ada tidak berkesan dan mengkaji alternatif penyelesaian bagi menangani isu pencerobohan tanah kerajaan di negeri Perak. Bagi mencapai objektif kajian, rekabentuk kualitatif telah digunakan. Dua jenis data diperolehi iaitu data primer dan data sekunder. Data primer diperolehi dengan kaedah temubual bersama pegawai-pegawai dari Unit Penguatkuasaan dan Teknikal di bawah Pejabat Pengarah Tanah dan Galian Perak supaya memberi gambaran keadaan semasa dan maklum balas tentang isu pencerobohan tanah milik kerajaan negeri Perak. Manakala bagi data sekunder diperolehi dari ekstrak kajian-kajian lepas, keratan akhbar, dan jurnal-jurnal berkaitan. Seterusnya data-data ini dianalisis dengan menggunakan kaedah analisis deskriptif. Hasil kajian mendapati terdapat tiga punca penyelesaian sedia ada tidak berkesan iaitu campur tangan politik, peruntukan kewangan terhad dan ancaman keselamatan dari penceroboh. Selain itu terdapat beberapa alternatif penyelesaian yang telah dicadangkan iaitu penggunaan teknologi dan mewujudkan pangkalan data yang lengkap mengenai tanah yang diceroboh. Kesimpulannya, diharapkan dapatan kajian ini memberi faedah kepada semua pihak khususnya pihak kerajaan dalam menangani isu-isu pencerobohan tanah hakmilik kerajaan negeri.

Kata Kunci: Pencerobohan, Tanah Kerajaan, Alternatif Penyelesaian

Pengenalan

Isu pencerobohan tanah milik kerajaan ini telah lama berlaku di negara ini dan ia semakin berleluasa dari setahun ke setahun. Menurut Kanun Tanah Negara (1965) Seksyen 425(1A), pihak-pihak yang menduduki, atau membina apa-apa bangunan di atas tanah kerajaan, tanah rizab atau tanah perlombongan adalah melakukan suatu kesalahan. Jika disabitkan, pihak tersebut akan dikenakan denda yang tidak melebihi sepuluh ribu ringgit, atau dipenjarakan untuk suatu tempoh yang tidak melebihi satu tahun atau kedua-duanya.

Menerusi kenyataan yang dikeluarkan oleh Pejabat Menteri Besar Perak, sebanyak 24,000 hektar tanah milik kerajaan negeri dan syarikat berkaitan kerajaan (GLC) telah diceroboh sejak dahulu (Saifullah, 2019). Seterusnya, menurut kenyataan Menteri Besar Perak, Datuk Seri Ahmad Faizal Azumu menjelaskan bahawa aktiviti pencerobohan ini telah berlaku sejak puluhan tahun dengan melibatkan ribuan hektar tanah. Pencerobohan tanah kerajaan

bukan sahaja ada di kalangan petani atau pekebun kecil sebaliknya turut melibatkan syarikat korporat yang besar (Fakhrull, 2018). Terdapat beberapa contoh kes berkenaan pencerobohan tanah milik kerajaan Perak seperti kes di Bukit Kledang dan di Chenor. Bukit Kledang merupakan satu aset semula jadi indah dan tempat kegemaran untuk pendaki bukit serta pelancong. Menteri Besar Perak, Datuk Seri Ahmad Faizal Azumu mengesahkan bahawa penerokaan tanah seluas 10 hektar berhampiran Bukit Kledang merupakan aktiviti haram bagi tujuan perladangan kelapa sawit (Razak, 2019). Penebangan pokok di kawasan itu telah memusnahkan kawasan yang subur dan boleh menyebabkan banjir lumpur pada musim hujan. Hal ini akan membahayakan kawasan perumahan di kaki bukit. Isu yang seterusnya dilaporkan berkenaan pencerobohan tanah milik kerajaan di Chemor, Perak oleh sekumpulan petani yang telah menjalankan aktiviti pertanian selama 50 tahun (Saifullah, 2019). Kerajaan negeri Perak mengetahui tanah tersebut telah diceroboh apabila kerajaan ingin menghadiahkan tanah tersebut kepada pemain pasukan bola sepak negeri Perak. Dalam hal ini, kerajaan negeri Perak telah mengeluarkan notis 14 hari kepada petani yang terlibat supaya mengosongkan tanah pertanian yang diusahakan oleh mereka (Saifullah, 2019). Tambahan lagi, menurut sumber akhbar tempatan terdapat sebuah syarikat korporat telah menceroboh tanah milik kerajaan Perak dengan menggunakan kumpulan tertentu bagi menghalang penguatkuasa mengambil tindakan terhadap tanah berkenaan (Farah, 2019). Menurut Menteri Besar Perak, Datuk Seri Ahmad Faizal Azumu, terdapat peneroka haram yang menyaman kerajaan kerana menganggap tanah milik kerajaan yang mereka duduki sekian lama telah menjadi hak mereka.

Pencerobohan ini telah memberi impak yang sangat besar khususnya kepada pihak Kerajaan Negeri Perak. Menurut Pejabat Menteri Perak, pencerobohan akan menjejaskan perancangan untuk menjalankan projek pembangunan seperti membina rumah mampu milik (Saifullah, 2019; Shahrizal, 2019). Selain itu dari aspek ekonomi, pencerobohan boleh menjejaskan usaha kerajaan negeri dalam menarik lebih ramai pelabur asing dan seterusnya mengakibatkan kerajaan negeri mengalami kerugian. Tambahan lagi kerajaan akan mengalami kerugian kerana tidak mendapat hasil kutipan cukai tanah dari aktiviti haram yang diusahakan atas tanah tersebut (Pahang Media, 2020). Kesan seterusnya adalah kerajaan perlu mengeluarkan kos yang tinggi (Multazimah, 2015). Hal ini disebabkan pihak kerajaan perlu menanggung kos pembersihan sisa buangan, penempatan setingan, pembayaran pampasan dan suguhati. Akibat dari kegagalan pihak berkuasa melaksanakan langkah penguatkuasaan, pihak penceroboh akan berjaya menggunakan tanah tersebut untuk menjalankan aktiviti tersendiri tanpa membayar sebarang kos dan cukai tanah.

Bagi menangani isu pencerobohan ini pihak berkuasa telah melaksanakan pelbagai tindakan seperti mengenakan denda terhadap penceroboh, mengeluarkan Lesen Pendudukan Sementara (LPS) dan pemberimilikan tanah. Walaubagaimanapun isu pencerobohan tanah kerajaan masih tidak dapat diselesaikan. Oleh itu, kajian ini dijalankan bagi mengkaji alternatif penyelesaian supaya dapat membantu kerajaan Negeri Perak dalam menangani masalah pencerobohan tanah milik kerajaan ini.

Kajian Literatur

Undang-undang tanah di Malaysia adalah berdasarkan Sistem Torrens yang diperkenalkan oleh penjajah British. Di Malaysia, Kanun Tanah Negara (KTN) 1965 merupakan undang-undang tertinggi di Malaysia mengenai urusan pentadbiran tanah. KTN hanya berkuatkuasa di Semenanjung Malaysia sahaja. Manakala Sabah dan Sarawak mempunyai undang-undang tanah tersendiri iaitu Ordinan Tanah Sabah (Cap 68) dan Kanun Tanah Sarawak (Cap 81). Undang-undang tanah ini akan digunakan dan dirujuk oleh pihak berkuasa dalam menjalankan urusan pentadbiran tanah termasuk hal yang berkaitan pencerobohan tanah.

Takrifan Pencerobohan Tanah Kerajaan

Pencerobohan tanah kerajaan bermaksud menduduki atau menjalankan apa-apa sahaja kegiatan tanpa kebenaran daripada pihak kerajaan. Menurut Seksyen 425 (1) KTN memperuntukkan bahawa seseorang telah melakukan kegiatan pencerobohan tanah kerajaan apabila ianya tidak mendapat kebenaran yang sah semasa melakukan perkara-perkara seperti menduduki atau membina mana-mana bangunan di atas tanah kerajaan, tanah rizab atau tanah perlombongan atau membersihkan, membajak, menggali mengepungi atau bercucuk tanam di mana-mana tanah tersebut samada sebahagian atau secara keseluruhan, memotong atau memindah apa-apa kayuan atau hasil di atas atau dari tanah tersebut.

Aktiviti Pencerobohan Tanah Kerajaan

Aktiviti Penempatan Setinggalan

Penempatan merupakan antara satu aktiviti yang dilakukan oleh penceroboh di atas milik tanah kerajaan. Penempatan ini lebih dikenali sebagai penempatan setinggalan. Penempatan setinggalan boleh wujud kerana faktor kemiskinan atau faktor migrasi penduduk. Kadar kemiskinan yang tinggi menyebabkan kadar kewujudan penempatan setinggalan yang tinggi. Kemiskinan ditakrifkan sebagai situasi serba kekurangan memenuhi keperluan asas yang minimum untuk hidup (Norzita, 2014). Kos sara hidup yang tinggi di bandar telah memberi tekanan tinggi kepada golongan berpendapatan rendah. Hal ini mengakibatkan golongan tersebut mencari alternatif lain untuk menampung keperluan hidup seperti memilih untuk menduduki secara haram di atas tanah kerajaan bagi menampung kehidupan mereka. Selainnya kemasukkan migrasi secara besar-besaran ke kawasan Bandar menjadi punca utama pertambahan penempatan setinggalan. Faktor utama migrasi adalah untuk mencari peluang pekerjaan. Namun begitu sebelum mendapat pekerjaan dan pendapatan yang mencukupi, sudah tentu kawasan setinggalan menjadi tumpuan sebagai tempat tinggal. Menurut laporan akhbar Sinar Harian, terdapat 12 kes dengan isu penempatan setinggalan telah berlaku di beberapa lokasi dalam Negeri Perak dan pihak kerajaan telah berusaha untuk mengatasi masalah ini (Shahrizal, 2019)

Aktiviti Pertanian

Aktiviti pertanian merupakan aktiviti yang biasa dilakukan oleh penceroboh di atas tanah. yang biasanya dilakukan oleh penceroboh atas tanah adalah aktiviti pertanian. Mereka mengusahakan tanah dan membangunkan tanah dengan aktiviti pertanian bagi menampung kehidupan mereka. Kebiasaannya pencerobohan tanah yang melibatkan kegiatan pertanian adalah berlaku di kawasan luar bandar. Hal ini disebabkan pendapatan masyarakat di kawasan luar bandar adalah bergantung kepada kegiatan pertanian. Mereka memerlukan tanah kosong untuk menjalankan aktiviti pertanian sehingga sanggup menceroboh tanah kerajaan.

Aktiviti Perniagaan

Aktiviti perniagaan seperti mencuci kereta, membuka gerai kecil-kecilan merupakan satu aktiviti yang biasa dijalankan oleh pencerobo (Khasanah, 2009). Kegiatan pencerobohan ini berlaku di mana-mana sahaja tidak kira ianya kawasan luar bandar atau kawasan bandar. Ini berlaku di atas tanah-tanah kosong yang terletak di tepi jalan, bawah jambatan pejalan kaki, atau mana-mana tanah kosong termasuklah tanah kerajaan yang tidak diusahakan atau dibangunkan selalunya menjadi sasaran untuk masyarakat menjalankan perniagaan sendiri tanpa kebenaran pihak berkuasa (Khasanah, 2009).

Faktor-faktor Menyebabkan Pencerobohan Tanah Kerajaan

Terdapat beberapa faktor yang menyebabkan pencerobohan tanah kerajaan iaitu faktor ekonomi, faktor sosial dan faktor perundangan. Bagi faktor ekonomi, kemiskinan merupakan

antara satu faktor yang menyumbang kepada pencerobohan tanah. Kebiasaannya keadaan ini akan berlaku di kalangan golongan yang berpendapatan rendah seperti petani yang menjalankan aktiviti pertanian untuk meneruskan kehidupan mereka (Azlena, 2012).

Seterusnya bagi faktor sosial seperti perpindahan masyarakat luar bandar ke kawasan bandar. Kebiasaannya penghijrahan ini bertujuan untuk mencari sumber pendapatan di kawasan bandar. Selain daripada itu, tanah kerajaan dilihat mudah untuk diceroboh kerana tiada papan tanda amaran yang diletakkan untuk menunjukkan orang awam dilarang menceroboh tanah kerajaan tersebut. Tambahan lagi tanah kerajaan sering dilihat terbiar lebih-lebih lagi yang terletak di kawasan pedalaman. Menurut Menteri Hal Ehwal Ekonomi, Datuk Seri Mohamed Azmin Ali menyatakan ketika ini terdapat banyak tanah kerajaan yang terbiar dan tidak dibangunkan, selain tiada perancangan khusus untuk membangunkan tanah itu dalam masa beberapa tahun akan datang (Zanariah, 2019). Dengan ini, penceroboh mengambil peluang untuk menjalankan aktiviti-aktiviti mereka memandangkan tiada sesiapa mengawasi atau menjaga kawasan berkenaan lebih-lebih lagi sekiranya tanah tersebut di kawasan pedalaman.

Selain daripada itu, Norizuani (2008) menyatakan bahawa terdapat penceroboh yang tetap berada di atas tanah kosong tersebut mempunyai niat untuk mendapatkan perhatian daripada pihak kerajaan semata-mata untuk mendapatkan bayaran pampasan pada waktu operasi pencerobohan dijalankan.

Bagi faktor perundangan, menurut Dewi (2012) menyatakan hukuman yang ringan terhadap penceroboh merupakan salah satu faktor isu ini berleluasa. Menurut KTN 1965 Seksyen 425 menyatakan jika disabitkan kesalahan denda tidak melebihi RM10,000 atau dipenjarakan tidak lebih dari satu tahun akan dikenakan kepada penceroboh. Namun begitu, denda ini tidak akan terlaksana sekiranya tiada tindakan dari pihak penguatkuasa dalam membuat pemantauan terhadap pencerobohan ke atas tanah kerajaan. Selain daripada itu proses permohonan tanah yang panjang juga menyebabkan masyarakat mengambil keputusan untuk menceroboh tanah-tanah terbiar. Menurut kajian Norhasnisha (2013), kelewatan kelulusan permohonan tanah telah timbul disebabkan kekurangan kakitangan di Pejabat Tanah dan kesukaran mendapatkan fail asal permohonan tanah. Fail asal pemohon ini penting kerana di dalamnya terdapat maklumat yang berkaitan dengan sesuatu permohonan, serta salinan resit bayaran premium atau bayaran-bayaran lain yang berkaitan. Oleh yang demikian, pelan akui tidak dapat didaftarkan jika tiada apa-apa bukti yang menunjukkan bahawa pemohon telah menjelaskan bayaran yang telah dikenakan.

Kaedah Penyelesaian Pencerobohan Tanah yang Telah Dilaksanakan

Penyelesaian pertama yang telah dilaksanakan adalah tindakan penguatkuasaan. Apabila suatu kes pencerobohan tanah telah dikenalpasti, pihak Pejabat Tanah akan mengambil tindakan penguatkuasaan mengikut Seksyen 425 (1) KTN terhadap penceroboh tersebut. Seksyen 425 (1) KTN menyatakan dengan jelas bahawa jika seseorang disabitkan, denda boleh dikenakan tidak melebihi RM10,000 atau penjara tidak lebih dari setahun atau kedua-duanya sekali.

Penyelesaian kedua adalah pengeluaran Lesen Pendudukan Sementara (LPS). Menurut Seksyen 42(1) KTN, pemberian LPS di bawah borang 4A merupakan satu kaedah pelupusan tanah oleh Pihak Berkuasa Negeri (PBN) dengan memberi kebenaran kepada seseorang individu untuk menduduki atau menjalankan aktiviti di atas tanah tersebut pada suatu tempoh tertentu. Lesen ini diluluskan hanya untuk kegunaan sementara sahaja. Sebagai contoh, seseorang individu yang mendapat lesen ini hanya boleh menanam tanaman yang tidak kekal dan tanaman bermusim atau membina rumah atau binaan yang boleh dialih berjenis sementara kerana tanah tersebut menjadi milik kerajaan semula setelah akhir tempoh lesen tersebut.

Selain itu, pemberimilikan tanah merupakan tindakan yang diambil oleh kerajaan sebagai satu langkah penyelesaian untuk menangani masalah pencerobohan tanah (Mohd Rashid, 2004). Menurut KTN 1965, pemberimilikan tanah merupakan salah satu bentuk pelupusan tanah yang diperuntukkan dalam Seksyen 42(1)(a). PBN mempunyai kuasa untuk memberimilik tanah kerajaan melalui peruntukan-peruntukan di bawah Seksyen 76 KTN 1965.

Punca-punca yang Menyebabkan Penyelesaian Sedia Ada Tidak Berkesan

Terdapat beberapa punca yang menyebabkan penyelesaian sedia ada tidak berkesan dalam menangani isu pencerobohan tanah milik kerajaan seperti dijelaskan di bawah.

Campur tangan Politik

Antara satu masalah yang dihadapi oleh Unit Penguatkuasa semasa menjalankan tugas untuk menangani kegiatan pencerobohan tanah milik kerajaan adalah campur tangan oleh politik. Hal ini disebabkan apabila orang awam menghadapi masalah akan membuat rayuan kepada ahli politik seperti wakil-wakil rakyat yang telah dilantik sewaktu pilihanraya (Yanti, 2010). Orang awam menganggap ahli politik merupakan orang tengah di antara kerajaan dan orang awam. Dengan ini apabila orang awam melanggar undang-undang, mereka akan meminta bantuan daripada ahli politik supaya masalah ini dapat diselesaikan. Ahli politik tersebut kebiasaannya akan berusaha untuk memberi bantuan kepada mereka yang menghadapi masalah supaya mengukuhkan kedudukan diri sendiri dalam hati orang awam.

Peruntukan Kewangan yang Terhad

Pihak penguatkuasa memerlukan wang untuk menjalankan operasi. Menurut Yanti (2010), peruntukan kewangan adalah digunakan untuk membeli kelengkapan dan peralatan yang diperlukan semasa menjalankan operasi tindakan penguatkuasaan, pembayaran gaji bagi bayaran kerja lebih masa atau kos-kos yang diperlukan bagi menjalankan pemantauan, pengawasan dan bancian. Oleh itu, peruntukan kewangan yang tidak mencukupi menyukarkan unit penguatkuasa dalam menjalankan tugas dengan lancar.

Ancaman Keselamatan

Keselamatan pihak penguatkuasa semasa menjalankan operasi tindakan penguatkuasaan perlu diberikan perhatian yang serius. Hal ini dapat ditunjukkan dengan sebahagian pihak penceroboh yang sanggup menghalang pihak penguatkuasa demi mempertahankan hak yang bukan milik mereka terhadap tanah tersebut. Menurut Yanti (2010), pihak penceroboh memberontak dengan menggunakan senjata seperti kayu, parang, batu dan sebagainya.

Metodologi Kajian

Kajian ini telah menggunakan reka bentuk kualitatif. Terdapat dua sumber data iaitu data sekunder dan data primer. Data sekunder diperoleh melalui ekstrak kajian-kajian lepas, artikel, jurnal, akta dan perkeliling serta keratan akhbar yang berkaitan. Manakala data primer pula diperoleh melalui kaedah temu bual secara bersemuka. Soalan temubual berbentuk semi struktur digunakan semasa sesi temu bual. Hal ini kerana soalan berbentuk semi struktur boleh disusun semula dan boleh ditambah mengikut keperluan semasa sesi temu bual berlangsung. Borang temu bual mengandungi tiga bahagian. Bahagian A mengenai latar belakang responden seperti jawatan dan pengalaman kerja mereka. Bahagian B mengenai faktor-faktor yang menyebabkan penyelesaian sedia ada tidak berkesan dan Bahagian C adalah soalan terbuka mengenai pandangan dan cadangan responden terhadap penyelesaian alternatif untuk mengatasi masalah pencerobohan tanah milik kerajaan di Perak. Bagi pemilihan responden, kaedah persampelan bertujuan telah digunakan. Kaedah ini terbukti berkesan apabila hanya

memerlukan sebilangan kecil responden yang dapat memberi maklumat yang terperinci berkaitan dengan kajian yang sedang dilakukan (John, 2018). Jadual 1 di bawah menunjukkan senarai responden dalam kajian ini yang terdiri daripada lima orang pegawai tanah yang terlibat secara langsung dalam menyelesaikan masalah pencerobohan tanah kerajaan di negeri Perak. Seterusnya data yang diperolehi akan dikumpul dan dianalisis dengan menggunakan analisis Penyelidik menganalisis maklumat yang dikumpul dengan menggunakan analisis deskriptif bagi mencapai kedua objektif kajian ini

Jadual 1: Maklumat Responden

Nama	Tempoh Pengalaman	Jawatan
Shahrul Nizam Bin Shokri (R1)	6 Tahun	Penolong Pengarah PTG Perak (Bahagian Penguatkuasaan dan Teknikal)
Mohd Fairoz Bin Md Hairi (R2)	6 Tahun	Penolong Pegawai Tanah PTG Perak (Bahagian Penguatkuasaan dan Teknikal)
Shahril Ridzuan Bin Ramli (R3)	8 Tahun	Penolong Pegawai Tanah PTG Perak (Bahagian Penguatkuasaan dan Teknikal)
Khairul Rizal Bin Abdul Razak (R4)	16 Tahun	Penolong Pegawai Tanah PTG Perak (Bahagian Penguatkuasaan dan Teknikal)
Shahrul Bin Ahmad Redzuan (R5)	10 Tahun	Penolong Pegawai Tanah PTG Perak (Bahagian Penguatkuasaan dan Teknikal)

Analisis dan Perbincangan

Analisis dibuat berdasarkan maklumat yang diperolehi dari data sekunder dan primer. Bagi faktor-faktor yang menyebabkan penyelesaian sedia ada tidak berkesan dalam menyelesaikan masalah pencerobohan tanah kerajaan di Perak, semua responden (R1, R2, R3, R4 dan R5) bersetuju bahawa campur tangan politik merupakan salah satu faktor yang menyebabkan operasi penguatkuasaan tidak berjalan dengan lancar. R2 dan R4 menegaskan bahawa penglibatan ahli politik dengan menyalahgunakan kuasa mereka untuk melindungi penceroboh melambatkan operasi penguatkuasaan. R3 menyatakan bahawa keadaan politik yang tidak stabil menyebabkan dasar tidak teratur. Sebagai contoh, menurut R5 kerajaan negeri Perak berjanji akan memberikan hak milik tanah secara tetap kepada penduduk, namun selepas bertukar kerajaan, kerajaan baru tidak melaksanakan perjanjian tersebut.

Berdasarkan kajian literatur, faktor kedua adalah peruntukan kewangan yang terhad. Semua responden berpendapat peruntukan kewangan yang mencukupi dari kerajaan sangat penting untuk memastikan kelancaran operasi dan menampung segala kos perbelanjaan peralatan utiliti yang digunakan semasa semasa operasi

Seterusnya semua responden (R1, R2, R3, R4 dan R5) bersetuju dengan faktor ancaman keselamatan merupakan salah satu kekangan yang dihadapi oleh pihak penguatkuasa di PTG Perak. R1 menyatakan walaupun semasa menjalankan operasi penguatkuasaan, pasukan keselamatan seperti tentera dan polis berada bersama, namun banyak kemungkinan yang tidak dijangka boleh berlaku di lokasi kejadian. Tambahan daripada itu R5 mengatakan bahawa faktor kekurangan kakitangan adalah salah satu penyebab penyelesaian yang tidak berkesan. R1 menekankan bahawa kekurangan kakitangan membebankan kerana lebih banyak kerja perlu dilakukan. Apabila kerajaan ingin menjimatkan kos dari segi pengurangan pengambilan kakitangan, ianya secara tidak langsung mempengaruhi operasi penguatkuasaan dimana banyak kes yang akan tertunggak untuk diselesaikan.

Seterusnya responden ditemubual berhubung dengan penyelesaian alternatif untuk mengatasi masalah pencerobohan tanah di Perak. Berdasarkan hasil temubual yang telah dilakukan terdapat beberapa langkah alternatif yang boleh dibuat oleh kerajaan negeri bagi

menyelesaikan masalah pencerobohan tanah dari terus berleluasa. Semua responden (R1, R2, R3, R4 dan R5) menyatakan bahawa campur tangan politik sukar dibanteras melainkan ada undang-undang yang menghalang ahli politik daripada campur tangan dalam urusan PTG Perak ketika mereka menjalankan operasi penguatkuasaan.

Di samping itu, bagi faktor peruntukan kewangan yang terhad, responden R2 berpendapat dengan menyediakan pangkalan data yang menyimpan data terperinci dan maklumat tanah untuk memudahkan aktiviti pemantauan dapat mengurangkan kos operasi selain dapat menyelesaikan isu kekurangan kakitangan di Pejabat Tanah. Pangkalan data ini sangat penting dalam meringankan beban dari memantau sejumlah besar tanah. Beliau juga menyarankan agar undang-undang di bawah Seksyen 425 harus diperkuatkan dengan memberikan hukuman yang lebih berat seperti mengenakan denda yang lebih tinggi kepada para penceroboh. Selain daripada itu R3 menyarankan agar menggunakan teknologi canggih seperti *drone* untuk memantau tanah kerajaan supaya dapat menjimatkan kos dari segi pengambilan lebih banyak kakitangan. Penggunaan teknologi untuk memantau tanah kerajaan terutama tanah kerajaan yang terletak di kawasan luar bandar dapat membantu untuk mengelakkan pencerobohan kerana pihak penguatkuasa dapat mengesan berlakunya pencerobohan dengan lebih awal. Responden R4 menyarankan agar pihak kerajaan harus melakukan bancian semula untuk mengetahui keadaan tanah milik kerajaan dan memberikannya kepada Syarikat Berkaitan Kerajaan (GLC) yang berpotensi untuk mengurangkan tanah kosong kerajaan. Dengan melaksanakan dasar ini, dalam masa yang sama pihak kerajaan dapat memperoleh hasil pendapatan. Tambahan lagi, R1 mencadangkan agar pengurusan PTG Perak melihat semula proses permohonan LPS supaya proses tersebut dapat dimudahkan agar dapat mempercepatkan proses permohonan LPS supaya individu mendapat lesen dan menjalankan aktiviti di atas tanah secara sah di sisi undang-undang.

Kesimpulan

Hasil kajian ini telah mengenalpasti beberapa faktor yang menyebabkan penyelesaian sedia ada tidak berkesan dalam menyelesaikan masalah pencerobohan tanah milik kerajaan di Perak. Antara faktor yang menyebabkan masalah ini adalah campur tangan politik, peruntukan kewangan yang terhad, ancaman keselamatan, dan kekurangan kakitangan. Bagi mengatasi masalah pencerobohan ini terus berleluasa, terdapat beberapa alternatif yang dicadangkan oleh para responden seperti menggubal undang-undang untuk mencegah mana-mana pihak untuk campur tangan dalam urusan penguatkuasaan pencerobohan tanah kerajaan. Selain itu, membangunkan pangkalan data untuk merekod maklumat tanah secara terperinci, mengenakan hukuman yang lebih berat, menggunakan teknologi canggih, bekerjasama dengan Syarikat Berkaitan Kerajaan (GLC) dan mempercepat proses permohonan lesen atau hak milik tanah.

Tambahan daripada itu pihak kerajaan harus meningkatkan kesedaran masyarakat terhadap isu pencerobohan tanah milik kerajaan. Dengan meningkatkan kesedaran masyarakat mengenai kegiatan pencerobohan ini dan tidak membiarkan penceroboh mengambil kesempatan untuk menagih simpati masyarakat untuk tindakan penguatkuasaan terhadap mereka. Cadangan seterusnya ialah dengan mengkaji semula semua kegunaan tanah terbiar milik kerajaan supaya boleh mewujudkan dasar yang jelas dan konsisten mengenai jenis pembangunan yang sesuai kepada tanah tersebut. Pihak kerajaan juga boleh mengaplikasikan sistem pendaftaran bagi mendaftar tanah tersebut di bawah hakmilik Negeri pada masa depan. Hal ini disebabkan tanah milik kerajaan kini tidak didaftar di bawah hakmilik Negeri. Sekiranya tanah milik kerajaan didaftarkan di bawah hakmilik Negeri, ini dapat membantu pihak kerajaan dari segi memantau tanah tersebut daripada pencerobohan.

Secara kesimpulannya, isu pencerobohan tanah kerajaan perlu diselesaikan segera supaya tanah yang ada dapat digunakan untuk kegunaan yang lebih bermanfaat bagi keperluan masyarakat setempat. Selain itu, alternatif penyelesaian yang diambil oleh pihak kerajaan haruslah diteliti sebaiknya kerana ia akan memberi implikasi terhadap tindakan yang bakal diambil di masa hadapan terhadap penceroboh khususnya di Perak dan di seluruh Malaysia amnya.

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KECEKAPAN PENGURUSAN ASET DI POLITEKNIK KUALA TERENGGANU

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Abstrak: *Pengurusan aset merupakan salah satu aspek penting dalam tadbir urus sesebuah organisasi. Kecekapan pengurusan aset memperlihatkan keberkesanan organisasi dalam mengikuti pekeliling pengurusan aset yang dikeluarkan oleh pihak kerajaan. Oleh itu isu-isu yang berkaitan dengan kelemahan tatacara pengurusan aset perlu diatasi bagi menunjukkan kecekapan organisasi terbabit. Kajian yang dijalankan adalah berbentuk deskriptif untuk menilai kecekapan pengurusan aset di Politeknik Kuala Terengganu. Sampel bagi kajian ini terdiri dari 80 orang staf di jabatan dan unit. Instrumen bagi kajian ini merupakan satu set soalan borang soal selidik. Analisis data dibuat dengan menggunakan perisian Statistical Package for Social Sciences (SPSS) version 23.0. Dapatan kajian menunjukkan semua amalan pengurusan aset adalah mengikut tatacara pengurusan aset (min keseluruhan = 3.87). Kompetensi pengurusan aset adalah tinggi di mana penyelaras aset telah menjalankan tugas dengan baik (min keseluruhan = 3.89). Hasil kajian mendapati hipotesis, H^1 diterima iaitu terdapat hubungan yang signifikan di antara amalan pengurusan aset dengan kompetensi pengurusan aset. ($r = 0.534$). Ini dapat disimpulkan bahawa amalan pengurusan aset yang berterusan dapat meningkatkan kompetensi pengurusan aset.*

Kata kunci: *kecekapan, amalan, kompetensi, pengurusan, aset.*

Pendahuluan

Pengurusan aset adalah proses berstruktur yang bertujuan untuk memastikan nilai terbaik bagi setiap wang yang dibelanjakan bagi memperolehi aset untuk memenuhi keperluan strategik pihak berkuasa tempatan (Hasting, 2010). Ianya adalah sama seperti mana-mana fungsi pengurusan yang lain, untuk meningkatkan kompetensi tadbir urus. Justeru itu, prestasi dan kualiti perkhidmatan perlu mempunyai keseimbangan kos mengikut keperluan dan peraturan dalam pengurusan mereka (Schneider et al., 2006).

Aset merupakan sumber yang dikawal oleh entiti, hasil daripada peristiwa lampau dan memberi manfaat kepada ekonomi pada masa hadapan atau potensi perkhidmatannya akan mengalir ke dalam entiti. Aset Alih bermaksud peralatan atau barangan yang boleh dipindahkan atau dialihkan dari satu tempat ke tempat lain secara mudah, termasuk aset alih yang dibekalkan bersama dengan penyediaan bangunan atau infrastruktur lain. Pengurusan aset kerajaan bertujuan untuk menguruskan segala bentuk harta modal dan aset alih bernilai rendah yang meliputi penerimaan, pendaftaran, penggunaan, penyimpanan, pemeriksaan penyelenggaraan, pindahan, pelupusan, kehilangan dan hapus kira (Perbendaharaan Malaysia, 2018). Fokus terhadap meningkatkan kesedaran pengurusan aset amat penting, dalam memperbaiki dan menambahbaik sistem pengurusan aset sedia ada. Bagi mengelak pembaziran, aspek pengurusan aset perlu ditingkatkan terutama dalam penyelenggaraan, pemantauan, penyeliaan dan rekod aset kerajaan yang perlu dikemaskini (Jabatan Audit Negara, 2013).

Objektif utama pengurusan aset adalah untuk meningkatkan proses dalam membuat keputusan bagi mengagihkan dana dalam kalangan semua agensi untuk tujuan prolehan aset supaya pulangan pelaburan terbaik diperolehi. Bagi mencapai matlamat ini, pengurusan aset perlu dilaksanakan dengan berkesan (Nemmers 2004). Oleh itu pihak pengurusan sesebuah

organisasi hendaklah peka terhadap tatacara pengurusan aset dan melaksanakan segala prosedur yang telah ditetapkan dengan sempurna. Di bawah Program Transformasi Kerajaan (GTP) penekanan diberikan terhadap nilai aset kerajaan dengan harapan aspek pengurusan aset menjadi lebih baik dan cekap di masa akan datang (Saleh dan Pendlebury, 2006).

Kajian yang dijalankan adalah untuk menilai kecekapan pengurusan aset di Politeknik Kuala Terengganu. Hasil dapatan yang diperolehi boleh dijadikan sebagai sumber rujukan bagi penambahbaikan yang akan dilaksanakan. Aspek pengurusan aset yang baik bergantung kepada kecekapan individu dalam bekerjasama dalam suatu kumpulan bagi mencapai matlamat yang ditetapkan.

Pernyataan Masalah

Pengurusan aset merupakan salah satu komponen dalam pengurusan kewangan. Laporan audit yang dikeluarkan sering membangkitkan beberapa isu berkaitan kelemahan dalam aspek pengurusan aset. Perkara paling asas yang ditegur dalam laporan audit adalah harta modal dan aset alih bernilai rendah yang tidak didaftarkan dengan lengkap dalam tempoh 2 minggu dari tarikh pengesahan penerimaan (Jabatan Audit Negara, 2018). Ini menunjukkan penambahbaikan perlu dilaksanakan dari masa ke semasa bagi memastikan kecekapan dalam pengurusan aset.

Di Politeknik Kuala Terengganu, tatacara pengurusan aset berjalan dengan lancar selaras dengan pekeling yang telah dikeluarkan namun dari segi kecekapan pengurusan aset perlunya ada kajian dijalankan agar penambaaian dapat dilaksanakan.

Objektif Kajian

- i) Mengenalpasti amalan pengurusan aset.
- ii) Mengenalpasti kompetensi pengurusan aset di Politeknik Kuala Terengganu.
- iii) Mengenalpasti hubungan diantara amalan pengurusan aset dengan kompetensi pengurusan aset.

Persoalan Kajian

- i) Apakah amalan pengurusan aset.
- ii) Adakah terdapat kompetensi pengurusan aset di Politeknik Kuala Terengganu.
- iii) Adakah terdapat hubungan diantara amalan pengurusan aset alih kerajaan dengan kompetensi pengurusan aset.

Kepentingan Kajian

Hasil kajian ini dapat membantu pihak Politeknik Kuala Terengganu mengenalpasti amalan pengurusan aset dan kompetensi pengurusan aset serta hubungan diantara kedua-duanya.aset.

Skop Kajian

Kajian ini hanya dijalankan ke atas staf di jabatan dan unit bagi menilai amalan pengurusan aset dan kompetensi pengurusan aset di Politeknik Kuala Terengganu (PKT) sahaja. Disamping itu juga, kajian ini dijalankan bagi mengenalpasti hubungan diantara kedua-duanya. Item-item telah dibangunkan dan analisis terhadap penilaian item dijalankan.

Kajian Literatur

Menurut kajian Jingliang (2015) pengurusan aset memerlukan suatu pasukan yang cekap. Pada masa kini, ramai staf yang bekerja di unit pengurusan aset di universiti tidak professional dan menjejaskan kecekapan pengurusan aset. Universiti harus membina pasukan pengurusan aset yang professional dengan menyediakan latihan untuk kakitangan pengurusan aset dan

memupuk kesedaran pengurusan aset agar bersikap profesional. Dengan cara ini, pengurusan aset akan menjadi lebih cekap, pengagihan aset dapat dilaksanakan secara optimum dan penggunaan aset berada di tahap maksimum.

Mohd Isa (2002) menegaskan aset adalah sama seperti sumber kewangan dan maklumat yang menyumbang kepada kejayaan organisasi dan perlu diuruskan dengan berkesan dan cekap. Aset perlu diuruskan secara profesional untuk memastikan nilainya dijaga.

Dow et al., (2006) menyatakan New Zealand adalah salah satu daripada reformis yang paling maju dalam pengurusan harta benda awam. Pencetus utama dalam pembaharuan ini adalah hubungan antara pembaharuan perakaunan dan pembaharuan pengurusan aset dan sistem maklumat. Pembaharuan jelas meningkatkan ketelusan dan akauntabiliti dalam urus niaga aset serta mengurangkan ketidakcekapan ekonomi yang berkaitan dengan aset awam (Edwards & Ellison, 2003; Haynes & Nunnington, 2010).

Menurut Kaganova (2000), pada masa kini, amalan pengurusan aset berhadapan dengan pelbagai cabaran. Kerajaan tempatan mempunyai tekanan untuk meningkatkan kecekapan dan keberkesanan dalam mengurus pelbagai jenis aset. Woodhouse (2006) mendakwa aspek yang penting dan membawa kejayaan kepada pengurusan aset adalah kesedaran dan sikap individu yang professional.

Metodologi

Metodologi kajian merujuk kepada kaedah yang sesuai untuk menjalankan penyelidikan dan menentukan tatacara yang berkesan bagi menjawab segala permasalahan kajian.

Kaedah Kajian

Kajian ini menggunakan kaedah statistik deskriptif. Penggunaan skor min digunakan untuk mengenalpasti amalan pengurusan aset dan kompetensi pengurusan aset. Ujian korelasi telah dijalankan bagi menentukan hubungan diantara kedua-duanya.

Instrumen Kajian

Instrumen kajian adalah berbentuk borang soal selidik yang digunakan untuk menentukan amalan pengurusan aset dan kompetensi pengurusan aset serta hubungan diantara kedua-duanya. Setiap item dalam borang soal selidik dinilai berdasarkan skala Likert lima mata dengan skor 1, 2, 3, 4, dan 5.

Sampel

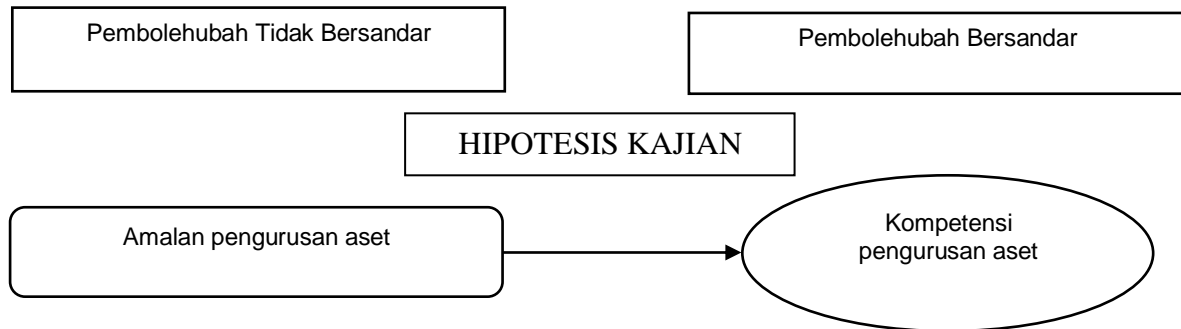
Sampel bagi kajian ini terdiri dari 80 orang staf di Politeknik Kuala Terengganu (PKT).

Kaedah Analisis Data

Data yang telah diperolehi dari borang soal selidik dianalisis dengan menggunakan program *Statistical Package for Social Science version (SPSS) version 23.0*. Kajian ini menggunakan statistik deskriptif untuk melihat min, dan sisihan piawai bagi menganalisa dan membuat keputusan terhadap item yang dikaji.

Pembolehubah Kajian

Pembolehubah mempunyai sifat yang boleh berubah-ubah dan ianya merupakan sesuatu yang boleh mengambil nilai yang berbeza (Nurfariana, 2012). Nilai terbabit akan berubah-ubah bagi sesuatu objek atau individu. Di dalam kajian ini, kompetensi pengurusan aset merupakan pembolehubah bersandar dan amalan pengurusan aset merupakan pembolehubah tidak bersandar. Kajian ini juga dijalankan bagi melihat hubungan antara kompetensi pengurusan aset dengan amalan pengurusan aset.



Rajah 1: Kerangka Kajian

Hipotesis Kajian

Berdasarkan persoalan kajian, hipotesis berikut dirangka bertujuan untuk mengetahui adakah terdapat hubungan di antara amalan pengurusan aset dengan kompetensi pengurusan aset. Hipotesis yang direka adalah seperti berikut:

- H^o Tidak terdapat hubungan yang signifikan di antara amalan pengurusan aset dengan kompetensi pengurusan aset
- H¹ Terdapat hubungan yang signifikan di antara amalan pengurusan aset dengan kompetensi pengurusan aset

Analisa Data

Intepretasi min adalah berpandukan skala yang telah digunakan oleh Rusni (2005) dan Norizan (2003) dalam kajian yang telah mereka dijalankan.

Jadual 1: Amalan Pengurusan Aset di Politeknik Kuala Terengganu

Di Politeknik Kuala Terengganu:

Bil.	Item	Min	Sisihan Piawai	Intepretasi
1.	Aset yang diterima disemak terlebih dahulu dari segi keadaanya, spesifikasi, kualiti dan kuantiti.	3.79	0.91	Tinggi
2.	Aset yang diterima didaftarkan dalam tempoh 2 minggu selepas pengesahan penerimaan barang.	3.83	0.87	Tinggi
3.	No. Siri Pendaftaran yang seragam dicatatkan pada daftar aset bagi memudahkan pengenalan dan pengesanan barangan.	3.85	0.97	Tinggi
4.	Semua aset diberi label melalui penjanaan sistem dan dilekatkan pada aset berkenaan.	4.07	1.20	Tinggi
5.	Senarai aset ditempatkan di setiap lokasi yang ditetapkan.	4.01	1.15	Tinggi
6.	Laporan Kedudukan Aset disediakan setiap tahun dikemukakan kepada Unit Pengurusan Aset (Ibu Pejabat).	3.91	0.98	Tinggi
7.	Pinjaman dan pergerakan aset direkodkan.	3.94	0.89	Tinggi
8.	Aset yang mengalami kerosakan direkodkan.	3.79	0.94	Tinggi
9.	Pemeriksaan ke atas semua aset alih hendaklah dilaksanakan seratus peratus (100%) dan pemeriksaan boleh dilaksanakan sepanjang tahun pada tahun semasa secara berperingkat.	4.09	1.07	Tinggi
10.	Aset yang memerlukan penyelenggaraan dikenal pasti dan disenaraikan.	3.87	0.91	Tinggi
11.	Setiap penyelenggaraan yang dilaksanakan direkodkan.	3.95	0.93	Tinggi
12.	Laporan Penyelenggaraan disediakan setiap tahun.	3.81	0.96	Tinggi

13.	Pindahan aset dilaksanakan berdasarkan kepada permohonan daripada Pusat Tanggungjawab (PTJ).	3.53	0.85	Sederhana
14.	Perakuan Pelupusan disediakan untuk semua kaedah pelupusan	4.01	1.13	Tinggi
15.	Tindakan pelupusan mengikut kaedah yang diluluskan hendaklah dilaksanakan dalam tempoh enam (6) bulan dari tarikh kelulusan.	4.11	1.01	Tinggi
16.	Ketua Jabatan menyediakan Laporan Awal Kehilangan Aset bagi kehilangan yang telah berlaku di jabatan di bawah kawalannya.	3.63	0.88	Sederhana
17.	Proses hapus kira yang disediakan akan dikemukakan kepada Unit Pengurusan Aset (Ibu Pejabat).	3.61	0.89	Sederhana
	Min keseluruhan	3.87	0.94	Tinggi

Jadual 1 menunjukkan min keseluruhan adalah 3.79 bagi amalan pengurusan aset di Politeknik Kuala Terengganu. Ini menunjukkan setiap item yang dinilai mewakili amalan terbaik atau tugas yang perlu dilaksanakan bagi menguruskan aset di Politeknik Kuala Terengganu.

Jadual 2: Kompetensi Pengurusan Aset di Politeknik Kuala Terengganu
Penyelaras Aset Jabatan dan Unit di Politeknik Kuala Terengganu menjalankan tugas:

Bil.	Item	Min	Sisihan Piawai	Intepretasi
1.	Mengendalikan penerimaan aset alih kerajaan	3.97	0.97	Tinggi
2.	Mendaftar aset alih dalam tempoh 2 minggu selepas pengesahan penerimaan barang.	3.94	1.01	Tinggi
3.	Melaksanakan prosedur pelabelan aset alih kerajaan.	4.11	1.07	Tinggi
4.	Mengenalpasti aset alih kerajaan di setiap lokasi yang ditetapkan.	4.03	1.10	Tinggi
5.	Menguruskan pinjaman dan pergerakan aset alih kerajaan.	3.98	0.91	Tinggi
6.	Mengendalikan pelaporan kerosakan aset alih kerajaan.	3.91	0.89	Tinggi
7.	Melaksanakan pemeriksaan ke atas semua aset alih, seratus peratus (100%).	4.01	0.93	Tinggi
8.	Mengenalpasti aset alih yang memerlukan penyelenggaraan.	3.87	0.88	Tinggi
9.	Merekod penyelenggaraan yang telah dilaksanakan.	3.89	0.84	Tinggi
10.	Menentukan masa bagi proses pelupusan aset alih kerajaan dilaksanakan.	3.81	0.92	Tinggi
11.	Melaksanakan tindakan pelupusan mengikut kaedah yang diluluskan.	3.85	0.96	Tinggi
12.	Mengendalikan perpindahan aset alih berdasarkan kepada permohonan daripada Pusat Tanggungjawab (PTJ).	3.63	0.83	Sederhana
13.	Mengendalikan proses pelaporan kehilangan aset alih kerajaan.	3.77	0.82	Tinggi
14.	Membantu Ketua Jabatan dalam mengendalikan proses hapus kira.	3.85	0.87	Tinggi
15.	Mengemaskini rekod daftar aset alih dari masa ke semasa.	3.73	0.93	Tinggi
	Min keseluruhan	3.89	0.93	Tinggi

Jadual 2 menunjukkan min keseluruhan adalah 3.89 bagi kompetensi pengurusan aset. Hasil kajian ini menunjukkan aspek pengurusan aset berada di tahap yang baik. Penyelaras aset

di Politeknik Kuala Terengganu telah menjalankan tugas mereka dengan cekap dalam mengendalikan aset kerajaan.

Jadual 3: Korelasi Amalan Pengurusan Aset Dengan Kompetensi Pengurusan Aset di Politeknik Kuala Terengganu

				Amalan pengurusan aset	Kompetensi pengurusan aset
Amalan pengurusan aset	Pearson Correlation			1	.534
	Sig. (2-tailed)				.000
	N			80	80
Kompetensi pengurusan aset	Pearson Correlation			.534	
	Sig. (2-tailed)			.000	
	N			80	80

Jadual 3 di atas, menunjukkan nilai korelasi, $r = 0.534$ menunjukkan terdapat hubungan yang kuat dan positif antara amalan pengurusan aset dengan kompetensi pengurusan aset dengan nilai signifikan, $p = 0.00$ (Cohen, Manion dan Marrison (2011)). Berdasarkan analisis data di atas dapat disimpulkan bahawa hipotesis, H^1 diterima iaitu terdapat hubungan yang signifikan di antara amalan pengurusan aset dengan kompetensi pengurusan aset di Politeknik Kuala Terengganu.

Kesimpulan

Kompetensi merupakan gabungan elemen pengetahuan, kemahiran dan ciri-ciri personaliti yang diperlukan untuk melaksanakan tugas dan tanggungjawab tertentu bagi meningkatkan keberhasilan kerja (Beheshtifar & Moghadam, 2011). Amalan pekerjaan yang dilaksanakan oleh individu atau berkumpulan secara berterusan mampu meningkatkan prestasi kerja dan produktiviti organisasi. Pengurusan aset yang cekap merujuk kepada kepatuhan terhadap tatacara pengurusan aset yang dikeluarkan oleh Perbendaharaan Malaysia. Kajian yang dijalankan menunjukkan terdapat hubungan yang kukuh ($r = 0.534$) diantara amalan pengurusan aset dengan kompetensi pengurusan aset di Politeknik Kuala Terengganu. Amalan tatacara pengurusan aset yang baik (min keseluruhan = 3.87) menunjukkan Unit Pengurusan Aset di Politeknik Kuala Terengganu telah mengikut prosedur yang betul bagi melaksanakan pengurusan aset. Para penyelaras aset di peringkat jabatan dan unit telah menunjukkan kompetensi (min keseluruhan = 3.89) dalam mengendalikan urusan berkaitan dengan aset. Ini sedikit sebanyak menunjukkan mereka telah di beri latihan secukupnya disambil melaksanakan prosedur yang telah ditetapkan dengan betul. Pendedahan terhadap aspek pengurusan aset mampu meningkatkan kesedaran warga organisasi mengenai isu dan amalan pengurusan aset. Aspek kebertanggungjawaban dalam pengurusan aset mampu meningkatkan keberkesanan pengurusan aset (Nor Hazanah etl., 2018).

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CABARAN PEDAGOGI PEMBELAJARAN ABAD KE-21: KAJIAN KUALITATIF DALAM KALANGAN GURU NOVIS PENDIDIKAN ISLAM

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Abstrak: Pembelajaran abad ke-21 menekankan pembelajaran yang berpusatkan pelajar dan pembelajaran aktif yang mengubah peranan guru kepada pemudah cara. Guru bertindak untuk membantu pelajar menyelesaikan masalah yang diberikan kepada mereka sebagai proses pembelajaran. Oleh itu, guru memainkan peranan yang penting dalam menentukan hasil pembelajaran dapat dicapai. Walau bagaimanapun, kajian lepas mendapati pelaksanaan pembelajaran abad ke-21 ternyata menyumbang kepada pelbagai bentuk cabaran kepada guru. Justeru, artikel ini membincangkan hasil kajian yang berjaya mengenalpasti bentuk cabaran yang dihadapi oleh guru novis dalam melaksanakan pembelajaran abad Ke-21. Kajian telah dijalankan menggunakan reka bentuk kualitatif, secara temu bual semi berstruktur bersama 10 orang guru novis pendidikan Islam sekolah menengah. Dapatan kajian mendapati walaupun mereka berjaya mengaplikasikan pedagogi pembelajaran Abad ke-21, namun terpaksa berhadapan dengan beberapa bentuk cabaran. Dua bentuk cabaran yang dominan muncul sebagai tema untuk dibincangkan dalam artikel ini. Pertama, cabaran dalam memilih pendekatan pembelajaran dan kedua; cabaran untuk mengaplikasikan M-pembelajaran dengan efektif. Dapatan kajian memberi implikasi kepada para pendidik, terutamanya guru novis, untuk lebih memahami dan memiliki kemahiran abad ke-21 dengan lebih efektif agar mampu menyediakan generasi baharu yang berdaya saing dalam menghadapi kehidupan, seiring dengan perkembangan pesat Teknologi Maklumat dan Komunikasi (TMK).

Katakunci: Pedagogi, Pembelajaran Abad ke-21, Kualitatif, Guru Novis Pendidikan Islam

Pengenalan

Malaysia telah memperkenalkan revolusi perindustrian keempat yang bermula pada akhir tahun 2017. Perubahan ini turut berkait rapat dengan sistem pendidikan negara yang perlu seiring dengan kehendak pasaran bagi melahirkan modal insan yang seimbang. Penguasaan kepada sains, teknologi, kejuruteraan dan matematik (STEM) telah diperhebatkan bagi menyahut cabaran industri 4.0, di mana kemahiran abad ke-21 mula dipandang serius oleh pelbagai pihak. Kemahiran abad ke-21 merupakan kemahiran yang amat diperlukan dalam pasaran kerja era revolusi 4.0, kerana segulung ijazah kini bukan lagi penentu bagi seseorang graduan untuk mendapatkan pekerjaan. Sebaliknya, kemahiran abad ke-21 seperti kebolehan bekerja dalam persekitaran yang pelbagai, kemahiran komunikasi lisan dan tulisan yang berkesan, kemahiran berfikir secara kreatif, kritis dan analitikal, kepimpinan, kebolehan menyelesaikan masalah dan membuat keputusan, pengurusan masa dan kemahiran bekerja

secara berkumpulan, akan dinilai oleh majikan. Justeru, semua kemahiran ini perlu diintegrasikan melalui sistem pendidikan yang efektif, bersesuaian dengan kerangka PAK-21 yang telah diperkenalkan dalam “*The Partnerships for 21st century skills*” untuk membimbing para pendidik menerapkan PAK-21 menerusi kurikulum (Joseph Bishop, 2015). Revolusi industri dan PAK-21 telah memberi impak yang besar dalam pelbagai bidang pendidikan, termasuklah bidang Pendidikan Islam. Guru Pendidikan Islam diminta untuk sentiasa bersedia dengan perubahan dalam pendekatan pembelajaran dan pemudah caraan (PdPc). Pedagogi pengajaran Pendidikan Islam turut menerima perubahan bagi menyahut revolusi pendidikan 4.0 ini.

Pedagogi merujuk kepada kaedah dan prinsip pengajaran yang diamalkan oleh seseorang guru. Lazimnya, proses pembelajaran berlaku di dalam kelas di mana pelajar duduk dalam barisan dan mendengar pengajaran daripada guru. Namun, apabila dikaitkan dengan pembelajaran abad ke-21 (PAK-21), guru perlu melakukan perubahan dalam pedagogi pengajaran mereka. Hal ini kerana guru berfungsi sebagai pemudahcara kepada pelajar untuk membantu mengembangkan pengetahuan melalui penyelesaian masalah (Cochrane, 2010).

Pemilihan pedagogi dalam pelaksanaan PAK-21 akan mempengaruhi hasil pembelajaran pelajar. Bagi menyusun strategi pembelajaran dan pemudah caraan (PdPc) PAK-21, guru perlu mengambil kira kriteria 4K yang melibatkan; i) komunikasi, ii) pemikiran kritis, iii) kolaboratif dan, iv) kreativiti. Setiap elemen ini perlu dirungkai dan diserap dalam silibus kurikulum pembelajaran semasa proses PdPc berlangsung (Kementerian Pendidikan Malaysia, 2017).

Suasana pembelajaran aktif dan berpusatkan pelajar mampu membantu guru menjayakan PAK-21. Walau bagaimanapun, proses PdPc tersebut tidak hanya terikat dengan masa dan tempat. Hal ini kerana bimbingan dan pembelajaran pelajar berlaku secara berterusan, melebihi waktu PdPc mereka di dalam kelas. Selari dengan keperluan semasa, guru perlu merancang pelbagai strategi dan pendekatan yang membolehkan pelajar untuk berkolaborasi, berkomunikasi dan menjadi kreatif untuk mendapatkan hasil yang maksimum dalam pembelajaran mereka.

Justeru, pedagogi PAK-21 perlu difahami dan diaplikasi oleh semua guru, sama ada yang sudah berpengalaman mahupun guru novis yang baharu memulakan perkhidmatan pendidikan. Sebagai guru novis, mereka telahpun mendapat pendidikan yang mendalam mengenai opsyen pembelajaran mereka melalui kelayakan iktisas yang dimiliki melalui latihan khusus semasa menjalani kursus perguruan sama ada di Institut Pendidikan Guru mahupun universiti. Mereka telah didedahkan dengan kemahiran pedagogi yang berasaskan kepada pembelajaran PAK-21. Justeru, guru novis selayaknya telah mempunyai kefahaman kandungan dan pedagogi yang baik hasil latihan profesional yang telah diterima.

Pernyataan Masalah

Dalam menempuh pembelajaran abad ke-21 (PAK21), guru dikehendaki mengaplikasikan pedagogi yang menggunakan strategi, pendekatan, kaedah dan teknik pembelajaran yang baharu, bersesuaian dengan era globalisasi dan teknologi maklumat. Guru juga dikehendaki mengaplikasikan pendidikan yang menjurus ke arah pelbagai bentuk kemahiran abad ke-21, antaranya seperti Kemahiran Berfikir Aras Tinggi (KBAT), yang mana telahpun diintegrasikan dalam pendidikan di luar negara seperti Amerika Syarikat dan England, iaitu sejak tahun 1970an lagi.

Walaupun bagaimanapun, kajian lepas mendapati guru yang melaksanakan pembelajaran abad ke-21 (PAK-21) dan Kemahiran Berfikir Aras Tinggi (KBAT) terpaksa berhadapan dengan pelbagai cabaran. Di sebalik beberapa kajian yang menunjukkan dapatan yang positif dalam kefahaman dan pelaksanaan guru mengenai PAK-21 (Siti Faizzatul Aqmal, Mohamad

dan Razali, 2011; Norasmahani et al., 2015; Wan Ismail, Muhammad, Lubis, & Hamzah, 2016; Badrul Hisham & Mohd Nasruddin, 2016; Mohd Syaubari & Ahmad Yunus, 2017; Nurzarina & Roslinda, 2017; Mashira Yahaya et.al., 2019), kajian mereka turut mendapati beberapa bentuk cabaran dan masalah yang terpaksa dihadapi para pendidik. Dapatan kajian mereka menunjukkan cabaran berpunca daripada kurang pengetahuan dan pemahaman guru mengenai kaedah pembelajaran yang dapat mengimplementasikan kemahiran pembelajaran abad ke-21 di dalam kelas. Sementara itu terdapat juga kajian yang mendapati guru menghadapi cabaran untuk menyesuaikan pendekatan pengajaran yang dipilih dengan tahap pemikiran pelajar yang berbeza (Che Noh, Omar, & Hussin, 2014; Norasmahani et al., 2015; Tengku Kasim, & Abdurajak, 2018; Nurzarina & Roslinda, 2017; Mashira Yahaya et.al., 2019). Terdapat juga cabaran yang dikaitkan dengan kesediaan guru dalam melaksanakan PAK-21, kesediaan pelajar untuk menerima pembelajaran abad ke-21, kemudahan infrastruktur, kemudahan Bahan Bantu Mengajar (BBM) dalam PAK-21, kemudahan sumber rujukan tambahan, penggunaan teknologi dan capaian internet dalam proses pembelajaran (Husni et al., 2018; Mashira et al., 2019).

Kajian terhadap guru Pendidikan Islam juga mendapati mereka menghadapi masalah dalam melaksanakan Pendidikan abad ke-21 disebabkan pelajar yang kurang bermotivasi untuk menerima pelajaran kerana menganggap proses pembelajaran sebagai suatu perkara yang membosankan dan juga tidak berminat untuk menyertai aktiviti pembelajaran (Zaiton & Hishamuddin. 2012). Sikap guru seperti kurang memberi perhatian terhadap kaedah-kaedah pengajaran yang kreatif dan terbaharu bersesuaian abad ke-21, tidak mengambil endah mengenai penggunaan IT semasa proses pengajaran juga memberikan implikasi yang mengecewakan dalam meneruskan gelombang pendidikan abad ke-21 (Gamal & Salwa, 2012). Guru Pendidikan Islam juga didapati tidak mampu mengaitkan topik pembelajaran dengan suasana persekitaran ataupun situasi yang berkaitan dengan kehidupan seharian pelajar untuk menimbulkan minat pelajar semasa proses pembelajaran (Fathiyah, Nor Hayati, Azimi, & Lukman, 2013; Zaiton & Najihah, 2015). Kajian yang dijalankan oleh Khadijah et al. (2012) dan Kamarul Azmi, Nurliyana, dan Siti Fauziyani (2015) pula membuktikan terdapat hubungan yang signifikan di antara peranan Guru Pendidikan Islam dengan motivasi pelajar dalam mewujudkan persekitaran pembelajaran yang kondusif dan fleksibel, bersesuaian dengan Pendidikan abad ke-21

Walaupun terdapat beberapa kajian terhadap guru novis Pendidikan Islam, namun fokus kajian lebih menjurus kepada kebolehan mereka berbanding dengan guru yang berpengalaman. Sebagai contoh, Goh, Qismullah dan Wong (2017) telah mengenalpasti beberapa masalah dalam kompetensi pedagogi guru novis di Malaysia, iaitu kawalan bilik darjah, tingkahlaku pelajar, penyediaan pengajaran, pengetahuan mereka terhadap pedagogi, memahami keperluan pelajar dan juga kesedaran sebagai seorang guru. Wolff, Jarodzka dan Boshuizen (2017) pula membuat perbandingan di antara interpretasi guru novis dan guru yang berpengalaman terhadap pengurusan kelas yang bermasalah dengan memfokuskan kepada peranan guru novis dalam menangani masalah pengurusan kelas mereka. Orgoványi-Gajdos (2015), Oshrat-Fink (2014), dan Lokman et al. (2014) masing-masing mendapati bahawa guru novis mempunyai kesukaran dalam mengadaptasi apa yang telah dipelajari semasa berada dalam institusi latihan pendidikan guru ke dalam kelas yang sebenar. Seterusnya, di antara isu yang lain yang telah dibincangkan di dalam kajian Goh, Nor Shah dan Wong (2012) pula menyentuh mengenai 'tahap profesionalisme guru novis'.

Pendekatan Pembelajaran Abad Ke-21

Senario pembelajaran semasa masih terikat dalam ruang lingkup kelas yang tertutup serta berpusatkan guru. Justeru, Kementerian Pendidikan Malaysia mencanangkan pendekatan

Pembelajaran Abad ke-21 (PAK-21) yang menekankan pendekatan pembelajaran berpusatkan pelajar dan pembelajaran aktif yang mengubah peranan guru kepada pemudah cara. Guru bertindak untuk membantu pelajar menyelesaikan masalah yang diberikan kepada mereka sebagai proses pembelajaran. Pendekatan ini merujuk kepada proses pembelajaran yang berpusatkan murid berteraskan elemen komunikasi, kolaboratif, pemikiran kritis, dan kreativiti serta aplikasi nilai murni dan etika (Kementerian Pendidikan Malaysia, 2017).

Analisis terhadap kajian-kajian lepas membuktikan bahawa pengaplikasian pendekatan pembelajaran pemusatan pelajar telah mampu meningkatkan kualiti pembelajaran pelajar, juga menarik minat dan motivasi pelajar untuk terlibat dalam sesi pembelajaran (Brandes & Ginnis, 1986; Glasgow, 1997; Meyer & Jones, 1993). Minat pelajar dapat diwujudkan dan ditingkatkan dengan menggunakan pelbagai jenis kaedah yang merupakan sebahagian daripada strategi dalam proses pembelajaran yang berpusatkan pelajar yang bersifat pembelajaran aktif. Justeru, guru hendaklah lebih bijaksana, kreatif dan mahir dalam memilih, merancang dan mengaplikasi sesuatu kaedah pengajaran agar segala objektif yang telah ditetapkan dapat tercapai dengan semaksimum mungkin.

Satu pengertian mengenai pendekatan pemusatan pelajar yang boleh difahami ialah:

“Ways of thinking and learning that emphasize student responsibility and activity in learning rather than what the teachers are doing. Essentially SCL has student responsibility and activity at its heart, in contrast to a strong emphasis on teacher control and coverage of academic content in much conventional, didactic teaching” (Cannon & Newble, 2000, h. 16).

Pengaplikasian M-Pembelajaran dalam Abad Ke-21

M-pembelajaran (Mobile Learning) boleh ditakrifkan sebagai pembelajaran menggunakan peranti atau teknologi yang bersifat mudah alih (Nik Mastura, Mohd Nor, & Posiah, 2011; Saedah Siraj & Muhammad Helmi, 2012) seperti penggunaan komputer riba dan telefon bimbit sebagai medium pembelajaran (Issham, Rozhan, Azidah, & Munirah, 2010; Cochrane, 2010). Selain itu, m-pembelajaran juga dilihat sebagai revolusi daripada pembelajaran elektronik (*e-Learning*) dan pembelajaran teradun (*blended learning*) (Sølvberg & Rismark, 2012; Supyan, Mohd Radzi, Zaini, & Krish, 2012). Menurut Issham, Rozhan, et al. (2010), penggunaan pelbagai peranti mudah alih dalam pembelajaran merupakan seni dalam penggunaan teknologi untuk meningkatkan pengalaman pembelajaran.

Konsep m-pembelajaran didefinisikan sebagai pembelajaran yang tidak terikat dengan ruang masa dan tempat, bersifat mudah alih dari segi fungsi dan teknologinya, peralatan dan kelengkapan belajar, persekitaran, dan individualisme (Saedah Siraj & Muhammad Helmi, 2012). Aspek mobiliti dalam konsep m-pembelajaran ini dapat dikelaskan mengikut tiga aspek utama iaitu mobiliti teknologi, yang merujuk kepada kemajuan teknologi tanpa wayar; mobiliti pembelajaran, yang merujuk kepada isi pembelajaran bersifat mudah alih; dan mobiliti pelajar iaitu keberadaan pelajar tidak terikat dengan masa dan tempat (Nor Fadzleen, Halina, & Ibrahim, 2013). Dengan m-pembelajaran, pelajar boleh berinteraksi dengan maklumat tanpa batasan dan guru akan memerhatikan mereka bagi memastikan pelajaran berlangsung dengan baik. Guru hanya perlu membimbing pelajar untuk mencari maklumat dan pelajar membina pengetahuan mereka berdasarkan maklumat yang diperolehi (Robiah & Nor Sakinah, 2007), bertepatan dengan pendapat bahawa teknologi tanpa wayar dapat meningkatkan kolaboratif (Barker et al., 2005; Nik Mastura et al., 2011).

Tan, Ng, dan Lee (2013) menyatakan prinsip yang perlu ada pada m-pembelajaran ialah bersifat mudah alih dari segi ruang dan teknologi bagi membolehkan pembelajaran berkembang tanpa terikat dengan masa. Melalui prinsip ini, persekitaran pembelajaran berubah

daripada 'chalk and talk' kepada penggunaan pendekatan berasaskan teknologi, menjadikan peranti bersifat mudah alih sebagai salah satu medium untuk menyampaikan isi pelajaran. Secara tidak langsung, hal ini membolehkan pembelajaran berlaku 'di luar kelas' di mana guru berperanan sebagai pemudahcara bagi mencapai isi pelajaran (Sølvberg & Rismark, 2012). Kelebihan yang terdapat pada m-pembelajaran membolehkan pelajar mengalami pendekatan berbeza berkaitan proses pembelajaran mereka (Issham, Thenmolli, P.P Koh, & Rozhan, 2010). Penggunaan pelbagai variasi peranti mudah alih yang semakin meluas memberi peluang kepada pelaksanaan m-pembelajaran dalam pendidikan dan memungkinkan kajian terhadap kesesuaiannya untuk pengajaran.

Secara kesimpulannya, pengamalan m-pembelajaran berbalik semula kepada guru dan pelajar untuk memilih ruang pembelajaran bebas atau terikat dengan kelas kerana kaedah tradisional dan teknologi saling memiliki kelebihan dan kekurangan (Sølvberg & Rismark, 2012). Inovasi teknologi yang pelbagai dapat memajukan kehidupan manusia, tetapi kejayaan penggunaannya bergantung kepada manusia itu sendiri. Penggunaan peranti mudah alih untuk tujuan pengajaran dan pembelajaran masih kurang meluas sedangkan ia sangat kerap digunakan untuk menyokong pembelajaran.

Metodologi Kajian

Satu kajian dijalankan untuk mengetahui cabaran yang dihadapi oleh guru novis Pendidikan Islam dalam melaksanakan pedagogi PAK-21. Kajian ini menggunakan pendekatan kualitatif melalui kaedah kajian kes pelbagai yang melibatkan 10 orang guru novis pendidikan Islam di 10 buah sekolah menengah harian biasa di beberapa buah negeri di Malaysia. Pemilihan peserta kajian telah dibuat berdasarkan kaedah persampelan bertujuan, iaitu pengkaji memilih individu yang dapat membantu pengkaji memahami fenomena yang sedang dikaji (Creswell, 2007). Peserta kajian yang dipilih ini merupakan mereka yang telah memenuhi kriteria kajian, iaitu guru novis yang berkhidmat kurang dari lima tahun dan mengajar mata pelajaran Pendidikan Islam di sekolah menengah. 10 orang guru novis Pendidikan Islam ini (diberikan nama samaran) adalah terdiri daripada Puan Malina, Puan Rosnah, Puan Rozita, Cik Syuhada, Cik Hafira, Cik Suhaila, Encik Kamal, Encik Razlan, Encik Zamrizal dan Encik Arifin.

Kaedah pengumpulan data bagi kajian ini adalah melalui temu bual, pemerhatian dan analisis dokumen. Temu bual separa berstruktur dilakukan bersama informan yang berakhir dalam jangka masa satu jam setengah. Analisis tematik telah dilakukan terhadap data yang diperolehi bagi mengenalpasti tema-tema penting berkaitan kajian. Dalam kajian kualitatif, proses analisis perlu berjalan serentak dengan proses pengumpulan data demi mengelakkan pengkaji daripada kehilangan maklumat penting disebabkan lambakan data yang tidak diurus dengan segera (Bogdan & Biklen, 1992). Dalam kajian ini proses analisis data berlaku sebaik sahaja selesai pemerhatian dan temu bual pertama dijalankan. Rakaman video dan transkripsi yang disediakan telah dilihat dan dibaca berulang kali bagi memastikan pengkaji dapat memahami data yang ada. Setiap kali transkrip dibaca, pengkaji akan mencatat kod yang bersesuaian, atau persoalan yang timbul untuk ditanyakan dalam sesi temu buat seterusnya.

Dapatan Dan Perbincangan

Dapatan kajian menunjukkan guru novis pendidikan Islam telah mengaplikasikan pembelajaran abad ke-21 dalam pengajaran mereka. Mereka mempunyai kaedah dan strategi tertentu dalam melaksanakan pembelajaran tersebut bersesuaian dengan kemampuan dan kecenderungan pelajar mereka. Namun, dapatan mendapati terdapat dua cabaran yang dominan yang menghalang mereka untuk mengaplikasikan pembelajaran abad ke -21 dengan lebih efektif.

Cabaran Dalam Mengaplikasikan Pendekatan Pembelajaran Aktif

Akibat salah faham tentang konsep PAK-21, guru novis Pendidikan Islam yang ditemu bual berpendapat bahawa pelaksanaan PAK-21 telah membebaskan mereka. Mereka menjelaskan pengalaman mereka yang sukar untuk menyampaikan topik yang hendak diajar menggunakan kaedah pembelajaran yang terdapat di bawah PAK-21 kerana pelajar tidak berminat untuk melibatkan diri dalam aktiviti yang dirancang.

Kaedah yang cikgu patut guna dalam PAK-21 macam *Gallery Walk, Fan & Pick, Round Robin* tu bukan senang nak buat dalam kelas...susah nak pastikan semua pelajar boleh terlibat...

(Puan Rosnah)

Saya pernah guna kaedah *jigsaw, problem solving dan gallery walk* ...aduh...tak dapat sambutan... pelajar macam tak berminat, jadi susah nak ajak mereka *join* aktiviti tu...

(Cik Syuhada)

Memanglah saya tahu macamana nak gunakan semua kaedah yang ada bawah PAK-21 tu, tapi kalau kita sebagai cikgu buat, tapi pelajar tak berminat...tak bersungguhpun untuk ikut apa yang kita suruh, tak jadi jugak...*last last*... balik guna kaedah biasa jugak...mengajar macam biasa, *explain* topik kemudian soal apa yang pelajar tak faham..*then* terang semula sampai pelajar faham...

(Encik Razlan)

Kenyataan Puan Rosnah, Cik Syuhada dan Encik Razlan seolah-olah membayangkan kefahaman mereka bahawa pedagogi dalam PAK-21 mewajibkan guru untuk menggunakan kaedah-kaedah seperti itu. Jadi apabila mereka tidak berjaya mendapat sambutan daripada pelajar, mereka merasakan yang mereka sudah gagal menjalankan PAK-21. Sedangkan apa yang dimaksudkan oleh PAK-21 adalah apa sahaja kaedah pembelajaran yang berpusatkan pelajar (Aaron Johnson, 2013).

Sekiranya pelajar tidak berminat dengan satu-satu kaedah yang diperkenalkan, guru sebenarnya masih bebas untuk memilih kaedah yang lain. Ini adalah kerana maksud PAK-21 adalah apa-apa sahaja kaedah pembelajaran yang mengaplikasikan pembelajaran aktif berpusatkan pelajar yang melibatkan elemen 4K1N iaitu, 'Komunikasi', 'Pemikiran kritis', 'kreativiti', 'Kolaboratif' dan 'Nilai Murni & Etika' (Kementerian Pendidikan Malaysia, 2017). Kefahaman yang agak kurang tepat ini menghalang matlamat dan fungsi sebenar PAK-21, iaitu untuk menjadi "pendekatan pembelajaran yang menyeronokkan di dalam bilik darjah".

Temu bual yang dijalankan juga mendapati informan kajian berhadapan dengan cabaran ketika cuba menjadi pembimbing atau fasilitator kepada pelajar mereka. Mereka memberitahu walaupun telah membimbing pelajar mereka untuk terlibat secara aktif dalam kaedah seperti *traffic light, gallery walk dan parking lots*, namun pelajar masih tidak aktif seperti yang sepatutnya.

Teruklah kalau nak kena bimbing sorang sorang pelajar...bukannya sikit (bilangan) pelajar dalam kelas...ramai.. ada yang mencecah 45 orang sekelas...mana larat nak tengok kerja atau peta *I think* sorang demi sorang...kadang saya buat jugak secara berkumpulan, senangnya sikit nak bimbing...tak buang masa. Kalau tak, entah apa yang mereka dapat ...

(Puan Malina)

Kalau nak jadi fasilitator untuk program-program lain, macam program-program motivasi, persediaan menjawab soalan exam...semua tu bolehlah..tapi kalau nak buat macam tu masa dalam kelas, untuk mengajar topik yang baharu, memang tak jalan...mana diaorang (pelajar) boleh faham...takkan selesai topik tu nanti...buat *parking lots* semua tu...bukan semua pelajar yang boleh belajar kaedah macam tu...
(Encik Kamal)

Diaorang (pelajar) seronok bila saya gunakan *system traffic light* atau gunakan *laptop* semasa mengajar, tapi masa saya yang guna lah...bila saya minta mereka buat kerja dalam kumpulan, untuk siapkan aktiviti untuk jawab soalan, tak semua pelajar yang buat...asyik-asyik pelajar yang sama jugak... bukan saya tak bagi *clue*, panduan untuk mereka siapkan, tapi mereka tak berminat...saya rasa saya dah habis daya ajar mereka *step by step*...
(Puan Rozita)

Dalam melaksanakan pendekatan pembelajaran pemusatan pelajar dalam PAK-21, guru seharusnya faham bahawa mereka bukan sekadar dilihat sebagai penyampai ilmu semata-mata, tetapi juga perlu berperanan sebagai pembimbing dan fasilitator yang membantu dan memudahkan aktiviti pembelajaran. Justeru, guru perlu mengatasi cabaran yang timbul dengan mempelbagaikan kaedah dan teknik pembelajaran yang aktif. Guru juga perlu mengaplikasikan kemahiran psikologi dalam mendekati pelajar agar mereka dapat memainkan peranan dengan lebih baik dan merasa seronok untuk mengambil bahagian dengan aktif dalam kaedah pembelajaran.

PAK-21 menekankan agar peranan guru perlu berubah, di mana kaedah penerangan atau kuliah seharusnya dikurangkan. Sebaliknya guru akan lebih menggalakkan pelajar untuk meneroka dan memahami bahan ilmiah yang diperolehi. Guru bertindak sebagai fasilitator atau moderator yang merancang menyediakan input yang sesuai untuk proses pengajaran dan pembelajaran di dalam kelas. Pendekatan pemusatan pelajar yang berkesan akan mencetuskan perbincangan dalam kalangan pelajar serta merangsang pemikiran mereka agar dapat berfikir pada aras yang lebih tinggi (Glasgow, 1997).

Cabaran Pelaksanaan M-Pembelajaran Dalam Kalangan Guru Novis Pendidikan Islam

Berdasarkan perkongsian daripada informan, cabaran pelaksanaan m-pembelajaran yang dihadapi oleh infoman dapat dikelaskan kepada dua bahagian, iaitu cabaran dari segi i) pengetahuan dan kemahiran, dan ii) perbezaan latar belakang pelajar.

Kekurangan Pengetahuan dan Kemahiran terhadap Penggunaan m-Pembelajaran

Cabaran paling ketara dalam temu bual yang dijalankan adalah berkaitan kekurangan pengetahuan dalam strategi PdPc menggunakan m-pembelajaran. Tidak semua informan menerima bimbingan berkaitan pengamalan m-pembelajaran dengan baik. Seperti respon daripada Cik Hafira yang menyatakan bahawa bimbingan hanya secara maya ketika pandemik mula merebak di Malaysia.

“Saya dan rakan guru sekolah diberikan taklimat dan berbengkel secara maya menggunakan *Google Meet* oleh guru ICT masa bulan Mac (tahun 2020) hari tu. Tetapi pelaksanaannya masih terhad bagi saya sebab saya masih perlukan masa untuk memahami dengan baik kandungan serta visi kurikulum baru

[baharu]”, ujar Cik Hafira selaku guru yang baru bertugas pada penghujung tahun 2019.

Begitu juga respons Encik Zamrizal di mana beliau menghadiri bengkel pembelajaran maya secara sukarela anjuran Pusat Kegiatan Guru Daerah,

“Saya *join* [sertai] kerana minat. Di sekolah pun ada diberikan taklimat dan bengkel, cuma untuk mendalami dengan lebih lagi bagi memudahkan saya mengajar pelajar sepanjang cuti Covid-19 ni”. Beliau mengikuti bengkel tersebut kerana minat dan atas sukarela bagi membantu pelajar untuk mencapai bahan pembelajaran walaupun mereka tidak hadir ke sekolah.

Beliau turut menambah bahawa rujukan juga adalah sangat terhad. “Kalau rujuk dengan orang pun, tiada [sesiapa] yang boleh ajar dengan baik. Contohnya kan, kalau kita guna pun *m-learning* ni untuk fasa pandemik untuk PdPc jarak jauh bila pelajar tidak hadir [ke sekolah], tapi tiada *guide* [bimbingan] macam mana [bagaimana] kita mahu masukkan elemen 4K dalam PAK-21. Jadi, atas usaha dan fikiran sendiri tu lah saya cuba menyusun dan menggabungkan pengetahuan yang ada”.

Manakala bagi Cik Suhaila pula, meminati seni teknologi menjadikan beliau suka untuk menerokai penggunaan peranti dan aplikasi baharu dalam bidang pendidikan.

“Saya hadiri pelbagai bengkel, masuk dalam *group* guru ICT di Telegram, cuba pelbagai aplikasi seperti edit video, buat *sites* di *Google*, *try* [mencuba] AR [*augmented reality*] dan AI [*artificial intelligence*] *technology*... Tapi itulah... hanya tahu dan boleh kongsi.. Saya tidak dapat membangunkan atau menggunakan sepenuhnya kebolehan tu untuk subjek saya sendiri...”

Daripada perkongsian beliau, jelas terdapat satu kekangan yang dihadapi oleh guru novis, iaitu bagaimana cara menggabung jalin pengetahuan teknologi dengan isi pembelajaran sesuatu subjek, khususnya Pendidikan Islam. Sikap tiga informan terawal adalah berbeza dengan informan keempat dalam bidang mendalami ilmu teknologi. Didapati bahawa terdapat informan yang tidak berusaha untuk memperkembangkan kemahiran yang dimiliki, sebaliknya hanya menunggu tawaran untuk menghadiri kursus atau bengkel berkaitan. Hal ini dinyatakan sendiri oleh Encik Arifin dalam temu bual yang dijalankan bersama beliau dalam kajian ini,

“Saya akan ikut [menyertai] bengkel atau kursus berkaitan m-pembelajaran sekiranya ditawarkan.. Tapi hanya untuk dapatkan pengetahuan asas dan sekiranya ditawarkan.. Kalau atas usaha sendiri, jujur saya katakan saya tiada usaha untuk mengikutinya”.

Latar Belakang Pelajar adalah Berbeza

Dari segi persiapan peralatan guru, informan mempunyai talian internet serta peranti mudah alih yang menyokong m-pembelajaran. Tetapi kelemahan infrastruktur dialami oleh pelajar. Setiap pelajar datang daripada latar belakang yang berbeza. Tidak semua pelajar mampu menghadiri kelas maya dan memberi respon ketika m-pembelajaran berlangsung atas sebab ketiadaan internet ataupun peranti yang terpaksa dikongsi dengan ahli keluarga yang lain.

“Hampir semua pelajar ada [memiliki] telefon pintar, tapi tidak mampu *topup* [tambah nilai] langganan internet selalu. Kos *dorang* [mereka] jadi tinggi sebab hampir semua subjek menggunakan *Google Meet*. Tapi yang pasti semua subjek perlukan internet untuk akses bahan pembelajaran”, ujar Cik Hafira.

“*Phone* ada, internet pun ada. Tapi masih tidak mampu bagi komitmen kalau *Google Meet* sebab pelajar berkongsi *phone* dengan adik-beradik yang lain. rakan guru lain pun banyak yang membantu untuk berikan nota dan rakaman video bagi yang tidak mampu hadir *on time*”,
(*Cik Suhaila*).

Permasalahan yang wujud hanya berkaitan peranti pelajar, bukan lagi kesediaan peralatan guru seperti yang dinyatakan oleh (Muhamad Khairul Ahmad et al., 2019). Pendapat ini selari dengan kajian Aliff Nawi dan Mohd Isa Hamzah (2013) iaitu GPI bersedia menggunakan bahan dalam bentuk teknologi mudah alih sekiranya ia disediakan. Walaupun peranti tidak disediakan, pemilikan pelbagai peranti mudah alih dan telefon pintar telah menjadi satu keperluan kepada setiap guru.

Informan tetap optimis untuk menggunakan m-pembelajaran walaupun terdapat kekangan dari aspek kemahiran dan bimbingan yang. Perkara ini didorong oleh faktor penerimaan yang positif dalam kalangan pelajar mereka.

Cik Hafira turut menyatakan bagaimana perkongsian maklumat dan bahan antara sesama pelajar memudahkan mereka berinteraksi dengan bantuan m-pembelajaran,

“Pelajar lebih bersemangat untuk melaksanakan tugas yang diberikan secara *online*. Pelajar lebih senang berhubung sesama mereka untuk menyiapkan tugas berkumpulan yang diberikan melalui peranti mudah alih.”

Cik Suhaila turut berkongsi respon yang positif dalam penggunaan m-pembelajaran apabila beliau memerlukan bahan rujukan segera ketika PdPc berlangsung,

“...m-pembelajaran memudahkan guru berinteraksi tanpa terikat dengan masa dan tempat... Guru mudah untuk mencari bahan tambahan dan pelajar pun seronok bila guru berikan satu informasi yang baru dan menarik untuk *dorong* [mereka].”

Perkongsian maklumat baharu membantu perkembangan pengetahuan pelajar (Robiah Sidin & Nor Sakinah Mohamad, 2007). Tambahan pula apabila guru menggunakan teknologi bersama pelajar dapat memberikan mereka pengalaman baharu dalam mencari rujukan (Siti Nor Farhana & Siti Mistima, 2017). Walaupun latar belakang pelajar adalah berbeza, bimbingan daripada guru novis dapat memberikan pelajar pengetahuan dan pengalaman baharu dalam berinteraksi dengan teknologi. Tetapi, untuk melaksanakannya, guru novis terlebih dahulu perlu menjadi kreatif untuk menggunakan teknologi dengan baik disamping menyusun perancangan PdPc dengan teliti bagi meraikan perbezaan pelajar.

Penutup

Di Malaysia, secara teorinya, semua guru novis termasuk guru novis Pendidikan Islam telahpun dilatih dengan baik oleh institusi masing-masing bagi memenuhi tuntutan industri revolusi Pendidikan 4.0 dan juga PAK-21. Namun, transisi daripada guru pelatih kepada guru dalam perkhidmatan bukan mudah, kerana guru novis perlu berhadapan dengan realiti sebenar dalam memainkan peranan dan tanggungjawab yang mereka belum pernah alami semasa berada dalam latihan pendidikan guru. Peranan mereka tidak terhad kepada pembelajaran dan pemudah caraan (PdPc) sahaja, tetapi juga bertanggungjawab untuk memupuk akhlak pelajar untuk mencapai kehidupan seimbang, bertepatan dengan harapan Kementerian Pendidikan yang mahukan pendidikan yang holistik menerusi pembelajaran abad ke-21 (PAK-21). Justeru, semua guru novis perlu mengetahui dan memahami konsep PAK-21 dengan lebih tepat agar

pedagogi yang digunakan dapat seiring dengan peredaran zaman bagi memastikan proses pembelajaran pelajar bukan setakat mengumpul ilmu pengetahuan, malah menguasai kemahiran abad ke-21 bagi menghadapi era globalisasi pada masa ini.

Penghargaan

Penyelidik ingin mengucapkan terima kasih kepada Institut Pengurusan dan Pemantauan Penyelidikan (IPPP), Universiti Malaya kerana telah menyokong penyelidikan ini. Kertas kerja ini merupakan hasil daripada penyelidikan yang dibiayai oleh Geran Penyelidikan Fakulti GPF004L-2019.

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KONSEP PENDIDIKAN CINTA DALAM PERSPEKTIF ISLAM

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Abstrak: Pendidikan merupakan aspek yang sangat penting dalam kehidupan manusia. Islam memandang pendidikan sebagai media untuk menjadikan manusia agar memiliki nilai-nilai Islam dalam dirinya dan mengamalkannya dalam setiap perilakunya. Akan tetapi pendidikan dewasa ini lebih diorientasikan kepada usaha untuk melahirkan pekerja yang memiliki intelektual dan keahlian dalam segala bidang, akibatnya nilai (values) yang merupakan intipati utama dalam proses pendidikan terabaikan begitu sahaja. Akibat daripada itu terjadilah berbagai-bagai masalah sosial serta keganasan dalam kalangan remaja seperti seks bebas, hamil di luar nikah, pembuangan bayi, hilang tumpuan dalam pembelajaran, bunuh diri dan pembunuhan. Diantara puncanya yang didapati oleh sebahagian penyelidik adalah kerana pemahaman dan pengamalan cinta yang salah dalam kalangan remaja. Oleh itu, artikel ini bertujuan untuk membincangkan bagaimana konsep pendidikan cinta yang sebenar menurut Islam. Kajian ini dapat memberi kefahaman bagi peserta didik akan cinta yang sebenar. Penulis mendapati bahawa konsep pendidikan cinta dalam Islam harus memenuhi tiga prinsip utama iaitu pertama; Tauhid, pengakuan atas realiti Tuhan Yang Maha Esa dan mengabdikan dirinya hanya kepada Allah SWT sahaja. Kedua; Nubuwah iaitu seluruh pengabdian hamba kepada Allah SWT menepati cara yang ditunjukkan NabiNya. Ketiga; Pasrah bahawa seluruh pengabdian itu dilakukan hanya mengharap keredaanNya sahaja. Oleh itu, dapat disimpulkan bahawa cinta dalam Islam dapat diajarkan melalui tiga pilar utama iaitu Iman, Islam dan Ihsan.

Katakunci: Cinta Remaja, Pendidikan Cinta dan Islam

Pendahuluan

Cinta adalah kekuatan jiwa, anugerah daripada Allah yang maha kasih sayang. Kehadirannya, menjadikan seorang ibu rela menyabung nyawanya demi melahirkan anak yang dikandunginya selama sembilan bulan, ia pula rela kurang tidur untuk menyusui dan membesarkannya. Cinta pula, menjadikan banyak anak manusia rela berkorban jiwa, raga dan harta demi yang dicintainya. Tidak diragukan lagi akan kuasa cinta dalam mewarnai kehidupan ini. Seorang sufi daripada Persia Jalāl ad-Dīn Muhammad Rūmī (1273) pernah menuturkan sebuah syair “Andai kata tidak ada cinta, maka alam ini tidak lagi mempesona, kicauan burung tidak lagi merdu, panorama alam tidak lagi indah, bahkan dunia akan membeku tanpa makna” (Ni’am, 2001).

Menurut sebuah penelitian David McClelland, Ph.D dari Harvad Medical School, membuktikan tentang kuasa cinta, menurutnya melalui apa yang disebut “efek ibu Teresa” iaitu dengan hanya melihat video dokumentari Ibu Teresa yang penuh kasih sayang melayani orang sakit memberi kesembuhan pada pesakit yang terkena infeksi virus seperti selesema. Dalam penelitian lain McClelland juga membuktikan melalui kajiannya, mahasiswa yang memikirkan dua hal seperti saat dulu waktu mereka merasa amat disayangi dan diperhatikan orang lain dan saat mereka mencintai orang lain. Melalui teknik ini sanggup menghalau serangan selesema

(Dossey, 1996). Bagi Larry Dossey (1996) pula cinta mempunyai kekuatan untuk mengubah tubuh. Menurutnya pula cinta dengan kasih yang lemah lembut dan penuh pengertian sama-sama diakui sebagai unsur yang berharga dalam penyembuhan. Hal ini diperjelas oleh pernyataan Socrates yang mengatakan bahawa cinta adalah penolong manusia yang paling baik. (Rouse, 1986:36).

Berkenaan dengan pentingnya peranan cinta dalam pendidikan (pedagogi) sejumlah ahli falsafah dan tokoh pendidikan seperti Plato, Sigmund Freud (1961), Bell Hooks (1994), Freire (2000), sehinggalah ke Peter McLaren (2000) telah mencadangkannya dalam penulisannya tentang pelbagai idea dan gagasan tentang cinta dalam pendidikan dan sebahagian mereka mendapati bahawa melibatkan kasih sayang dalam bilik kelas atau dalam komuniti lainnya telah menjadikan para pelajar menjadi lebih baik dan berkembang (Freire, 1970, 1972; Cangkuk, 2003; Love & Love, 1995; Lampert, 2003). Wacana tentang kepentingan cinta atas pendidikan ini terus dikaji dalam pelbagai artikel dan juga buku-buku falsafah pendidikan, seperti: “*The Art of Love in the Classroom: A Defense of Affective Pedagogy*” (Allan Patience 2008), “*Love as Pedagogy*” (Loreman 2011), “*Pedagogical Love and Good Teacherhood*” (Maatta dan Uusiautti 2013) dan “*Love-based Practice in Education*” (Uusiautti et al 2013). Kesemua cadangan mereka menunjukkan pentingnya cinta menjadi teras pendidikan.

Daripada pelbagai karya dan kajian diatas, menunjukkan bahawa cinta dan pendidikan tidak dapat dipisahkan, dalam pendidikan boleh dikatakan cukup mendapat perhatian daripada para ahli dan penyelidik. Namun dalam aspek pengajaran ataupun pendidikan cinta belum cukup mendapatkan perhatian oleh sebahagian kalangan. Hal ini juga diakui oleh penyelidik sebelumnya bahawa mereka mendapati sedikitnya teks pendidikan yang memperkenalkan cinta dalam pengajaran untuk kepelbagaian dan keadaan sosial (Adams, Bell, 2016 & Griffin, 1997). Hal ini juga dirasai oleh pengkaji saat ini, bahawa lebih banyak dijumpai perbualan tentang idea dan strategi perubahan sosial dan transformasi ilmu pengetahuan, dibandingkan teks-teks pengajaran cinta yang malah semakin dipinggirkan dalam dunia pendidikan. Para sarjana lebih memilih mengkaji kebuasan dan penindasan yang dilakukan manusia ke atas manusia dan makhluk lainnya dibandingi menyulap cinta ke dalam konteks ruang kelas dan pengamalan dalam kehidupan.

Kenyataan di atas di antaranya disebabkan oleh minimumnya pembahasan terhadap tema pembelajaran, pengajaran dan pendidikan cinta. Selain itu ia juga disebabkan oleh tidak adanya standardisasi atas konsep dan makna cinta itu sendiri, di Barat misalnya, cinta difahami sebagai bentuk kasih sayang, keluarga, atau bersifat seksual (Brooks, 2017). Implikasi daripada fahaman ini adalah membawa impak terhadap perilaku masyarakat mereka dan sudah menjadi lumrah pemandangan terjadi disana yang asalkan saling mencintai, mereka bebas melakukan seks kepada orang yang dicintainya. Tidak hairan jika kadar aktiviti seks dan kehamilan dalam kalangan remaja di Barat mengalami peningkatan setiap harinya. Itulah salah satu sebab mengapa pendidikan seks dijalankan di sekolah-sekolah Barat seperti Amerika. Hal ini bertujuan bagi mengurangi perilaku seks bebas dan kehamilan dalam kalangan remaja (Furstenberg Jr, Moore, & Peterson, 1985).

Fahaman cinta seperti Barat ini juga menjangkit dalam kalangan remaja Muslim. Tidak sedikit daripada para remaja Muslim yang demi cinta rela menyerahkan kehormatan diri dan berbagai impak negatif lainnya seperti mengandung angkara teman lelaki, *date rape*, pembuangan bayi, remaja lari dari rumah kerana mengikut teman lelaki, pergaduhan sehingga meninggal dunia, perebutan teman wanita dan bersekedudukan walaupun belum bernikah. Daripada aspek akademik pula, beberapa kajian terdahulu juga menunjukkan bahawa remaja yang jatuh pada amalan cinta berahi dan seksual menyebabkan lalai, kurang fokus dan menurunnya prestasi akademik (Surianti 2004; Aida Adreana 2005 dan Robiah 2006).

Kenyataan ini memberikan sedikit gambaran kepada penulis bahawa pentingnya pendidikan dalam kehidupan cinta remaja. Cadangan ini juga disampaikan oleh Othman, Ahmad, Othman, & Muda (2016) dalam penyelidikannya bahawa pentingnya pendidikan dalam upaya memberi kesedaran kepada remaja akan hakikat bercinta yang sebenar dan seterusnya menurut mereka boleh menghindarkan para remaja terjebak kepada cinta berahi dan seksual.

Berdasarkan fakta dan analisis kajian terdahulu, Penulis menyusun bagaimana konsep pendidikan cinta dalam Islam yang menepati tuntunan Al-Quran dan Sunnah. Sehingga nantinya pendidikan cinta lebih dapat dimengerti dan diamalkan dalam dunia pendidikan dan dirasai faedahnya bagi mengelakkan setiap individu hari ini daripada perpecahan dalam keluarga, keruntuhan akhlak dalam kalangan generasi muda, ketandusan kasih sayang dan cinta dalam pelbagai konteks termasuklah dalam rumah tangga, tempat kerja, komuniti, masyarakat dan Negara.

Tujuan Pendidikan dalam Islam

Pendidikan merupakan aspek yang sangat penting dalam kehidupan manusia. Islam memandang pendidikan sebagai usaha untuk menjadikan manusia agar memiliki nilai-nilai Islam dalam dirinya dan mengamalkannya dalam setiap perilakunya. Sebagaimana menurut Syed M Naquib Al-Attas bahawa tujuan pendidikan dalam Islam adalah menciptakan manusia-manusia yang baik dan soleh yang menyembah Tuhan dengan sebenar-benarnya, membangun struktur kehidupan dunianya sesuai dengan hukum Islam demi terwujudnya Iman (al-Attas, 1996). Oleh itu, menjaga iman diantara salah satu matlamat utama pendidikan dalam Islam, kerana aspek batiniah ini menentukan baik buruknya aspek lahiriah. Muhammad Iqbal mengungkapkan bahawa sebuah pendidikan jika hanya bertujuan pada aspek lahiriah sahaja seperti yang dilakukan oleh Barat, maka pendidikan itu hanya akan membentuk manusia yang condong kepada materialisme, memiliki intelektual tinggi tapi tidak memiliki hati nurani (Iqbal, 2013). Inilah diantara alasan mengapa aspek batiniah menjadi fokus utama penulisan ini. Jika mengikut pendapat Al-Attas, iman adalah matlamat utama dari seluruh rangkaian dan proses pendidikan. Apa pun jenis pendidikan yang di ajarkan, maka iman harus menjadi spirit utama pendidikan itu, sehingga Iman akan menjadikan sesuatu itu menjadi bernilai untuk kebaikan dunia dan akhirat.

Namun persoalannya adalah bagaimana mewujudkan iman yang sah, yang kemudian akan berimpak kepada amal yang salih dan menghasilkan produktiviti yang tinggi seterusnya dapat menegakkan kembali kegemilangan peradaban ummat Islam. Tentu semua itu harus bermula daripada institusi hati, kerana hati merupakan pusat daripada setiap proses tingkah laku manusia. Sebagaimana hadis yang diriwayatkan oleh Nu'man bin Basyir bahawa Rasulullah SAW bersabda:

وإن في الجسد مضغة إذا صلحت صلح الجسد كله وإذا فسدت فسد الجسد كله ألا وهي القلب

(Bukhari, sahih, Kitab al-Iman, Bab *Fadhl Man Istabra' li Dinih*, No. Hadis 52)

“Dan sesungguhnya di dalam satu jasad ada seketul daging. Jika ia baik, maka baiklah seluruh anggota dan jika rosak maka rosaklah seluruh anggota. Ketahuilah, ia adalah hati.”

Ibn Rajab Hanbali berpendapat akan hadis ini, sebagaimana yang dipetik oleh Mushtaq (2006) bahawa hati diumpamakan seperti raja kepada seluruh anggota badan iaitu tentera yang patuh dan taat. Sekiranya raja itu seorang yang baik akhlaknya, maka kesemua tenteranya juga berakhlak baik. Namun, sekiranya raja itu buruk akhlaknya, maka kesemua tenteranya juga akan berakhlak buruk. Kerosakan hati ini yang akan menyebabkan penyakit jasad dan penyakit jiwa (Mushtaq, 2006). Hal senada juga disampaikan oleh al-Ghazali bahawa hati diumpamakan

seperti raja, badan laksana seluruh wilayah, akal sebagai perdana menteri, syahwat sebagai gabenor wilayah, amarah adalah musuh, sedangkan anggota badan baik zahir dan batin ibarat para tentera raja (Al-Ghazali, 2016). Kesemua ini menunjukkan bahawa hati memiliki fungsi penting dalam diri manusia.

Demikian pentingnya hati bagi segenap tubuh badan manusia. Disanalah bersemayam berbagai kuasa yang seperti nama dan fungsinya disebutkan dalam al-Quran: *al-qalb*; ia adalah tempat iman bersemayam. Ia juga disebut *alsyaghaf* iaitu tempat cinta, *habat al-qalb*; sebagai tempat cinta dan kebenaran, *al-fuad*; dapat memelihara kebenaran, *al-sadr*; tempat Islam, *al-Suwaida* tempat ilmu agama dan *muhjat al-qalb*; yang merupakan manifestasi sifat-sifat Allah (1974, الكفوي). Dari pelbagai fungsi tersebut, jelaslah sudah bahawa hati memiliki kuasa yang sangat signifikan dalam menentukan baik dan buruk tingkah laku manusia. Oleh itu, agar semua fungsi hati ini dapat berjalan sesuai dengan fitrahnya, yang dapat menata, mengatur dan menilai benar salahnya perasaan, niat, angan-angan, pemikiran, hasrat, sikap dan tindakan. Maka segala fungsi hati tersebut harus juga menjadi objektif dan kurikulum pendidikan Islam. Dalam hal ini Muhammad Iqbal (1877-1938) menawarkan satu formula yang harus ada dalam kurikulum pendidikan Islam adalah cinta, menurutnya cinta dapat mengatasi segala-galanya, tentu cinta yang dimaksudkan adalah cinta (manusia) kepada Tuhannya. Bukan cinta jasmani atau pencarian mistik yang samar-samar dan sia-sia sahaja (Munir, 2017). Oleh itu, tahulah kita daripada mana mestinya pendidikan itu dimulai.

Memandangkan keadaan ummat Islam hari ini, dimana-mana terjadi peperangan, pembunuhan, ekonomi jatuh merosot, ghairah keagamaan yang menurun dan toleransi pecah belah. Tidak hanya itu, hal yang pahit juga terjadi ditengah-tengah pemuda Islam seperti kerosakan moral, seks bebas, pembuangan bayi, hilang tumpuan dalam pembelajaran, bunuh diri dan pembunuhan. Persoalan ini apabila dikaji sungguh sangat mengejutkan bahawa diantara puncanya disebabkan oleh pemahaman cinta yang salah (Shamsuddin (2005), Hamzah (2006), Talib, Yunos, & Yaacob (2009) dan Zahrin, Osman, & Idris (2016)). Daripada ini menjadi terbuhtilah apa yang menjadi penyakit dan apa pula obatnya.

Dari kesedaran akan realiti ini, dapat disimpulkan bahawa pendidikan Islam harus menampung setiap masalah sezaman yang dihadapi ummat Islam hari ini, Islam sebagai agama *rahmat lil 'alamin* sudah waktunya pendidikan Islam menjadi penggerak utama dalam mengajarkan pemahaman cinta yang sebenar dan yang selari dengan Al-Quran dan Hadis. Cinta yang diajarkan hendaklah bukan hanya setakat wawasan ilmu pengetahuan semata tetapi harus juga mengajarkan bagaimana mengaplikasikannya sehingga ia terwujud dalam amal perbuatan seperti yang dikehendaki oleh Allah kepada manusia iaitu menjadi khalifah sebagai wakil tuhan dalam kempen kasih sayangNya bagi seluruh alam.

Cinta dalam Islam

Seorang penyair pernah berkata "*love is so blind*" (cinta begitu buta). Berdasarkan kepada gejala yang ditimbulkan, bahawa cinta membawa satu isu yang sangat penting. Pepatah melayu mengatakan "*tak kenal maka tak sayang, tak sayang makanya tak cinta*". Cinta yang cuba dibincangkan dalam sudut nalar manusia sentiasa menuai perbezaan. Kadar nilainya (value) mengikuti konsep nilai yang di yakini oleh manusia. Oleh itu, tidak hairan jika nama dan makna cinta sentiasa berbeza-bebeza mengikuti setiap tradisi dan budaya manusia. Dalam tradisi Yunani kuno "cinta" dikenal dengan istilah *Agape* (cinta ilahi), *Philia* (cinta persahabatan) dan *Eros* (cinta berahi) kemudian ada juga dengan kata *Xenia* (cinta tamu). Dalam budaya lain pula seperti Asia ada menyebut cinta dengan kata *Ren*, *Kama*, *Bhakti*, *Mettā*, *Ishq*, *Chesed* (Nygren, 1953, Liddell & Scott, 2007). Sedangkan dalam Islam, cinta juga memiliki berbagai sebutan diantaranya "*hubb*", "*mahabbah*" dan "*ishq*". Kata "*hubb*" dan "*mahabbah*" berasal daripada akar kata "*حَبَبٌ*". Sedangkan kata "*ishq*" lebih banyak dijumpai di dalam tradisi sufi Persia

seperti Farid al-Din Attar (d.617/1220) dan Jalal al-Din Rumi (d.627/1273) (Lumbard, 2007). Diantara kata-kata tersebut Al-Quran lebih memilih kata “*hub*” dalam menunjukkan soal cinta, sekurangnya al-Quran menyebutkan kata “*hub*” sebanyak 93 kali meski dengan berbagai bentuk perubahan katanya (al-Baqi, 1996). Ibnu 'Ajibah (2013) memaknai kata “*al-hubb*” di dalam kitab tafsirnya sebagai “*kecenderungan hati kepada yang di cintai*”.

Dari sudut definisi pula, ada pelbagai tokoh dalam Islam mencuba untuk mendefinisikan cinta diantaranya seperti yang dikutip oleh Ja'far Dr. Ja'far, (2016) dalam bukunya “*Gerbang Tasawuf Dimensi Teoritis dan Praktis Ajaran Sufi*”: 1) Menurut Junaid al-Baghdadi, cinta adalah masuknya sifat-sifat kekasih pada sifat-sifat yang mencintai. 2) Menurut Muhammad bin 'Ali al-Kattani, cinta mengutamakan yang dicintainya. 3) Menurut Husain al-Manshur al-Hallaj, hakikat cinta itu jika kamu berdiri bersama kekasihmu dengan menanggalkan sifat-sifatmu. 4) Menurut Muhammad bin al-Fadh al-Farawi, Cinta itu adalah runtuhnya semua cinta dalam hati kecuali kepada kekasih. Keterangan cinta daripada ahli tasawuf ini menunjukkan cinta yang mengandungi nilai-nilai transendental dan mengesampingkan nilai-nilai keegoan manusia dalam dirinya. Syed Muhammad Iqbal (1915) pula menganggap cinta sebagai asas *khallaqiyah* atau prinsip kreatif yang meliputi segala sesuatu yang hidup di dalam semesta dan diri manusia (Iqbal & Nicholson, 1950). Berbeza dengan Ibn Arabi (d. 1165/1240), baginya cinta adalah sebuah pengetahuan yang tidak boleh di definisikan, ia adalah sebuah pengetahuan yang mesti dirasakan ('Arabi, 1985). Walau bagaimanapun perbezaan definisi cinta itu terjadi, cinta layak untuk diperbincangkan dalam sudut konsep dan pengamalan. Sehingga cinta dapat lebih mudah dimengerti dan diamalkan.

Sejarah mencatat bahawa terma cinta dalam Islam sudah dikenal sejak abad ke 8 melalui para sufi seperti Rabi'atul Adawiyah (Munhanif, 2002) kemudian tema-tema cinta itu terus berkembang sehingga zaman kejayaan Islam. Ada banyak cendekiawan Islam yang telah menuliskan tentang risalah cinta, seperti Ibnu Sina (1037) yang pernah menulis risalah dengan tajuk “*A Treatise on Love*” (Fackenheim, 1945). Kemudian dari Persia seperti Farid al-Din 'At.t.ār (w. 1221). Daripada para ahli teologi juga ada seperti Ibn Taymiyya (wafat 1328), Ibn Qayyim al-Jawziyya (1350), Muhammad al-Ghazali (1111) dan Ibn Dabbāgh (1296) yang telah melahirkan karya tentang “*Cinta Ilahi dalam Mistisisme Islam*” (Abrahamov, 2013) dan Ibnu al-'Arabi, boleh dikatakan seorang teoretikus cinta Muslim terkemuka (Abrahamov 2009).

Daripada tangan para ahli falsafah, sufi dan ahli teologi Islam di atas, cinta lebih banyak dibincangkan dalam aspek ketuhanan. Mereka biasanya memetik ayat-ayat Al-Quran yang sarat dengan pesan-pesan bagi menegaskan ajaran-ajaran yang terkandung di dalamnya. Mereka meyakini Allah sahaja sang pemilik cinta, daripadanya dan akan kembali kepadanya. Oleh itu, untuk memahami cinta dan bagaimana pengajaran cinta dalam Islam adalah dengan kembali kepada apa yang telah diturunkan Allah kepada NabiNya iaitu Al-Quran dan al-Sunnah.

Al-Quran dan Hadis adalah sebuah sumber autentik yang menjadi rujukan utama bagi umat Islam. Al-Quran tidak hanya kitab yang berisikan informasi hukum, etika dan teologi tetapi ia juga merupakan kitab cinta. Daripada Al-Quran seseorang itu mengetahui tentang erti dan tujuan daripada kehidupan ini. Melalui Al-Quran juga seseorang itu diberitahu bahawa hanya Allah sahaja yang maha kuasa dan tiada seorang pun yang mampu menandinginya (42:11). Hal ini juga tersirat dalam 99 namaNya (Al-Asma Al-Husna), kesemua nama itu bagi menggambarkan kekuasaanNya yang tiada batas. Daripada banyak nama tersebut, ada satu nama yang mewakili dari cinta kasihnya iaitu Al-Wadud yang bererti yang maha mencintai (*the loving*). Atas kasih sayangNya, manusia hari ini dapat menikmati keindahan ciptaanNya. Atas cinta kasihNya diutusNya pula para nabi kepada umatNya. Khazanah kasih sayangNya yang tiada tapal batas, mengalir seperti dalam sifatnya yang baqa (kekal). Itu juga yang menjadi alasan mengapa cinta itu menjadi atribut penting dalam kehidupan manusia, yang

kisah dan sejarahnya tidak pernah usai dan terus berulang dan menjadi topik yang selalu hangat diperbincangkan.

Cinta Ilahi (Divine Love)

Dialah Allah yang Maha Kasih Sayang. Kewujudan manusia dan alam raya ini merupakan daripada sifatnya yang maha Mencintai. Al-Quran menyebutnya dengan nama “*al-Wadud*” yang bererti “yang maha mencintai”. Selain nama itu, Al-Quran menyebutnya “*ar-Rahman*” (Yang Maha Belas Kasih) dan “*ar-Rahim*” (Yang Maha Penyayang)”. Al-Quran menjadikan kasih sayangNya menjadi sifat yang paling asas daripada Allah SWT seperti disebutkan dalam Al-Quran “*Serulah nama "Allah" atau nama "Ar-Rahman"*, yang mana sahaja kamu serukan (dari kedua-dua nama itu adalah baik belaka); kerana Allah mempunyai banyak nama-nama yang baik serta mulia” (17:10). Allah menjadikan rahmat dan kasih sayangNya lebih utama daripada sifat kemurkaanNya. Hal ini dijelaskan dalam sebuah hadis Qudsi yang amat popular “*Sesungguhnya rahmat-Ku lebih mengalahkan kemurkaan-Ku.*” (HR. Bukhari no. 7404) pada riwayat yang lain Nabi pun berkata “*Sungguh Allah lebih sayang kepada hamba-hamba-Nya daripada seorang ibu kepada anaknya*” (HR. Bukhari dan Muslim). Al-Quran juga menegaskan “*Tidak ada sesiapa di langit dan di bumi melainkan ia akan datang kepada (Allah) Ar-Rahman, sebagai hamba*” (19:93). Al-Quran mengesahkan tentang tafsiran ini bahawa rahmat Allah meliputi tiap-tiap sesuatu (7:156). Semua wujud apa sahaja di atas alam raya ini adalah merupakan manifestasi daripada sifatNya Al-Wadud (yang maha mencintai). Berdasarkan keterangan ayat-ayat di atas bahawa cinta merupakan satu kesatuan dalam diri tuhan. Seperti juga disebutkan oleh Daylamī, Bell, & Shafie (2005) bahawa Dialah Allah yang Maha mencintai, dicintai dan cinta itu sendiri atau dalam perspektif hadis disebutkan “*Dialah Allah Maha Indah dan mencintai keindahan*” (HR. Bukhari No.91).

Diantara tanda cinta dan keindahNya itu, Allah menciptakan manusia dengan sebaik-baik bentuk ciptaan seperti disebutkan dalam surah At-Tin (95:4) “*Sesungguhnya Kami telah menciptakan manusia dalam bentuk yang sebaik-baiknya (dan berkelengkapan sesuai dengan keadaannya)*” dan Allah juga beri penghormatan kepada bani Adam (anak cucu Adam) seperti disebut dalam ayat “*Kemudian Ia menyempurnakan kejadiannya, serta meniupkan padanya: roh ciptaanNya. Dan Ia mengurniakan kepada kamu pendengaran dan penglihatan serta hati (akal fikiran), (supaya kamu bersyukur, tetapi) amatlah sedikit kamu bersyukur*” (32:33) dan dalam ayat lain Allah SWT menyebutkan “*Dan sesungguhnya Kami telah memuliakan anak-anak Adam; dan Kami telah beri mereka menggunakan berbagai-bagai kenderaan di darat dan di laut; dan Kami telah memberikan rezeki kepada mereka dari benda-benda yang baik-baik serta Kami telah lebihkan mereka dengan selebih-lebihnya atas banyak makhluk-makhluk yang telah Kami ciptakan*” (17:70). Menurut Said Ramadhan Al-Buthy (2009) bahawa segala keistimewaan dan penghormatanNya kepada manusia seperti yang disebutkan dalam ayat-ayat tersebut adalah kerana cinta dan kebaikan Allah SWT. Ia bukanlah hasil jerih payah manusia yang ia upayakan sendiri bahkan cinta Allah itu akan semakin bertambah seiring kepatuhan manusia kepadaNya.

Cinta Manusia (Human Love)

Kemuktamadan cinta manusia kepada Allah merupakan teras bagi penghambaan diri kepadaNya. Kerana Dialah yang mutlak dicintai di atas segalanya. Penyerahan diri total hanya kepadaNya, Sebagaimana Allah gambarkan cinta itu dalam al-Quran “*..Adapun orang-orang yang beriman sangat cinta kepada Allah..*”(2:165). Amira Shamma Abidin (2004) dalam kajiannya tentang cinta dalam Islam, mengungkapkan cinta ini harus dicapai melalui kepatuhan kepada Nabi Muhammad SAW, kerana melalui pesannya semua manusia menjadi tahu apa sahaja yang di cintai Oleh Allah SWT. Hal ini selari dengan apa yang Al-Quran sebutkan

“Katakanlah (wahai Muhammad): Jika benar kamu mengasihi Allah maka ikutilah daku, nescaya Allah mengasihi kamu serta mengampunkan dosa-dosa kamu. Dan (ingatlah), Allah Maha Pengampun, lagi Maha Mengasihani (Qs. 3:31). Begitu juga dengan pandangan

Oleh itu, memahami konsep cinta pada jenis cinta manusia (*human love*) harus di rujuk kepada praktik kenabian. Salah seorang ahli falsafah moden hari ini yang bernama William Chittick (2014), Ia yang sangat fokus terhadap kajian konsep cinta dalam Islam membincangkan bahawa cinta dalam tanda petik cinta manusia (*human love*) menurutnya harus memenuhi tiga prinsip dasar iaitu *tauhid, nubuwah dan pasrah* (return to the God). Prinsip *pertama* menurutnya adalah seperti yang tersirat dalam kalimat syahadah: “*Tiada tuhan melainkan Allah dan Muhammad adalah utusan Allah*” ini memberi implikasi kepada kehidupan manusia, bahawa tidak ada yang benar-benar tuhan melainkan Allah, tiada yang benar-benar belas kasihan (cinta) kecuali Yang Maha Pemurah. Hal ini menegaskan bahawa tiada sesuatu yang berhak kita cintai melainkan Allah SWT dan pengabdian kita kepadaNya bukan kerana ingin mendapatkan sesuatu daripadanya. Adapun cinta yang ditujukan kepada selainNya hanyalah bersifat majazi (metafora). Seperti yang disebutkan di dalam Al-Quran bahawa Allah yang telah menjadikan manusia sukakan kepada wanita, anak-anak, emas, perak, kuda, lembu dan tanah air (3:14). Oleh itu, cinta metafora adalah bagian daripada subordinat dalam rangka mencintai realiti yang mutlak (W. C. Chittick, 2013). Al-Quran juga menyebutkannya “Dan di antara tanda-tanda yang membuktikan kekuasaannya dan rahmatNya (30:21), bahawa Ia menciptakan untuk kamu (wahai kaum lelaki), isteri-isteri dari jenis kamu sendiri, supaya kamu bersenang hati dan hidup mesra dengannya, dan dijadikanNya di antara kamu (suami isteri) perasaan kasih sayang dan belas kasihan (30:21).

Prinsip *kedua* dalam cinta adalah nubuwah, bahawa Allah mendedahkan diriNya kepada manusia dengan matlamat membimbing manusia ke jalan kebaikan melalui para nabiNya (W. Chittick, 2014). Berkenaan dengan nubuwah ini sarjana Islam seperti Ibnu Sina juga menjelaskan dalam teorinya tentang pentingnya nubuwah (kenabian) untuk mengajarkan teladan kepada umat manusia (Madkūr, 1988). Oleh itu, hubungan nubuwah dalam cinta adalah satu cara Allah menjelaskan tentang bagaimana cinta harus di ajarkan kepada manusia. Al-Quran menyebutkan perhubungan antara kenabian dan cinta seperti dalam ayat berikut: “Katakanlah (wahai Muhammad): "Jika benar kamu mengasihi Allah maka ikutilah daku, nescaya Allah mengasihi kamu serta mengampunkan dosa-dosa kamu. Dan (ingatlah), Allah Maha Pengampun, lagi Maha Mengasihani (3:31). Daripada ayat ini terlihat jelas bahawa cinta merupakan matlamat besar dalam Islam, sehingga misi nubuwah (kenabian) adalah bagi memberi teladan (*uswatun hasanah*) dalam membuktikan bagaimana sebenarnya cinta seorang hamba kepada Tuhannya sehingga seorang hamba itu boleh meraih cintaNya.

Mentafsirkan Surah Ali Imran ayat 31 diatas, Imam al-Thabari meriwayatkan sebab turunnya: “*Dari Bakr bin al-Aswad berkata, “saya mendengar Al-Hasan berkata: “Di zaman Rasulullah SAW ada suatu kaum yang berkata: ‘wahai Muhammad, kami mencintai Rabb kami! Kemudian Allah SWT menurunkan: Katakanlah! Jika kamu (benar-benar) mencintai Allah, ikutilah aku, niscaya Allah mengasihi dan mengampuni dosa-dosamu’, Allah menjadikan ittiba’ (mengikuti sunnah) Nabi Muhammad SAW sebagai bukti cinta mereka kepada Allah dan mengazab siapa saja yang menyelisihinya.”* (al-Tabari, 1997). Berdasarkan riwayat di atas disebutkan juga bahawa pembuktian cinta yang sebenar adalah dengan mengikuti (*ittiba’*) sunnah Rasulullah SAW, kerana dialah manusia terbaik yang menjadi teladan dalam pengabdian seorang hamba kepada penciptanya.

Prinsip ketiga dalam cinta adalah pasrah kepada Allah (*Return to the God*). Ianya adalah inti utama daripada ajaran agama (Sholikhin, 2013), dalam hubungan cinta dan kepasrahan adalah ketika cinta telah dimulakan dengan berbagai amalan dalam rangka mendekati diri kepada Tuhan, maka konsep beramal pada saat itu bukan lagi kerana takut

akan neraka atau hanya menginginkan syurga. Semua amalan itu dilakukan atas dasar keikhlasan dan kerinduan padaNya'. Hingga mencapai kedudukan seperti yang digambarkan dalam sebuah hadis kudsi "*Hamba-Ku tidak pernah berhenti mendekat kepada-Ku melalui perbuatan baik sampai aku mencintainya, dan ketika aku mencintainya, akulah pendengaran yang dia dengar, penglihatan yang dia lihat, tangan yang dia pegang, dan kaki yang dengannya dia berjalan*". Berdasarkan ini, sangat jelaslah bahawa cinta telah menggiring jiwa-jiwa manusia untuk mengikuti bimbingan Ilahi dan mencapai penyatuan dengan Yang Terkasih yang sejati

Apa yang menjadi point daripada perbincangan tiga prinsip diatas adalah bahawa cinta harus dibingkaikan dalam kerangka pengabdian kepada Allah (tauhid). Pengabdian itu harus mengikuti cara-cara yang Allah dedahkan melalui Rasulnya (sunnah) dan atas pengabdian yang telah dilakukan, maka pasrahkanlah hanya kepadaNya sahaja tanpa ada maksud kecuali keranaNya semata. Berdasarkan keterangan di atas, dapatlah diketahui bahawa ajaran cinta dalam Islam dapat difahami dan diamalkan melalui tiga aspek yang dalam Pendidikan Islam dikenal dengan Iman, Islam dan Ihsan.

Konsep Pendidikan Cinta

Konsep Pendidikan Cinta yang paling ideal tentu mengacu kepada konsep pendidikan cinta yang diamalkan oleh Rasulullah SAW iaitu cinta yang memadukan unsur ilahiah dan menjadi spirit yang bermuara pada kemanusiaan dan akhlak mulia terhadap semua ciptaan Allah SWT. Sebagaimana misi kenabiannya iaitu sebagai *rahmatan lil 'alamin* (kasih sayang bagi sekalian alam). Sejarah mencatat bagaimana konsep cinta yang dibawa oleh Rasulullah SAW mampu mengubah mekkah ketika itu, dari mekkah yang tidak berperadaban (*uncivilized*), menjadi mekkah yang berperadaban penuh kasih sayang (*affection*), persamaan (*egalitarianism*) dan pembebasan (*liberation*).

Muhammad Qorib (2018) mengungkapkan bahawa cinta yang ditunjukkan oleh Rasulullah SAW bersifat progresif dan jauh melampaui masanya, bahkan menurutnya amalan cinta Rasulullah SAW sudah bersifat moden kerana melingkupi semua faham yang kebelakangan ini seperti *teosentrisme*, *antroposentrisme* dan *feminisme*. Seluruh penjabaran amalan cinta daripada Rasulullah dapat dikenali melalui wahyu dan sunnah-sunnahnya. Sedikit contoh dari sekian banyak ayat-ayat al-Quran dan hadis yang mengandungi pengamalan cinta seperti misalnya, "*Kamu tidak sekali-kali akan dapat mencapai (hakikat) kebajikan dan kebaktian (yang sempurna) sebelum kamu dermakan sebahagian dari apa yang kamu sayang*". (Qs. 3:92). Jika dicermati dalam ayat tersebut bahawa cinta diekspresikan dalam upaya untuk membahagiakan kaum marginal dan tertindas. Upaya ini dilakukan cara dengan memberikan sebahagian harta yang dicintai dan disayangi. Amalan cinta Rasulullah SAW juga nampak melalui sunnahnya seperti dalam hal pembebasan budak, Rasulullah SAW menyampaikan bahawa perbezaan tidak boleh dilihat dari warna kulit, Arab dan '*ajam*, kaya dan miskin, kecuali melalui prestasi ketakwaannya kepada Allah. Rasulullah juga menunjukkan kasih sayangnya kepada kaum perempuan iaitu dengan mengangkat status mereka, hal seperti ini baru dikenal dalam fahaman moden sekarang iaitu *feminisme*. Mengenai interaksi manusia dengan alam, Al-Quran juga menyebutkan bagaimana wujud cinta dalam berinteraksi dengan alam secara harmonis. Misalnya Al-Quran menjelaskan, "*Telah timbul berbagai kerosakan dan bala bencana di darat dan di laut dengan sebab apa yang telah dilakukan oleh tangan manusia; (timbulnya yang demikian) kerana Allah hendak merasakan mereka sebahagian dari balasan perbuatan-perbuatan buruk yang mereka telah lakukan, supaya mereka kembali (insaf dan bertaubat)*" (Q.s 30: 41). Ayat tersebut sarat dengan pesan cinta terhadap alam. Yang bermaksud bahawa alam juga merupakan makhluk Allah dan manusia mesti mengolah, merawat dan memanfaatkannya dengan baik bukan dengan

merusaknya. Tidak hanya itu, cinta yang dicontohkan Rasulullah dapat diamati dari berbagai sabda beliau kepada para sahabat seperti misalnya bahawa berbuat baik kepada setiap yang bernyawa (haiwan) mendatangkan ganjaran dari Allah. Bahkan Rasulullah menaruh rasa hormat yang cukup tinggi terhadap hak-hak hidup haiwan (semut) yang menempati lubang-lubang tanah dengan melarang umat Islam buang air di dalamnya. Jika di banyak perguruan tinggi baik di Amerika mahupun Eropah baru belajar mata kuliah *animal rights* (hak-hak haiwan), maka Rasulullah jauh sebelum itu sudah menunjukkan dan menjadi teladan dalam hal ini.

Dari pada penjelasan diatas, sedikit gambaran cinta daripada sekian banyak ayat al-Quran dan hadis yang menggambarkannya. Dapatlah ditarik kesimpulan bahawa cinta yang diajarkannya penuh akan nilai-nilai ilahiah yang menjadikannya ia peka terhadap masalah kemanusiaan, haiwan, tumbuhan dan lingkungan alam semesta. Inilah sesungguhnya poin-poin penting yang terkandung dalam konsep pendidikan cinta dalam Islam. Iaitu cinta yang tidak hanya melangit sehingga dalam sebuah riwayat mengatakan bahawa hingga pecah-pecah tumit Rasulullah dalam beribadah kepada Allah, tapi di siang hari cinta itu membumi menebarkan kasih sayang kepada umatnya.

Jika ditelaah kembali, sesungguhnya konsep pendidikan cinta dalam Islam telah berakar umbi dalam sistem pendidikan Islam. Diantara materi pelajaran yang mewakili daripadanya iaitu pendidikan akidah, pendidikan akhlak, pendidikan al-Quran dan Hadis. Semua materi yang diajarkan itu bermuara kepada pembinaan iman, Islam dan ihsan. Sebagaimana kita ketahui bahawa aspek iman, Islam dan ihsan merupakan diantara aspek yang menjadi matlamat pendidikan Islam. Mohd Amin bin Abdul Rahim (1986) mensimulasikan hubungan kait antara iman, Islam dan ihsan dan aspek pendidikan Islam (kognitif, afektif dan psikomotor) seperti yang disepakati oleh Muhammad Quthb, Mukhtar Yahya, Muhammad Fadhil al-Jamali dan Al-Attas (Nata, 2016) bahawa pembentukan iman itu bermula daripada otak (menurut penganalisisan yang tidak terlibat proses penerimaan hidayah). Otak individu akan mempelajari dan menanggapi perkara-perkara yang hendak di imaninya, hal inilah yang melibatkan aspek kognitif. Penyingkapan dan pembelajaran itu tidak akan sempurna melainkan dengan wahyu (al-Quran) dan ajaran-ajaran yang telah disampaikan oleh Rasulullah SAW. Hati pula menerima hasil pembelajaran dan penyingkapan tadi dengan keyakinan yang tidak sedikit pun bercampur dengan keraguan, hal ini menurutnya melibatkan aspek afektif. Lalu keyakinan hati pula akan mempengaruhi anggota-anggota badan yang lain sehingga anggota tersebut tunduk dan patuh untuk melaksanakan segala tuntunan keyakinan hati yang melibatkan aspek kognitif dan psikomotor.

Kesimpulan

Cinta memiliki kedudukan yang tinggi dalam Islam. Ia mengandungi iman bagi meluruskan hati kepada sesuatu yang paling berhak ia cintai. Ia juga memerlukan petunjuk dan bimbingan agar sampai pada destinasi cinta itulah yang disebut Islam. Maka cinta yang menepati iman dan Islam itulah nantinya menyampaikan matlamat tuhan iaitu menjadi khalifah (wakil tuhan) dalam kempen kasih sayangnya kepada seluruh alam. Oleh itu sebagai kesimpulan tentang konsep pendidikan cinta dalam Islam bahawa cinta sejati hanya dapat dicapai melalui pendidikan iman, pendidikan Islam dan pendidikan Akhlak seperti yang sudah diterapkan dalam berbagai-bagai tingkat pendidikan di negara-negara Islam. Diharapkan pendidikan cinta tidak hanya dijadikan sebagai medium yang menyampaikan pengetahuan, tetapi ia harus mampu menjadi gerak laku dalam kehidupan.

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PELAKSANAAN PENGURUSAN KEHADIRAN PELAJAR (SMATT) DI JABATAN PERDAGANGAN POLITEKNIK PORT DIKSON

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Abstrak: Seiring dengan pembangunan teknologi yang pesat pada masa kini, pelbagai cara atau medium yang boleh digunakan bagi memberikan maklumat tentang pengetahuan terhadap sesuatu perkara. Pelbagai medium telah digunakan bagi memudahkan sesuatu maklumat dicapai, antaranya ialah dengan menggunakan web portal dan yang terbaru dengan menggunakan sejenis kod dua dimensi iaitu Kod QR sebagai medium perantaraan untuk pencapaian sesuatu maklumat. Telah menjadi satu desakan untuk melaksanakan PdP atas talian menjadi satu keperluan. Terdapat beberapa masalah yang dikenal pasti semasa PdP dijalankan di Politeknik Port Dickson (PPD). Ini adalah masa yang tepat untuk melaksanakan sistem kehadiran berdasarkan kod QR pada waktu PdP untuk membantu dan meningkatkan keberkesanan perekodan kehadiran pelajar. Melalui SmAtt, kehadiran pelajar boleh direkodkan dengan mengimbas kod QR tersebut dengan aplikasi scanner yang telah sedia ada atau dimuatnaik ke dalam telefon pintar. Pelajar akan mengimbas kod QR tersebut ketika hadir ke kelas bagi kursus pada waktu perkuliahan dan bila-bila masa untuk mengelakan pelajar melakukan penipuan kehadiran. Data kehadiran yang telah diimbas akan di simpan di dalam Google drive yang bertindak sebagai platform IOT. Pensyarah kursus seterusnya boleh mengakses data kehadiran pelajar untuk hari tersebut dalam format Microsoft Excel. Oleh itu kaedah ini memudahkan pensyarah untuk menyediakan laporan kehadiran pelajar bersesuaian dengan keperluan ISO9001:2018 dan MQA tanpa menggunakan kaedah lama. Penggunaan SmAtt dapat membantu pensyarah dalam proses mengambil kehadiran pelajar semasa proses PdP berlangsung di kelas tanpa mengambil kehadiran secara manual yang akan mengambil masa yang singkat, pelajar boleh memberi penumpuan sepenuhnya kepada PdP. Penjimatan kertas serta proses menyediakan dokumen kehadiran mengikut keperluan ISO9001:2018 dan MQA dapat dijalankan dengan lebih cepat, teratur dan kemas.

Kata Kunci: Kod QR, Kehadiran,

Pengenalan

Perkembangan teknologi telah membawa satu revolusi baru dalam dunia yang serba canggih, khususnya dalam bidang pendidikan di Malaysia. Teknologi banyak mempengaruhi manusia dalam setiap aspek kehidupan. Arus teknologi juga telah menjadi satu alat yang sangat penting dan memberi pengaruh yang besar dalam segala urusan manusia. Ini diperhebatkan lagi dengan wujudnya portal yang membincangkan pelbagai aspek menggunakan teknologi terkini dan tidak ketinggalan dalam dunia pendidikan.

Projek penyelidikan ini dijalankan di Jabatan Perdagangan PPD untuk menyelesaikan masalah pengambilan kehadiran pelajar ke kelas. Terdapat pelbagai kaedah yang berbeza digunakan untuk aplikasi sistem kehadiran yang digunakan di PPD. Antara kaedah yang

digunakan adalah kaedah tradisional menggunakan kertas dan pen yang kelihatan tidak produktif dan membebankan pensyarah, yang memerlukan masa pensyarah.

Dalam kajian ini penggunaan kod QR, Smart Management Attendance (SmAtt) telah dicadangkan untuk dibangunkan. Dengan mengimbas, kod QR menggunakan telefon pintar dan kemudiannya dapat diubah menjadi aplikasi untuk melakukan proses selanjutnya. Tatacara untuk pengambilan kehadiran pelajar secara manual oleh pensyarah pada setiap kelas adalah proses yang memakan masa 10-15 minit terutama ketika kelas besar (35-40 orang atau lebih daripada 80 orang). Majoriti pensyarah dan pelajar memiliki dan menggunakan telefon pintar secara meluas, ini dapat menangani masalah pembaziran masa untuk mengambil kehadiran pelajar ke kuliah dan sistem SmAtt ini menawarkan untuk mengurangkannya hampir 90% masalah pembaziran masa sewaktu pengambilan kehadiran pelajar. Penyelesaian yang dicadangkan adalah dengan pelajar perlu mengimbasnya kod QR kursus melalui aplikasi telefon pintar masing-masing. Imbasan kod QR yang dibangunkan dan pelajar perlu mengisi maklumat diri yang ditanya dalam *google form* bagi mengesahkan kehadiran pelajar dan jumlah jam pertemuan setiap sesi perkuliahan yang dijalankan oleh pensyarah. Penggunaan SmAtt ini akan mempercepat proses pengambilan kehadiran dan penumpuan sepenuhnya diberikan kepada proses PdP bagi kursus yang diajar.

Dengan menggunakan SmAtt ini, pengurusan kehadiran pelajar akan dapat membantu pensyarah bukan sahaja dari aspek masa tetapi juga usaha penyimpanan kehadiran pelajar. Politeknik Port Dickson mengamalkan sistem pengurusan kualiti yang mana kehadiran pelajar ke kelas adalah wajib diambil dan dicatatkan dalam Sistem Pengurusan Maklumat Politeknik Malaysia (SPMP) mengikut Prosedur Pengendalian Standard (SOP) Manual PLSP 05 (ISO 9001:2018).

Latarbelakang kajian

Tujuan kajian ini adalah untuk membuktikan penggunaan SmAtt dapat memudahkan pensyarah dari aspek pengambilan kehadiran secara manual dan secara tidak langsung dapat mengurangkan menggunakan kertas dan menjimatkan masa.

Kajian ini memfokuskan pada pembangunan SmAtt dengan menggunakan kod QR. Sistem ini membolehkan pensyarah mempercepat proses pengambilan kehadiran semasa kelas dan akan menjimatkan masa serta pensyarah dapat mengemaskini rekod kehadiran mengikut standard yang ditetapkan. Pembangunan SmAtt telah dicadangkan mengoptimumkan aplikasi yang diperolehi secara percuma atas talian seperti *google form*, *google sheet* yang menjadikan telefon pelajar sebagai medium untuk mengimbas kod QR yang dibangunkan. Pensyarah hanya perlu menyediakan kod QR kursus dan juga formula yang telah disetkan ke dalam *google sheet* dan boleh dilihat seolah-olah pensyarah menanda / pada senarai nama pelajar tertentu. Maklumat kehadiran pelajar tersebut yang disimpan menggunakan masa yang sebenar (*real time*) yang telah disetkan dalam *google sheet*.

Penggunaan SmAtt ini akan lebih tersusun dan mempercepatkan pengurusan masa dan seterusnya meningkatkan kecekapan pensyarah dari pelbagai aspek terutamanya dalam bidang pengurusan PdP itu sendiri.

Penyataan Masalah

Pada masa ini, jumlah pelajar universiti di setiap universiti boleh mencapai 10 ribu. Untuk menangani sebilangan besar pelajar boleh menjadi masalah untuk mendapatkan kehadiran mereka. (Masalha & Hirzallah, 2014). Dalam keadaan sekarang, proses untuk mendapatkan kehadiran di universiti majoriti masih berlaku gunakan proses tradisional. Proses manual bermaksud bahawa ketika permulaan kelas, pensyarah akan memberikan sehelai helaian kehadiran dan pelajar akan menandatangani. Ini bukan cara yang sistematik untuk

mengumpulkan kehadiran. Lembaran kehadiran memerlukan terlalu banyak masa untuk ditandatangani oleh semua pelajar. Pelajar bahawa lupa menandatangani kehadiran mereka dan mereka akan menganggap tidak akan datang ke kelas itu.

Kaedah yang digunakan adalah kaedah tradisional menggunakan kertas dan pen yang kelihatan tidak produktif dan membebankan pensyarah, yang memerlukan masa pensyarah. Masalahnya juga berlaku ketika pensyarah kecikiran borang kehadiran. Pelajar mesti menulis nama pada sehelai kertas baru dan kadangkala pelajar boleh menipu kehadiran rakan mereka yang tidak hadir. Oleh itu, adalah memakan masa bagi pensyarah untuk memasukkan kehadiran pelajar kali kedua di dalam SPMP.

Akhir sekali, sistem semasa (SPMP) tidak menghasilkan laporan kehadiran mengikut standard yang ditetapkan.

Objektif Kajian

1. Mengenalpasti kod QR dapat mengurangkan bebanan pengurusan PdP pensyarah.
2. Mengenalpasti penggunaan teknologi melalui *Smart phone* dan Kod QR membantu proses merekod kehadiran pelajar.
3. Mengenalpasti hubungan antara Kod QR mengoptimumkan aplikasi yang diperolehi secara percuma atas talian dengan kejayaan pensyarah dapat mengemaskini rekod kehadiran dengan lebih cepat dan tepat.

Skop dan limitasi kajian

Kajian ini dijalankan terhad kepada pelajar dan pensyarah Jabatan Perdagangan PPD sahaja.

Sorotan Kajian

Menurut Sunil Jadhav, Akash Gagare, Pooja Gunjal, dan Prof Vidya Jagtap (2018), cara umum untuk mendapatkan kehadiran adalah secara manual. Biasanya pelajar harus menandatangani senarai kehadiran di kelas / makmal. Dalam pendekatan ini pelajar tidak boleh menipu dengan menandatangani pelajar lain yang tidak hadir, jadi penyelidik mencadangkan sistem separa automatik untuk menyelesaikan masalah ini, kaedah sistem kehadiran pelajar mudah alih berdasarkan QR kod menggunakan pengimbas. Oleh itu kami berusaha menyelesaikan masalah kawalan kehadiran menggunakan sistem kod QR dalam kajian ini. Perisian sistem kod QR untuk pelajar ini memperbaiki masa yang digunakan untuk mengambil kehadiran manual dan memperbaiki kesilapan. Kami menerapkan sistem yang akan menyembunyikan maklumat setiap orang pelajar (kad ID) dalam kod QR, jadi ketika pelajar mengimbas kod QR pada waktu itu, tarikh masa pengimbasan kod QR akan disimpan dalam pangkalan data.

Menurut Patil Falguni, Utkarsha Bhandria, Madhuri Kasa (2017), sewaktu kuliah atau peperiksaan, menandatangani kehadiran pelajar adalah masalah penting yang memerlukan masa dan mengalihkan perhatian pelajar. Salah satunya boleh dicadangkan atau paling digemari ialah penggunaan *Smart ID Card*. Sebagai contoh, pengenalan kad pintar adalah kaedah yang meningkatkan kos dan tidak dapat disesuaikan dengan setiap sistem serta memerlukan sokongan perisian yang kompleks. Anda perlu menambahkan kod QR yang mengandungi nombor pelajar ke kad pengenalan pelajar. Kad pengenalan pelajar boleh dibaca dengan aplikasi kecil membaca kandungan kod QR. Hasilnya, kita dapat mengatakan bahawa aplikasi yang kita lakukan mudah disesuaikan dan dapat disesuaikan dengan semua sistem dengan kos yang rendah.

Menurut Md Rizal Md Hendry, Mohd Noah A. Rahman dan Afzaal. H. Seyal (2017), salah satu teknologi ini ialah kod QR. Kod A (QR) adalah kod dua dimensi yang digunakan untuk merakam ribuan karakter dan nombor dalam imej kecil yang dihasilkan oleh Denso-Wave Corporation of Japan pada tahun 1994. Kod QR disusun dalam lajur dan baris warna

hitam dan putih yang dirancang untuk siap digunakan oleh pengguna telefon pintar (Shin et al. 2012). Pengguna yang mengakses kod QR dapat menggunakan perisian *decode* yang sedia ada di dalam aplikasi untuk mengubah imej kod yang diimbas menjadi informasi yang dikodkan dan menyimpannya ke dalam pangkalan data. Kelebihan utama penggunaan kod QR dalam sistem kehadiran adalah menyediakan satu sistem pengesanan dan pelaporan kehadiran yang boleh dipercayai dan berfungsi dengan baik, yang membolehkan pentadbir mengenal pasti dan mengesan pelajar yang tidak memenuhi kehadiran minimum. Di samping itu, sistem kehadiran yang menggunakan kod QR akan mengurangkan tenaga kerja pentadbiran secara manual dan meminimumkan penggunaan kertas.

Manakala dalam kajian yang dilaksanakan oleh Nur Farhana Binti Mohd Amir, UTEM (2015), Sistem Pemantauan Kehadiran adalah sistem yang memungkinkan pengumpulan maklumat kehadiran melalui aplikasi telefon bimbit. Maklumat dikumpulkan melalui Android. Ia dapat dipantau melalui telefon Android juga atau melalui e-mel. Semua butiran pengguna dan maklumat pelajar disimpan dalam web yang dipanggil Panel Pentadbiran. Panel Pentadbiran dikendalikan oleh pentadbiran. Aplikasi perlu mengesahkan rekod pelajar dengan mengimbas kod QR pelajar. Perincian pelajar disusun dalam teknologi kod QR.

Nur Farhana Binti Mohd Amir, UTEM (2015) menyatakan QR adalah kependekan dari Quick Response, ia dapat dibaca dengan cepat oleh telefon bimbit. Dari sekeping maklumat dari media sementara dan boleh dibaca melalui telefon pintar. Kod QR selalu digunakan dalam bahan iklan di lingkungan seperti iklan majalah, di papan iklan, halaman web atau bahkan di televisyen. Ia mungkin memberikan perincian mengenai perniagaan atau perincian tersebut dan menunjukkan URL (*Uniform Resource Locator* adalah rujukan (alamat) ke sumber di Internet) mengenai pautan ke resume atau laman web individu. Ini akan menjadi jalan pintas untuk berhubung terus dengan laman web atau sumber dalam talian tanpa perlu menaip URL ke penyemak imbas internet.

Dengan cara ini, sistem akan menjimatkan bukan sahaja masa tetapi juga usaha yang seharusnya dilakukan oleh tenaga pengajar dalam setiap kuliah. Ini akan mempercepat proses pengambilan kehadiran dan meninggalkan banyak masa untuk kuliah diberikan dengan betul.

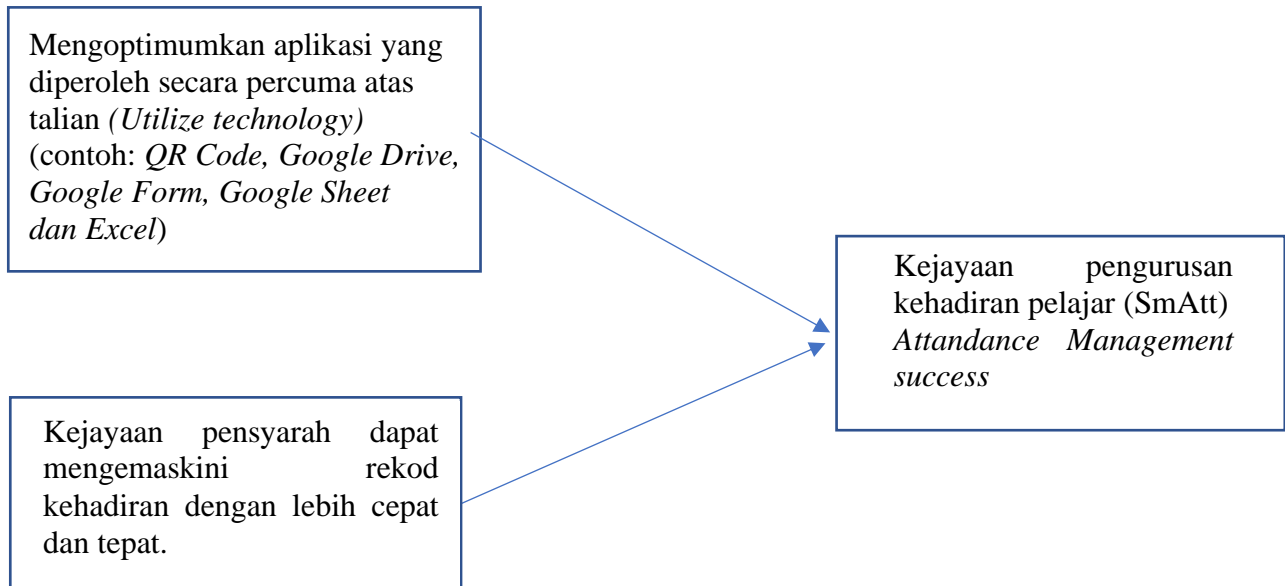
Kesimpulan

Menurut Sunil et.all, perisian sistem kod QR untuk pelajar memperbaiki masa yang digunakan untuk mengambil kehadiran manual dan memperbaiki kesilapan. Hasil kajian Patil Falguni et.all, penggunaan *Smart ID Card* kaedah yang meningkatkan kos dan tidak dapat disesuaikan dengan setiap sistem serta memerlukan sokongan perisian yang kompleks. Kajian mencadangkan penggunaan Kod QR. Di samping itu, sistem kehadiran yang menggunakan kod QR akan mengurangkan tenaga kerja pentadbiran secara manual dan meminimumkan penggunaan kertas. Ini dilaporkan oleh Md Rizal Md Hendry et.all dalam kajian mereka. Manakala dalam kajian yang dilaksanakan oleh Nur Farhana Binti Mohd Amir, UTEM (2015), Sistem Pemantauan Kehadiran adalah sistem yang memungkinkan pengumpulan maklumat kehadiran melalui aplikasi telefon bimbit dan Kod QR.

Kesemua kajian menyatakan persetujuan penggunaan kod QR dan aplikasi telefon bimbit mempercepatkan proses pengambilan kehadiran semasa kelas dan akan menjimatkan masa serta pensyarah dapat mengemaskini rekod kehadiran lebih cepat dan tepat.

Kaedah Kajian

Kerangka Teori



Kaedah Pengumpulan Data

Kajian ini adalah kajian berbentuk survey atau tinjauan yang melibatkan seramai 60 orang responden. Penyelidik menjalankan kajian dengan berjumpa responden secara individu atau berkumpulan. Penyelidik telah memulakan kajian dengan memberi penerangan tentang sistem Kod QR (*SmAtt*) dan kajian yang ingin dijalankan kepada responden. Maklumat tentang Kod QR (*SmAtt*) diberi dalam bentuk teks dan gambar.

Kaedah persampelan secara mudah (*convenience*) digunakan untuk memilih responden dalam kajian ini. Responden terdiri daripada 60 orang pensyarah dari pelbagai kursus di Jabatan Perdagangan Politeknik Port Dickson. Oleh kerana kajian ini dijalankan secara kuantitatif pengkaji akan mengumpulkan responden secara mudah (*convenience*) sehingga mencapai 60 responden dari Jabatan Perdagangan.

Pengumpulan data

Data dikumpul dengan memberi borang soalselidik kepada 60 orang pensyarah Jabatan Perdagangan di PPD. Penyelidik memberi soalselidik kepada pensyarah di Jabatan Perdagangan untuk mendapatkan maklumbalas.

Instrumen Kajian

Instrumen yang digunakan bagi kajian ini adalah borang soal selidik. Sebanyak 10 item telah dibangunkan berdasarkan soalan-soalan dari kajian lepas. Soalselidik yang dibangunkan dengan menggunakan skala likert. Penyelidik telah menggunakan jenis soalan skala likert 5 mata bagi item-item yang mewakili 1-sangat tidak setuju, 2-tidak setuju, 3-sederhana setuju, 4-setuju dan 5-sangat setuju.

Data Analisis

Penyelidik menggunakan SPSS untuk menganalisa data. Analisis yang dilakukan adalah untuk

- a. Mengenalpasti kod QR dapat mengurangkan bebanan pengurusan Pdp pensyarah.
- b. Mengenalpasti penggunaan teknologi melalui Smart phone dan Kod QR membantu proses merekod kehadiran pelajar.

- c. Mengenalpasti hubungan antara Kod QR mengoptimumkan aplikasi yang diperoleh secara percuma atas talian dengan kejayaan pensyarah dapat mengemaskini rekod kehadiran dengan lebih cepat dan tepat.

Huraian Dapatan Kajian

	Descriptive Statistics					
	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Error	Std. Deviation Statistic
VAR00001	60	2.00	5.00	4.0333	.09196	.71228
VAR00002	60	2.00	5.00	3.7833	.10916	.84556
VAR00003	60	2.00	5.00	4.3167	.10760	.83345
VAR00004	60	2.00	5.00	4.2667	.12771	.98921
VAR00005	60	2.00	5.00	4.0167	.11520	.89237
VAR00006	60	3.00	5.00	3.6500	.08174	.63313
VAR00007	60	3.00	5.00	3.9000	.06596	.51090
VAR00008	60	2.00	5.00	4.3167	.10760	.83345
VAR00009	60	2.00	5.00	4.0333	.09196	.71228
VAR00010	60	2.00	5.00	4.2667	.012771	.98921
Valid N (listwise)	60					

Daripada dapatan kajian yang diperolehi menunjukkan bahawa responden memberikan respon yang positif (49%- 98%) terhadap soalan kajian. Responden memberikan respon bersetuju dengan soalan kajian. Berdasarkan jadual diatas, analisis kajian adalah seperti berikut:

1. 71% daripada responden bersetuju dengan pernyataan SmAtt dapat mengurangkan bebanan pengurusan PdP pensyarah.
2. Sebanyak 84.5% responden bersetuju dengan pernyataan Anda selalu kecaciran dan kehilangan senarai nama kehadiran pelajar yang diambil sewaktu kelas.
3. 83.3% dari responden menyatakan persetujuan bahawa Proses merekod dan mengemaskini senarai kehadiran pelajar mengambil masa.
4. Sistem sedia ada tidak dapat menghasilkan laporan kehadiran mengikut standard yang ditetapkan, rata-rata pensyarah bersetuju dengan pernyataan tersebut.
5. 89.2% pensyarah menyatakan mereka bersetuju penggunaan teknologi melalui Smart phone dan Kod QR membantu proses merekod kehadiran pelajar.
6. Pensyarah menggunakan Google Drive, Google Form, Google Sheet dan Microsoft Excel secara optimum pernyataan ini mendapat persetujuan sebanyak 63.3%.
7. Sebanyak 51.0% responden bersetuju dengan pernyataan penggunaan aplikasi percuma (google drive dll) dan Kod QR cepat dan memudahkan.
8. 83.3% pensyarah bersetuju bahawa pensyarah dapat mengemaskini rekod kehadiran dengan lebih cepat dan tepat dgn menggunakan SmAtt.
9. SmAtt membantu menghasilkan laporan kehadiran mengikut standard yang ditetapkan, 71.2% responden menyatakan persetujuan dengan kenyataan ini.
10. Secara keseluruhannya responden bersetuju sebanyak 98.9% dengan kenyataan bahawa penggunaan SmAtt ini lebih tersusun dan mempercepatkan pengurusan kehadiran pelajar.

Perbincangan

Dapatan kajian menunjukkan SmAtt dapat memudahkan pensyarah dari aspek pengambilan kehadiran secara manual yang secara tidak langsung dapat mengurangkan penggunaan kertas

dan menjimatkan masa. SmAtt juga tidak menimbulkan sebarang implikasi kos kepada jabatan kerana menggunakan aplikasi-aplikasi percuma.

Pembangunan SmAtt telah dicadangkan mengoptimumkan aplikasi yang diperoleh secara percuma atas talian seperti google form, google sheet yang menjadikan telefon pelajar sebagai medium untuk mengimbas kod QR yang dibangunkan. Pensyarah hanya perlu menyediakan kod QR kursus dan juga formula yang telah disetkan ke dalam google sheet dan boleh dilihat seolah-olah pensyarah menanda / pada senarai nama pelajar tertentu. Maklumat kehadiran pelajar tersebut yang disimpan menggunakan masa yang sebenar (real time) yang telah disetkan dalam google sheet. Walaupun hanya 51% responden menyatakan persetujuan dengan pernyataan penggunaan aplikasi percuma (Google Drive, Google Form, Google Sheet dan Microsoft Excel) dan Kod QR cepat dan memudahkan. Ini berlaku kerana responden belum terdedah secara optimum dengan aplikasi-aplikasi yang ada atas talian secara percuma yang boleh memudahkan kerja dan menjimatkan masa. Tambahan pula aplikasi percuma atas talian ini sentiasa berubah mengikut peredaran masa.

Kesimpulan

Secara kesimpulannya, penghasilan SmAtt dapat mengurangkan bebanan pengurusan PdP pensyarah, rata-rata pensyarah telah menggunakan teknologi Smart phone dan Kod QR dan membantu proses merekod kehadiran pelajar dan penggunaan SmAtt telah mengoptimumkan aplikasi yang diperolehi secara percuma atas talian dengan kejayaan pensyarah dapat mengemaskini rekod kehadiran dengan lebih cepat dan tepat. Penggunaan SmAtt dapat membantu pensyarah dalam proses mengambil kehadiran pelajar semasa proses PdP berlangsung di kelas tanpa mengambil kehadiran secara manual yang akan mengambil masa yang singkat, pelajar boleh memberi penumpuan sepenuhnya kepada PdP. Penjimatan kertas serta proses menyediakan dokumen kehadiran mengikut keperluan ISO9001:2018 dan MQA dapat dijalankan dengan lebih cepat, teratur dan kemas.

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PEMERKASAAN PEMBELAJARAN ABAD KE-21 (PAK-21) DALAM PENGAJARAN TARANNUM AL- QURAN: ANALISIS KESEDIAAN GURU PELATIH PENDIDIKAN ISLAM

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Abstrak: *Al-Quran dan Al-Sunnah merupakan sumber rujukan utama dalam mempelajari ilmu tarannum. Inti pati kedua-dua sumber ini dapat diterjemahkan melalui agenda Falsafah Pendidikan Kebangsaan (FPK), Falsafah Pendidikan Islam (FPI) dan Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025. Menyedari akan kepentingan perubahan reka bentuk pembelajaran dan pemudahcara (PdPc) untuk generasi masa kini, inisiatif pembelajaran abad ke-21 telah dilancarkan oleh Kementerian Pendidikan Malaysia (KPM) di seluruh negara yang menggariskan ciri-ciri pembelajaran yang lebih dinamik dan memenuhi keperluan masa kini. Oleh itu, artikel ini membincangkan hasil kajian yang memfokuskan kepada kesediaan dan pelaksanaan pengajaran tarannum al-Quran dalam kalangan guru pelatih Kelas Khas Kemahiran Membaca dan Menghafaz Al-Quran (KKQ). Kajian yang dijalankan menggunakan reka bentuk kajian kualitatif dengan mengaplikasikan kaedah triangulasi iaitu temu bual semi- struktur, pemerhatian sesi pengajaran dan analisis dokumen terhadap enam orang informan guru pelatih Sarjana Muda Pendidikan Islam, pengkhususan dalam Pengajian al-Quran. Dapatan kajian mendedahkan bahawa para informan bersedia dan berjaya melaksanakan pengajaran tarannum al-Quran berasaskan elemen pembelajaran abad ke-21 (PAK 21) secara dinamik. Disamping itu, pelaksanaan pengajaran tarannum al-Quran berasaskan PAK 21 turut diaplikasikan dalam sesi PdPc melalui kepelbagaian strategi pengajaran. Justeru, penulisan artikel ini mencadangkan agar pelaksanaan pengajaran tarannum al-Quran perlu diperkasakan dari masa ke semasa terutama dalam aspek pengaplikasian strategi PAK 21 agar ianya sesuai dengan keperluan pelajar masa kini.*

Kata kunci: *Pembelajaran abad ke-21 (PAK 21); pengajaran; tarannum al-Quran; guru pelatih Pendidikan Islam.*

Pendahuluan

Kemuliaan al-Quran dapat dilihat melalui keagungan mukjizatnya dan keunikan gaya bahasa yang terdapat di dalamnya. Keunikan al-Quran boleh diperhalusi melalui pembelajaran ilmu tarannum (Sharifah, Shafiee & Tasnim, 2018) secara mendalam dan berterusan. Menurut Sihabudin (2007), ilmu tarannum merupakan seni suara dalam pembacaan al-Quran secara berlagu. Saranan membaca al-Quran secara bertarannum ini diperkukuhkan dengan firman Allah S.W.T dalam surah al-Muzammil ayat keempat yang bermaksud “*dan bacalah al-Quran dengan tartil*”. Nik Ja’afar (2012) mengklasifikasikan bacaan Rasulullah S.A.W secara *tartil* kepada empat perkara asas iaitu mempunyai unsur tajwid, tarannum, fasohah dan suara.

Sehubungan itu, pengajaran tarannum al-Quran melalui program Kelas Khas Kemahiran Membaca dan Menghafaz Al-Quran (KKQ) merupakan salah satu inisiatif yang dilaksanakan Kementerian Pendidikan Malaysia (KPM) sejak tahun 1986 (JAPIM, 2004).

Program KKQ bertujuan untuk memperkasakan kemahiran ilmu al-Quran dalam kalangan pelajar sekolah seiring dengan tuntutan Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025 yang memfokuskan kepada pembentukan kemahiran sendiri pelajar dalam pembelajaran dan pemudahcara (PdPc). Menurut Syed Ismail (2018), kemenjadian pelajar dalam era globalisasi ini memerlukan intervensi tiga elemen utama iaitu sistem pendidikan, guru dan pelajar yang perlu diterapkan dengan nilai Pembelajaran Abad Ke 21 (PAK 21). Guru perlu bersedia untuk menerapkan strategi pengajaran PAK 21 merangkumi unsur 4C iaitu *communication* (komunikasi), *collaboration* (kolaborasi), *creative* (kreatif) dan *critical thinking* (pemikiran kritis).

Merujuk kepada kajian lepas, corak pengajaran guru akan mempengaruhi pembentukan pemikiran kritis pelajar sekolah (Marin & Halpern, 2011; Philips, 2013; Rosnani, Suhailah & Juhasni, 2014). Pelaksanaan strategi pengajaran yang merangsang pemikiran kritis pelajar (Nursafra, Wan Ali & Isa, 2018) amat digalakkan bagi mewujudkan suasana pembelajaran aktif di dalam kelas. Justeru, penulis mengetengahkan kelompok guru sebagai sampel perbincangan kerana perannya sebagai agen utama dalam mendokong pelaksanaan gelombang kedua transformasi pendidikan ke arah masyarakat Malaysia yang berdaya saing, kreatif, inovasi, rasional dan kompeten (Tengku Sarina & Fatimah, 2018; Yusmarwati & Halizah, 2015). Namun begitu, skop perbahasan difokuskan kepada kesediaan guru pelatih Pendidikan Islam dalam mendepani cabaran PAK 21 dan pelaksanaan pengajaran tarannum al-Quran. Hal ini disebabkan pelbagai isu, persoalan dan cabaran dalam kalangan guru pelatih perlu dirungkaikan dengan lebih mendalam (Abdull Sukor, Izam & Nurahimah, 2016; Ab Hamid, Abdullah & Ridzuan, 2017), disamping membantu mempersiapkan diri mereka sebelum berada dalam realiti dunia keguruan.

Masalah Kajian

Pelaksanaan pengajaran tarannum al-Quran melalui program KKQ telah dilaksanakan secara menyeluruh di sekolah-sekolah menengah di Malaysia seperti Sekolah Menengah Kebangsaan (SMK), Sekolah Menengah Kebangsaan Agama (SMKA), Sekolah Agama Bantuan Kerajaan (SABK) dan Sekolah Berasrama Penuh Integrasi (SBPI). Namun begitu, masih terdapat beberapa isu yang dikaitkan dengan program KKQ sehingga menzahirkan kelemahan-kelemahan terhadap pelaksanaannya di sekolah (Eadil, 2010; Mazhair, 2014; Jahidih & Azmil, 2014; Azmil & Jahidih, 2015). Penulisan ini memfokuskan kepada kesediaan guru pelatih untuk menerapkan unsur PAK-21 dalam pengajaran tarannum al-Quran dari aspek kefahaman dan pengaplikasian strategi pengajaran.

Konsep PAK 21 menegaskan bahawa guru bukan lagi bertindak sebagai pemberi utama sumber ilmu pengetahuan semata-mata, akan tetapi guru bertindak sebagai pemudah cara, agen perubahan dan sumber inspirasi kepada pelajar. Namun begitu, masih terdapat isu mengenai guru Pendidikan Islam yang masih mengendalikannya pengajaran bersifat dogmatik (Bani & Nor Hayati, 2018; Rosnani Hashim, Suhailah & Jahasni et.al, 2014) dan kurang menumpukan kepada teknik penyolaan berkesan serta berpusatkan pelajar (Nursafra & Wan Ali & Isa et.al, 2018). Kajian yang dijalankan oleh Bani dan Nor Hayati (2018) menunjukkan bahawa strategi pengajaran yang diaplikasikan oleh guru Pendidikan Islam berada pada tahap sederhana dan jarang melakukan aktiviti PdPc di luar kelas.

Walaupun dapatan Zetty, Mariam & Sahlawati (2015) menunjukkan terdapat beberapa orang guru telah mengaplikasikan kaedah pengajaran seperti bercerita, perbincangan, *tasmi'*, *tikrar*, *talaqqi* dan *musyafahah*, namun masih terdapat sekelompok guru yang masih tidak berminat untuk melaksanakan strategi pengajaran berpusatkan pelajar dalam pengajaran mereka (Marzuqi & Azmil et.al, 2017). Kesannya, kelemahan kemahiran guru dalam mengaplikasikan strategi pengajaran menyumbang kepada faktor kelemahan pelajar dalam

menguasai ilmu tarannum al-Quran khususnya. Justeru, penulis ingin meninjau sejauhmana strategi pengajaran yang diaplikasikan oleh guru pelatih dalam pengajaran tarannum al-Quran. Justifikasi penulis memilih guru pelatih sebagai sampel kajian adalah kerana mereka merupakan bakal guru KKQ di sekolah pada masa akan datang.

Objektif Kajian

Kajian ini merupakan kesinambungan daripada hasil penulisan sebelumnya yang didapati bahawa guru pelatih Pendidikan Islam sememangnya telah mengaplikasikan pelbagai pendekatan dan kaedah pengajaran disamping menggunakan BBM dalam pengajaran tarannum al-Quran.

Justeru itu, penulis menetapkan dua objektif utama yang perlu dirungkai secara sistematik untuk mengetahui pelaksanaan pengajaran tarannum al-Quran di sekolah.

- Mengenal pasti kesediaan guru pelatih Pendidikan Islam untuk mengaplikasi Pembelajaran Abad Ke 21 (PAK 21) dalam pengajaran tarannum al-Quran.
- Mengenal pasti pengaplikasian guru pelatih terhadap strategi Pembelajaran Abad Ke 21 (PAK 21) dalam pengajaran tarannum al- Quran.

Berdasarkan kedua-dua objektif tersebut akan memperlihatkan satu dimensi pelaksanaan pengajaran tarannum al-Quran yang sesuai dengan kehendak transformasi pendidikan hari ini.

Pelaksanaan Pengajaran Tarannum Al-Quran Di Sekolah-Sekolah Di Malaysia

Status kelas KKQ sebagai salah satu aktiviti kokurikulum dijalankan pada luar waktu rasmi sekolah selama tiga jam seminggu. Salah satu topik dalam sukatan pelajaran KKQ ialah ilmu tarannum. Merujuk buku panduan KKQ menjelaskan berkaitan sukatan pelajaran tarannum seperti jadual di bawah (KPM, 2016):

Jadual 1: Sukatan Pelajaran Tarannum

	Teori	Praktikal
Tingkatan 1	<ul style="list-style-type: none"> Pengenalan suara Latar belakang, sejarah ilmu tarannum Sejarah tarannum <i>bayati</i> dan <i>husaini</i> 	<ul style="list-style-type: none"> Mengalunkan lagu <i>bayati</i> & <i>husaini</i>
Tingkatan 2	<ul style="list-style-type: none"> Sejarah tarannum <i>nahwand</i> dan <i>rast</i> 	<ul style="list-style-type: none"> Mengalunkan lagu <i>nahwand</i> & <i>rast</i>
Tingkatan 3	<ul style="list-style-type: none"> Sejarah tarannum <i>hijaz</i> dan <i>soba</i> 	<ul style="list-style-type: none"> Mengalunkan lagu <i>hijaz</i> & <i>soba</i>
Tingkatan 4	<ul style="list-style-type: none"> Sejarah tarannum <i>sikah</i> dan <i>jiharkah</i> Istilah-istilah dalam ilmu tarannum 	<ul style="list-style-type: none"> Mengalunkan lagu <i>sikah</i> & <i>jiharkah</i>
Tingkatan 5	<ul style="list-style-type: none"> Istilah-istilah dalam ilmu tarannum 	<ul style="list-style-type: none"> Mengalunkan lagu <i>hijaz</i>, <i>sikah</i> & <i>jiharkah</i>

Kebiasaannya, sebelum sesi pembelajaran tarannum secara praktikal dijalankan, guru-guru perlu memberi pengenalan awal berkenaan latar belakang setiap jenis tarannum sebagai pengetahuan awal bagi menarik minat pelajar. Ini membuktikan betapa pentingnya persediaan guru dari aspek kefahaman isi pengajaran dan strategi pengajaran sebelum memulakan sesi pengajaran. Namun begitu, satu kajian yang telah dijalankan oleh Zulkifli (2014) bagi mengenal pasti tahap penguasaan ilmu tarannum dalam kalangan 66 orang guru di SMKA dan SMK sekitar Selangor mendapati, seramai 20 orang guru mampu menguasai isi kandungan

ilmu tarannum dengan baik. Manakala, seramai 46 orang guru yang lain hanya dapat menguasai ilmu tarannum pada tahap sederhana sahaja. Situasi seperti ini akan menyebabkan proses PdPc terganggu dan tidak dapat berjalan dengan lancar (Nasir, Sedek & Zulkifli, 2017). Justeru, guru perlu mempunyai persediaan dari aspek pendekatan dan kaedah pengajaran bagi memastikan kelompangan pengajaran dapat diatasi dengan bijak dan cermat.

Dapatan kajian Mazhair et.al (2014) menunjukkan bahawa kaedah pembelajaran tarannum yang menjadi keutamaan dalam kalangan pelajar adalah *talaqqi musyafahah* bersama guru. Di samping itu, hasil kajian tersebut juga memperlihatkan sikap pelajar yang gemar bertarannum berdasarkan kefahaman ayat al-Quran. Hal ini bermaksud, al-Quran perlu difahami oleh sesiapa sahaja yang membacanya. Jika ayat-ayat yang dibaca itu berbentuk azab, dukacita atau sedih maka, irama bacaan adalah selari dengan maksud ayat al-Quran. Walaupun dapatan menunjukkan pelajar gemar bertarannum berdasarkan kefahaman ayat, namun masih terdapat pelajar yang tidak dapat mengalunkan tarannum dengan baik. Hal ini berkemungkinan dipengaruhi oleh corak pengajaran guru yang hanya memfokuskan kepada satu kaedah pengajaran sahaja tanpa melihat kepada keperluan dan keadaan semasa setiap pelajar. Justeru, penulisan ini akan mengetengahkan beberapa strategi pengajaran yang diaplikasikan oleh guru pelatih semasa latihan mengajar sesuai dengan keperluan dan kehendak pendidikan masa kini.

Konsep Pembelajaran Abad Ke-21 (PAK 21)

Agenda melahirkan modal insan minda kelas pertama dan berkualiti tinggi amat bertepatan dengan apa yang digariskan dalam gagasan PPPM 2013-2025 (Kementerian Pelajaran Malaysia, 2013). Para pelajar seharusnya dilengkapi dengan kemahiran dan kompetensi kurikulum yang moden bertujuan untuk melahirkan murid yang seimbang, berdaya tahan, mempunyai inkuiri yang tinggi, mempunyai kemahiran berfikir dan berkomunikasi dengan berkesan. Hal ini memerlukan tindakan seorang guru pelatih yang dilatih dan dibimbing bagi mewujudkan PdPc yang berkesan serta berkualiti.

Bagi mewujudkan PdPc yang berkualiti, guru pelatih perlu mempunyai kemahiran PAK 21 merangkumi pembelajaran dan kemahiran inovasi (*Learning and Innovation Skills*), kemahiran maklumat, media dan teknologi (*Information, Media and Technology Skills*), kemahiran hidup dan kerjaya (*Life and Career Skills*). Kemahiran-kemahiran ini boleh diaplikasikan dalam pengajaran tarannum melalui konsep “4C” (Yusuf & Rusman, 2019). Pendekatan dan kaedah pengajaran haruslah dijalankan dengan bercirikan Kemahiran Berfikir Aras Tinggi (KBAT) dan berpusatkan pelajar. Persediaan guru yang cukup dalam mengaplikasikan konsep PAK 21 ini bakal melahirkan guru yang kompeten dan memenuhi cabaran pendidikan mendatang.

Penerimaan PAK 21 dalam kalangan pelajar masih pada tahap sederhana. Hal ini menggambarkan kemahiran yang dimiliki oleh guru untuk menerapkan pedagogi PAK 21 masih perlu ditingkatkan. Menurut Masyuniza dan Zamri (2013) mendapati aspek komunikasi berkesan dalam PdPc berada pada tahap sederhana (min=3.69). Aspek komunikasi berkesan merupakan elemen utama dan penting dalam mewujudkan sikap saling membantu antara pelajar, memupuk sikap positif dan menjalinkan hubungan silaturrahim yang baik antara guru dan pelajar. Guru pelatih Pendidikan Islam perlu berperanan sebagai *muallim, mudarris, mursyid dan murabbi* yang bertanggungjawab mendidik dan melahirkan generasi Ulul Albab demi kelangsungan ummah.

Penerapan nilai KBAT yang melibatkan unsur kreatif dan kritis juga perlu diberi penekanan lebih mendalam sepanjang menjalani latihan mengajar (Raja Abdullah & Daud, 2018). Pengajaran tarannum al-Quran juga memerlukan guru pelatih menggunakan pendekatan pengajaran berpusatkan pelajar. Walaupun guru pelatih diberi pilihan untuk menggunakan kaedah konvensional seperti *talaqqi* dalam pengajaran tarannum al-Quran, namun sebagai guru

pelatih yang kompeten digalakkan untuk menerokai dan mengadun kaedah pengajaran PAK 21 seterusnya mengatur pelaksanaannya dalam PdPc secara sistematik. Hal ini disebabkan paradigma baru PAK 21 memerlukan PdPc berbentuk dinamik untuk mendidik generasi muda yang dipengaruhi oleh revolusi teknologi digital (Benade, L., 2015).

Justeru, keperluan PAK 21 dalam pendidikan masa kini memerlukan komitmen guru yang tinggi agar kemenjadian guru dan pelajar dapat direalisasikan secara seiring dan dimanfaatkan dalam masyarakat. Abd. Halim dan Hanani (2017) menyimpulkan bahawa terdapat 4 ciri utama untuk membentuk guru abad ke-21 iaitu; menguasai isi kandungan pengajaran; memahami perkembangan dan psikologi pelajar; penerapan kemahiran pedagogi pendidikan (strategi pengajaran) dan mempunyai kemahiran kaunseling.

Metodologi Kajian

Reka bentuk kajian penting dalam memastikan sesuatu dapatan dan objektif kajian tercapai (Chua, 2006). Objektif penulisan ini bertujuan untuk mengetahui kesediaan guru pelatih Pendidikan Islam dan proses pengajaran tarannum al-Quran, maka penulis memilih untuk menggunakan reka bentuk kajian kualitatif. Penulis telah menggunakan kaedah temu bual semi struktur, pemerhatian kelas dan penelitian dokumen sebagai strategi pengumpulan data kajian ini. Sebanyak dua fasa temu bual telah disusun bersama informan bagi memenuhi tuntutan soalan kajian yang telah digariskan. Seramai 6 orang informan telah dipilih melalui persampelan bertujuan (*purposive sampling*) untuk terlibat secara langsung dalam kajian ini; iaitu 4 lelaki dan 2 perempuan.

Proses pengumpulan data dalam kajian ini telah menggunakan dua jenis instrumen. Pertama, protokol soalan temu bual bagi kaedah temu bual dan kedua, protokol senarai semak pemerhatian bagi kaedah pemerhatian. Pembinaan kedua-dua instrumen ini berkait rapat dengan persoalan kajian dan mengambil kira analisis terhadap dokumen, kajian-kajian lepas yang berkaitan dengan objektif. Setelah selesai temu bual fasa 1, penulis telah melakukan pemerhatian dan temu bual fasa 2 sebagai salah satu kaedah triangulasi bagi menganalisis kandungan dan pelaksanaan pengajaran tarannum al-Quran dalam kalangan guru pelatih. Penulis akan memperolehi info-info yang tidak disedari oleh informan melalui proses triangulasi seperti bahasa tubuh badan dan pandangan mata pelajar.

Proses analisis data kajian telah menggunakan kaedah teoritikal tematik yang diperkenalkan oleh Braun dan Clark (2016). Penulis akan mencatat semula dapatan-dapatan temu bual yang diperolehi mengikut kaedah yang telah ditetapkan untuk membina tema-tema dan kod-kod khas bagi memudahkan pembinaan laporan dapatan kajian yang berkualiti. Penulis telah menggunakan perisian Atlas.ti versi 7.0 bagi mensistematikkan data-data yang telah dikumpulkan dalam kajian ini.

Dapatan & Perbincangan

Secara keseluruhannya, hasil analisis dapatan kajian mendedahkan penemuan empat tema yang berkait rapat dengan kesediaan guru pelatih dan strategi pengajaran tarannum al-Quran yang diaplikasikan dalam pengajaran iaitu:

Pengajaran Tarannum Al-Quran Merealisasikan Tuntutan Falsafah Dan Pelan Pendidikan Pembangunan Malaysia (PPPM) 2013-2025

Tema ini menjelaskan bahawa elemen kefahaman berkaitan PAK 21 merupakan salah satu indikator yang dapat menggambarkan sejauhmana kesediaan guru pelatih terhadap pelaksanaan PdPc tarannum al-Quran. Dapatan temu bual mendapati beberapa informan menyatakan bahawa pengajaran tarannum al-Quran merupakan suatu "*pengajaran kemahiran seni suara*" (Amir) yang bertujuan untuk "*mencungkil bakat dan kemahiran*" (Arif) para

pelajar untuk dilatih secara konsisten sebagai “*pelapis qari’ dan juga qari’ah*” (Afiqah). Namun begitu, terdapat juga informan yang memahami bahawa pembelajaran tarannum al-Quran perlu seiring dengan “*corak pendidikan abad ke 21*” seperti tuntutan PPPM 2013-2025.

“...falsafah pendidikan dan PPPM fokusnya ke arah kemenjadian pelajar dalam aspek kemahiran, akademik atau sahsiah... tarannum ini melibatkan kemahiran seni suara, walaupun secara terangnya dalam PPPM hanya sebut kemahiran kepimpinan, tapi tanpa sedar pembelajaran tarannum melahirkan sifat-sifat kepimpinan dalam diri pelajar... saya suka buat aktiviti semasa kelas tarannum... sekarang kan zaman abad ke-21... dari aktiviti inilah saya dapat tahu rupanya ada pelajar yang berkepimpinan dan berkemahiran... cikgu kena rajin gilap bakat mereka...” (Amir)

Berdasarkan sesi pemerhatian penulis semasa pengajaran tarannum al-Quran mendapati bahawa Ustaz Amir telah menyimpulkan sesi pengajaran dengan merujuk poster PPPM 2013-2025 di papan kenyataan kelas dan mengaitkannya dengan pembelajaran tarannum. Poster tersebut tertera rajah kerangka Kurikulum Standard Sekolah Menengah (KSSM) yang menuntut pelajar ke arah pembentukan generasi abad ke-21 yang seimbang melalui nilai inovatif, kreatif dan kritis. Walaupun program KKQ tidak termasuk dalam mata pelajaran KSSM, namun penegasan dalam PPPM 2013-2025 jelas menunjukkan bahawa setiap PdPc perlu menerapkan unsur PAK 21. Hal ini berjaya diterangkan dengan baik oleh Ustaz Amir kepada pelajar-pelajarnya agar mereka merasa pentingnya mendalami ilmu-ilmu kemahiran dalam KKQ seperti tarannum, qiraat, hafazan, tajwid dan ulum al-Quran.

Selain itu, elemen peranan guru pelatih juga telah dianalisis sehingga menemui dapatan yang bersesuaian dengan tema ini. Penulis mendapati bahawa Ustazah Amirah telah mengaitkan pengajaran tarannum al-Quran dengan semangat spiritual yang ditekankan dalam FPK melalui penekanan konsep Jasmani, Emosi, Rohani, Intellect dan Spiritual (JERIS).

“... tarannum ni sangat halus kalau dikaitkan dengan falsafah pendidikan yang JERIS tu... Jasmani, Emosi, Rohani, Intellect dan Spiritual... tapi kalau saya, saya nampak tarannum ni memberikan semangat spritiual dalam jiwa saya dan pelajar... saya akan rasa sedih dan sayu kalau saya dengar orang baca al-Quran secara berlagu atau bertarannum... masuk dalam hati saya... seolah-olah saya faham isi kandungan ayat al-Quran tu... sebab tu saya nekad untuk lahirkan pelapis qari’ dan qari’ah dari kelas KKQ ni... bila faham isi al-Quran, mereka akan sanjung al-Quran...” (Amirah).

Hal ini membuktikan Ustazah Amirah telah memaksimumkan peranan sebagai pendidik dan motivator apabila mengulas konsep JERIS sambil diselangi dengan pandangan yang lahir dari jiwa Ustazah Amirah sendiri. Kenyataan ini menampakkan kefahaman dan semangat Ustazah Amirah dalam bidang keguruan.

Justeru, wujudnya hubungan antara kesediaan guru pelatih melalui kefahaman mereka berkaitan keperluan PAK 21 dalam pengajaran tarannum al-Quran dan tuntutan FPK serta PPPM 2013-2025. Dalam hal ini, informan memahami bahawa pemeraksanaan ilmu tarannum dalam diri pelajar merupakan salah satu agenda memartabatkan pendidikan al-Quran melalui penubuhan program KKQ di sekolah-sekolah menengah dalam negara (Eadil et.al, 2010). Oleh itu, seharusnya guru pelatih mempunyai keazaman untuk optimis mendokong transformasi pendidikan negara melalui pengajaran tarannum al-Quran dengan semangat spiritual dan penghayatan frasa kata “*didiklah dari hati yang ikhlas agar sampai ke hati mereka*” melalui pembudayaan PAK 21.

Pengajaran Tarannum Al-Quran Adalah Asas Perkembangan Potensi Dan Kemahiran Pelajar.

Pengajaran tarannum al-Quran memerlukan pemfokusan para pelajar untuk menguasainya menepati ciri-ciri *al-lahjah al-‘arabiyyah* (Wan Hilmi, Hamdi & Sabri et.al, 2019). Dapatan temu bual menunjukkan majoriti informan bersetuju bahawa pengajaran tarannum al-Quran mampu membina dan menggilap bakat dan potensi pelajar. Para pelajar diberi peluang mempelajari asas ilmu tarannum yang terdiri daripada bentuk suara, *harakat*, *mahattah* serta jenis-jenis tarannum. Sebagai contoh, Ustazah Amirah berpandangan bahawa:

“... tarannum al-Quran boleh dipelajari di semua peringkat umur bermula seawal peringkat sekolah... pelajar bebas belajar tarannum walaupun mereka tiada suara yang sedap... kadang-kadang pelajar saya ni malu-malu bila saya ajak baca al-Quran dengan berlagu... sebenarnya tarannum ini bukan milik pelajar yang mempunyai suara sedap sahaja... tapi untuk semua yang berminat dan ada kecenderungan...” (Ustazah Amirah)

Ustazah Amirah berpandangan bahawa perkembangan bakat pelajar boleh bermula dari peluang yang diberikan oleh guru untuk mempelajari ilmu tarannum al-Quran. Guru berperanan sebagai fasilitator atau pembimbing untuk membantu pelajar menguasai ilmu tarannum dengan mudah melalui beberapa pendekatan dan kaedah yang bersesuaian (Shahabudin, Rohizani & Mohd Zohir, 2013). Pelajar pula perlu meneroka sendiri isi kandungan pelajaran yang dipelajari. Hal ini bersesuaian dengan teori konstruktivisme yang menekankan keterlibatan pelajar secara optimum dalam PdPc mereka. Situasi ini membuktikan guru pelatih telah mengaplikasikan pendekatan pemusatan pelajar sesuai dengan kehendak dan keperluan PAK 21. Pandangan ini turut dipersetujui oleh Ustazah Afiqah dalam temu bual seperti petikan di bawah:

“... kadang-kadang pelajar sendiri tidak sedar mereka mempunyai bakat seni suara tersendiri... kalau cikgu minta baca al-Quran secara berlagu, ramai yang pandang bawah... masa itu peranan cikgu bermula... macam mana nak jadikan pelajar yang tunduk bawah boleh angkat muka bila ditanya guru... barangkali dari 20 orang yang tunduk ada seorang dua pelajar yang mempunyai suara emas...” (Afiqah)

Menurut Ustazah Afiqah, bakat pelajar ini dapat dikenal pasti apabila informan mengatakan *“saya beri peluang kepada pelajar untuk kuasai tarannum dengan cara mereka sendiri”*. Menurut Brophy & Good (1986) menjelaskan bahawa pelajar mampu mencapai kejayaan yang lebih cemerlang sekiranya mereka berusaha untuk mengenal pasti kekuatan dan kelemahan diri setelah diberi peluang oleh guru untuk menonjolkan bakat dalam proses pembelajaran.

Selain itu, Ustaz Azil mendapati beberapa orang pelajarnya mempunyai kemahiran kepimpinan yang tinggi. Hal ini seiring dengan enam aspirasi murid dalam PPPM 2013-2025 iaitu; membentuk kemahiran kepimpinan dalam diri pelajar. Ustaz Azil menjelaskan bahawa beberapa maklum balas dari pelajar menunjukkan kebolehan kepimpinan dalam diri mereka seperti berkeyakinan mengalunkan tarannum di hadapan kelas walaupun alunan kurang tepat, berani memperbaiki bacaan rakan lain, sukarela membaca ayat al-Quran secara berlagu tanpa dipaksa oleh guru.

Oleh itu, ciri-ciri kepimpinan yang terbentuk telah memupuk minat yang mendalam dalam diri mereka untuk terus mempelajari ilmu tarannum al-Quran. Hal ini turut dipersetujui Ustaz Amir melalui kenyataannya:

“mereka minat belajar tarannum... katanya rasa tenang dan yakin dengan bacaan sendiri... kerap kali juga mereka suka rela nak bertarannum masa dalam kelas... dan minta cikgu semak alunan bacaan... seorang pelajar saya selalu mintak saya buat kelas khusus untuk dia dan 2 orang rakannya sebab nak belajar lebih tentang tarannum... pelajar macam ini yang saya suka... betul salah tarannumnya tu belakang kira tapi yang penting mereka ada usaha nak mencuba...” (Amir)

Hal ini jelas menunjukkan bahawa sifat yakin diri dan kesungguhan yang dizahirkan pelajar akhirnya menimbulkan perasaan minat yang mendalam untuk mempelajari ilmu tarannum. Ustaz Amir telah berjaya mencungkil bakat dan potensi pelajar sehingga boleh menimbulkan minat untuk terus mempelajari ilmu tarannum al-Quran. Situasi ini antara faktor kejayaan pengajaran tarannum al-Quran; di mana ianya menjadi ukuran kebolehpercayaan dan kefahaman guru terhadap pelaksanaan pengajaran tarannum di era kontemporari ini. Pemerhatian di dalam kelas juga mendapati Ustaz Amir banyak menggunakan kemahiran interaksi dua hala ketika berkomunikasi dengan pelajar agar mereka seronok untuk menguasai ilmu tarannum.

Justeru, kemahiran kepimpinan yang diterapkan dalam diri pelajar mampu menonjolkan potensi diri mereka dengan bimbingan guru yang kompeten. Namun, dalam masa yang sama pelajar perlu sentiasa diberikan motivasi dan dorongan untuk terus belajar tanpa berputus asa. Hal ini bertepatan dengan objektif pengajaran tarannum al-Quran yang bertujuan untuk memperkasakan kemahiran ilmu tarannum dan dipraktikkan dalam kehidupan seharian. Lantaran itu, guru-guru perlu sentiasa memberi ruang kepada pelajar untuk menterjemah bakat mereka dalam suasana pembelajaran yang kondusif agar potensi diri yang terpendam dapat digilap dan diperkasakan lagi.

Pendekatan Pengajaran Berpusatkan Pelajar

Strategi pengajaran merangkumi pendekatan, kaedah dan teknik yang digunakan guru dalam suatu pengajaran. Dapatan strategi pengajaran telah diklasifikasikan kepada dua aspek bagi menjawab objektif dan persoalan kajian yang kedua. Aspek pertama ialah pendekatan pengajaran berpusatkan pelajar, manakala aspek kedua memfokuskan kepada perbincangan kaedah peta pemikiran (i-think) yang telah membentuk daya kreativiti dan kepimpinan pelajar.

Semua informan bersetuju bahawa mereka mempunyai pengetahuan asas tentang pendekatan pengajaran yang dipelajari dari Kursus Pedagogi Pendidikan dalam Program Pendidikan Islam, Akademi Pengajian Islam, Universiti Malaya (UM). Pengetahuan berkaitan pendekatan pengajaran perlu dipelajari dan difahami secara mendalam oleh guru pelatih kerana generasi abad ke-21 memerlukan kepelbagaian gaya pengajaran dalam PdPc. Hal ini dapat dibuktikan melalui temu bual bersama Ustaz Afiq berkaitan pandangannya terhadap penerapan pendekatan pengajaran:

“...pensyarah pesan, kelas kita akan mati kalau tiada strategi pengajaran... strategi merangkumi pendekatan, kaedah dan teknik... seingat saya pendekatan terdiri daripada berpusatkan pelajar, guru dan bahan... setiap pendekatan ni ada baik buruk... pilih ikut keperluan pelajar kita...” (Afiq)

Namun begitu, Ustaz Arif pula banyak menerima ilmu tambahan berkaitan pedagogi pendidikan dari sekolah tempat beliau mengajar sebagai guru ganti dahulu. Sekolah tersebut menyediakan kursus kepada guru-guru untuk mempelajari beberapa pendekatan pengajaran untuk diaplikasikan kepada pelajar.

“... kebanyakan guru guna pendekatan berpusatkan pelajar... pelajar belajar menggunakan otak untuk mendapatkan isi pengajaran yang disusun guru... kelas bertukar aktif... kadang-kadang ada subjek yang perlu guna pendekatan berpusatkan guru contohnya hafazan tapi kita kena kreatif untuk jadikan hafazan tu menarik dengan kaedah pengajaran aktif... kalau saya ajar tarannum, saya suka guna pendekatan yang menyeronokkan... tak semua minat tarannum... jadi saya kena pandai tarik minat mereka dan buang sifat malu mencuba dalam diri mereka...” (Arif)

Berdasarkan beberapa pandangan informan di atas jelas menunjukkan kefahaman mereka berkaitan pendekatan pengajaran berpusatkan pelajar dan bersedia untuk mengaplikasikannya dalam pengajaran tarannum al-Quran. Pemerhatian dalam kelas Ustaz Afiq mendapati bahawa beliau telah mengaplikasikan pendekatan pengajaran berpusatkan pelajar melalui amalan memberi peluang kepada pelajar untuk menguasai dan mempelajari ilmu tarannum. Sebagai contoh, Ustaz Afiq telah menyediakan 2 aktiviti yang sesuai dengan tajuk pengajaran pada hari tersebut iaitu pengenalan *harakat, mahattah* dan *qit'ah*. Tindakan Ustaz Afiq merakam sesi PdPc melalui *live facebook* telah mendorong pelajar untuk bergerak aktif. Beberapa pelajar terpegun sehingga segelintir mereka menyatakan “*sopan-sopan, nanti mak awak nampak dalam kelas ni*”, “*fokus-fokus, awak sedang diperhatikan*”, “*haish, aku kena tunjuk bakat ni*”. Ragam pelajar-pelajar ini sedikit sebanyak memudahkan Ustaz Afiq untuk mengawal mereka semasa aktiviti-aktiviti sedang dijalankan. Beberapa orang pelajar secara sukarela tampil ke hadapan berkongsi pandangan mereka berkaitan *harakat, mahattah* dan *qit'ah* tanpa merujuk kepada guru. Suasana kelas menjadi aktif apabila mereka saling berbincang pandangan yang betul sambil dibantu Ustaz Afiq.

Sebagai guru pelatih, Ustaz Afiq dan rakannya Ustaz Amir kerap kali berjumpa dengan guru-guru Pendidikan Islam yang lain untuk mengetahui beberapa pendekatan yang sesuai diaplikasikan untuk pelajar-pelajar mereka. Mereka juga telah membawa penulis ke Laman PAK 21 yang terletak di hadapan pejabat sekolah. Hasil pemerhatian penulis mendapati guru-guru di sekolah tersebut telah diterapkan dengan budaya PAK 21 dan Kemahiran Berfikir Aras Tinggi (KBAT). Terdapat banyak poster dan lukisan pelajar yang menterjemahkan fahaman mereka terhadap PAK 21. Menurut Ustaz Amir, setiap panitia telah mengadakan pertandingan mencipta poster dalam kalangan pelajar dan guru bertemakan PAK 21 dan pemenang dipilih berdasarkan kekreatifan hasil lukisan dan isi kandungan poster yang dikaitkan dengan setiap subjek di bawah panitia masing-masing.

Secara keseluruhan, guru-guru pelatih memahami bahawa pendekatan pengajaran berpusatkan pelajar sesuai untuk diaplikasikan dalam pengajaran tarannum al-Quran. Selain bertujuan untuk memudahkan guru mencapai objektif pengajaran, pengaplikasiannya dalam pengajaran seiring dengan misi yang digagaskan dalam FPK, FPI dan PPPM 2013-2025. Budaya dan amalan pengajaran PAK 21 dan KBAT yang menggalakkan di sekolah juga menjadi pendorong dan suntikan semangat kepada guru-guru untuk lebih kreatif dalam menyampaikan ilmu dan pengetahuan kepada pelajar. Oleh kerana pengajaran tarannum melibatkan pembentukan kemahiran seni suara, maka semua informan telah memilih pendekatan pemusatan pelajar untuk menarik minat para pelajar di samping membuang sifat malu dan takut untuk mencuba sesuatu kemahiran yang baru.

Peta Pemikiran (I-Think) Membentuk Daya Kreativiti Dan Kepimpinan Pelajar

Kaedah pengajaran kontemporari merupakan suatu kaedah yang seiring dan selaras dengan kehendak kurikulum pendidikan pada hari ini untuk dilaksanakan dalam PdPc. KPM telah melancarkan KSSM dengan beberapa penekanan penting terhadap peranan guru dalam

melahirkan pelajar yang seimbang dari sudut jasmani, emosi, rohani, intelek dan spiritual. Berdasarkan temu bual penulis bersama Ustaz Amir mendapati bahawa antara kaedah pengajaran yang popular digunakan oleh guru-guru di sekolah beliau ialah kaedah peta *i-think*.

“... peta i-think sangat popular di sekolah ini... ada unsur KBAT dan PAK 21... peta ini satu kaedah pengajaran yang tersusun sebenarnya dan boleh dijadikan aktiviti untuk pelajar belajar dengan otak mereka sendiri... ada 8 jenis semuanya dan setiap peta ada fungsinya tersendiri...pelajar kat sekolah ni pun ramai yang dah mahir...” (Amir)

Situasi ini menunjukkan bahawa gaya pengajaran berunsurkan KBAT dan PAK 21 sudah menjadi pengamalan guru-guru di sekolah tersebut. Budaya ini telah mendorong Ustaz Amir untuk mengaplikasikannya dalam pengajaran tarannum al-Quran. Disamping itu, Ustaz Arif memaklumkan bahawa beliau telah menggunakan peta *i-think* jenis *Double Bubble Map* (Peta Buih Berganda) semasa pengajaran tarannum al-Quran. Menurut Ustaz Arif, *“...peta buih berganda ini sesuai kalau nak bezakan sesuatu perkara... nak buat perbandingan la maksudnya... minggu lepas saya guna peta ni untuk minta pelajar bezakan jenis-jenis suara dalam tarannum...”*. Pengalaman yang diceritakan oleh Ustaz Arif telah mendorong penulis untuk meneliti data dokumen yang terdapat di Laman Abad 21 di sekolah tersebut.

Penulis turut mendapatkan maklum balas dari Ustaz Arif berkaitan faktor pemilihan kaedah pengajaran dalam bentuk peta *i-think* sehingga menjadi amalan dan budaya dalam kalangan guru termasuk guru KKQ sekolah tersebut. Antara faktor yang dijelaskan oleh Ustaz Arif ialah; mudah dilaksanakan untuk semua peringkat, sesuai dengan isi pengajaran, kemampuan pelajar untuk adaptasi pengetahuan ke lakaran peta dan peruntukan masa pengajaran. Kaedah ini hanya memerlukan kertas mahjong dan *marker pen* untuk lukisan lakaran di atasnya. Ustaz Arif telah merujuk Ustaz Hanafi (bukan nama sebenar) yang berpengalaman mengajar KKQ selama lima tahun berkenaan pemilihan jenis peta yang sesuai dengan isi kandungan pengajaran.

“... kelas KKQ ni lama... 2 jam sekali kelas... selalunya pelajar mesti penat lepas seharian belajar aliran perdana... jadi, cikgu kena pandai ambik hati pelajar dengan aktiviti-aktiviti yang sesuai...sebab tu Ustaz Hanafi (bukan nama sebenar) kata kalau nak buat i-think kena pastikan masa panjang sekitar 1 jam setengah ke atas...flow (peringkat) i-think ni mula dari faham konsep i-think, pilih peta i-think yang sesuai, bincangkan dengan rakan isi kandungan pembelajaran yang sesuai dimasukkan dalam peta, pembentangan dan akhir sekali, komentar dari guru dan pelajar...” (Arif)

Justeru, dapat disimpulkan di sini bahawa segelintir informan telah melaksanakan kaedah pengajaran aktif seperti penggunaan peta *i-think* dan penerapan elemen KBAT dalam pengajaran tarannum al-Quran. Hal ini menunjukkan bahawa guru pelatih faham tentang kepentingan melaksanakan kaedah pengajaran yang mempunyai unsur PAK 21.

Kesimpulan

Seiring dengan transformasi pendidikan ke arah pembentukan negara baharu, guru pelatih turut mengambil peranan dalam membentuk generasi abad ke 21 dengan ilmu, pengetahuan dan kemahiran diri pelajar yang pelbagai. Guru Pelatih Pendidikan Islam khususnya diberi kepercayaan dalam mengembangkan ilmu dan kemahiran dalam pengajaran tarannum al-Quran melalui pelaksanaan program KKQ. Walaupun program KKQ merupakan salah satu aktiviti kokurikulum, namun ianya mempunyai sukatan mata pelajaran khusus iaitu; hafazan, tarannum, qiraat sab'ah, tajwid dan ulum al-Quran. Bagi memastikan kemahiran ilmu tarannum

dapat dikembangkan dan diterapkan dalam diri pelajar, guru pelatih perlu memberikan sentuhan pengajaran yang lebih dinamik dan berkualiti sesuai dengan keperluan PAK 21.

Kajian ini membuktikan bahawa guru pelatih mempunyai kesediaan yang cukup melalui pemahaman yang jelas dan pengaplikasian strategi pengajaran yang sesuai dengan menerapkan unsur PAK 21 dalam pengajaran tarannum al-Quran. Kematangan guru pelatih juga dalam mendepani masalah dan konflik ketika pengajaran juga menampakkan mereka bersedia untuk menjadi fasilitator yang baik kepada para pelajar. Pengaplikasian pendekatan pengajaran berpusatkan pelajar dan penggunaan kaedah peta pemikiran (*i-think*) sedikit sebanyak telah banyak membantu guru pelatih untuk mewujudkan susasana kelas tarannum yang ceria, aktif dan ideal. Justeru, pemilihan strategi pengajaran yang sesuai dengan keperluan dan psikologi pelajar bukan sahaja mampu mewujudkan pengajaran yang berkualiti sematamata, namun secara tidak langsung guru pelatih boleh memupuk nilai kepimpinan dalam diri pelajar. Kemenjadian pelajar ini adalah bukti kefahaman yang jelas dan komitmen tinggi yang telah ditunjukkan oleh guru pelatih dalam pengajaran tarannum al-Quran. Hal ini secara tidak langsung menunjukkan bahawa pengajaran tarannum al-Quran telah memenuhi tuntutan dasar dan falsafah pendidikan negara serta mendokong transformasi pendidikan seperti yang dinyatakan dalam PPPM 2013-2025.

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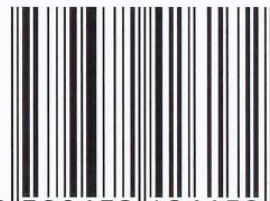


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(1257579-U)**

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eISBN 978-967-2426-17-2



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